

# **Cariboo PEM: Predictive Ecosystem Mapping Description of PEM Entities**

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## Introduction

This report provides documentation for the PEM map entities developed for the predictive ecosystem map (PEM) produced for the former Cariboo Forest Region in B.C.

The report is meant to act as an appendix or index to facilitate access to information about the mapping entities defined for the Cariboo PEM project. It is not intended to be read continuously from start to end. Rather, users of the PEM maps are advised to identify specific PEM entities, for specific BGC Units, and to locate and read the descriptions of these specific entities in this document.

The BGC Units are presented in order of the integer ID number that LMES used to identify each Subzone or Variant for the PEM mapping. These integer numbers, which range from 34 to 98, order the BGC Units in approximately alphabetic order, except for units that were not known or anticipated at the start of the project and which were therefore not included in the correct alphabetic sequence in the original numbering system applied to the initial BGC units.

The document adopts a repeating format based on a standardized boilerplate or template. Descriptions are organized and presented by BGC Unit (Subzone or Variant). The same information is presented in the same order and following the same format for each BGC Unit.

The template used to present information about the PEM map entities for each BGC Unit presents the following information in the following sequence.

## Header information

The header identifies the BGC Unit for which PEM entities are to be described. It also gives the LMES integer ID number assigned to identify that BGC Unit.

## Extent and Location within each TSA

The top of the first page presents a small index map that illustrates the location and extent of the BGC unit within the boundaries of the former Cariboo Forest Region. This index map also includes the boundaries for the three TSAs that partition the former Cariboo Forest Region (Quesnel, Williams Lake and 100 Mile House TSAs).

A Table located to the left of the index map gives the extent of the BGC unit in hectares and in percent within each of the three TSAs and across the entire extent of the former Cariboo Forest Region.

Users can quickly gain an appreciation for the relative size, extent and location of each BGC unit within the entire Cariboo, or within a specific TSA, by consulting the map and table. This information allows a reader to rapidly assess the relative size of the PEM entities defined for any BGC unit and the relative importance of the BGC unit with respect to the total area of the Cariboo or of any of the TSAs.

## List of Ecological Class Codes Defined for Use in any BGC unit

A table on the bottom of the first page of each repeating template lists the forested site series and non-forested ecological classes defined for that specific BGC unit.

These ecological entities represent the target classes that the PEM tried to model and predict within that BGC unit. The target classes are based on classes and concepts of ecological entities as presented in the most relevant and current representation of the Biogeoclimatic Ecosystem Classification (BEC) system of site classification for BC (Pojar et al., 1987).

The classes listed in this table represent the ecological entities that have been defined and identified for each BGC unit. These ecological classes define the target concepts that LMES tried to model and predict within each BGC unit. Readers should consult this table to identify what PEM entities exist for each BGC unit and what attributes, moisture regimes and landscape settings are associated with each defined entity.

### **Authority or Source for Defined Site Series**

For most BGC units in the former Cariboo Forest Region, the published authority for identifying all defined ecological classes within a particular BGC unit was the “Field Guide to Forest Site Identification and Interpretation for the Cariboo Forest Region” (Steen and Coupé, 1997). For several of the smaller, or more recently defined, BGC units, identification of the PEM entities relied upon descriptions and keys presented in Field Guides for adjacent regions (Prince George, Kamloops, Prince Rupert, or Vancouver). For several other BGC units, there was no finalized classification. For these areas, the Regional Ecologist (Ray Coupé) prepared a list of provisional mapping entities and described the site conditions under which these entities would be expected to occur. These interim, or provisional, classifications are not final or officially approved, but they do have the approval and acceptance of the Regional Ecologist.

The BEC system of site classification is constantly evolving and being improved. Consequently, the entities defined for the present PEM can only represent the classification concepts that were in existence at the time the PEM was produced. The ecological entities defined for this PEM are as relevant and up to date as could be achieved at the time of mapping. Future changes in the classification system may well alter or invalidate some of the named map entities.

### **Landscape Profile Diagram**

A Landscape Profile diagram is presented at the top of the second page of the repeating template for those BGC units for which a diagram was available.

The intent of presenting the Landscape Profile diagrams is to provide the user with a schematic illustration of the idealized distribution of ecological entities (Site Series) in the landscape, relative to the controlling factors of size and scale of landform, slope gradient, slope aspect, parent material depth and texture and relative landscape position. The Landscape Profile diagrams were copied from the relevant Field Guide in which they were published. The actual distribution of ecological classes in the landscape is somewhat more complex than illustrated in the Landscape Profile diagrams. However, consideration of these diagrams can help a user to rapidly identify and appreciate the main environmental settings under which each defined ecological class is anticipated to occur and how these settings can differ between ecological classes.

### **Example Attribute Class rule File for the BGC Unit**

The bottom half of the second page of the template presents a copy of an attribute rule file for one of the classification zones within the given BGC Unit. Typically, the attribute rule file presented is for the most common and extensive classification zone in the unit. This is usually the zone of medium textured materials in areas of moderate to high relief.

The point of including an example of the KB rule file for defining attribute classes is to provide the reader with some appreciation and knowledge of the attributes that were used to predict the ecological classes within each BGC unit. The structure and content of the attribute rule file is described in detail in the main body of the report on input data layers and knowledge base development (MacMillan et al., 2008a). Readers can rapidly determine which input data layers (attr\_in) were used to define which conceptual classes of attributes (class\_out) using which type of fuzzy model and which particular threshold values for defining the fuzzy membership functions (b, d). The names given to the attribute classes are meant to be somewhat cognitive and should provide the reader with some insight into the site conditions that the attribute was designed to recognize (e.g. wet or dry, crest or toe).

## Example Fuzzy Ecological Class rule File for the BGC Unit

The third page of the template presents an example of the KB rule file for defining the Fuzzy output classes of ecological entities predicted by the LMES DSS PEM procedures. As with the fuzzy attribute file, this example is usually drawn from the most common and extensive classification zone defined for the BGC Unit.

The point of including an example of the fuzzy classification rule file is to provide the interested user with some understanding of how the main ecological classes predicted for any given area were defined and computed. If the reader is interested in reviewing fuzzy KB rules for any of the other classification zones defined for a particular BGC unit, they would have to obtain a copy of the original KB rules in Excel format from the provincial data warehouse and open the rule file for the specific classification zone of interest to them.

Readers should be able to review these example rule files to appreciate how the final output classes were defined in terms of weighted values of the various attribute classes. The KB rules try to be cognitive so that anyone reading the rule files should be able to develop a pretty good appreciation of the site conditions associated with any given defined class. The example table identifies the dominant output class (site unit) that is predicted to be associated with each defined landscape setting. It also provides a terse description of the main attributes of each defined output class.

## PEM Entity Descriptions for the BGC Unit

Beginning on the fourth page of the template is a table that represents an extended legend that describes each of the unique integer numbers used to identify the LMES DSS PEM map entities.

This extended legend presents a textual description of each of the unique PEM entities. It also lists the numeric and/or alpha code associated with the ecological class that is predicted to be dominant within areas identified by that particular identifying number (LM Code ID#). Each unique number represents a prediction about the site conditions that are believed to occur at each location identified by that number. The areas classified into each numeric class were reviewed by the Regional Ecologist and a prediction was made regarding which ecological class, or classes, was most likely to occur within areas identified by that number. This dominant ecological class is identified in the table under the headings Site\_S1 (number) and SiteMC\_S1 (alpha code). This table only identifies the main dominant class associated with each PEM entity. Each entity is treated as if it were a “pure” occurrence of a single dominant ecological class. We recognize that this may be a simplification, but it is a simplification that works.

A short textual description is provided for each numbered entity in the column labelled “PEM entity Description and Comments”. Originally, these comments and descriptions were recorded to help the knowledge engineer to remember what concepts each entity was trying to capture and what ecological classes were most likely to be associated with areas characterized by the site conditions that existed for each defined entity. The comments were also used to assist in communicating to the local ecological expert (the Regional Ecologist) what kinds of conditions the knowledge engineer considered would occur within areas identified by each integer code and what site series he thought most likely to occur within each area. The Regional Ecologist often reviewed these comments to gain some appreciation of the site conditions associated with each unique numbered entity so that he could then suggest which ecological class, or classes, were most likely to occur within these areas.

While these textual comments were initially only intended for internal use, we found them so useful in helping us to keep track of what concepts each entity was trying to capture and what attributes were characteristic of each entity, that it was decided they might prove useful to end users as well. Consequently, the decision was taken to include a copy of these comments in the final documentation of the PEM map entities. We would not expect any user to read all entity descriptions for an entire area. However, if a user



was interested in the characteristics and classification of a particular entity, they could read the written comments provided for just that entity to gain a better appreciation of its main attributes.

Readers are encouraged to review a few of these written descriptions to discover whether they find them helpful for gaining a better understanding of the site conditions and ecological classes associated with any uniquely numbered PEM entity.

This table represents the main formal documentation of the PEM entities defined for each BGC unit in the Cariboo PEM project area. It provides a written record of not only the attributes of each entity but also the thought processes and concepts that went into the definition of each entity.

### **PEM Entity Extended Legend with Proportions of Site Series**

The final section of each template is a table that represents an extended legend that describes the proportions of up to three different ecological classes (Site Series or non-forested ecological classes) for each of the unique integer numbers used to identify the LMES DSS PEM map entities.

This table is simply another way of presenting the known information about each PEM entity. This table is essentially a slightly abbreviated version of the standard ECP table required by provincial PEM standards. It gives the proportions and the integer and/or alpha codes for up to three site units that are considered as likely to occur within areas identified by the unique PEM entity ID number. Readers should be aware that these estimates of proportions of potential included ecological classes have not been tested or verified by formal accuracy assessment procedures. The accuracy assessment procedures tested each PEM entity as if it was a “pure” entity composed entirely of the dominant named ecological class.

This table was included simply to indicate that most PEM entities are likely to include other ecological classes, in addition to the named and described dominant class. The knowledge engineer and the Regional Ecologist made these estimates as a way of exchanging ideas about which ecological classes were most likely to occur within any given numbered PEM entity. At the end of the day, we were reluctant to throw away any information or work, even if it had not been systematically assessed and verified. So, we elected to include this information in this table so that it would not be lost. Users can certainly elect to ignore the information on second and third classes included in this table, since it has not been verified. However, if any users do find it useful to have access to information that can alert them to the possible presence of second or third inclusions within any area of any PEM entity of interest, then it is preserved here for them to access.

### **About this Report and Documentation**

The ecological classes assigned to each uniquely numbered PEM entity represent an informed estimate, or guess, made by the knowledge engineer, with the input and advice of the Regional Ecologist, about what site unit was most likely to occur within each of the uniquely identified areas.

The PEM modeling approach adopted for the Cariboo PEM was entirely founded upon making use of the existing ecological knowledge of the most experienced ecological expert in the former Cariboo Forest Region, this being the Regional Ecologist, Ray Coupé. The classes predicted to occur at any given location, identified by any given LMES PEM code, represent our attempt to capture this local ecological knowledge and portray the most likely spatial distribution of the ecological classes that have been identified as occurring in any given BGC unit.

We did not capture the knowledge perfectly. Neither did we make error-free predictions or estimates. However, formal procedures to assess the accuracy of these predictions have confirmed that they are of an acceptable level of accuracy for the intended uses and that further improvements in accuracy are not likely to be possible within the limits imposed by time, cost and available input data layers.

**BGC Unit: IMA****LMES Zone ID: 34****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	7,949.3	0.38%
Williams Lake TSA	23,583.2	0.48%
100 Mile House TSA	1,904.1	0.15%
Cariboo Region	33,436.6	0.41%

**List of Site Series Codes Defined for use in IMA**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
00	AF	White mountain-avens - Altai fescue tundra	submesic	Thin ground cover, Mostly Thin Dry Tundra
00	FC	Bl - Merten's cassiope	mesic	Thin ground cover, Moister in hollows and draws
00	FM	Bl - Heather parkland	submesic - mesic	Sparse Cool Parkland, Thin scattered trees and brush in moist draws
00	PC	Dry Closed Forest		Vigorous scrub brush to scattered trees in moist hollows to draws
00	SF	Moist (subhygric) Closed Forest	subhygric - hygric	Used for moderate ground cover of grasses and shrubs grading to brush
00	SS	Scrub birch - Ragged snow, shrub steppe	submesic - mesic	Maybe this is a better code to use to describe 40 areas of scrub brush
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		
00	PN	Permanent Ice and Snow		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the IMA once a new classification of alpine and sub-alpine areas is published.

## Landscape Profile Diagram: IMA

No Landscape Profile Diagram available

### Example Attribute Class Rule File for IMA (arule3431)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT05	4	5.50	5.00	99.00	5.00	99.00	0.5
14	formfile	SLOPE	SlopeLT05	5	4.50	0.00	5.00	0.00	5.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

**Example Fuzzy Ecological Class Rule File for IMA (crule3431)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
SH3430r	Crest	35	1	3430	AF Sparse Dry Tundra	SH3434ne	Up2Low	35	5	3434	SF Meadow- Brush Transition
SH3430r	Dry_WI	35	1	3430	Ridge Crest	SH3434ne	Dry2Med_WI	35	5	3434	< 30% NE Slope
SH3430r	SlopeLT20	20	1	3430		SH3434ne	SlopeLT30	20	5	3434	
SH3430r	Hi_Ridge	10	1	3430		SH3434ne	NE_Aspect	10	5	3434	
SH3431sw	Up2Low	35	2	3431	SF Meadow- Brush Transition	SH3435ne	Up2Low	35	6	3435	SF Meadow- Brush Transition
SH3431sw	Dry2Med_WI	35	2	3431	< 30% SW Slope	SH3435ne	Dry2Med_WI	35	6	3435	30-45% NE Slope
SH3431sw	SlopeLT30	20	2	3431		SH3435ne	SlopeLT45	10	6	3435	
SH3431sw	SW_Aspect	10	2	3431		SH3435ne	SlopeGT30	10	6	3435	
SH3432sw	Up2Low	35	3	3432	SF Meadow- Brush Transition	SH3435ne	NE_Aspect	10	6	3435	
SH3432sw	Dry2Med_WI	35	3	3432	30-45% SW Slope	SH3436ne	Up2Low	35	7	3436	RO Thin Grass and Rock
SH3432sw	SlopeLT45	10	3	3432		SH3436ne	Dry2Med_WI	35	7	3436	> 45% NE Slope
SH3432sw	SlopeGT30	10	3	3432		SH3436ne	Steep	20	7	3436	
SH3432sw	SW_Aspect	10	3	3432		SH3436ne	NE_Aspect	10	7	3436	
SH3433sw	Up2Low	35	4	3433	RO Thin Grass and Rock	SH3437st	Hollow	35	8	3437	RO Rocky Rubbly Wet Chute
SH3433sw	Dry2Med_WI	35	4	3433	> 45% SW Slope	SH3437st	Wet2V_Wet	35	8	3437	Sloping > 5%
SH3433sw	Steep	20	4	3433		SH3437st	SlopeGT05	30	8	3437	
SH3433sw	SW_Aspect	10	4	3433		SH3438lv	Hollow	35	9	3438	SF Forb - Brush Transition
						SH3438lv	Wet2V_Wet	35	9	3438	Level Hollow< 5%
						SH3438lv	SlopeLT05	30	9	3438	

**PEM Entity Descriptions for: IMA**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3400	IMA	00	RO	r	s	3400 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
3401	IMA	00	RO	s	j	3401 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
3402	IMA	00	RO	w	s	3402 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3402 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
3403	IMA	00	RO	w	v	3403 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
3404	IMA	00	RO	s	j	3404 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.
3405	IMA	00	RO	k	s	3405 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3405 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
3406	IMA	00	RO	k	v	3406 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
3407	IMA	00	RU	s	y	3407 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with bare rock ground cover.
3408	IMA	00	FC	s	y	3408 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with bare rock ground cover.
3410	IMA	00	RO	r	s	3410 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
3411	IMA	00	RO	s	j	3411 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3412	IMA	00	RO	w	s	3412 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3422 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
3413	IMA	00	RO	w	v	3413 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
3414	IMA	00	RO	s	j	3414 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation.
3415	IMA	00	RO	k	s	3415 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3425 areas had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
3416	IMA	00	RO	k	v	3416 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
3417	IMA	00	RU	s	y	3417 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with very thin ground cover.
3418	IMA	00	FC	s	y	3418 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with very thin ground cover.
3420	IMA	00	RO	r	s	3420 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
3421	IMA	00	AF	s	j	3421 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation but were most likely occupied by dry tundra. Gentle slopes, warm aspects, medium textured shallow soils, dry tundra types, sparsely vegetated
3422	IMA	00	AF	w	s	3422 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3422 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter than 3421 areas due to seepage from upslope.
3423	IMA	00	RO	w	v	3423 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
3424	IMA	00	AF	s	j	3424 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation but were most likely occupied by dry tundra. Gentle slopes, Cool aspects, medium textured shallow soils, dry tundra types, sparsely vegetated.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3425	IMA	00	AF	k	s	3425 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3425 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter than 3424 areas due to seepage from upslope.
3426	IMA	00	RO	k	v	3426 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
3427	IMA	00	RU	s	y	3427 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with sparse ground cover.
3428	IMA	00	FC	s	y	3428 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with sparse ground cover.
3430	IMA	00	AF	r	s	3430 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of grasses and shrubs. 3430 areas are transition areas from meadow to a combination of brush and rock. Crest positions, gentle slopes, medium textured shallow soils, and grass to shrub transition vegetation. Shallow crests.
3431	IMA	00	SF	s	j	3431 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of grasses and shrubs. 3431 areas are transition areas from meadow to a combination of brush and rock. Gentle slopes, deep, medium textured soils.
3432	IMA	00	SF	w	s	3432 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by a mixture of grasses and shrubs. 3432 areas are transition areas from meadow to a combination of brush and rock. Moderate to steep slopes, shallow, medium textured soils.
3433	IMA	00	RO	w	v	3433 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of grasses and rock. Very steep slopes, shallow, rocky, medium textured soils.
3434	IMA	00	SF	s	j	3434 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses and shrubs. 3434 areas are transition areas from meadow to a combination of brush and rock. Gentle slopes, deep, medium textured soils.
3435	IMA	00	SF	k	s	3435 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses, shrubs and a few low, stunted trees. 3435 areas are transition areas from meadow to a combination of brush and rock. Moderate to steep slopes, shallow, medium textured soils.
3436	IMA	00	RO	k	v	3436 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses, shrubs and a few low, stunted trees. 3436 areas appear to be covered by a mixture of scattered heather and rock. Very steep slopes, shallow, rocky, medium textured soils.
3437	IMA	00	RU	s	y	3437 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with transitional forb to brush ground cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3438	IMA	00	SF	s	y	3438 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with transitional forb to brush ground cover.
3440	IMA	00	RO	r	s	3440 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of vigorously growing grasses and shrubs. 3440 areas are transition areas from meadow and shrub to thick continuous brush. Crest positions, gentle slopes, medium textured shallow soils, and grass to shrub transition to vigorous shrub vegetation. Shallow crests.
3441	IMA	00	SF	s	j	3441 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on warm aspects.
3442	IMA	00	SF	w	s	3442 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on warm aspects.
3443	IMA	00	RO	w	v	3443 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on warm aspects.
3444	IMA	00	SF	s	j	3444 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on cold aspects.
3445	IMA	00	SF	k	s	3445 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on cold aspects.
3446	IMA	00	RO	k	v	3446 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of vigorously growing grass, forbs and low brush; generally on cold aspects.
3447	IMA	00	RU	s	y	3447 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas transitional to vigorous brush ground cover.
3448	IMA	00	PC	s	y	3448 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas transitional to vigorous brush ground cover.
3451	IMA	00	RO	r	s	3451 areas were mapped in areas characterized by a mixture of bare rock, rubble, snow and ice that does not appear to be permanent snow or glacier ice. Some 3451 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 3451 areas do not appear to have any significant vegetative ground cover.
3452	IMA	00	PN	s		3452 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 3452 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 3452 areas do not appear to have any significant vegetative ground cover.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3453	IMA	00	GL	r	s	3453 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N or E facing slopes. 3453 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
3454	IMA	00	GL			3454 areas were mapped to enclose the cores of what appear to be permanent glaciers. These glaciers generally occur down slope of the lee lips of steep windswept upper slopes. 3454 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
3460	IMA	00	RO	r	s	3460 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a thick continuous cover of trees. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.
3461	IMA	00	FM	s	j	3461 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects.
3462	IMA	00	PC	w	s	3462 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects.
3463	IMA	00	RO	w	v	3463 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects.
3464	IMA	00	FM	k	j	3464 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects.
3465	IMA	00	FM	k	s	3465 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects.
3466	IMA	00	RO	k	v	3466 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects.
3467	IMA	00	RU	s		3467 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a continuous tree cover. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of continuous tree ground cover.
3468	IMA	00	FM	j		3468 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with continuous tree ground cover.
3470	IMA	00	RO	r	s	3470 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3471	IMA	00	FM	s	j	3471 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 3471 occurs in the alpine and most of it appears to be most closely associated with gently to moderately sloping 3421 areas. For the present, it is assumed that 3471 areas are similar to 3421 areas and are dry meadows. (Ray says if thick trees are present then areas is most likely FA from ESSF wc)
3472	IMA	00	PC	w	s	3472 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 3472 occurs in the alpine and most of it appears to be most closely associated with moderately to steeply sloping 3445 areas. For the present, it is assumed that 3472 areas are similar to 3445 areas and are brush, rock and snow.
3473	IMA	00	RO	w	v	3473 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus.
3474	IMA	00	FM	k	j	3474 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on N and W exposures consist of mainly of bare rock, rubble and talus.
3475	IMA	00	FM	k	s	3475 areas were mapped on moderate to steep slopes (30-45%) with an N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on N and W exposures consist of mainly of bare rock, rubble and talus.
3476	IMA	00	RO	k	v	3476 areas were mapped on very steep slopes (> 45%) with an N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on N and W exposures consist of mainly of bare rock, rubble and talus.
3477	IMA	00	RU	s		3477 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of dark shadows and bare rock or rubble.
3478	IMA	00	FM	j		3478 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas of dark shadows and bare rock or rubble.
3491	IMA	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3492	IMA	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. No 3492 areas occur in the Cariboo PEM.
3493	IMA	00	FC			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
3494	IMA	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures. No 3494 areas occur in the Cariboo PEM.
3495	IMA	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs. No 3495 areas occur in the Cariboo PEM.
3496	IMA	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series. No 3496 areas occur in the Cariboo PEM.
3498	IMA	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

### PEM Entity Extended Legend with Proportions of Site Series for: IMA

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3400	3410	RO	IMA	6	00	RO	r	s	4	00	AF			
3401	3411	RO	IMA	6	00	RO	s	j	4	00	AF			
3402	3412	RO	IMA	6	00	RO	w	s	4	00	AF			
3403	3413	RO	IMA	8	00	RO	w	v	2	00	AF			
3404	3414	RO	IMA	6	00	RO	s	j	4	00	AF			
3405	3415	RO	IMA	6	00	RO	k	s	4	00	AF			
3406	3416	RO	IMA	8	00	RO	k	v	2	00	AF			
3407	3417	RU	IMA	6	00	RU	s	y	4	00	FC			
3408	3418	FC	IMA	6	00	FC	s	y	4	00	RU			
3410	3410	RO	IMA	6	00	RO	r	s	4	00	AF			
3411	3411	RO	IMA	6	00	RO	s	j	4	00	AF			
3412	3412	RO	IMA	6	00	RO	w	s	4	00	AF			
3413	3413	RO	IMA	8	00	RO	w	v	2	00	AF			
3414	3414	RO	IMA	6	00	RO	s	j	4	00	AF			
3415	3415	RO	IMA	6	00	RO	k	s	4	00	AF			
3416	3416	RO	IMA	8	00	RO	k	v	2	00	AF			
3417	3417	RU	IMA	6	00	RU	s	y	4	00	FC			
3418	3418	FC	IMA	6	00	FC	s	y	4	00	RU			
3420	3420	RO	IMA	6	00	RO	r	s	4	00	AF			
3421	3421	AF	IMA	7	00	AF	s	j	3	00	RO			
3422	3422	AF	IMA	6	00	AF	w	s	4	00	RO			
3423	3423	RO	IMA	8	00	RO	w	v	2	00	AF			
3424	3424	AF	IMA	7	00	AF	s	j	3	00	RO			
3425	3425	AF	IMA	6	00	AF	k	s	4	00	RO			
3426	3426	RO	IMA	6	00	RO	k	v	2	00	BF	2	AF	FC
3427	3427	RU	IMA	6	00	RU	s	y	4	00	FC			
3428	3418	FC	IMA	6	00	FC	s	y	4	00	RU			
3430	3430	AF	IMA	6	00	AF	r	s	3	00	RO	1	00	FC
3431	3431	SF	IMA	6	00	SF	s	j	3	00	FC	1	00	RO
3432	3432	SF	IMA	6	00	SF	w	s	3	00	RO	1	00	FC
3433	3433	RO	IMA	7	00	RO	w	v	2	00	SF	1	00	FC
3434	3434	SF	IMA	6	00	SF	s	j	3	00	FC	1	00	RO
3435	3435	SF	IMA	6	00	SF	k	s	3	00	RO	1	00	FC
3436	3436	RO	IMA	7	00	RO	k	v	2	00	SF	1	00	FC
3437	3437	RU	IMA	6	00	RU	s	y	4	00	SF			
3438	3438	SF	IMA	6	00	SF	s	y	4	00	RU			
3440	3440	RO	IMA	6	00	RO	r	s	4	00	SF			
3441	3441	SF	IMA	6	00	SF	s	j	3	00	FC	1	00	RO
3442	3442	SF	IMA	6	00	SF	w	s	2	00	FC	2	00	RO
3443	3443	RO	IMA	5	00	RO	w	v	3	00	SF	2	00	FC
3444	3444	SF	IMA	6	00	SF	s	j	3	00	FC	1	00	RO
3445	3445	SF	IMA	6	00	SF	k	s	2	00	FC	2	00	RO
3446	3446	RO	IMA	5	00	RO	k	v	3	00	SF	2	00	FC
3447	3437	RU	IMA	6	00	RU	s	y	4	00	SF			
3448	3448	PC	IMA	6	00	PC	s	y	4	00	RU			
3451	3451	RO	IMA	6	00	RO	r	s	2	00	RU	2	00	AF
3452	3452	PN	IMA	6	00	PN	s		2	00	GL	2	00	RU
3453	3453	GL	IMA	6	00	GL	r	s	2	00	RO	2	00	PN
3454	3454	GL	IMA	10	00	GL								
3460	3460	RO	IMA	8	00	RO	r	s	2	00	FM			
3461	3461	FM	IMA	6	00	FM	s	j	2	00	PC	2	00	RU
3462	3462	PC	IMA	5	00	PC	w	s	3	00	FM	2	00	RO
3463	3463	RO	IMA	5	00	RO	w	v	3	00	PC	2	00	FM
3464	3464	FM	IMA	6	00	FM	k	j	2	00	RU	2	00	PC
3465	3465	FM	IMA	5	00	FM	k	s	3	00	RO	2	00	PC
3466	3466	RO	IMA	5	00	RO	k	v	3	00	FM	2	00	PC

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3467	3467	RU	IMA	7	00	RU	s		3	00	FM			
3468	3468	FM	IMA	6	00	FM	j		4	00	RU			
3470	3470	RO	IMA	8	00	RO	r	s	2	00	FM			
3471	3461	FM	IMA	6	00	FM	s	j	2	00	PC	2	00	RU
3472	3462	PC	IMA	5	00	PC	w	s	3	00	FM	2	00	RO
3473	3473	RO	IMA	5	00	RO	w	v	3	00	PC	2	00	FM
3474	3464	FM	IMA	6	00	FM	k	j	2	00	RU	2	00	PC
3475	3465	FM	IMA	5	00	FM	k	s	3	00	RO	2	00	PC
3476	3476	RO	IMA	5	00	RO	k	v	3	00	FM	2	00	PC
3477	3467	RU	IMA	7	00	RU	s		3	00	FM			
3478	3468	FM	IMA	6	00	FM	j		4	00	RU			
3491	3491	OW	IMA	10	00	OW								
3492	3492	WE	IMA	10	00	WE	d	y						
3493	3493	FC	IMA	10	00	FC								
3494	3494	PA	IMA	10	00	PA								
3495	3495	BR	IMA	10	00	BR								
3496	3496	DL	IMA	10	00	DL								
3498	3498	AV	IMA	10	00	AV								

**BGC Unit: AT****LMES Zone ID: 35****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	9,351.8	0.45%
Williams Lake TSA	14,061.3	0.29%
100 Mile House TSA	0.0	0.00%
Cariboo Region	23,413.1	0.28%

**List of Site Series Codes Defined for use in AT**

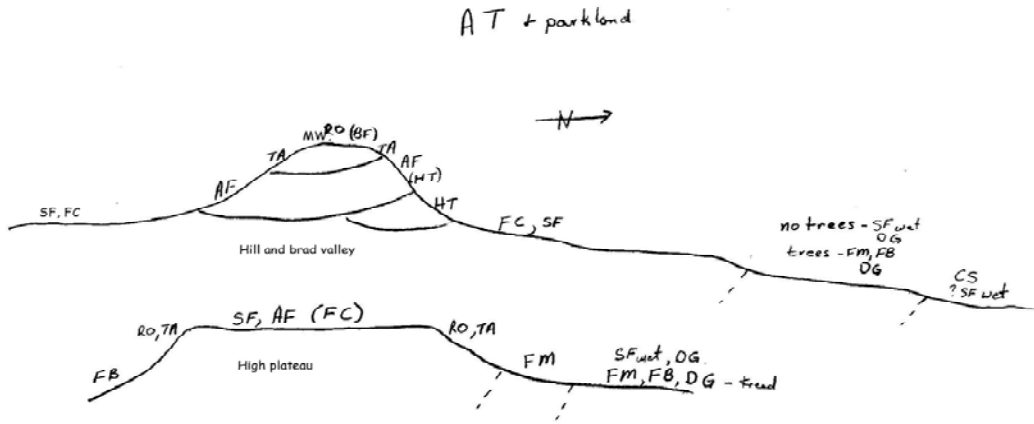
<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
00	AF	White mountain-avens - Altai fescue grassland	very xeric - submesic	We used this for Dry Tundra - heathers and avens-fescue, thin
00	CS	Cottongrass - Sedge - Sphagnum fen	subhygric - hydric	We used this for wet level hollows with no trees and grass/sedge
00	DG	unknown		We used this for gentle wet hollows with some thin krumholz
00	FB	Subalpine fir - Five-leaved bramble	submesic	We used this for thin krumholz on gentle warm SW slopes
00	FC	Altai fescue - Cladonia grassland	subxeric - mesic	We used this for sparse grasses and herbs, plateaus and gentle crest to mid slopes
00	FM	Krumholtz - clumped B-layer trees on gentle cool NE slopes		We used this for thin krumholz on gentle cool NE slopes
00	HT	Heather - Mountain sageword tundra	mesic	We used this for heathers and grass at base of talus slopes
00	SF	Scrub birch - Altai fescue shrub steppe	xeric - submesic	We used this for scrub birch, Plateaus and gentle slopes < 20%
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	BR	Non-productive Brush		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2005. Codes were taken from the Itcha-Ilgachuz TEM.

**Please Note:** The AT was a BGC Zone at the time that the original Quesnel PEM was completed in 2005. The AT was later subdivided to recognize two new BGC Units in the alpine (BAFA) and subalpine (ESSF xvp). We elected not to redo the PEM for the original Quesnel map area using a revised and updated version of the Big BEC and revised KB rules for BAFA and ESSF xvp. The PEM was re-run using the new zones and KB rules but it was decided that the results obtained for the AT Zone for the initial Quesnel PEM mapping were preferable. The area mapped as AT within the original Quesnel PEM area can be considered as a separate classification zone within the larger extent of the BAFA Zone. The AT area has its own set of KB rules and its own set of PEM entities but these are comparable to the entities defined for the BAFA.

**Landscape Profile Diagram: AT**



**Example Attribute Class Rule File for AT (arule3530)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	relzfile	Z2St	Hi_Ridge	4	60.00	60.00	60.00	50.00	999.00	10
2	relzfile	Z2St	Low_Knoll	5	90.00	90.00	90.00	0.00	100.00	10
3	relzfile	Z2St	Above_Base	4	20.00	20.00	20.00	15.00	999.00	5
4	relzfile	Z2St	Near_Base	5	15.00	15.00	15.00	0.00	20.00	5
5	relzfile	PCTZ2ST	Crest2Mid	4	60.00	60.00	60.00	50.00	100.00	10
6	relzfile	PCTZ2ST	Crest2Low	4	30.00	30.00	50.00	25.00	85.00	35
7	relzfile	PCTZ2ST	Up2Low	1	40.00	40.00	40.00	10.00	70.00	30
8	formfile	LNQAREA	Valley	4	12.00	12.00	12.00	11.50	50.00	0.5
9	formfile	QWETI	Rel_Dry	5	9.50	9.50	9.50	0.00	10.00	0.5
10	formfile	QWETI	Moist	1	11.00	11.00	11.00	9.00	13.00	2
11	formfile	QWETI	Wet	4	13.00	13.00	13.00	12.50	99.00	0.5
12	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
13	formfile	SLOPE	SlopeLT05	5	2.00	2.00	2.00	0.00	3.00	1
14	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
15	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	25.00	5
16	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
17	formfile	SLOPE	SlopeGT05	4	6.00	6.00	6.00	5.00	100.00	1
18	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
19	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	100.00	1
20	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
21	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	5
22	geofile	B3	Treed	5	75.00	75.00	75.00	0.00	80.00	5
23	geofile	B3	Low_Brush	1	110.00	110.00	110.00	80.00	140.00	30
24	geofile	B3	Grassed	1	175.00	175.00	175.00	140.00	210.00	35
25	geofile	B3	Bare	4	215.00	215.00	215.00	210.00	255.00	5

## Example Fuzzy Ecological Class Rule File for AT (crule3530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
R3512AF	Crest2Mid	20	1	3512	AF Nearly Bare - Dry Tundra	LK3540FB	Crest2Mid	20	12	3540	FB Krumholz - Clumped Trees
R3512AF	SlopeLT20	30	1	3512	Gently Sloping Plateaus	LK3540FB	SlopeLT20	30	12	3540	Gentle SW Upper Slopes < 20%
R3512AF	Bare	20	1	3512	Gentle Upper Slopes < 20%	LK3540FB	SW_Aspect	10	12	3540	Warm Aspects
R3512AF	Hi_Ridge	10	1	3512		LK3540FB	Treed	20	12	3540	
R3512AF	Above_Base	10	1	3512		LK3540FB	Low_Knoll	10	12	3540	
R3512AF	Rel_Dry	10	1	3512		LK3540FB	Above_Base	10	12	3540	
R3522FC	Crest2Mid	20	2	3522	FC Sparse Grass - Few Trees	LK3540FB	Rel_Dry	10	12	3540	
R3522FC	SlopeLT20	30	2	3522	Gently Sloping Plateaus	LK3541FM	Crest2Mid	20	13	3541	FM Krumholz - Clumped Trees
R3522FC	Grassed	20	2	3522	Gentle Upper Slopes < 20%	LK3541FM	SlopeLT20	30	13	3541	Gentle NE Upper Slopes < 20%
R3522FC	Hi_Ridge	10	2	3522		LK3541FM	NE_Aspect	10	13	3541	Cool Aspects
R3522FC	Above_Base	10	2	3522		LK3541FM	Treed	20	13	3541	
R3522FC	Rel_Dry	10	2	3522		LK3541FM	Low_Knoll	10	13	3541	
R3532SF	Crest2Mid	20	3	3532	SF Scrub Brich - Scrub Steppe	LK3541FM	Above_Base	10	13	3541	
R3532SF	SlopeLT20	30	3	3532	Gently Sloping Plateaus	LK3541FM	Rel_Dry	10	13	3541	
R3532SF	Low_Brush	20	3	3532	Gentle Upper Slopes < 20%	MS3524HT	Up2Low	20	14	3524	
R3532SF	Hi_Ridge	10	3	3532		MS3524HT	SlopeLT20	30	14	3524	HT Mesic Heather Tundra
R3532SF	Above_Base	10	3	3532		MS3524HT	Grassed	20	14	3524	Gentle Slopes below Talus
R3532SF	Rel_Dry	10	3	3532		MS3524HT	Low_Knoll	10	14	3524	
SW3513RO	Crest2Low	20	4	3513	RO Nearly Bare - Rock-Tundra	MS3524HT	Above_Base	10	14	3524	
SW3513RO	Steep	30	4	3513	Steep Warm SW Slopes > 30%	MS3524HT	Rel_Dry	10	14	3524	
SW3513RO	SW_Aspect	10	4	3513	Some dry tundra	MS3531SF	Up2Low	20	15	3531	SF Scrub Brich - Scrub Steppe
SW3513RO	Bare	10	4	3513		MS3531SF	SlopeLT20	30	15	3531	Gentle Upper Slopes < 20%
SW3513RO	Hi_Ridge	10	4	3513		MS3531SF	Low_Brush	20	15	3531	Low Bushes and Shrubs
SW3513RO	Above_Base	10	4	3513		MS3531SF	Low_Knoll	10	15	3531	
SW3513RO	Rel_Dry	10	4	3513		MS3531SF	Above_Base	10	15	3531	
SW3523AF	Crest2Low	20	5	3523	RO Nearly Bare - Rock-Grass	MS3531SF	Rel_Dry	10	15	3531	
SW3523AF	Steep	30	5	3523	Steep Warm SW Slopes > 30%	MS3540FB	Up2Low	20	16	3540	FB Krumholz - Clumped Trees
SW3523AF	SW_Aspect	10	5	3523	Some scrub birch and grasses	MS3540FB	SlopeLT20	30	16	3540	Gentle SW Upper Slopes < 20%
SW3523AF	Low_Brush	10	5	3523		MS3540FB	SW_Aspect	10	16	3540	Warm Aspects
SW3523AF	Hi_Ridge	10	5	3523		MS3540FB	Treed	20	16	3540	
SW3523AF	Above_Base	10	5	3523		MS3540FB	Low_Knoll	10	16	3540	
SW3523AF	Rel_Dry	10	5	3523		MS3540FB	Above_Base	10	16	3540	
SW3543FB	Crest2Low	20	6	3543	RO Nearly Bare - Rock-Krumholz	MS3540FB	Rel_Dry	10	16	3540	
SW3543FB	Steep	30	6	3543	Steep Warm SW Slopes > 30%	MS3541FM	Up2Low	20	17	3541	FM Krumholz - Clumped Trees
SW3543FB	SW_Aspect	10	6	3543	Some clumped trees & brush	MS3541FM	SlopeLT20	30	17	3541	Gentle NE Upper Slopes < 20%
SW3543FB	Treed	10	6	3543		MS3541FM	NE_Aspect	10	17	3541	Cool Aspects
SW3543FB	Hi_Ridge	10	6	3543		MS3541FM	Treed	20	17	3541	
SW3543FB	Above_Base	10	6	3543		MS3541FM	Low_Knoll	10	17	3541	
SW3543FB	Rel_Dry	10	6	3543		MS3541FM	Above_Base	10	17	3541	
NE3515TA	Crest2Low	20	7	3515	TA Nearly Bare -Talus Slopes	MS3541FM	Rel_Dry	10	17	3541	
NE3515TA	Steep	30	7	3515	Steep Cool NE Slopes > 30%	LS3527SF	Up2Low	20	18	3537	SF-wet Scrub Brich - Moister
NE3515TA	NE_Aspect	10	7	3515	Some dry tundra	LS3527SF	SlopeLT20	30	18	3537	Gentle Low-Toe Slopes < 20%
NE3515TA	Bare	10	7	3515		LS3527SF	Grassed	20	18	3537	Low Bushes and Shrubs
NE3515TA	Hi_Ridge	10	7	3515		LS3527SF	Low_Knoll	10	18	3537	Slightly Moister conditions
NE3515TA	Above_Base	10	7	3515		LS3527SF	Above_Base	10	18	3537	
NE3515TA	Rel_Dry	10	7	3515		LS3527SF	Moist	10	18	3537	
NE3525AF	Crest2Low	20	8	3525	TA Nearly Bare -Talus Slopes	LS3537SF	Up2Low	20	19	3537	SF-wet Scrub Brich - Moister
NE3525AF	Steep	30	8	3525	Steep Cool NE Slopes > 30%	LS3537SF	SlopeLT20	30	19	3537	Gentle Low-Toe Slopes < 20%
NE3525AF	NE_Aspect	10	8	3525	Some scrub birch and grasses	LS3537SF	Low_Brush	20	19	3537	Low Bushes and Shrubs
NE3525AF	Low_Brush	10	8	3525		LS3537SF	Low_Knoll	10	19	3537	Slightly Moister conditions
NE3525AF	Hi_Ridge	10	8	3525		LS3537SF	Above_Base	10	19	3537	
NE3525AF	Above_Base	10	8	3525		LS3537SF	Moist	10	19	3537	
NE3525AF	Rel_Dry	10	8	3525		LS3540FB	Up2Low	20	20	3540	FB Krumholz - Clumped Trees
NE3525FM	Crest2Low	20	9	3545	TA Nearly Bare -Talus Slopes	LS3540FB	SlopeLT20	30	20	3540	Gentle SW Upper Slopes < 20%
NE3525FM	Steep	30	9	3545	Steep Cool NE Slopes > 30%	LS3540FB	SW_Aspect	10	20	3540	Warm Aspects
NE3525FM	NE_Aspect	10	9	3545	Some clumped trees & brush	LS3540FB	Treed	20	20	3540	
NE3525FM	Treed	10	9	3545		LS3540FB	Low_Knoll	10	20	3540	
NE3525FM	Hi_Ridge	10	9	3545		LS3540FB	Above_Base	10	20	3540	
NE3525FM	Above_Base	10	9	3545		LS3540FB	Moist	10	20	3540	
NE3525FM	Rel_Dry	10	9	3545		LS3541FM	Up2Low	20	21	3541	FM Krumholz - Clumped Trees
LK3521FC	Crest2Mid	20	10	3521	FC Sparse Grass - Few Trees	LS3541FM	SlopeLT20	30	21	3541	Gentle NE Upper Slopes < 20%
LK3521FC	SlopeLT20	30	10	3521	Gentle Upper Slopes < 20%	LS3541FM	NE_Aspect	10	21	3541	Cool Aspects
LK3521FC	Grassed	20	10	3521	Thin ground cover	LS3541FM	Treed	20	21	3541	
LK3521FC	Low_Knoll	10	10	3521		LS3541FM	Low_Knoll	10	21	3541	
LK3521FC	Above_Base	10	10	3521		LS3541FM	Above_Base	10	21	3541	
LK3521FC	Rel_Dry	10	10	3521		LS3541FM	Moist	10	21	3541	
LK3531SF	Crest2Mid	20	11	3531	SF Scrub Brich - Scrub Steppe	DE3528CS	Valley	20	22	3528	CS - Forbs and Grass in Hollow
LK3531SF	SlopeLT20	30	11	3531	Gentle Upper Slopes < 20%	DE3528CS	SlopeLT10	30	22	3528	Level < 10% Wet Hollows
LK3531SF	Low_Brush	20	11	3531	Low Bushes and Shrubs	DE3528CS	Grassed	20	22	3528	No trees or brush visible
LK3531SF	Low_Knoll	10	11	3531		DE3528CS	Low_Knoll	10	22	3528	
LK3531SF	Above_Base	10	11	3531		DE3528CS	Near_Base	10	22	3528	
LK3531SF	Rel_Dry	10	11	3531		DE3528CS	Wet	10	22	3528	
DE3548DG	Valley	20	23	3548	DG Clumped Trees in Hollow	DE3548DG	SlopeLT10	30	23	3548	Level < 10% Wet Hollows
DE3548DG	SlopeLT10	30	23	3548	Level < 10% Wet Hollows	DE3548DG	Treed	20	23	3548	Clumped trees, grass & forbs
DE3548DG	Treed	20	23	3548	Clumped trees, grass & forbs	DE3548DG	Low_Knoll	10	23	3548	
DE3548DG	Low_Knoll	10	23	3548		DE3548DG	Near_Base	10	23	3548	
DE3548DG	Near_Base	10	23	3548		DE3548DG	Wet	10	23	3548	



**PEM Entity Descriptions for: AT**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3512	AT un	00	AF	s		3512 areas were mapped on gentle slopes in upper landform positions (Plateaus) that had little or no observable vegetation (e.g. bare soils). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated avens-fescue or heather dominated
3513	AT un	00	RO	w	v	3513 areas were mapped on steep SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A gentle to steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect
3515	AT un	00	TA	k	v	3515 areas were mapped on steep NE facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). Angular rock fragments of any size accumulate at the foot of steep rock slopes as a result of successive rock falls. It is a type of colluvium. Cool aspect. BF (block fields, 0-70% slopes with cool aspects) is another possibility for these sites. They would also have little observable vegetation.
3521	AT un	00	FC	j	d	3521 areas were mapped on gentle slopes (< 20%) in mid to crest landform positions associated with lower rises and knolls that appeared to possess a moderate to sparse ground cover of grasses and herbs. Gentle slopes, deep, medium textured soils, various herbs and well-developed moss layer
3522	AT un	00	FC	j	d	3522 areas were mapped on gentle slopes in upper landform positions (Plateaus) that appeared to have continuous grassland vegetation with few observable trees or low bushes. Gentle slopes, deep, medium textured soils, various herbs and well-developed moss layer
3523	AT un	00	RO	w	v	3523 areas were mapped on steep SW facing cliffs and hillsides that appeared to have continuous grassland vegetation with few observable trees or low bushes. A steep, bedrock escarpment or outcropping, with little soil development and sparse grassland vegetative cover. Warm aspect
3524	AT un	00	HT	j	d	3524 areas were mapped on gentle to moderate slopes (<20%) usually located at the base of steep cliffs or talus slopes that appeared to possess a moderate to sparse ground cover of grasses and herbs. Level to gentle slopes, deep medium textured soils, common on the poorer bedrock types, mesic heather tundra. The HT is also located in nivation hollows and depressions. These tend to be late-lying snow areas therefore the heathers.
3525	AT un	00	TA	k	v	3525 areas were mapped on steep NE facing cliffs and hillsides that appeared to have continuous grassland vegetation with few observable trees or low bushes. A steep, bedrock escarpment or outcropping, with little soil development and sparse grassland vegetative cover. Angular rock fragments of any size accumulate at the foot of steep rock slopes as a result of successive rock falls. It is a type of colluvium. Cool aspect. BF (block fields, 0-70% slopes with cool aspects) is another possibility for these sites.
3528	AT un	00	CS	p	j	3528 areas were mapped in level to depressional areas in hollows and draws that appeared to lack a cover of trees or brush. organic blanket
3531	AT un	00	SF	j	d	3531 areas were mapped on gentle slopes (< 20%) in mid to crest landform positions associated with lower rises and knolls that appeared to possess a moderate to sparse ground cover of low bushes and shrubs (scrub birch). Gentle slopes, deep, medium textured soils, shrub-steppe, well-developed moss layer
3532	AT un	00	SF	j	d	3532 areas were mapped on gentle slopes in upper landform positions (Plateaus) that appeared to have a ground cover of low bushes and shrubs (scrub birch). Gentle slopes, deep, medium textured soils, shrub-steppe, well-developed moss layer

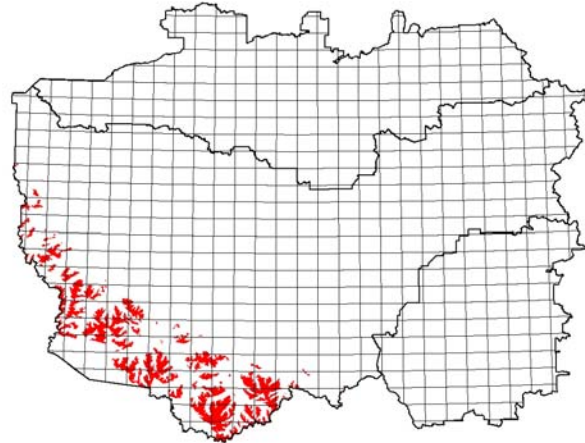
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3537	AT un	00	SF	y	j	3537 areas were mapped in lower to toe slope positions that appeared to be slightly moister than normal and to possess a moderate to sparse ground cover of low bushes and shrubs (scrub birch). 3537 areas are meant to capture the concept of a slightly wetter alpine shrub land proposed by the Regional Ecologist and currently termed SF-wet. Gentle slopes, deep, medium textured soils, shrub-steppe, well-developed moss layer
3540	AT un	00	FB	w	j	3540 areas were mapped on gentle SW facing slopes (<20%) in mid to crest landform positions associated with lower rises and knolls that appeared to possess a ground cover consisting of clumped trees (krumholz) interspersed with grasses and forbs. Clumped B layer trees with Festalt, Vaccsco, Artenor, and Cladonias; generally on warm aspects
3541	AT un	00	FM	k	j	3541 areas were mapped on gentle NE facing slopes (<20%) in mid to crest landform positions associated with lower rises and knolls that appeared to possess a ground cover consisting of clumped trees (krumholz) interspersed with grasses and forbs. Clumped B layer trees with heather understory; generally on cool aspects
3543	AT un	00	RO	w	v	3543 areas were mapped on steep SW facing cliffs and hillsides that appeared to possess a ground cover consisting of clumped trees (krumholz) interspersed with grasses and forbs. Clumped B layer trees with heather understory; generally on warm aspects. A steep, bedrock escarpment or outcropping, with little soil development and thin krumholz vegetative cover. Warm aspect
3545	AT un	00	TA	k	v	3545 areas were mapped on steep NE facing cliffs and hillsides that appeared to possess a ground cover consisting of clumped trees (krumholz) interspersed with grasses and forbs. Clumped B layer trees with heather understory; generally on warm aspects. A steep, bedrock escarpment or outcropping, with little soil development and thin krumholz vegetative cover. Angular rock fragments of any size accumulate at the foot of steep rock slopes as a result of successive rock falls. It is a type of colluvium. Cool aspect. BF (block fields, 0-70% slopes with cool aspects) is another possibility for these sites.
3548	AT un	00	DG	j	d	3548 areas were mapped in level to depressional areas in hollows and draws that appeared to possess a ground cover consisting of clumped trees (krumholz) interspersed with grasses and forbs. These are non-forested wetlands.
3591	AT un	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
3592	AT un	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
3593	AT un	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
3594	AT un	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures. No areas of 3594 were mapped in the AT
3595	AT un	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
3596	AT un	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series. No areas of 3596 were mapped in the AT
3598	AT un	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: AT**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3512	3512	AF	AT un	10	00	AF	s							
3513	3513	RO	AT un	10	00	RO	w	v						
3515	3525	TA	AT un	10	00	TA	k	v						
3521	3521	FC	AT un	10	00	FC	j	d						
3522	3522	FC	AT un	10	00	FC	j	d						
3523	3523	RO	AT un	10	00	RO	w	v						
3524	3524	HT	AT un	10	00	HT	j	d						
3525	3525	TA	AT un	10	00	TA	k	v						
3528	3528	CS	AT un	10	00	CS	p	j						
3531	3531	SF	AT un	10	00	SF	j	d						
3532	3532	SF	AT un	10	00	SF	j	d						
3537	3537	SF	AT un	10	00	SF	y	j						
3540	3540	FB	AT un	10	00	FB	w	j						
3541	3541	FM	AT un	10	00	FM	k	j						
3543	3543	RO	AT un	10	00	RO	w	v						
3545	3545	TA	AT un	10	00	TA	k	v						
3548	3548	DG	AT un	10	00	DG	j	d						
3591	3591	OW	AT un	10	00	OW								
3592	3592	WE	AT un	10	00	WE								
3593	3593	ME	AT un	10	00	ME								
3594	3594	PA	AT un	10	00	PA								
3595	3595	BR	AT un	10	00	BR								
3596	3596	DL	AT un	10	00	DL								
3598	3598	AV	AT un	10	00	AV								

**BGC Unit: BAFA****LMES Zone ID: 36****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	257,350.4	5.22%
100 Mile House TSA	0.0	0.00%
Cariboo Region	257,350.4	3.12%

**List of Site Series Codes Defined for use in BAFA**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
00	AF	White mountain-avens - Altai fescue grassland	very xeric - submesic	Dry Tundra, Very thin dry ground cover. Almost bare.
00	CS	Cottongrass - Sedge - Sphagnum fen	subhygric - hydric	Bare to sparsely vegetated hollows and rocky chutes
00	DG	unknown		Moist gullies and chutes with more vigorous brush vegetation
00	FC	Altai fescue - Cladonia grassland	subxeric - mesic	More vigorous vegetation, thicker ground cover, Grass with brush
00	HT	Heather - Mountain sageword tundra	mesic	Steep NE slopes with some vegetative cover, purple colors on LS7
00	PC	Pa - Crowberry krummholz	xeric - submesic	Thin clumped b-layer trees, krummholz, Mostly cool, dry NE slopes
00	SF	Scrub birch - Altai fescue shrub steppe	xeric - submesic	Scrub birch and scattered clumped trees with grass and forb cover
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007. Codes are collected from several different BGC Units Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the BAFA once a new classification of alpine and sub-alpine areas is published.

**Landscape Profile Diagram: BAFA**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for BAFA (arule3631)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT15	4	15.50	15.00	99.00	15.00	99.00	0.5
14	formfile	SLOPE	SlopeLT15	5	14.50	0.00	15.00	0.00	15.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

**Example Fuzzy Ecological Class Rule File for BAFA (crule3631)**

<u>f_name</u>	<u>fuzattr</u>	<u>attrwt</u>	<u>facet_no</u>	<u>f_code</u>	<u>Predicts</u>	<u>f_name</u>	<u>fuzattr</u>	<u>attrwt</u>	<u>facet_no</u>	<u>f_code</u>	<u>Predicts</u>
SH3630r	Crest	35	1	3630	AF Sparse Dry Tundra	SH3634ne	Up2Low	35	5	3634	SF Meadow- Brush Transition
SH3630r	Dry_WI	35	1	3630	Ridge Crest	SH3634ne	Dry2Med_WI	35	5	3634	< 30% NE Slope
SH3630r	SlopeLT20	20	1	3630		SH3634ne	SlopeLT30	20	5	3634	
SH3630r	Hi_Ridge	10	1	3630		SH3634ne	NE_Aspect	10	5	3634	
SH3631sw	Up2Low	35	2	3631	SF Meadow- Brush Transition	SH3635ne	Up2Low	35	6	3635	SF Meadow- Brush Transition
SH3631sw	Dry2Med_WI	35	2	3631	< 30% SW Slope	SH3635ne	Dry2Med_WI	35	6	3635	30-45% NE Slope
SH3631sw	SlopeLT30	20	2	3631		SH3635ne	SlopeLT45	10	6	3635	
SH3631sw	SW_Aspect	10	2	3631		SH3635ne	SlopeGT30	10	6	3635	
SH3632sw	Up2Low	35	3	3632	SF Meadow- Brush Transition	SH3635ne	NE_Aspect	10	6	3635	
SH3632sw	Dry2Med_WI	35	3	3632	30-45% SW Slope	SH3636ne	Up2Low	35	7	3636	RO Thin Grass and Rock
SH3632sw	SlopeLT45	10	3	3632		SH3636ne	Dry2Med_WI	35	7	3636	> 45% NE Slope
SH3632sw	SlopeGT30	10	3	3632		SH3636ne	Steep	20	7	3636	
SH3632sw	SW_Aspect	10	3	3632		SH3636ne	NE_Aspect	10	7	3636	
SH3633sw	Up2Low	35	4	3633	RO Thin Grass and Rock	SH3637st	Hollow	35	8	3637	CS Rocky Rubbly Wet Chute
SH3633sw	Dry2Med_WI	35	4	3633	> 45% SW Slope	SH3637st	Wet2V_Wet	35	8	3637	Sloping > 5%
SH3633sw	Steep	20	4	3633		SH3637st	SlopeGT15	30	8	3637	
SH3633sw	SW_Aspect	10	4	3633		SH3638lv	Hollow	35	9	3638	CS Forb - Brush Transition
						SH3638lv	Wet2V_Wet	35	9	3638	Wet, Level Hollow< 5%
						SH3638lv	SlopeLT15	30	9	3638	

**PEM Entity Descriptions for: BAFA**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3600	BAFA	00	RO	r	s	3600 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
3601	BAFA	00	AF	s	j	3601 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, warm aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
3602	BAFA	00	AF	w	s	3602 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3602 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
3603	BAFA	00	RO	w	v	3603 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. Rubble or scree.
3604	BAFA	00	AF	s	j	3604 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, Cool aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
3605	BAFA	00	FC	k	s	3605 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3605 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
3606	BAFA	00	RO	k	v	3606 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. Rubble and scree.
3607	BAFA	00	CS	s	y	3607 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 00). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
3608	BAFA	00	CS	s	y	3608 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 00). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
3610	BAFA	00	RO	r	s	3610 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
3611	BAFA	00	FC	s	j	3611 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3612	BAFA	00	FC	w	s	3612 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3622 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, warm aspect, medium textured shallow soils, and thin dry tundra.
3613	BAFA	00	RO	w	v	3613 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
3614	BAFA	00	FC	s	j	3614 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
3615	BAFA	00	FC	k	s	3615 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3625 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, and thin dry tundra.
3616	BAFA	00	RO	k	v	3616 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
3617	BAFA	00	CS	s	y	3617 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
3618	BAFA	00	CS	s	y	3618 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
3620	BAFA	00	RO	r	s	3620 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
3621	BAFA	00	AF	s	j	3621 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
3622	BAFA	00	AF	w	s	3622 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 3622 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
3623	BAFA	00	RO	w	v	3623 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
3624	BAFA	00	AF	s	j	3624 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3625	BAFA	00	FC	k	s	3625 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 3625 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
3626	BAFA	00	RO	k	v	3626 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
3627	BAFA	00	CS	s	y	3627 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes with some minor forbs and willow.
3628	BAFA	00	CS	s	y	3628 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a minor cover of forbs and willows.
3630	BAFA	00	AF	r	s	3630 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 3630 areas are transition areas from dry tundra to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition vegetation. Shallow crests.
3631	BAFA	00	SF	s	j	3631 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 3631 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
3632	BAFA	00	SF	w	s	3632 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by a dry tundra vegetation. 3632 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
3633	BAFA	00	RO	w	v	3633 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.
3634	BAFA	00	SF	s	j	3634 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 3634 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
3635	BAFA	00	SF	k	s	3635 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by a dry tundra vegetation. 3635 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
3636	BAFA	00	RO	k	v	3636 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3636 areas appear to be covered by a mixture bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3637	BAFA	00	CS	s	y	3637 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
3638	BAFA	00	CS	s	y	3638 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
3640	BAFA	00	SF	r	s	3640 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 3640 areas are transition areas from dry tundra to sparse parkland. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition. Shallow crests.
3641	BAFA	00	FC	s	j	3641 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
3642	BAFA	00	FC	w	s	3642 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
3643	BAFA	00	FC	w	v	3643 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on warm aspects.
3644	BAFA	00	PC	s	j	3644 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on cold aspects.
3645	BAFA	00	PC	k	s	3645 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting sparse parkland vegetation; generally on cold aspects.
3646	BAFA	00	PC	k	v	3646 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on cold aspects.
3647	BAFA	00	PC	s	y	3647 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasing ground cover of sparse stunted trees; (class 40). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas transitional to sparse parkland ground cover.
3648	BAFA	00	PC	s	y	3648 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasing ground cover of sparse stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet brushy gullies.
3651	BAFA	00	RO	r	s	3651 areas were mapped in areas characterized by a mixture of bare rock, rubble, snow and ice that does not appear to be permanent snow or glacier ice. Some 3651 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 3651 areas mainly occur adjacent to the edges of glaciers and do not appear to have any significant vegetative ground cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3652	BAFA	00	GL	s		3652 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 3652 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 3652 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
3653	BAFA	00	GL	r	s	3653 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N, NW or NE facing slopes. 3653 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
3654	BAFA	00	GL			3654 areas were mapped to enclose the cores of what appear to be permanent glaciers. 3654 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery. Most 3654 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
3660	BAFA	00	PC	r	s	3660 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a continuous cover of stunted trees. Crest positions, gentle slopes, medium textured shallow soils, continuous stunted tree cover. Shallow crests.
3661	BAFA	00	FC	s	j	3661 areas were mapped on gentle (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
3662	BAFA	00	FC	w	s	3662 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
3663	BAFA	00	FC	w	v	3663 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
3664	BAFA	00	PC	s	j	3664 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
3665	BAFA	00	PC	k	s	3665 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
3666	BAFA	00	PC	k	v	3666 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
3667	BAFA	00	RU	s	y	3667 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a sparse parkland stunted tree cover. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
3668	BAFA	00	DG	s	y	3668 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3670	BAFA	00	RO	r	s	3670 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine.. Crest positions, gentle slopes, medium textured shallow soils, sparse parkland stunted tree cover; Shallow crests.
3671	BAFA	00	FC	s	j	3671 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 3671 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
3672	BAFA	00	FC	w	s	3672 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows but may also contain sparse parkland stunted trees. Very little 3672 occurs in the alpine and most of it appears to be most closely associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp
3673	BAFA	00	FC	w	v	3673 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus.
3674	BAFA	00	HT	s	j	3674 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 3674 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
3675	BAFA	00	HT	k	s	3675 areas were mapped on moderate to steep slopes (30-45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 3675 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
3676	BAFA	00	RO	k	v	3676 areas were mapped on very steep slopes (> 45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on N and W exposures consist of mainly of bare rock, rubble, scree and talus.
3677	BAFA	00	DG	s	y	3677 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
3678	BAFA	00	DG	s	y	3678 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.
3691	BAFA	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3692	BAFA	00	GW	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
3693	BAFA	00	FC			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer. No 3693 areas were permitted to occur in the Cariboo PEM area. We elected to predict meadow classes ourselves instead of using the manual exception mapping.
3694	BAFA	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures. . No 3694 areas were permitted to occur in the Cariboo PEM area.
3695	BAFA	00	BR			These areas were mapped visually as areas of scrub brush. No 3695 areas were permitted to occur in the Cariboo PEM area. We elected to predict brush areas ourselves instead of using the manual exception mapping.
3696	BAFA	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series. No 3696 areas occur in the Cariboo PEM area
3697	BAFA	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
3698	BAFA	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

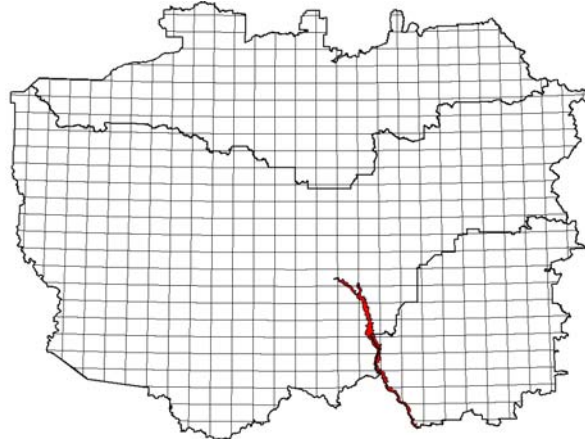
**PEM Entity Extended Legend with Proportions of Site Series for: BAFA**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3600	3610	RO	BAFA	6	00	RO	r	s	4	00	FC			
3601	3601	AF	BAFA	7	00	AF	s	j	3	00	RO			
3602	3602	AF	BAFA	6	00	AF	w	s	4	00	RO			
3603	3613	RO	BAFA	8	00	RO	w	v	2	00	FC			
3604	3604	AF	BAFA	7	00	AF	s	j	3	00	RO			
3605	3605	FC	BAFA	6	00	FC	k	s	4	00	RO			
3606	3616	RO	BAFA	6	00	RO	k	v	2	00	BF	2	00	FC
3607	3617	CS	BAFA	6	00	CS	s	y	4	00	RU			
3608	3618	CS	BAFA	6	00	CS	s	y	4	00	RU			
3610	3610	RO	BAFA	6	00	RO	r	s	4	00	FC			
3611	3611	FC	BAFA	7	00	FC	s	j	3	00	RO			
3612	3612	FC	BAFA	6	00	FC	w	s	4	00	RO			
3613	3613	RO	BAFA	8	00	RO	w	v	2	00	FC			
3614	3614	FC	BAFA	7	00	FC	s	j	3	00	RO			
3615	3615	FC	BAFA	6	00	FC	k	s	4	00	RO			
3616	3616	RO	BAFA	8	00	RO	k	v	2	00	FC			
3617	3617	CS	BAFA	6	00	CS	s	y	4	00	RU			
3618	3618	CS	BAFA	6	00	CS	s	y	4	00	RU			
3620	3620	RO	BAFA	6	00	RO	r	s	4	00	FC			
3621	3621	AF	BAFA	7	00	AF	s	j	3	00	RO			
3622	3622	AF	BAFA	6	00	AF	w	s	4	00	RO			
3623	3623	RO	BAFA	8	00	RO	w	v	2	00	FC			
3624	3624	AF	BAFA	7	00	AF	s	j	3	00	RO			
3625	3625	FC	BAFA	6	00	FC	k	s	4	00	RO			
3626	3626	RO	BAFA	6	00	RO	k	v	2	00	BF	2	00	FC
3627	3637	CS	BAFA	6	00	CS	s	y	4	00	RU			
3628	3638	CS	BAFA	6	00	CS	s	y	4	00	RU			
3630	3630	AF	BAFA	6	00	AF	r	s	4	00	RO			
3631	3631	SF	BAFA	7	00	SF	s	j	3	00	RO			
3632	3632	SF	BAFA	6	00	SF	w	s	4	00	RO			
3633	3633	RO	BAFA	8	00	RO	w	v	2	00	SF			
3634	3634	SF	BAFA	7	00	SF	s	j	3	00	RO			
3635	3635	SF	BAFA	6	00	SF	k	s	4	00	RO			
3636	3636	RO	BAFA	8	00	RO	k	v	2	00	SF			
3637	3637	CS	BAFA	6	00	CS	s	y	4	00	RU			
3638	3638	CS	BAFA	6	00	CS	s	y	4	00	RU			
3640	3640	SF	BAFA	6	00	SF	r	s	4	00	RO			
3641	3661	FC	BAFA	7	00	FC	s	j	3	00	RO			
3642	3662	FC	BAFA	6	00	FC	w	s	4	00	RO			
3643	3663	FC	BAFA	8	00	FC	w	v	2	00	SF			
3644	3664	PC	BAFA	7	00	PC	s	j	3	00	RO			
3645	3665	PC	BAFA	6	00	PC	k	s	4	00	SF			
3646	3666	PC	BAFA	8	00	PC	k	v	2	00	SF			
3647	3647	PC	BAFA	6	00	PC	s	y	4	00	RU			
3648	3648	PC	BAFA	6	00	PC	s	y	4	00	RU			
3651	3651	RO	BAFA	8	00	RO	r	s	2	00	AF			
3652	3652	GL	BAFA	8	00	GL	s		2	00	RO			
3653	3653	GL	BAFA	8	00	GL	r	s	2	00	RO			
3654	3654	GL	BAFA	10	00	GL								
3660	3660	PC	BAFA	6	00	PC	r	s	4	00	RO			
3661	3661	FC	BAFA	7	00	FC	s	j	3	00	RO			
3662	3662	FC	BAFA	6	00	FC	w	s	4	00	RO			
3663	3663	FC	BAFA	8	00	FC	w	v	2	00	SF			
3664	3664	PC	BAFA	7	00	PC	s	j	3	00	RO			
3665	3665	PC	BAFA	6	00	PC	k	s	4	00	SF			
3666	3666	PC	BAFA	8	00	PC	k	v	2	00	SF			

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3667	3667	RU	BAFA	6	00	RU	s	y	4	00	DG			
3668	3668	DG	BAFA	6	00	DG	s	y	4	00	RU			
3670	3670	RO	BAFA	6	00	RO	r	s	4	00	SF			
3671	3661	FC	BAFA	7	00	FC	s	j	3	00	RO			
3672	3662	FC	BAFA	8	00	FC	w	s	2	00	RO			
3673	3663	FC	BAFA	6	00	FC	w	v	4	00	RO			
3674	3674	HT	BAFA	7	00	HT	s	j	3	00	RO			
3675	3675	HT	BAFA	8	00	HT	k	s	2	00	SF			
3676	3676	RO	BAFA	6	00	RO	k	v	4	00	FM			
3677	3677	DG	BAFA	6	00	DG	s	y	4	00	RU			
3678	3668	DG	BAFA	6	00	DG	s	y	4	00	RU			
3691	3691	OW	BAFA	10	00	OW								
3692	3692	GW	BAFA	10	00	GW	d	y						
3693	3693	FC	BAFA	10	00	FC								
3694	3694	PA	BAFA	10	00	PA								
3695	3695	BR	BAFA	10	00	BR								
3696	3696	DL	BAFA	10	00	DL								
3697	3697	TA	BAFA	10	00	TA								
3698	3698	AV	BAFA	10	00	AV								

**BGC Unit: BG xh3****LMES Zone ID: 38****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	16,377.8	0.33%
100 Mile House TSA	10,945.3	0.89%
Cariboo Region	27,323.0	0.33%

**List of Site Series Codes Defined for use in BG xh3**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
Ro01	Ro01	Bluebunch wheatgrass – Sidewalk moss - Dry Rocky Outcrops and cliffs	xeric - subxeric	Grassland Areas - Shallow, Rubbly Talus, Dry Rocky Outcrops and Cliffs
Ro02	Ro02	Bluebunch wheatgrass – Selaginella - Dry Rocky Outcrops and cliffs	xeric - subxeric	Grassland Areas - Shallow, Rubbly Talus, Dry Rocky Outcrops and Cliffs
Rt01a	Rt01a	Saskatoon – Bluebunch wheatgrass	subxeric - mesic	Grassland areas - Shallow Rubbly Talus - Cool Aspect, Dry, Moderately Steep Talus NE
Rt01b	Rt01b	Saskatoon – Bluebunch wheatgrass	xeric - subxeric	Grassland areas - Shallow Rubbly Talus - Moderately Steep Talus on Warm SW
Gb02a	Gb02a	Big sagebrush – Bluebunch wheatgrass – Needle-and-thread grass cool aspect phase	xeric - subxeric	Grassland areas - Moderate, Cool and Neutral Aspects, Deep Soils
Gb02b	Gb02b	Big sagebrush – Bluebunch wheatgrass – Needle-and-thread grass warm phase	xeric - subxeric	Grassland areas - Dry, Hot, Steep SW-facing Slopes, Deep Soils
01	Gb01	Big sage - Bluebunch wheatgrass	submesic - mesic	Grassland areas - Zonal and other near mesic sites on level to moderate slopes.
01	Gb01	Big sage - Bluebunch wheatgrass	submesic - mesic	Grassland areas - Zonal and other near mesic sites Steep E and NW aspects
Gg01c	Gg01c	Bluebunch Wheatgrass – Junegrass	subxeric - mesic	Deep Steep NE Grassland
Gg04	Gg04	Needle-and-thread grass	submesic - mesic	Grassland areas - Gentle SE, S, SW and W facing slopes with deep fine sandy and loamy aeolian soils (Sand Dunes)
Gg06	Gg06	Rabbitbrush – Bluebunch wheatgrass - Selaginella	subhygric	Deep Steep NE Grassland
Gg07	Gg07	Sand dropseed – Needle-and-thread grass	subxeric - submesic	Grassland areas - Gentle and moderately sloping SE, S, SW and W facing slopes with deep sandy aeolian deposits (Sand Dunes)
Gg15	Gg15	Short-awned porcupinegrass - Small-flowered penstemon	subhygric	Grassland areas - Shallow, moist depressions on level to gently sloping
Gd01	Gd01	Wolf-willow - Giant wildrye	subhygric	Shrubland - Moist Seepage from Steep Slopes
Gd02	Gd02	Western snowberry - Prairie rose	subhygric	Shrubland - Shrubby, Moist Shallow Basins
Gd03	Gd03	Water birch - Rose	subhygric	Shrubland - Shrubby, Cool, Mid to Toe Slopes in deeply incised gullies
Wm04	Wm04	Wetland depressions	subhygric - hygric	Shrubland - Wet depressions
02		Interim Classification - No Alpha Codes Assigned	mesic - subhygric	Forested Sites - Steep Moist, NE Cool Aspects
03		Interim Classification - No Alpha Codes Assigned	mesic - subhygric	Forested Sites - Level to gently sloping valley bottoms and terraces
04		Interim Classification - No Alpha Codes Assigned	subhygric	Forested Sites - Moist shady, lower slopes and bottoms of steep-sided gullies.
05		Interim Classification - No Alpha Codes Assigned	subhygric - hygric	Forested Sites - Moist Middle Bench floodplain sites

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

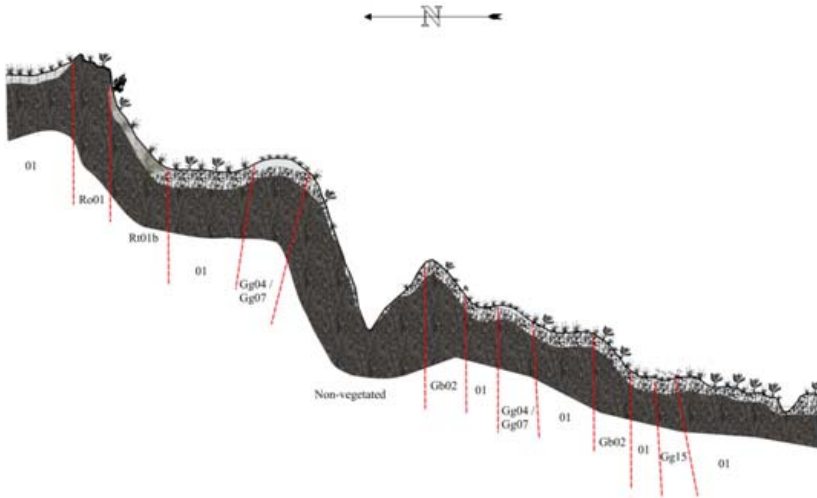
Codes and concepts are taken from a provisional, interim classification for the BG xh3 provided by the Regional Ecologist.



### Landscape Profile Diagram: BG xh3



BGxh3 Landscape Profile



### Example Attribute Class Rule File for BG xh3 (arule3820)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
5	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
6	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
7	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
8	formfile	QWETI	Dry2SIWet	1	7.50	5.50	9.50	5.50	9.50	2
9	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
10	formfile	QWETI	SL_Wet	1	9.70	8.80	10.60	8.80	10.60	0.9
11	formfile	QWETI	SLWet2Wet	1	11.25	112.50	11.25	10.25	12.25	1
12	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
13	formfile	SLOPE	Steep	4	40.00	40.00	40.00	40.00	100.00	1
14	formfile	SLOPE	SlopeLT05	5	4.00	5.00	5.00	0.00	5.00	1
15	formfile	SLOPE	SlopeLT15	5	14.00	0.00	10.00	0.00	15.00	1
16	formfile	SLOPE	SlopeLT20	5	19.00	0.00	20.00	0.00	20.00	1
17	formfile	SLOPE	SlopeLT40	5	39.00	40.00	40.00	0.00	40.00	1
18	formfile	SLOPE	SlopeLT45	5	44.00	0.00	45.00	0.00	45.00	1
19	formfile	SLOPE	SlopeGT05	4	6.00	5.00	100.00	4.00	100.00	1
20	formfile	SLOPE	SlopeGT15	4	16.00	10.00	10.00	15.00	100.00	1
21	formfile	SLOPE	SlopeGT25	4	26.00	25.00	25.00	25.00	100.00	1
22	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
23	formfile	NEW_ASP	NNE_Aspect	1	90.00	90.00	90.00	66.00	112.00	22
24	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
25	formfile	NEW_ASP	NW_Aspect	1	23.00	23.00	23.00	0.00	45.00	22
26	formfile	NEW_ASP	SE_Aspect	1	158.00	158.00	158.00	135.00	180.00	22
27	formfile	PROF	Concave	5	-2.00	-2.00	-2.00	-100.00	-1.00	1
28	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
29	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
30	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
31	geofile	TEXTURE	Coarse	4	60.00	60.00	60.00	60.00	100.00	5
32	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
33	geofile	L2Wet	WetL_LT200	5	50.00	50.00	50.00	0.00	100.00	50
34	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
37	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for BG xh3 (crule3820)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
DG3880r	Crest	30	1	3880	Ro01 Grassland Shallow Crest	DG3881n	Crest2Low	30	12	3881	Rt01a Grass Shallow Mod NE
DG3880r	VDry	30	1	3880		DG3881n	Dry2SIWet	30	12	3881	
DG3880r	SlopeLT30	10	1	3880		DG3881n	NE_Aspect	10	12	3881	
DG3880r	Med2Crs	10	1	3880		DG3881n	SlopeLT40	10	12	3881	
DG3880r	Shallow	40	1	3880		DG3881n	SlopeGT25	10	12	3881	
DG3880r	Hi_Ridge	10	1	3880		DG3881n	Med2Crs	5	12	3881	
DG3808r	Crest	30	2	3808	Gb01 Grassland Deep Crest	DG3881n	Shallow	5	12	3881	
DG3808r	VDry	30	2	3808		DG3816n	Crest2Low	30	13	3816	Gb01 Grass Deep Mod NE
DG3808r	SlopeLT30	10	2	3808		DG3816n	Dry2SIWet	30	13	3816	
DG3808r	Med2Crs	10	2	3808		DG3816n	NE_Aspect	10	13	3816	
DG3808r	Deep	20	2	3808		DG3816n	SlopeLT40	10	13	3816	
DG3808r	Hi_Ridge	10	2	3808		DG3816n	SlopeGT25	10	13	3816	
DG3882s	Crest2Low	30	3	3882	Gb02b Grass Deep Steep SW	DG3816n	Med2Crs	5	13	3816	
DG3882s	Dry2SIWet	30	3	3882		DG3816n	Deep	5	13	3816	
DG3882s	Steep_SW	20	3	3882		DG3801s	Crest2Low	30	14	3801	Gb01 Grass Deep Gentle NE
DG3882s	Med2Crs	10	3	3882		DG3801s	Dry2SIWet	30	14	3801	
DG3882s	Deep	10	3	3882		DG3801s	NE_Aspect	10	14	3801	
DG3828s	Crest2Low	30	4	3871	Ro01 Grass Shallow Steep SW	DG3801s	SlopeLT20	20	14	3801	
DG3828s	Dry2SIWet	30	4	3871		DG3801s	Med2Crs	5	14	3801	
DG3828s	Steep_SW	20	4	3871		DG3801s	Deep	5	14	3801	
DG3828s	Med2Crs	10	4	3871		DG3817m	Up2Low	35	15	3817	Gb01 Grass, Deep Gentle Low
DG3828s	Shallow	10	4	3871		DG3817m	Dry2Med	25	15	3817	
DG3818s	Crest2Low	30	5	3818	Rt01b Grass Shallow Mod SW	DG3817m	SlopeLT20	20	15	3817	
DG3818s	Dry2SIWet	30	5	3818		DG3817m	Med2Crs	10	15	3817	
DG3818s	SW_Aspect	10	5	3818		DG3817m	Deep	10	15	3817	
DG3818s	SlopeLT40	10	5	3818		DG3815n	Low2Toe	30	16	3815	Gb01 Grass, < 15% Deep Toe NE
DG3818s	SlopeGT25	10	5	3818		DG3815n	SI_Wet	30	16	3815	
DG3818s	Med2Crs	5	5	3818		DG3815n	SlopeLT15	10	16	3815	
DG3818s	Shallow	5	5	3818		DG3815n	NE_Aspect	10	16	3815	
DG3810s	Crest2Low	30	6	3810	Gb01 Grassland Deep Mod SW	DG3815n	Med2Crs	5	16	3815	
DG3810s	Dry2SIWet	30	6	3810		DG3815n	Deep	5	16	3815	
DG3810s	SW_Aspect	10	6	3810		DG3851s	Low2Toe	30	17	3851	Gb01 Grass, < 15% Deep Toe SW
DG3810s	SlopeLT40	10	6	3810		DG3851s	SI_Wet	30	17	3851	
DG3810s	SlopeGT25	10	6	3810		DG3851s	SlopeLT15	10	17	3851	
DG3810s	Med2Crs	5	6	3810		DG3851s	SW_Aspect	10	17	3851	
DG3810s	Deep	5	6	3810		DG3851s	Med2Crs	5	17	3851	
DG3811s	Crest2Low	30	7	3811	Gb01 Grassland Deep Mod SW	DG3851s	Deep	5	17	3851	
DG3811s	Dry2SIWet	30	7	3811		DG3801t	Low2Toe	30	18	3800	Gb01 Grass, < 15% Deep Toe
DG3811s	SW_Aspect	10	7	3811		DG3801t	SI_Wet	30	18	3800	
DG3811s	SlopeLT20	20	7	3811		DG3801t	SlopeGT15	20	18	3800	
DG3811s	Med2Crs	5	7	3811		DG3801t	Med2Crs	10	18	3800	
DG3811s	Deep	5	7	3811		DG3801t	Deep	10	18	3800	
DG3861n	Crest2Low	30	8	3861	Ro01 Grass Shallow Steep NE	DG3886n	Toe	30	19	3886	Gb01 Grass, < 15% Deep Toe NE
DG3861n	Dry2SIWet	30	8	3861		DG3886n	SLWet2Wet	30	19	3886	
DG3861n	Steep_NE	20	8	3861		DG3886n	SlopeLT15	10	19	3886	
DG3861n	Med2Crs	10	8	3861		DG3886n	NE_Aspect	10	19	3886	
DG3861n	Shallow	10	8	3861		DG3886n	Med2Crs	5	19	3886	
DG3883nw	Crest2Low	30	9	3883	Gb01 Grass Deep Steep NW	DG3886n	Deep	5	19	3886	
DG3883nw	Dry2SIWet	30	9	3883		DG3886s	Toe	30	20	3886	Gb01 Grass, < 15% Deep Toe SW
DG3883nw	Steep	10	9	3883		DG3886s	SLWet2Wet	30	20	3886	
DG3883nw	NW_Aspect	10	9	3883		DG3886s	SlopeLT15	10	20	3886	
DG3883nw	Med2Crs	10	9	3883		DG3886s	SW_Aspect	10	20	3886	
DG3883nw	Deep	10	9	3883		DG3886s	Med2Crs	5	20	3886	
DG3883se	Crest2Low	30	10	3883	Gb01 Grass Deep Steep SE	DG3886s	Deep	5	20	3886	
DG3883se	Dry2SIWet	30	10	3883		DG3889v	Valley	30	21	3889	Gd03 Grass, Sloping Valley
DG3883se	Steep	10	10	3883		DG3889v	Wet2V_Wet	30	21	3889	Shrubby vegetation in Valley
DG3883se	SE_Aspect	10	10	3883		DG3889v	SlopeGT05	20	21	3889	
DG3883se	Med2Crs	10	10	3883		DG3889v	Med2Crs	10	21	3889	
DG3883se	Deep	10	10	3883		DG3889v	Deep	10	21	3889	
DG3838ne	Crest2Low	30	11	3872	Gg01c Grass Deep, Steep NNE	DG3888f	Valley	30	22	3888	Gd03 Grass, Flat Valley
DG3838ne	Dry2SIWet	30	11	3872		DG3888f	Wet2V_Wet	30	22	3888	Shrubby vegetation in Valley
DG3838ne	Steep	10	11	3872		DG3888f	SlopeLT05	20	22	3888	
DG3838ne	NNE_Aspect	10	11	3872		DG3888f	Medium	10	22	3888	
DG3838ne	Med2Crs	10	11	3872		DG3888f	Deep	10	22	3888	
DG3838ne	Deep	10	11	3872		DG3888m	WetZ_LT05	50	23	3877	Gd02, Grass, Wetland Margins
DG3888m	WetZ_LT05	50	23	3877		DG3888m	WetZ_LT200	50	23	3877	
DG3888s	Hi_Seep	80	24	3879	Gd03 Grass, Moist Seepage	DG3888s	Hi_Seep	80	24	3879	Gd03 Grass, Moist Seepage
DG3888s	Med2Crs	20	24	3879		DG3888s	Med2Crs	20	24	3879	
DG3887o	Organic	99	25	3887	WE Grass, Wet Depressions	DG3829d	Concave	50	26	3809	Gg15 Grass, Shallow Hollow
DG3829d	Concave	50	26	3809		DG3829d	SlopeLT05	59	26	3809	

**PEM Entity Descriptions for: BG xh3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3800	BG xh3	01	Gb 01	d	j	3800 was mapped in dry grassland areas on MODERATE lower to toe, slightly moist SW and NE SLOPES (> 15%) that WERE NOT mapped as shallow to bedrock. 3800 occurs ONLY on moderate (> 15%) lower to toe slopes with slightly steeper gradients and DEEP soils. 3800 areas only occur on moderate >15% slopes in areas that were not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3801	BG xh3	01	Gb 01	d	j	3801 was mapped on GENTLE NE SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock. 3801 occurs ONLY on gentle NE facing slopes with normal moisture conditions and DEEP soils. 3801 areas only occur on gentle <20% slopes in areas that are not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3805	BG xh3	02	Gd 02	j	y	3805 areas were mapped only in areas of dry grassland land cover. 3805 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. 3805 areas are predicted to be occupied by slightly moister site series such as Gd02. Gentle slope or depressional areas with deep, medium - textured soils.
3806	BG xh3	03	Gd 03			3806 areas were mapped in dissected brushy areas with recognized SEEPAGE. The concept of the seepage class was that it recognized areas that were moister than expected for the landscape position and environmental setting. These SEEPAGE areas are therefore predicted to contain mainly the slightly wetter than mesic Gd03 site series.
3808	BG xh3	01	Gb 01	d	x	3808 was mapped on deep dry ridges and crests in areas of dry grassland land cover. 3808 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 01 site series along with some potential inclusions of Ro01 site series.
3809	BG xh3	15	Gg 15	j	y	3809 areas were mapped only in areas of dry grassland land cover. 3809 areas occupy moist shallow depressions that occur as minor closed hollows in grassland areas. 3809 areas are predicted to be occupied by moist Gg15 site series. Gentle slope or depressional areas with deep, medium - textured soils.
3810	BG xh3	01	Gb 01	w		3810 was mapped on MODERATE SW SLOPES (25-40%) that WERE NOT mapped as shallow. 3810 occurs ONLY on moderate SW facing slopes with warm dry conditions and DEEP soils. 3810 areas only occur on moderate 25-40% slopes in areas that are not shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3811	BG xh3	01	Gb 01	d	j	3811 was mapped on GENTLE SW SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock. 3811 occurs ONLY on gentle SW facing slopes with normal moisture conditions and DEEP soils. 3811 areas only occur on gentle <20% slopes in areas that are not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3814	BG xh3	01	Gb 01	d	j	3814 was mapped in dissected brushy areas on GENTLE SLOPES (< 15%) that WERE NOT mapped as shallow to bedrock. 3814 occurs ONLY on gentle (< 15%) lower to toe slopes in gullies with potentially elevated moisture conditions and DEEP soils. 3814 areas only occur on gentle <15% slopes in areas where that are not shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series with possibly some of the shrubby moister Gd03 that occurs near the bottoms of gullies.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3815	BG xh3	01	Gb 01	d	j	3815 was mapped in dry grassland areas on GENTLE lower to toe, slightly moist NE SLOPES (< 15%) that WERE NOT mapped as shallow to bedrock. 3815 occurs ONLY on gentle (< 15%) lower to toe slopes with slightly moister moisture conditions and DEEP soils. 3815 areas only occur on gentle <15% slopes in areas that are not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3816	BG xh3	01	Gb 01	k		3816 was mapped on MODERATE NE SLOPES (25-40%) that WERE NOT mapped as shallow to bedrock. 3816 occurs ONLY on moderate NE facing slopes with cool dry conditions and DEEP soils. 3816 areas only occur on moderate 25-40% slopes in areas that are not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3817	BG xh3	01	Gb 01	d	j	3817 was mapped in dry grassland areas on GENTLE NE SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock. 3817 occurs ONLY on gentle (< 20%) upper to lower slopes with normal moisture conditions and DEEP soils. 3817 areas only occur on gentle <20% slopes in areas that are not shallow to bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3818	BG xh3	00	Rt 01b	w	s	3818 was mapped on MODERATE SW SLOPES (25-40%) that WERE mapped as shallow to bedrock. 3818 occurs ONLY on moderate SW facing slopes with warm dry conditions and SHALLOW rocky soils. 3818 areas only occur on moderate 25-40% slopes that occur immediately below steep (>40%) rocky slopes in areas that are shallow to bedrock. These areas are interpreted as likely to be occupied by talus slopes identified as Rt01b.
3820	BG xh3	00	Ro 01	w	s	3820 was mapped on MODERATE SW SLOPES (25-40%) that WERE mapped as shallow to bedrock. 3820 occurs ONLY on moderate SW facing slopes with warm dry conditions and SHALLOW rocky soils. 3820 areas only occur on moderate 25-40% slopes that DO NOT occur immediately below steep (>40%) rocky slopes in areas mapped as shallow to bedrock. These areas are NOT interpreted as talus slopes but are instead identified as Ro01.
3821	BG xh3	00	Ro 01	w	s	3821 was mapped on MODERATE NE SLOPES (25-40%) that WERE mapped as shallow to bedrock. 3821 occurs ONLY on moderate SW facing slopes with warm dry conditions and SHALLOW rocky soils. 3821 areas only occur on moderate 25-40% slopes that DO NOT occur immediately below steep (>40%) rocky slopes in areas mapped as shallow bedrock. These areas are NOT interpreted as talus slopes but are instead identified as Ro01.
3824	BG xh3	01	Gb 01	d	j	3824 was mapped in dissected brushy areas on MODERATE lower to toe, slightly moist SW and NE SLOPES (> 15%) that WERE NOT mapped as shallow to bedrock. 3824 occurs ONLY on moderate (> 15%) lower to toe slopes with slightly steeper gradients and DEEP soils. 3824 areas only occur on moderate >15% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series but may also contain some brushy Gd03.
3825	BG xh3	01	Gb 01	d	j	3825 was mapped in dissected brushy areas on GENTLE, slightly moist toe SLOPES with a NE aspect that WERE NOT mapped as shallow to bedrock. 3825 occurs ONLY on gentle (< 15%) toe slopes with slightly moister moisture conditions and DEEP soils. 3825 areas only occur on gentle <15% slopes in dissected gullies that are not map shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series but may also contain some brushy Gd03 site series.
3826	BG xh3	01	Gb 01	d	j	3826 was mapped in dissected brushy areas on GENTLE, slightly moist toe SLOPES with a SW aspect that WERE NOT mapped as shallow to bedrock. 3826 occurs ONLY on gentle (< 15%) toe slopes with slightly moister moisture conditions and DEEP soils. 3826 areas only occur on gentle <15% slopes in dissected gullies that are not map shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series but may also contain some brushy Gd03 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3827	BG xh3	03	Gd 03	d	y	3827 areas were mapped ONLY in dissected brushy areas. 3827 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. These sloping draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Sloping Valleys). Lower slope, receiving site; deep, medium - textured soils
3828	BG xh3	03	Gd 03	d	y	3828 areas were mapped ONLY in dissected brushy areas. 3828 areas occur in level to very gently sloping draws, hollows and depressions with slopes less than 5%. These flat draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Flat Valleys). Lower slope, receiving site; deep, medium - textured soils
3829	BG xh3	04	Wm 04	p	y	3829 areas were mapped in ALL dry grassland locations with recognized ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by moister site series. No areas of ORGANIC soils were mapped in BG xh3 so NO 3887 occurs.
3831	BG xh3	00	ME			3831 areas were mapped ONLY in areas identified as being cultivated or irrigated meadows or pastures. 3931 areas exhibit gentle slopes (< 20%) and mesic to drier moisture conditions. These are gently sloping drier cultivated meadows and pastures.
3832	BG xh3	00	ME			3832 areas were mapped ONLY in areas identified as being cultivated or irrigated meadows or pastures. 3932 areas have moderate slopes (> 20%) and mesic to drier moisture conditions. These are moderately sloping, dry cultivated meadows and pastures.
3837	BG xh3	00	ME	d	y	3837 areas were mapped ONLY in areas identified as being cultivated or irrigated meadows or pastures. 3931 areas have moderate slopes (> 20%) and moister than mesic moisture conditions. These are moderately sloping moist cultivated meadows and pastures.
3838	BG xh3	00	ME	d	y	3838 areas were mapped ONLY in areas identified as being cultivated or irrigated meadows or pastures. 3938 areas exhibit gentle slopes (< 20%) and moister than mesic moisture conditions. These are gently sloping moist cultivated meadows and pastures.
3840	BG xh3	01	Gb 01	d	x	3840 areas were mapped ONLY in dissected brushy areas. 3840 was mapped on deep dry ridges and crests in areas of dissected brushy land cover. 3840 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 01 site series along with some potential inclusions of Ro01 site series.
3842	BG xh3	01	Gb 01	w		3842 was mapped in eroded brushy areas on MODERATE SW SLOPES (25-40%) that WERE NOT mapped as shallow to bedrock. 3842 occurs ONLY on moderate SW facing slopes with warm dry conditions and DEEP soils. 3842 areas only occur on moderate 25-40% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3843	BG xh3	01	Gb 01	d	j	3843 was mapped in eroded brushy areas on GENTLE SW SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock. 3843 occurs ONLY on gentle SW facing slopes with normal moisture conditions and DEEP soils. 3843 areas only occur on gentle <20% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3844	BG xh3	01	Gb 01	k	x	3844 was mapped in eroded brushy areas on STEEP WNW SLOPES (>40%) that WERE NOT mapped as shallow to bedrock. 3844 occurs ONLY on steep WNW facing slopes with slightly cooler and moister conditions, in rough, eroded brushy gullies with DEEP soils. 3844 areas bracket the slightly cooler 3846 areas that exhibit a tighter steep NE orientation.
3845	BG xh3	01	Gb 01	k	x	3845 was mapped in brushy eroded gully areas on STEEP ESE SLOPES (>40%) that WERE NOT mapped as shallow to bedrock. 3845 occurs ONLY on steep ESE facing slopes with slightly cooler and moister conditions, in rough, eroded brushy gullies with DEEP soils. 3845 areas bracket the slightly cooler 3846 areas that exhibit a tighter steep NE orientation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3846	BG xh3	01	Gg 01c	k	x	3846 was mapped in eroded gully brushy areas on STEEP tight NE facing SLOPES (>40%) that WERE NOT mapped as shallow to bedrock. 3846 occurs ONLY on steep NE facing slopes with slightly cooler and moister conditions, in rough, eroded brushy gullies with DEEP soils. 3846 areas are bracketed by the slightly less cool 3844 and 3845 areas that exhibit a less tight NE orientation. 3846 areas are anticipated to be occupied by the Gg01c site series.
3847	BG xh3	01	Gb 01	k		3847 was mapped on MODERATE NE SLOPES (25-40%) that WERE NOT mapped as shallow to bedrock in areas of brushy dissected gullies. 3847 occurs ONLY on moderate NE facing slopes with cool dry conditions and DEEP soils. 3847 areas only occur on moderate 25-40% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3848	BG xh3	01	Gb 01	d	j	3848 was mapped on GENTLE NE SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock in areas of brushy dissected gullies. 3848 occurs ONLY on gentle NE facing slopes with normal moisture conditions and DEEP soils. 3848 areas only occur on gentle <20% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3849	BG xh3	01	Gb 01	d	j	3849 was mapped in dissected brushy areas on GENTLE SLOPES (< 20%) that WERE NOT mapped as shallow to bedrock. 3849 occurs ONLY on gentle (< 20%) upper to lower slopes with normal moisture conditions and DEEP soils. 3849 areas only occur on gentle <20% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series or possibly some of the shrubby moister Gd03 that occurs near the bottoms of gullies.
3850	BG xh3	00	Ro 01	w	s	3850 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3850 areas occur on steep (>40%) SW-facing slopes that may possess a thin tree cover. The regional ecologist noted that trees should not occur on SW facing slopes in this Subzone. Consequently all steep SW facing slopes are inferred to be occupied by bare rock and scree (Ro01).
3851	BG xh3	01	Gb 01	d	j	3851 was mapped in dry grassland areas on GENTLE lower to toe, slightly moist SW SLOPES (< 15%) that WERE NOT mapped as shallow to bedrock. 3851 occurs ONLY on gentle (< 15%) lower to toe slopes with slightly moister moisture conditions and DEEP soils. 3851 areas only occur on gentle <15% slopes that are not shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3852	BG xh3	02		k	s	3852 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3852 areas occur on steep (>40%) NE-facing slopes that possess a thin tree cover. The dominant site series is inferred to be 02.
3853	BG xh3	03				3853 areas were mapped on all aspects on gentle slopes of < 10% that occurred mainly immediately adjacent to, but above, major river valley flood plains. 3853 areas occur within a land cover class (50) that was recognized by its dark purple color on the satellite imagery. In most instances, this dark purple color was associated with a mixing of reflectance from a combination of open river water and the adjacent river banks. Thus, 3853 areas ended up defining entities that were gently sloping high benches or terraces adjacent to major stream channels, but at least 10 m above the level of the river. We are presently unsure what site series is most likely to occur in these locations. They may be occupied by either the forested 03 site series or by the normal mesic grassland site series 01.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3854	BG xh3	03				3854 areas were mapped on all aspects on moderate slopes of 10-40% that occurred mainly immediately adjacent to major river valley floodplains. 3854 areas occur within a land cover class (50) that was recognized by its dark purple color on the satellite imagery. In most instances, this dark purple color was associated with a mixing of reflectance from a combination of open river water and the adjacent river banks. Thus, 3854 areas ended up defining a sort of narrow riparian buffer with moderate slopes (10-40%) adjacent to major stream channels. We are presently unsure what site series is most likely to occur in these locations. They may be occupied by either the forested 03 or 05 site series or by the normal mesic grassland site series 01.
3855	BG xh3	05				3855 areas were mapped on all aspects on gentle slopes of < 10% that occurred mainly immediately adjacent to, and less than 10 m above, major river valley floodplains. 3855 areas occur within a land cover class (50) that was recognized by its dark purple color on the satellite imagery. In most instances, this dark purple color was associated with a mixing of reflectance from a combination of open river water and the adjacent river banks. Thus, 3855 areas ended up defining entities that were gently sloping low benches or terraces adjacent to major stream channels, and less than 10 m above the level of the river. These areas may be occupied by either the rich, moist, forested 05 site series or by the normal mesic grassland site series 01. These areas look like they match the concept of cottonwoods on or near the floodplain.
3856	BG xh3	02				3856 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3856 areas occur on any aspect on steep (> 40%) slopes that may possess a thin tree cover. 3856 areas appear to be mostly found on steep slopes adjacent to and sloping into major river valley floodplains. 3856 areas are predicted to be occupied by the normal forested 02 site series.
3857	BG xh3	02		k	s	3857 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3857 areas occur on moderate (10-40%) NE-facing slopes that possess a thin tree cover. The dominant site series is inferred to be 02.
3858	BG xh3	02		w	s	3858 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3858 areas occur on moderate (10-40%) SW-facing slopes that may possess a thin tree cover. The regional ecologist noted that trees should not occur on SW facing slopes in this Subzone. However, for the present, these moderate SW facing slopes are inferred to be occupied by the 02 site series.
3859	BG xh3	05				3859 areas were mapped ONLY in areas identified as having a likelihood of possessing a forest or brush land cover (purple color in satellite image). 3859 areas occur on any aspect on gentle (< 10%) slopes with that may possess a thin tree cover. 3859 areas appear to be mostly found on low to middle benches adjacent to major river floodplains. 3859 areas are predicted to be occupied by the rich, moist 05 site series.
3860	BG xh3	00	Ro 01	w	s	3860 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3860 areas occur on steep (>40%) SW-facing upper to mid slopes that exhibit a green color on the imagery. Since we do not expect trees to develop on steep warm SW-facing slopes, we therefore infer that these slopes are mainly occupied by bare rock, soil or rubble (Ro01).
3861	BG xh3	00	Ro 01	k	s	3861 was mapped on STEEP NE SLOPES (>40%) that WERE mapped as SHALLOW to bedrock and on ALL textures of parent material. 3861 occurs ONLY on steep NE facing slopes with cool dry conditions, dry grassland or rough, eroded brushy gullies and SHALLOW soils.
3862	BG xh3	02		k	s	3862 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3862 areas occur on steep (>40%) NE-facing upper to mid slopes that possess a discernable tree cover. The dominant site series is inferred to be 02.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3863	BG xh3	04				3863 areas were mapped on all aspects on gentle slopes of < 10% that occurred mainly immediately adjacent to, but above, major river valley flood plains. 3863 areas occur within a land cover class (60) that was recognized by its green color on the satellite imagery. In most instances, this green color was associated with a visible tree cover. Thus, 3863 areas ended up defining entities that were gently sloping fans, aprons or high benches adjacent to major stream channels, but at least 10 m above the level of the river. We are presently unsure what site series is most likely to occur in these locations. They may be occupied by either the forested 03 site series or by the normal mesic grassland site series 01. NOTE: Changed to 04 at Ray's suggestion, Dec 12, 2007.
3864	BG xh3	04				3864 areas were mapped on all aspects on moderate slopes of 10-40% that occurred mainly immediately adjacent to major river valley floodplains. 3864 areas occur within a land cover class (60) that was recognized by its green color on the satellite imagery. In most instances, this green color was associated with the presence of trees. 3864 areas ended up defining a moderately sloping (10-40%) aprons and fans adjacent to, and above, major stream channels. We are presently unsure what site series is most likely to occur in these locations. They may be occupied by either the forested 03 site series or by the normal mesic grassland site series 01. NOTE: Changed to 04 at Ray's suggestion, Dec 12, 2007
3865	BG xh3	05				3865 areas were mapped on all aspects on gentle slopes of < 10% that occurred mainly immediately adjacent to, and less than 10 m above, major river valley floodplains. 3865 areas occur within a land cover class (60) that was recognized by its green color on the satellite imagery. In most instances, this green color was associated with a visible tree cover. Thus, 3865 areas ended up defining entities that were gently sloping low benches or terraces adjacent to major stream channels, and less than 10 m above the level of the river. These areas may be occupied by either the rich, moist, forested 05 site series or by the normal mesic grassland site series 01. These areas look like they match the concept of cottonwoods on or near the flood plain.
3866	BG xh3	04				3866 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3866 areas occur on steep (> 40%) slopes, with mainly NE aspects, that possess a visible tree cover. 3866 areas appear to be mostly found on steep NE-facing slopes adjacent to, but not within, major river valley flood plains. 3866 areas were initially predicted to be occupied by the normal forested 02 site series but may also contain some forested 04 site series. NOTE: Changed to 04 at Ray's suggestion, Dec 12, 2007.
3867	BG xh3	02		k	s	3867 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3867 areas occur on moderate (10-40%) NE-facing slopes that possess a thin tree cover. The dominant site series is inferred to be 02.
3868	BG xh3	02		w	s	3868 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3868 areas occur on moderate (10-40%) SW-facing slopes that may possess a thin tree cover. The regional ecologist noted that trees should not occur on SW facing slopes in this Subzone. However, for the present, these moderate SW facing slopes are inferred to be occupied by the normal 02 site series.
3869	BG xh3	03				3869 areas were mapped ONLY in areas identified as having a high likelihood of possessing a forest land cover (green color in satellite image). 3869 areas occur on any aspect on gentle (< 10%) slopes that possess a visible tree cover. 3869 areas were not plentiful within the mapped area. 3869 areas are predicted to be occupied by the gently sloping, forested 03 site series.
3871	BG xh3	00	Ro 01	w	s	3871 was mapped on STEEP SW SLOPES (>40%) that WERE mapped as SHALLOW to bedrock and on ALL textures of parent material. 3871 occurs ONLY on steep SW facing slopes with warm dry conditions, dry grassland or rough, eroded brushy gullies and SHALLOW soils.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3872	BG xh3	01	Gg 01c	k	x	3872 was mapped in dry grassland areas on STEEP tight NE facing SLOPES (>40%) that WERE NOT mapped as shallow to bedrock. 3872 occurs ONLY on steep NE facing slopes with slightly cooler and moister conditions, dry grassland or rough, eroded brushy gullies and DEEP soils. 3872 areas are bracketed by the slightly less cool 3883 areas that exhibit a less tight NE orientation. 3872 areas are anticipated to be occupied by the Gg01c site series.
3873	BG xh3	03	Gd 03	d	j	3873 was mapped in concave hollows and gullies in dry grassland areas on GENTLE, slightly moist toe SLOPES with a NE aspect that WERE NOT mapped as shallow to bedrock. 3873 areas are similar to 3866 areas except that they only occur on the lower portions of NE facing slopes located near the bottoms of concave gullies and draws in grassland areas. These areas are interpreted as being more likely to exhibit some of the brushier Gd03 vegetation in addition to the normal Gb01 site series.
3874	BG xh3	03	Gd 03	d	j	3874 was mapped in concave hollows and gullies in dry grassland areas on GENTLE, slightly moist toe SLOPES with a SW aspect that WERE NOT mapped as shallow to bedrock. 3874 areas are similar to 3866 areas except that they only occur on the lower portions of SW facing slopes located near the bottoms of concave gullies and draws in grassland areas. These areas are interpreted as being more likely to exhibit some of the brushier Gd03 vegetation in addition to the normal Gb01 site series.
3875	BG xh3	03	Gd 03	d	y	3875 areas were mapped ONLY in concave hollows and gullies in dry grassland areas. 3875 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. These sloping draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Sloping Valleys). Lower slope, receiving site; deep, medium - textured soils
3876	BG xh3	03	Gd 03	d	y	3876 areas were mapped ONLY in concave hollows and gullies in dry grassland areas. 3876 areas occur in level to very gently sloping draws, hollows and depressions with slopes less than 5%. These flat draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Flat Valleys). Lower slope, receiving site; deep, medium - textured soils
3877	BG xh3	02	Gd 02	j	y	3877 areas were mapped only in areas of dry grassland land cover. 3877 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. 3877 areas are predicted to be occupied by slightly moister site series such as Gg01 or Gd02. Gentle slope or depressional areas with deep, medium - textured soils
3878	BG xh3	02	Gd 02	j	y	3878 areas were mapped only in areas of dry grassland land cover. 3878 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. 3878 areas are predicted to be occupied by slightly moister site series such as Gg01 or Gd02. Gentle slope or depressional areas with deep, medium - textured soils
3879	BG xh3	03	Gd 03			3879 areas were mapped in dry grassland areas of recognized SEEPAGE. The concept of the SEEPAGE class was that it recognized areas that were moister than expected for the landscape position and environmental setting. These SEEPAGE areas are therefore predicted to contain mainly the slightly wetter than mesic Gd03 site series.
3880	BG xh3	00	Ro 01	s	r	3880 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 3880 occurs on the driest crest positions of high ridges that are shallow to bedrock. 3880 can occur in areas with land cover classes of dry grassland or brushy dissected gullies as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow soils over bedrock

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3881	BG xh3	00	Rt 01a	k	s	3881 was mapped on MODERATE NE SLOPES (25-40%) that WERE mapped as shallow to bedrock. 3881 occurs ONLY on moderate NE facing slopes with cool dry conditions and SHALLOW rocky soils. 3881 areas only occur on moderate 25-40% slopes that occur immediately below steep (>40%) rocky slopes in areas mapped as shallow bedrock. These areas are interpreted as likely to be occupied by talus slopes identified as Rt01b.
3882	BG xh3	02	Gb 02b	w	x	3882 was mapped on STEEP SW SLOPES (>40%) that WERE NOT mapped as shallow to bedrock and on ALL textures of parent material. 3882 occurs ONLY on steep SW facing slopes with warm dry conditions, dry grassland or rough, eroded brushy gullies and DEEP soils.
3883	BG xh3	01	Gb 01	k	x	3883 was mapped in dry grassland areas on STEEP WNW and ESE SLOPES (>40%) that WERE NOT mapped as shallow to bedrock. 3883 occurs ONLY on steep WNW or ENE facing slopes with slightly cooler and moister conditions, dry grassland or rough, eroded brushy gullies and DEEP soils. 3883 areas bracket the slightly cooler 3872 areas that exhibit a tighter steep NE orientation.
3886	BG xh3	01	Gb 01	d	j	3886 was mapped in dry grassland areas on GENTLE, slightly moist toe SLOPES with any aspect that WERE NOT mapped as shallow to bedrock. 3886 occurs ONLY on gentle (< 15%) toe slopes with slightly moister moisture conditions and DEEP soils. 3886 areas only occur on gentle <15% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.
3887	BG xh3	00	00	p	y	3887 areas were mapped in ALL dry grassland locations with recognized ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by moister site series. No areas of ORGANIC soils were mapped in BG xh3, so NO 3887 occurs.
3888	BG xh3	03	Gd 03	d	y	3888 areas were mapped ONLY in dry grassland areas. 3888 areas occur in level to very gently sloping draws, hollows and depressions with slopes less than 5%. These flat draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Flat Valleys). Lower slope, receiving site; deep, medium - textured soils
3889	BG xh3	03	Gd 03	d	y	3889 areas were mapped ONLY in dry grassland areas. 3889 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. These sloping draws tend to develop a thicker brushy land cover due to greater than normal accumulations of snow and runoff (Sloping Valleys). Lower slope, receiving site; deep, medium - textured soils
3891	BG xh3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
3892	BG xh3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. No 3492 areas occur in BG xh3.
3893	BG xh3	00	TF			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. No 3493 areas occur in BG xh3. We elected to map meadows ourselves using the LandSat imagery.
3894	BG xh3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
3895	BG xh3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
3896	BG xh3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
3897	BG xh3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process. No 3497 areas occur in BG xh3
3898	BG xh3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process. No 3498 areas occur in BG xh3

**PEM Entity Extended Legend with Proportions of Site Series for: BG xh3**

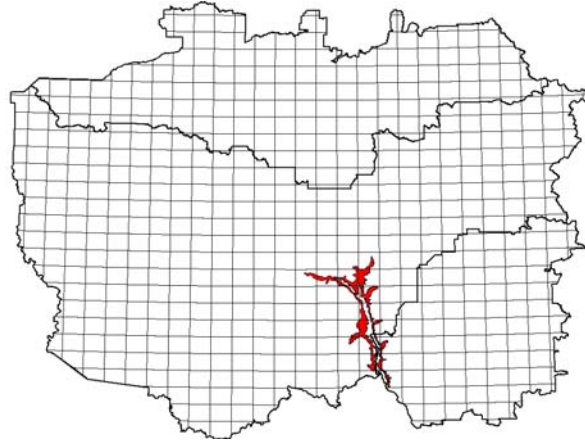
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3800	3800	Gb01	BG xh3	10	01	Gb01	d	j						
3801	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3805	3877	Gd02	BG xh3	10	02	Gd02	j	y						
3806	3806	Gd03	BG xh3	10	03	Gd03								
3808	3808	Gb01	BG xh3	10	01	Gb01	d	x						
3809	3809	Gg15	BG xh3	10	15	Gg15	j	y						
3810	3800	Gb01	BG xh3	10	01	Gb01	w							
3811	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3814	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3815	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3816	3800	Gb01	BG xh3	10	01	Gb01	k							
3817	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3818	3818	Rt01b	BG xh3	10	00	Rt01b	w	s						
3820	3820	Ro01	BG xh3	10	00	Ro01	w	s						
3821	3821	Ro01	BG xh3	10	00	Ro01	w	s						
3824	3824	Gb01	BG xh3	5	01	Gb01	d	j	5	03	Gd03			
3825	3886	Gb01	BG xh3	5	01	Gb01	d	j	5	03	Gd03			
3826	3886	Gb01	BG xh3	5	01	Gb01	d	j	5	03	Gd03			
3827	3889	Gd03	BG xh3	10	03	Gd03	d	y						
3828	3888	Gd03	BG xh3	10	03	Gd03	d	y						
3829	3829	Wm04	BG xh3	10	04	Wm04	p	y						
3831	3831	ME	BG xh3	10	00	ME								
3832	3832	ME	BG xh3	10	00	ME								
3837	3837	ME	BG xh3	10	00	ME	d	y						
3838	3838	ME	BG xh3	10	00	ME	d	y						
3840	3840	Gb01	BG xh3	10	01	Gb01	d	x						
3842	3824	Gb01	BG xh3	10	01	Gb01	w							
3843	3849	Gb01	BG xh3	10	01	Gb01	d	j						
3844	3844	Gb01	BG xh3	6	01	Gb01	k	x	4	Gg01				
3845	3845	Gb01	BG xh3	6	01	Gb01	k	x	4	Gg01				
3846	3846	Gg01c	BG xh3	10	01	Gg01c	k	x						
3847	3824	Gb01	BG xh3	6	01	Gb01	k	x	4	Gg01				
3848	3849	Gb01	BG xh3	10	01	Gb01	d	j						
3849	3849	Gb01	BG xh3	10	01	Gb01	d	j						
3850	3860	Ro01	BG xh3	10	00	Ro01	w	s						
3851	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3852	3862	02	BG xh3	6	02		k	s	4	Gg01c				
3853	3853	03	BG xh3	10	03					Gb01				
3854	3853	03	BG xh3	10	03									
3855	3865	05	BG xh3	10	05									
3856	3862	02	BG xh3	10	02									
3857	3867	02	BG xh3	10	02		k	s						
3858	3868	02	BG xh3	10	02		w	s						
3859	3859	05	BG xh3	10	05									
3860	3860	Ro01	BG xh3	10	00	Ro01	w	s						
3861	3861	Ro01	BG xh3	10	00	Ro01	k	s						
3862	3862	02	BG xh3	10	02		k	s						
3863	3863	04	BG xh3	10	04									
3864	3863	04	BG xh3	10	04									
3865	3865	05	BG xh3	10	05									
3866	3866	04	BG xh3	10	04									
3867	3867	02	BG xh3	10	02		k	s						
3868	3868	02	BG xh3	10	02		w	s						
3869	3869	03	BG xh3	10	03									
3871	3871	Ro01	BG xh3	10	00	Ro01	w	s						
3872	3846	Gg01c	BG xh3	10	01	Gg01c	k	x						

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3873	3889	Gd03	BG xh3	10	03	Gd03	d	j						
3874	3889	Gd03	BG xh3	6	03	Gd03	d	j	4	01	Gb01			
3875	3889	Gd03	BG xh3	10	03	Gd03	d	y						
3876	3888	Gd03	BG xh3	10	03	Gd03	d	y						
3877	3877	Gd02	BG xh3	10	02	Gd02	j	y						
3878	3877	Gd02	BG xh3	10	02	Gd02	j	y						
3879	3879	Gd03	BG xh3	10	03	Gd03								
3880	3880	Ro01	BG xh3	10	00	Ro01	s	r						
3881	3881	Rt01a	BG xh3	10	00	Rt01a	k	s						
3882	3882	Gb02b	BG xh3	10	02	Gb02b	w	x						
3883	3883	Gb01	BG xh3	10	01	Gb01	k	x						
3886	3886	Gb01	BG xh3	10	01	Gb01	d	j						
3887	3887	WE	BG xh3	10	00	00	p	y						
3888	3888	Gd03	BG xh3	10	03	Gd03	d	y						
3889	3889	Gd03	BG xh3	10	03	Gd03	d	y						
3891	3891	OW	BG xh3	10	00	OW								
3892	3892	WE	BG xh3	10	00	WE	d	y						
3893	3893	TF	BG xh3	10	00	TF								
3894	3894	PA	BG xh3	10	00	PA								
3895	3895	BR	BG xh3	10	00	BR								
3896	3896	DL	BG xh3	10	00	DL								
3897	3897	TA	BG xh3	10	00	TA								
3898	3898	AV	BG xh3	10	00	AV								



**BGC Unit: BG xw2****LMES Zone ID: 39****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	45,850.6	0.93%
100 Mile House TSA	6,203.4	0.50%
Cariboo Region	52,053.9	0.63%

**List of Site Series Codes Defined for use in BG xw2**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
Ro14	Ro14	Prairie sage – Bluebunch wheatgrass	very xeric - xeric	Grassland Areas - Shallow, Rocky Crests, Moderate-Steep SW
Ro15	Ro15	Big sagebrush – Bluebunch wheatgrass – Needle-and-thread grass	very xeric - xeric	Grassland Areas - Very Steep , Both Shallow and Deep
Rt05	Rt05	Rocky Mountain juniper – Big sage – Bluebunch wheatgrass	xeric - subxeric	Grassland Areas - Moderate Talus Slopes below exposed bedrock
Gg02	Gg02	Bluebunch wheatgrass	subxeric - submesic	Grassland Areas - Steep SW and NE Deep, Moderate SW Deep
Gg04	Gg04	Needle-and-thread grass	subxeric - submesic	Grassland Areas - Deep Moderate SW on Aeolian (old dunes)
01	Gb01	Bluebunch wheatgrass– Junegrass - 01a typic phase	submesic - mesic	Grassland Areas - All mesic to near mesic Gentle to Moderate
01c	Gb01c	Bluebunch wheatgrass– Junegrass - 01c steep, cool phase	submesic - mesic	Grassland Areas - Deep, Steep NW, N, WN and E Slopes
Gg08	Gg08	Spreading needlegrass–Old man’s whiskers	mesic	Grassland Areas - Moderately Sloping N Aspects
Gg09	Gg09	Short-awned porcupinegrass	mesic - subhygric	Grassland Areas - Moist seepage in Sloping Draws, Hollows and Depressions. Also predicted for some level valleys.
Gg14	Gg14	Spreading needlegrass–Northern bedstraw	subhygric	Grassland Areas - Shallow, Closed depressions not in channels
Fm01	Fm01	Act – Snowberry - Rose	subhygric	Grassland Areas - Gentle Slopes on Elevated Banches, Cottonwood
Fd02	02	Bluebunch wheatgrass – Pasture sage Site Series	submesic - mesic	Forested Areas - Dominant mesic to submesic forest, Steep NE
Fd03	03	Rocky Mountain juniper – Step moss	mesic - subhygric	Forested Areas - Slightly Moist on Lower Steep NE Slopes
Fd04	04	Pinegrass - Feathermoss	mesic - subhygric	Forested Areas - Moist Sloping Draws and Lower to Toe Slopes
Fd05	05	Douglas maple	subhygric	Forested Areas - Level to Very Gentle Moist Draws and Valleys
Fd06	06	Aspen - Snowberry	subhygric - hygric	Forested Areas - Very Moist Wetland Margins and Sloping Draws
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Codes and concepts are taken from a provisional, interim classification for the BG xw2 provided by the Regional Ecologist

## Landscape Profile Diagram: BG xw2

No Landscape Profile diagram available.

### Example Attribute Class Rule File for BG xw2 (arule3920)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
5	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
6	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
7	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
8	formfile	LNQAREA	Not_Wet	5	10.00	10.00	10.00	0.00	10.50	0.5
9	formfile	LNQAREA	Wet	4	11.00	11.00	11.00	0.00	11.00	0.5
10	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
11	formfile	SLOPE	Steep	4	40.00	40.00	40.00	40.00	100.00	1
12	formfile	SLOPE	SlopeLT05	5	4.00	5.00	5.00	0.00	5.00	1
13	formfile	SLOPE	SlopeLT15	5	14.00	0.00	10.00	0.00	15.00	1
14	formfile	SLOPE	SlopeLT20	5	19.00	0.00	20.00	0.00	20.00	1
15	formfile	SLOPE	SlopeLT25	5	24.00	0.00	25.00	0.00	25.00	1
16	formfile	SLOPE	SlopeLT40	5	39.00	40.00	40.00	0.00	40.00	1
17	formfile	SLOPE	SlopeLT45	5	44.00	0.00	45.00	0.00	45.00	1
18	formfile	SLOPE	SlopeLT100	5	99.00	0.00	45.00	0.00	100.00	1
19	formfile	SLOPE	SlopeGT05	4	6.00	5.00	100.00	4.00	100.00	1
20	formfile	SLOPE	SlopeGT15	4	16.00	10.00	10.00	15.00	100.00	1
21	formfile	SLOPE	SlopeGT25	4	26.00	25.00	25.00	25.00	100.00	1
22	formfile	SLOPE	SlopeGT100	4	100.00	100.00	100.00	100.00	999.00	1
23	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
24	formfile	NEW_ASP	NNE_Aspect	1	90.00	90.00	90.00	66.00	112.00	22
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
26	formfile	NEW_ASP	NW_Aspect	1	23.00	23.00	23.00	0.00	45.00	22
27	formfile	NEW_ASP	SE_Aspect	1	158.00	158.00	158.00	135.00	180.00	22
28	formfile	PROF	Concave	5	-2.00	-2.00	-2.00	-100.00	-1.00	1
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Aeolian	4	90.00	90.00	90.00	90.00	100.00	5
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	L2Wet	WetL_LT200	5	50.00	50.00	50.00	0.00	100.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
36	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
37	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
38	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for BG xw2 (crule3920)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
DG3902r	Crest	30	1	3900	Ro15 Shallow Crest	DG3914sd	Crest2Low	30	13	3912	01a Deep, Gentle to Mod NE
DG3902r	VDry	30	1	3900	Rock in Grassland Cover	DG3914sd	SlopeLT40	20	13	3912	Grassland Cover
DG3902r	SlopeLT30	10	1	3900		DG3914sd	SlopeGT15	20	13	3912	Coarse to Medium Aeolian
DG3902r	Med2Crs	10	1	3900		DG3914sd	NE_Aspect	10	13	3912	
DG3902r	Shallow	10	1	3900		DG3914sd	Aeolian	10	13	3912	
DG3902r	Hi_Ridge	10	1	3900		DG3901er	Crest2Low	30	14	3913	01a Deep, Moderate NE
DG3920r	Crest	30	2	3901	01a Deep Dry Ridge	DG3901er	SlopeLT40	20	14	3913	Grassland Cover
DG3920r	VDry	30	2	3901	Grassland Cover	DG3901er	SlopeGT25	20	14	3913	Medium to Coarse
DG3920r	SlopeLT30	10	2	3901		DG3901er	NE_Aspect	10	14	3913	
DG3920r	Med2Crs	10	2	3901		DG3901er	Med2Crs	10	14	3913	
DG3920r	Deep	10	2	3901		DG3901us	Crest2Low	30	15	3914	01a Deep, Gentle to Mod NE
DG3920r	Hi_Ridge	10	2	3901		DG3901us	SlopeLT25	20	15	3914	Grassland Cover
DG3921sr	Crest2Low	40	3	3902	Ro14 Very Steep Shallow	DG3901us	SlopeGT15	20	15	3914	Medium to Coarse
DG3921sr	SlopeGT100	40	3	3902	Rock in Grassland Cover	DG3901us	NE_Aspect	10	15	3914	
DG3921sr	Shallow	20	3	3902		DG3901us	Med2Crs	10	15	3914	
DG3922sd	Crest2Low	40	4	3903	Ro14 Very Steep Deep	DG3915tn	Crest2Low	30	16	3915	Rt05 Shallow, Gentle to Mod NE
DG3922sd	SlopeGT100	40	4	3903	Rock in Grassland Cover	DG3915tn	SlopeLT25	20	16	3915	Rock in Grassland Cover
DG3922sd	Deep	20	4	3903		DG3915tn	SlopeGT15	20	16	3915	
DG3923mr	Crest2Low	40	5	3904	Ro15 Shallow, Steep Upper	DG3915tn	NE_Aspect	10	16	3915	
DG3923mr	SlopeLT100	20	5	3904	Rock in Grassland Cover	DG3915tn	Shallow	10	16	3915	
DG3923mr	Steep	20	5	3904		DG3901up	Crest2Low	30	17	3916	01a Deep, Dry, Gentle Slopes
DG3923mr	Shallow	20	5	3904		DG3901up	Not_Wet	30	17	3916	Grassland Cover
DG3924st	Crest2Low	40	6	3905	Rt05 Moderate Shallow Talus	DG3901up	SlopeLT15	40	17	3916	
DG3924st	SlopeLT40	20	6	3905	Rock in Grassland Cover	DG3929up	Crest2Low	30	18	3917	Gg09 Moist, Gentle Draws
DG3924st	SlopeGT15	20	6	3905		DG3929up	Wet	30	18	3917	Grassland Cover
DG3924st	Shallow	20	6	3905		DG3929up	SlopeLT15	40	18	3917	
DG3925sw	Crest2Low	30	7	3906	Gg02 Deep, Dry, Steep SW	DG3901lo	Low2Toe	30	19	3918	01a Deep, Dry, Gentle Toes
DG3925sw	SlopeLT100	20	7	3906	Grassland Cover	DG3901lo	Not_Wet	30	19	3918	Grassland Cover
DG3925sw	Steep	20	7	3906		DG3901lo	SlopeLT15	40	19	3918	
DG3925sw	SW_Aspect	10	7	3906		DG3929lo	Low2Toe	30	20	3919	Gg09 Moist Gentle Toe Slope
DG3925sw	Deep	10	7	3906		DG3929lo	Wet	30	20	3919	Grassland Cover
DG3926ne	Crest2Low	30	8	3907	01c Deep, Cool Steep NE	DG3929lo	SlopeLT15	40	20	3919	
DG3926ne	SlopeLT100	20	8	3907	Grassland Cover	DG3919w	Low2Toe	30	21	3920	Gg09 Moist Moderate Toe Slope
DG3926ne	Steep	20	8	3907		DG3919w	Wet	30	21	3920	Grassland Cover
DG3926ne	NE_Aspect	10	8	3907		DG3919w	SlopeGT15	20	21	3920	
DG3926ne	Deep	10	8	3907		DG3919w	SlopeLT40	20	21	3920	
DG3927sd	Crest2Low	30	9	3908	Gg04 Deep, Moderate SW	DG3989v	Valley	30	22	3921	Gg09 Moist Sloping Valley
DG3927sd	SlopeLT40	20	9	3908	Grassland Cover	DG3989v	Wet2V_Wet	30	22	3921	Grassland Cover
DG3927sd	SlopeGT15	20	9	3908	Coarse to Medium Aeolian	DG3989v	SlopeGT05	20	22	3921	
DG3927sd	SW_Aspect	10	9	3908		DG3989v	Med2Crs	10	22	3921	
DG3927sd	Aeolian	10	9	3908		DG3989v	Deep	10	22	3921	
DG3928er	Crest2Low	30	10	3909	Gg02 Deep, Dry, Moderate SW	DG3988f	Valley	30	23	3922	Gg14 Wet, Flat Valley
DG3928er	SlopeLT40	20	10	3909	Grassland Cover	DG3988f	Wet2V_Wet	30	23	3922	Grassland Cover
DG3928er	SlopeGT25	20	10	3909		DG3988f	SlopeLT05	20	23	3922	
DG3928er	SW_Aspect	10	10	3909		DG3988f	Medium	10	23	3922	
DG3928er	Med2Crs	10	10	3909		DG3988f	Deep	10	23	3922	
DG3911us	Crest2Low	30	11	3910	01a Deep, Gentle to Mod SW	DG3983m	WetZ_LT05	50	24	3923	Gg14 Wet Margins
DG3911us	SlopeLT25	20	11	3910	Grassland Cover	DG3983m	WetZ_LT200	50	24	3923	Grassland Cover
DG3911us	SlopeGT15	20	11	3910		DG3984s	Hi_Seep	80	25	3924	Gg09 Moist Sloping Seepage
DG3911us	SW_Aspect	10	11	3910		DG3984s	Med2Crs	20	25	3924	Grassland Cover
DG3911us	Med2Crs	10	11	3910		DG3987o	Organic	99	26	3925	
DG3915ts	Crest2Low	30	12	3911	Rt05 Shallow, Gentle to Mod SW	DG3926d	Concave	50	27	3926	Gg14 Wet, Shallow Depression
DG3915ts	SlopeLT40	20	12	3911	Grassland Cover	DG3926d	SlopeLT05	59	27	3926	Grassland Cover
DG3915ts	SlopeGT15	20	12	3911							
DG3915ts	SW_Aspect	10	12	3911							
DG3915ts	Shallow	10	12	3911							



**PEM Entity Descriptions for: BG xw2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3900	BG xw2	00	Ro 15	s	r	3900 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 3900 occurs on the driest crest positions of high ridges that are shallow to bedrock. 3900 can occur in areas with land cover classes of DRY GRASSLAND or BRUSHY DISSECTED GULLIES as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow soils over bedrock
3901	BG xw2	01	01a	d	x	3901 was mapped on deep dry ridges and crests in areas of DRY GRASSLAND land cover. 3901 occupies the highest and driest shedding locations on the crests of high ridges that were NOT mapped as SHALLOW to bedrock in landscapes of moderate to high relief. 3901 is predicted to contain a mixture of predominantly 01a site series along with some potential inclusions of rocky Ro15.
3902	BG xw2	00	Ro 14	s	r	3902 was mapped on ALL ASPECTS of VERY STEEP SLOPES (>100%) mapped as SHALLOW to bedrock. 3902 occurs ONLY on very steep slopes that are shallow to bedrock. 3902 occurs ONLY in DRY GRASSLAND or BRUSHY DISSECTED GULLY areas and on SHALLOW soils.
3903	BG xw2	00	Ro 14	s	r	3903 was mapped on ALL ASPECTS of VERY STEEP SLOPES (>100%) that WERE NOT mapped as SHALLOW to bedrock. 3903 occurs ONLY on very steep slopes that are not mapped as shallow to bedrock. 3903 occurs ONLY in DRY GRASSLAND or BRUSHY DISSECTED GULLY areas and on DEEP soils. We assume that areas with slopes > 100% are dominantly rocky R014 even if not mapped as shallow.
3904	BG xw2	00	Ro 15	s	r	3904 was mapped on STEEP SLOPES (40-100%) that WERE mapped as SHALLOW to bedrock. 3904 occurs ONLY on steep slopes in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and SHALLOW soils. Inferred to be dominated by Ro15
3905	BG xw2	00	Ro 15	s	r	3905 was mapped on MODERATE SLOPES (25-40%) that WERE mapped as shallow to bedrock. 3905 occurs ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and SHALLOW soils. 3905 areas only occur on moderate 25-40% slopes that do not occur immediately below steep (>40%) rocky slopes in areas mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal rocky Ro15.
3906	BG xw2	02	Gg 02	w	x	3906 was mapped on STEEP SW SLOPES (>40%) that WERE NOT mapped as shallow. 3906 occurs ONLY on steep SW facing slopes with warm dry conditions, in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. Predicted to be dominated by Gg02.
3907	BG xw2	02	Gg 02	k	x	3907 was mapped on STEEP NE SLOPES (>40%) that WERE NOT mapped as shallow. 3907 occurs ONLY on steep NE facing slopes with cooler, moister conditions, in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. Predicted to be dominated by Gg02 and 01c; steep, cool phase.
3908	BG xw2	00	Gg 04	w	d	3908 was mapped on MODERATE SW SLOPES (15-40%) that WERE NOT mapped as shallow. 3908 occurs ONLY on moderate SW facing slopes with warm dry conditions in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP AEOLIAN DERIVED soils. 3908 areas only occur on moderate 15-40% slopes in Aeolian areas not mapped as shallow bedrock. No areas of 3908 have been mapped to date. The 3908 rule was created as a placeholder to permit recognition of Gg04 site series if future mapping pulls out sand dune areas.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3909	BG xw2	02	Gg02	w	d	3909 was mapped on MODERATELY STEEP SW SLOPES (25-40%) that WERE NOT mapped as shallow. 3909 occurs ONLY on moderately steep SW facing slopes that are likely to be eroded in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3909 areas only occur on moderate 25-40% slopes in non-Aeolian areas not mapped as shallow. Areas presently mapped as 3909 may represent locations where the sand dune type Gg04 could be likely to occur.
3910	BG xw2	01	01a	d	j	3910 was mapped on GENTLE TO MODERATE SW SLOPES (15-25%) that WERE NOT mapped as shallow. 3910 occurs ONLY on gentle to moderate SW facing slopes that are not likely to be eroded in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3910 areas only occur on gentle to moderate 15-25% slopes in non-Aeolian areas not mapped as shallow. Areas presently mapped as 3910 may well represent locations where the sand dune type Gg04 could be likely to occur.
3911	BG xw2	00	Ro15	w	s	3911 was mapped on MODERATE SW SLOPES (25-40%) that WERE mapped as shallow. 3911 occurs ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and ONLY on moderate SW facing slopes with warm dry conditions and SHALLOW rocky soils. 3911 areas only occur on moderate 25-40% slopes that do not occur immediately below steep (>40%) rocky slopes in areas mapped as shallow bedrock. These areas are interpreted as likely to be occupied by rocky Ro15.
3912	BG xw2	01	01a	k	d	3912 was mapped on MODERATE NE SLOPES (15-40%) that WERE NOT mapped as shallow. 3912 occurs ONLY on moderate NE facing slopes with cooler moister conditions in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP AEOLIAN DERIVED soils. 3912 areas only occur on moderate 15-40% slopes in Aeolian areas not mapped as shallow bedrock. No areas of 3912 have been mapped to date. The 3912 rule was created as a placeholder to permit recognition of Gg04 site series if future mapping pulls out sand dune areas.
3913	BG xw2	01	01a	k	d	3913 was mapped on MODERATELY STEEP NE SLOPES (25-40%) that WERE NOT mapped as shallow. 3913 occurs ONLY on moderately steep NE facing slopes that are likely to be eroded in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3913 areas only occur on moderate 25-40% slopes in non-Aeolian areas not mapped as shallow bedrock. 3913 areas were mapped as the opposite of 3908 areas in order to not predict 3908 on NE aspects.
3914	BG xw2	01	01a	d	j	3914 was mapped on GENTLE TO MODERATE NE SLOPES (15-25%) that WERE NOT mapped as shallow. 3914 occurs ONLY on gentle to moderate NE facing slopes that are not likely to be eroded in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3914 areas only occur on gentle to moderate 15-25% slopes in non-Aeolian areas not mapped as shallow bedrock. 3914 areas were mapped as the opposite of 3909 areas in order to not predict 3909 on NE aspects
3915	BG xw2	00	Ro15	k	s	3915 was mapped on MODERATE NE SLOPES (25-40%) that WERE mapped as shallow. 3915 occurs ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and ONLY on moderate NE facing slopes with cooler moister conditions and SHALLOW rocky soils. 3915 areas only occur on moderate 25-40% slopes that do not occur immediately below steep (>40%) rocky slopes in areas mapped as shallow bedrock. These areas are interpreted as likely to be occupied by rocky Ro15.
3916	BG xw2	01	01a	d	j	3916 was mapped on ALL GENTLE SLOPES (< 15%) that WERE NOT mapped as shallow and were not moist. 3916 occurs ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and ONLY on gentle water-shedding slopes with normal moisture conditions and DEEP soils. 3916 areas only occur on gentle <15% slopes in areas not mapped as shallow bedrock. These areas are interpreted as likely to be occupied by normal 01 grassland site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3917	BG xw2	09	Gg 09	d	y	3917 areas were mapped ONLY in shallow draws and hollows in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3917 areas occur in very gently sloping draws, hollows and depressions with slopes less than 15%. These sloping upper draws are inferred to be occupied mainly by the Gg09 site series.
3918	BG xw2	01	01a	d	j	3918 areas were mapped ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3918 areas were mapped on lower to toe slopes of < 15% that were not modeled as being moist. 3918 areas were created as the opposite of 3919 areas to prevent all gentle toe slopes from being modeled as moist. 3918 areas are predicted to be dominated by normal mesic 01 site series.
3919	BG xw2	09	Gg 09	d	y	3919 areas were mapped ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3919 areas were mapped on lower to toe slopes of < 15% that WERE modeled as being moist. 3919 areas are predicted to be dominated by the moister Gg09 site series.
3920	BG xw2	09	Gg 09	d	y	3920 areas were mapped ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3920 areas were mapped on lower to toe slopes of 15-40% that WERE modeled as being moist. 3920 areas are predicted to be dominated by the moister Gg09 site series but could also contain significant normal mesic 01 site series.
3921	BG xw2	09	Gg 09	d	y	3921 areas were mapped in SLOPING VALLEYS in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3921 areas occur in gently sloping draws, hollows and sloping depressions with slopes greater than 5%. These sloping draws are inferred to be occupied mainly by the Gg09 site series.
3922	BG xw2	09	Gg 09	d	y	3922 areas were mapped in FLAT VALLEYS in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3922 areas occur in nearly level draws, hollows and depressions with slopes less than 5%. These level draws are inferred to be occupied mainly by the Gg09 site series.
3923	BG xw2	14	Gg 14	d	y	3923 areas were mapped in low-lying margins around small lakes and wetlands in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and DEEP soils. 3923 areas occur in low-lying hollows and depressions around the margins of lakes and wetlands. These low-lying margins are inferred to be occupied mainly by the Gg14 site series.
3924	BG xw2	09	Gg 09	d	y	3924 areas were mapped in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES in all locations of manually recognized seepage. 3924 areas are meant to recognize conditions that are moister than expected for the normal mesic site series. The most common moister than mesic site series in this grassland environment is Gg09. Therefore these manually mapped SEEPAGE areas are inferred to be dominated by the Gg09 site series.
3925	BG xw2	00	WE	p	y	3925 areas were mapped in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES in all locations of manually recognized ORGANIC soils. 3925 areas are meant to recognize permanently wet conditions with a buildup of organic materials. No areas of organic soils were recognized by interpreters in this subzone, but a KB rule still has to be defined just to cover this possibility.
3926	BG xw2	14	Gg 14	d	y	3926 areas were mapped in shallow closed depressions and concavities in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES. 3926 areas were created to try to map the concept of a shallow closed depression that was not part of a larger, connected swale or channel. These small closed depressions are locations where the Gg14 site series is anticipated to occur.
3928	BG xw2	00	Rt 05	s		3928 was mapped on MODERATE SLOPES (25-40%) that WERE mapped as shallow. 3928 occurs ONLY in areas of DRY GRASSLAND or BRUSHY DISSECTED GULLIES and SHALLOW soils. 3928 areas only occur on moderate 25-40% slopes that occur immediately below steep (>40%) rocky slopes mapped as shallow bedrock. These areas are interpreted as likely to be occupied by talus slopes identified as Rt05.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3930	BG xw2	00	ME	d	j	3930 areas were mapped in locations where the land cover had been classified as cultivated or managed PASTURE or MEADOW. 3930 areas have slopes > 5% and were not modeled as being moist.
3931	BG xw2	00	ME	d	j	3931 areas were mapped in locations where the land cover had been classified as cultivated or managed PASTURE or MEADOW. 3931 areas have slopes < 5% and were not modeled as being moist.
3932	BG xw2	00	ME	d	y	3932 areas were mapped in locations where the land cover had been classified as cultivated or managed PASTURE or MEADOW. 3932 areas have slopes > 5% and were modeled as being somewhat MOIST.
3933	BG xw2	00	ME	d	y	3933 areas were mapped in locations where the land cover had been classified as cultivated or managed PASTURE or MEADOW. 3932 areas have slopes < 5% and were modeled as being somewhat MOIST.
3940	BG xw2	02	Fd 02	k	s	3940 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3940 areas occur on steep (>40%) NE-facing slopes that possess a cover of thin trees or brush and are not located directly adjacent to a main river channel floodplain. The dominant site series is inferred to be 02 but some moister 03 site series may also occur.
3941	BG xw2	00	Ro 01	w	s	3941 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3941 areas occur on steep (>40%) SW-facing slopes that are not located directly adjacent to a main river channel flood plain and that do not possess a typical grassland reflectance. The regional ecologist noted that steep SW facing slopes in this Subzone should normally be occupied by grassland or by bare soil or bare rock and scree (Ro01).3941 areas are predicted to be occupied by a mixture of bare soil or rock and thin grassland.
3942	BG xw2	02	Fd 02	k		3942 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3942 areas occur on moderate (10-40%) NE-facing slopes that possess a cover of thin trees or brush and are not located directly adjacent to a main river channel flood plain. The dominant site series is inferred to be 02 but some moister 03 site series may also occur.
3943	BG xw2	02	Fd 02	w		3943 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3943 areas occur on moderate (10-40%) SW-facing slopes that possess a cover of thin trees or brush and are not located directly adjacent to a main river channel floodplain. The dominant site series is inferred to be 02 but these areas may also be covered by grassland (01a) or brush.
3944	BG xw2	02	Fd 02	d	j	3944 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3944 areas occur on gentle (<10%) NE-facing slopes that possess a cover of thin trees or brush and are not located directly adjacent to a main river channel flood plain. The dominant site series is inferred to be 02 but these areas may also be covered by grassland (01a) or brush.
3945	BG xw2	01	01a	d	j	3945 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3945 areas occur on gentle (<10%) SW-facing slopes that possess a cover of thin trees or brush and are not located directly adjacent to a main river channel flood plain. The dominant site series is inferred to be the grassland 01a but these areas may also be covered thin trees or brush.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3946	BG xw2	01	01c	k	s	3946 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3946 areas occur on steep (>40%) NE-facing slopes that are usually, but not always, located directly adjacent to, and above, a main river channel floodplain. These steep NE-facing river banks are occupied by the cool, steep 01c site series if covered by grass but they may also contain a significant extent of bare soil and rock (Ro15).
3947	BG xw2	02	Gg02	w	x	3947 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3947 areas occur on steep (>40%) SW-facing slopes that are usually, but not always, located directly adjacent to, and above, a main river channel floodplain. These steep SW-facing river banks are occupied by the warm, steep Gg02 site series if covered by grass but they may also contain a significant extent of bare soil and rock (Ro15).
3948	BG xw2	01	01c	k	j	3948 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3948 areas occur on moderate (10-40%) NE-facing slopes that are usually, but not always, located directly adjacent to, and above, a main river channel floodplain. These moderate NE-facing river banks are occupied by the normal 01a site series if covered by grass. These riparian areas map also represent low sloping benches adjacent to major river channels and may contain some of the Fm01 site series. 3948 areas ended up defining a sort of narrow riparian buffer with moderate slopes (10-40%) adjacent to major stream channels. We ultimately described these areas as dominated by cool, steep 01c.
3949	BG xw2	02	Gg02	w	x	3949 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3949 areas occur on moderate (10-40%) SW-facing slopes that are usually, but not always, located directly adjacent to, and above, a main river channel floodplain. These moderate SW-facing river banks are occupied by the warm, dry Gg02 site series if covered by grass. These riparian areas may also represent low, sloping benches adjacent to major river channels and may contain some of the Fm01 site series. 3949 areas ended up defining a sort of narrow riparian buffer with moderate slopes (10-40%) adjacent to major stream channels. We ultimately described these areas as dominated by warm steep Gg02.
3950	BG xw2	00	Fm01	d	y	3950 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3950 areas were mapped on all aspects on gentle slopes of < 10% that occurred mainly immediately adjacent to, but above, major river valley floodplains. 3950 areas ended up defining entities that were gently sloping high benches or terraces adjacent to major stream channels, but at least 10 m above the level of the river. We are presently unsure what site series is most likely to occur in these locations. These riparian areas may represent low, sloping benches adjacent to major river channels occupied by the Fm01 site series. 3950 areas ended up defining a sort of narrow riparian buffer with gentle slopes (<10%) adjacent to major stream channels. We ultimately described these areas as dominated by high bench Fm01.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3951	BG xw2	00	Fm01	d	y	3951 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3951 areas were mapped on all aspects on gentle slopes of <10% that occurred mainly immediately adjacent to, and less than 10 m above, major river valley floodplains. 3951 areas ended up defining entities that were gently sloping high benches or terraces adjacent to major stream channels, and less than 10 m above the level of the river. We are presently unsure what site series is most likely to occur in these locations. These riparian areas may represent low, sloping benches adjacent to major river channels occupied by the Fm01 site series. 3951 areas ended up defining a sort of narrow riparian buffer with gentle slopes (<10%) adjacent to, and within, major stream channels. We ultimately described these areas as dominated by low bench Fm01.
3952	BG xw2	00	WE	p	y	3952 areas were mapped ONLY in areas that had a purple to bluish color on the satellite image. This color often represented a mixture of water and trees or grassland in shadow. 3952 areas were mapped in areas of purple shadows in all locations of manually recognized ORGANIC soils. 3952 areas are meant to recognize permanently wet conditions with a buildup of organic materials. No areas of organic soils were recognized in this subzone, but a KB rule still has to be defined just to cover this possibility.
3960	BG xw2	00	Ro15	s	r	3960 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3960 areas were mapped on the dry tops of crests that had been mapped as SHALLOW. 3960 areas are inferred to be occupied by thin, rocky soils and Ro15 site series.
3961	BG xw2	02	Fd02	r	s	3961 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3961 areas were mapped on the dry tops of deep crests that had NOT been mapped as SHALLOW. 3961 areas are inferred to be occupied by a thin, perhaps rocky, version of the 02 site series.
3962	BG xw2	02	Fd02	d	j	3962 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3961 areas were mapped on the slightly dryer tops of low knolls that had NOT been mapped as SHALLOW. 3962 areas are inferred to be occupied by the normal FORESTED 02 site series.
3963	BG xw2	02	Fd02	w	s	3963 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3963 areas were mapped on steep (>40%) SW-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3963 areas are relatively rare, as most SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the normal FORESTED 02 site series.
3964	BG xw2	02	Fd02	k	s	3964 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3964 areas were mapped on steep (>40%) NE-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3964 areas are relatively common, as many NE facing slopes are shaded and moist enough to develop forest vegetation. These 3964 areas are inferred to be occupied by the normal FORESTED 02 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3965	BG xw2	02	Fd 02	w	s	3965 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3965 areas were mapped on moderate (10-40%) SW-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3965 areas are relatively rare, as most SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the normal FORESTED 02 site series.
3966	BG xw2	02	Fd 02	k	s	3966 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3966 areas were mapped on moderate (10-40%) NE-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3966 areas are relatively common, as many NE facing slopes are shaded and moist enough to develop forest vegetation. These 3966 areas are inferred to be occupied by the normal FORESTED 02 site series.
3967	BG xw2	02	Fd 02	w	s	3967 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3967 areas were mapped on gentle (<10%) SW-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3967 areas are relatively rare, as most gentle SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the normal FORESTED 02 site series.
3968	BG xw2	02	Fd 02	k	s	3968 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3968 areas were mapped on gentle (<10%) NE-facing slopes, in upper landform positions that had NOT been mapped as SHALLOW. 3968 areas are relatively uncommon, as most NE facing slopes with forest vegetation tend to be steeper than 10%. These 3968 areas are inferred to be occupied by the normal FORESTED 02 site series.
3969	BG xw2	04	Fd 04	d	y	3969 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3969 areas were mapped on moderate (10-40%) slopes, in draws, hollows and concavities in upper landform positions that had NOT been mapped as SHALLOW. 3969 areas are sloping draws in upper landform positions in forested areas. These 3969 areas are inferred to be occupied by a moister than normal forested site series, such as 04 or 03.
3970	BG xw2	05	Fd 05	d	y	3970 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3970 areas were mapped on gentle (<10%) slopes, in draws, hollows and concavities in upper landform positions that had NOT been mapped as SHALLOW. 3970 areas are level to very gently sloping draws in upper landform positions in forested areas. These 3970 areas are inferred to be occupied by a moister than normal forested site series, such as 05 or 04.
3971	BG xw2	02	Fd 02	w	s	3971 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3971 areas were mapped on steep (>40%) SW-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3971 areas are relatively rare, as most steep SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the normal FORESTED 02 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3972	BG xw2	03	Fd 03	k	s	3972 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3972 areas were mapped on steep (>40%) NE-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3972 areas occur lower down on steep NE facing slopes and have slightly moister conditions that areas higher up the slopes that are not as strongly shaded. These 3972 areas are inferred to be occupied by the slightly moister FORESTED 03 site series.
3973	BG xw2	02	Fd 02	w	s	3973 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3973 areas were mapped on moderate (10-40%) SW-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3973 areas are relatively rare, as most SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the normal FORESTED 02 site series.
3974	BG xw2	03	Fd 03	k	s	3974 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3974 areas were mapped on moderate (10-40%) NE-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3974 areas occur lower down on moderate NE facing slopes and have slightly moister conditions that areas higher up the slopes that are not as strongly shaded. These 3974 areas are inferred to be occupied by the slightly moister FORESTED 03 site series.
3975	BG xw2	03	Fd 03	w	s	3975 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3975 areas were mapped on gentle (<10%) SW-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3975 areas are relatively rare, as most gentle SW facing slopes are too dry to develop forest vegetation, however a few were encountered and these are inferred to be occupied by the slightly moister FORESTED 03 site series.
3976	BG xw2	03	Fd 03	k	s	3976 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3976 areas were mapped on gentle (<10%) NE-facing slopes, in mid to lower landform positions that had NOT been mapped as SHALLOW. 3976 areas are relatively uncommon, as most NE facing slopes with forest vegetation tend to be steeper than 10%. These 3976 areas are inferred to be occupied by the slightly moister FORESTED 03 site series. 3976 areas represent tend to occur below slope breaks where seepage conditions can occur leading to the presence of some moister 03 site series.
3977	BG xw2	04	Fd 04	d	y	3977 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3977 areas were mapped on moderate (10-40%) slopes, in draws, hollows and concavities in mid to lower landform positions, that had NOT been mapped as SHALLOW. 3977 areas are sloping draws in mid to lower landform positions in forested areas. These 3977 areas are inferred to be occupied by a moister than normal forested site series, such as 04 or 05.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3978	BG xw2	05	Fd 05	d	y	3978 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3978 areas were mapped on gentle (<10%) slopes, in draws, hollows and concavities in mid to lower landform positions, that had NOT been mapped as SHALLOW. 3978 areas are level to very gently sloping draws in mid to lower landform positions in forested areas. These 3978 areas are inferred to be occupied by a moister than normal forested site series, such as 05 or 04.
3979	BG xw2	03	Fd 03	d	y	3979 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3979 areas were mapped on steep (> 40%) SW-facing slopes, in lower to toe-slope landform positions. On steeper SW slopes, these 3979 areas are inferred to be occupied by the slightly moister FORESTED 03 site series rather than the much moister 04 seepage site series
3980	BG xw2	04	Fd 04	d	y	3980 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3980 areas were mapped on steep (> 40%) NE-facing slopes, in lower to toe-slope landform positions. 3980 areas tend to be strongly shaded and to accumulate snowpack and seepage. On NE slopes, these 3979 areas are inferred to be occupied by the much moister 04 seepage site series
3981	BG xw2	03	Fd 03	d	y	3981 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3981 areas were mapped on moderate (10-40%) slopes of all aspects in lower to toe-slope landform positions. 3981 areas do not occupy moister draws or hollows but rather occupy the drier and more convex portions of lower toe slopes. These 3981, drier lower toe slope areas are inferred to be occupied by the slightly moister FORESTED 03 site series rather than the much moister 04 seepage site series
3982	BG xw2	04	Fd 04	d	y	3982 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3982 areas were mapped on gentle (<10%) slopes of all aspects in lower to toe-slope landform positions. 3982 areas tend to occur below slope breaks where increased seepage can occur. These 3982 areas are inferred to be occupied by the much moister 04 seepage site series with perhaps also some very moist 05 site series.
3983	BG xw2	04	Fd 04	d	y	3983 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3983 areas were mapped on moderate (10-40%) slopes of all aspects in toe-slope landform positions. 3983 areas do not occupy moister draws or hollows but rather occupy the drier and more convex portions of lower toe slopes. These 3983, slightly drier lower toe slope areas are inferred to be occupied by the very moist FORESTED 04 seepage site series
3984	BG xw2	04	Fd 04	d	y	3984 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3984 areas were mapped on gentle (<10%) slopes of all aspects in toe-slope landform positions. 3984 areas tend to occur in level areas below slope breaks where increased seepage can accumulate. These 3984 areas are inferred to be occupied by the much moister 04 seepage site series with perhaps also some very moist 05 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
3985	BG xw2	05	Fd 05	d	y	3985 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3985 areas occur in gently sloping draws, hollows and sloping depressions with slopes greater than 5%. These forested sloping draws are inferred to be occupied mainly by the very moist 05 forested site series.
3986	BG xw2	05	Fd 05	d	y	3986 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3986 areas occur in nearly level draws, hollows and depressions with slopes less than 5%. These level draws are inferred to be occupied mainly by very moist 05 forested site series.
3987	BG xw2	06	06	d	y	3987 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3987 areas were mapped in low-lying margins around small lakes and wetlands in areas of FOREST vegetation. 3987 areas occur in low-lying hollows and depressions around the margins of lakes and wetlands in forested areas. These low-lying margins are inferred to be occupied mainly by the very moist 06 site series.
3988	BG xw2	04	Fd 04	d	y	3988 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3988 areas were mapped in areas of FOREST vegetation in all locations of recognized seepage. 3988 areas are meant to recognize conditions that are moister than expected for the normal mesic site series. The most common moister than mesic site series in the forested areas is 04. Therefore these manually mapped SEEPAGE areas are inferred to be dominated by the 04 site series.
3989	BG xw2	00	00	p	y	3989 areas were mapped ONLY in areas that had a darker green color on the satellite image. This color was interpreted to represent the presence of continuous tree cover and FOREST VEGETATION in this grassland subzone. 3989 areas were mapped in areas of FOREST vegetation in all locations of manually recognized ORGANIC soils. 3989 areas are meant to recognize permanently wet conditions with a buildup of organic materials. No areas of organic soils were recognized in this subzone, but a KB rule still has to be defined just to cover this possibility.
3991	BG xw2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
3992	BG xw2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
3993	BG xw2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
3994	BG xw2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
3995	BG xw2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
3996	BG xw2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.

**PEM Entity Extended Legend with Proportions of Site Series for: BG xw2**

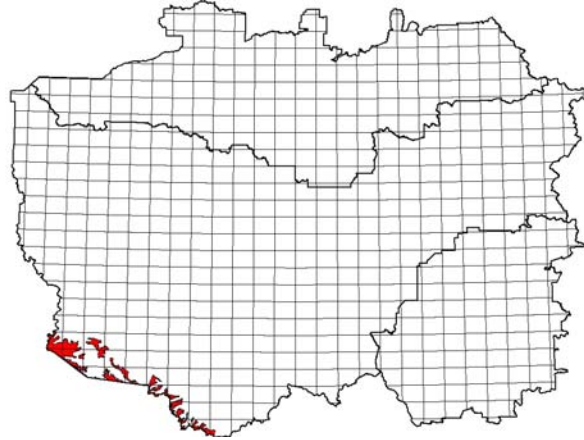
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3900	3900	Ro15	BG xw2	10	00	Ro15	s	r						
3901	3901	01a	BG xw2	10	01	01a	d	x						
3902	3902	Ro14	BG xw2	10	00	Ro14	s	r						
3903	3903	Ro14	BG xw2	10	00	Ro14	s	r						
3904	3904	Ro15	BG xw2	10	00	Ro15	s	r						
3905	3905	Ro15	BG xw2	10	00	Ro15	s	r						
3906	3906	Gg02	BG xw2	10	02	Gg02	w	x						
3907	3907	Gg02	BG xw2	10	02	Gg02	k	x						
3908	3908	Gg04	BG xw2	10	00	Gg04	w	d						
3909	3909	Gg02	BG xw2	10	02	Gg02	w	d						
3910	3910	01a	BG xw2	10	01	01a	d	j						
3911	3911	Ro15	BG xw2	10	00	Ro15	w	s						
3912	3912	01a	BG xw2	10	01	01a	k	d						
3913	3913	01a	BG xw2	10	01	01a	k	d						
3914	3914	01a	BG xw2	10	01	01a	d	j						
3915	3915	Ro15	BG xw2	10	00	Ro15	k	s						
3916	3916	01a	BG xw2	10	01	01a	d	j						
3917	3921	Gg09	BG xw2	10	09	Gg09	d	y						
3918	3916	01a	BG xw2	10	01	01a	d	j						
3919	3921	Gg09	BG xw2	10	09	Gg09	d	y						
3920	3921	Gg09	BG xw2	10	09	Gg09	d	y						
3921	3921	Gg09	BG xw2	10	09	Gg09	d	y						
3922	3922	Gg09	BG xw2	10	09	Gg09	d	y						
3923	3923	Gg14	BG xw2	10	14	Gg14	d	y						
3924	3924	Gg09	BG xw2	10	09	Gg09	d	y						
3925	3925	WE	BG xw2	10	00	00	p	y						
3926	3926	Gg14	BG xw2	10	14	Gg14	d	y						
3928	3928	Rt05	BG xw2	10	00	Rt05	s							
3930	3930	ME	BG xw2	10	00	ME	d	j						
3931	3931	ME	BG xw2	10	00	ME	d	j						
3932	3932	ME	BG xw2	10	00	ME	d	y						
3933	3933	ME	BG xw2	10	00	ME	d	y						
3940	3964	02	BG xw2	10	02		k	s						
3941	3941	Ro01	BG xw2	10	00	Ro01	w	s						
3942	3966	02	BG xw2	10	02		k							
3943	3965	02	BG xw2	10	02		w							
3944	3968	02	BG xw2	10	02		d	j						
3945	3916	01a	BG xw2	10	01	01a	d	j						
3946	3946	01c	BG xw2	10	01	01c	k	s						
3947	3906	Gg02	BG xw2	10	02	Gg02	w	x						
3948	3948	01c	BG xw2	10	01	01c	k	j						
3949	3909	Gg02	BG xw2	10	02	Gg02	w	x						
3950	3950	Fm01	BG xw2	10	00	Fm01	d	y						
3951	3950	Fm01	BG xw2	10	00	Fm01	d	y						
3952	3925	WE	BG xw2	10	00	00	p	y						
3960	3960	Ro15	BG xw2	10	00	Ro15	s	r						
3961	3961	02	BG xw2	10	02	02	r	s						
3962	3962	02	BG xw2	10	02		d	j						
3963	3963	02	BG xw2	10	02		w	s						
3964	3964	02	BG xw2	10	02		k	s						
3965	3965	02	BG xw2	10	02		w	s						
3966	3966	02	BG xw2	10	02		k	s						
3967	3967	02	BG xw2	10	02		w	s						
3968	3968	02	BG xw2	10	02		k	s						
3969	3977	04	BG xw2	10	04		d	y						
3970	3985	05	BG xw2	10	05		d	y						

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
3971	3963	02	BG xw2	10	02		w	s						
3972	3981	03	BG xw2	10	03		k	s						
3973	3965	02	BG xw2	10	02		w	s						
3974	3981	03	BG xw2	10	03		k	s						
3975	3974	03	BG xw2	10	03		w	s						
3976	3976	03	BG xw2	10	03		k	s						
3977	3977	04	BG xw2	10	04		d	y						
3978	3985	05	BG xw2	10	05		d	y						
3979	3979	03	BG xw2	10	03		d	y						
3980	3980	04	BG xw2	10	04		d	y						
3981	3981	03	BG xw2	10	03		d	y						
3982	3982	04	BG xw2	10	04		d	y						
3983	3977	04	BG xw2	10	04		d	y						
3984	3982	04	BG xw2	10	04		d	y						
3985	3985	05	BG xw2	10	05		d	y						
3986	3986	05	BG xw2	10	05		d	y						
3987	3987	06	BG xw2	10	06		d	y						
3988	3988	04	BG xw2	10	04		d	y						
3989	3989	WE	BG xw2	10	00	WE	p	y						
3991	3991	OW	BG xw2	10	00	OW								
3992	3992	WE	BG xw2	10	00	WE	d	y						
3993	3993	ME	BG xw2	10	00	ME								
3994	3994	PA	BG xw2	10	00	PA								
3995	3995	BR	BG xw2	10	00	BR								
3996	3996	DL	BG xw2	10	00	DL								



**BGC Unit: CMA****LMES Zone ID: 40****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	52,903.9	1.07%
100 Mile House TSA	0.0	0.00%
Cariboo Region	52,903.9	0.64%

**List of Site Series Codes Defined for use in CMA**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
00	AF	White mountain-avens - Altai fescue grassland	very xeric - submesic	Dry Tundra, Very thin dry ground cover. Almost bare.
00	CS	Cottongrass - Sedge - Sphagnum fen	subhygric - hydric	Bare to sparsely vegetated hollows and rocky chutes
00	DG	unknown		Moist gullies and chutes with more vigorous brush vegetation
00	FB	Bl - Dwarf blueberry - Dicranum parkland	xeric - mesic	Used in CMA for sparse dry Krummholz mostly on SW slopes
00	FC	Altai fescue - Cladonia grassland	subxeric - mesic	More vigorous vegetation, thicker ground cover, Grass with brush
00	FM	unknown		Used in CMA for nearly continuous tree cover, Krummholz
00	HT	Heather - Mountain sageword tundra	mesic	Steep NE slopes with some vegetative cover, purple colors on LS7
00	PC	Pa - Crowberry krummholz	xeric - submesic	Thin clumped b-layer trees, krummholz, Mostly cool, dry NE slopes
00	SF	Scrub birch - Altai fescue shrub steppe	xeric - submesic	Scrub birch and scattered clumped trees with grass and forb cover
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the CMA once a new classification of alpine and sub-alpine areas is published.

**Landscape Profile Diagram: CMA**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for CMA (arule4031)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT15	4	15.50	15.00	99.00	15.00	99.00	0.5
14	formfile	SLOPE	SlopeLT15	5	14.50	0.00	15.00	0.00	15.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

### Example Fuzzy Ecological Class Rule File for CMA (crule4031)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
SH4030r	Crest	35	1	4030	AF Sparse Dry Tundra	SH4034ne	Up2Low	35	5	4034	SF Meadow- Brush Transition
SH4030r	Dry_WI	35	1	4030	Ridge Crest	SH4034ne	Dry2Med_WI	35	5	4034	< 30% NE Slope
SH4030r	SlopeLT20	20	1	4030		SH4034ne	SlopeLT30	20	5	4034	
SH4030r	Hi_Ridge	10	1	4030		SH4034ne	NE_Aspect	10	5	4034	
SH4031sw	Up2Low	35	2	4031	SF Meadow- Brush Transition	SH4035ne	Up2Low	35	6	4035	RO Thin Grass and Rock
SH4031sw	Dry2Med_WI	35	2	4031	< 30% SW Slope	SH4035ne	Dry2Med_WI	35	6	4035	30-45% NE Slope
SH4031sw	SlopeLT30	20	2	4031		SH4035ne	SlopeLT45	10	6	4035	
SH4031sw	SW_Aspect	10	2	4031		SH4035ne	SlopeGT30	10	6	4035	
SH4032sw	Up2Low	35	3	4032	SF Meadow- Brush Transition	SH4035ne	NE_Aspect	10	6	4035	
SH4032sw	Dry2Med_WI	35	3	4032	30-45% SW Slope	SH4036ne	Up2Low	35	7	4036	RO Thin Grass and Rock
SH4032sw	SlopeLT45	10	3	4032		SH4036ne	Dry2Med_WI	35	7	4036	> 45% NE Slope
SH4032sw	SlopeGT30	10	3	4032		SH4036ne	Steep	20	7	4036	
SH4032sw	SW_Aspect	10	3	4032		SH4036ne	NE_Aspect	10	7	4036	
SH4033sw	Up2Low	35	4	4033	RO Thin Grass and Rock	SH4037st	Hollow	35	8	4037	RU Rocky Rubbly Wet Chute
SH4033sw	Dry2Med_WI	35	4	4033	> 45% SW Slope	SH4037st	Wet2V_Wet	35	8	4037	Sloping > 5%
SH4033sw	Steep	20	4	4033		SH4037st	SlopeGT15	30	8	4037	
SH4033sw	SW_Aspect	10	4	4033		SH4038lv	Hollow	35	9	4038	CS Forb - Brush Transition
						SH4038lv	Wet2V_Wet	35	9	4038	Wet, Level Hollow< 5%
						SH4038lv	SlopeLT15	30	9	4038	



**PEM Entity Descriptions for: CMA**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4000	CMA	00	RO	r	s	4000 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
4001	CMA	00	AF	s	j	4001 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, warm aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
4002	CMA	00	AF	w	s	4002 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4002 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
4003	CMA	00	RO	w	v	4003 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. Rubble or scree.
4004	CMA	00	AF	s	j	4004 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, Cool aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
4005	CMA	00	RO	k	s	4005 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4025 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
4006	CMA	00	RO	k	v	4006 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. Rubble and scree.
4007	CMA	00	RU	s	y	4007 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs. Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
4008	CMA	00	CS	s	y	4008 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs. Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
4010	CMA	00	RO	r	s	4010 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
4011	CMA	00	FC	s	j	4011 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4012	CMA	00	FC	w	s	4012 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4022 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, warm aspect, medium textured shallow soils, thin dry tundra.
4013	CMA	00	RO	w	v	4013 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
4014	CMA	00	FC	s	j	4014 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
4015	CMA	00	RO	k	s	4015 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4025 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, and thin dry tundra.
4016	CMA	00	RO	k	v	4016 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
4017	CMA	00	RU	s	y	4017 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
4018	CMA	00	CS	s	y	4018 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
4020	CMA	00	RO	r	s	4020 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
4021	CMA	00	TA	s	j	4021 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
4022	CMA	00	RO	w	s	4022 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4022 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4023	CMA	00	RO	w	v	4023 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
4024	CMA	00	RU	s	j	4024 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4025	CMA	00	RO	k	s	4025 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4025 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4026	CMA	00	RO	k	v	4026 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. (Ray says may be RO or AW)
4027	CMA	00	RU	s	y	4027 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes with some minor forbs and willow.
4028	CMA	00	CS	s	y	4028 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a minor cover of forbs and willows.
4030	CMA	00	AF	r	s	4030 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 4030 areas are transition areas from dry tundra to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition vegetation. Shallow crests.
4031	CMA	00	SF	s	j	4031 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 4031 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
4032	CMA	00	SF	w	s	4032 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by dry tundra vegetation. 4032 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
4033	CMA	00	RO	w	v	4033 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.
4034	CMA	00	SF	s	j	3434 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 3434 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
4035	CMA	00	RO	k	s	4035 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by covered by dry tundra vegetation. 4035 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
4036	CMA	00	RO	k	v	4036 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 4036 areas appear to be covered by a mixture bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4037	CMA	00	RU	s	y	4037 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
4038	CMA	00	CS	s	y	4038 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
4040	CMA	00	SF	r	s	4040 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 4040 areas are transition areas from dry tundra to sparse parkland. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition. Shallow crests.
4041	CMA	00	FB	s	j	4041 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
4042	CMA	00	FB	w	s	4042 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
4043	CMA	00	FB	w	v	4043 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on warm aspects.
4044	CMA	00	FB	s	j	4044 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on cold aspects.
4045	CMA	00	FB	k	s	4045 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting sparse parkland vegetation; generally on cold aspects.
4046	CMA	00	FB	k	v	4046 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on cold aspects.
4047	CMA	00	DG	s	y	4047 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasing ground cover of sparse stunted trees; (class 40). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas transitional to sparse parkland ground cover.
4048	CMA	00	DG	s	y	4048 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasing ground cover of sparse stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet brushy gullies.
4051	CMA	00	TA	r	s	4051 areas were mapped in areas characterized by a mixture of bare rock, rubble, snow and ice that does not appear to be permanent snow or glacier ice. Some 4051 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 4051 areas mainly occur adjacent to the edges of glaciers and do not appear to have any significant vegetative ground cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4052	CMA	00	GL	s		4052 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 4052 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 4052 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
4053	CMA	00	GL	r	s	4053 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N, NW or NE facing slopes. 4053 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
4054	CMA	00	GL			4054 areas were mapped to enclose the cores of what appear to be permanent glaciers. 4054 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery. Most 4054 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
4060	CMA	00	RO	r	s	4060 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a continuous cover of stunted trees. Crest positions, gentle slopes, medium textured shallow soils, continuous stunted tree cover. Shallow crests.
4061	CMA	00	FM	s	j	4061 areas were mapped on gentle (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4062	CMA	00	FM	w	s	4062 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4063	CMA	00	FM	w	v	4063 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4064	CMA	00	FM	s	j	4064 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4065	CMA	00	FM	k	s	4065 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4066	CMA	00	FM	k	v	4066 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4067	CMA	00	RU	s	y	4067 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a sparse parkland stunted tree cover. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
4068	CMA	00	DG	s	y	4068 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4070	CMA	00	RO	r	s	4070 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine. Crest positions, gentle slopes, medium textured shallow soils, sparse parkland stunted tree cover; Shallow crests.
4071	CMA	00	FB	s	j	4071 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4071 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
4072	CMA	00	FB	w	s	4072 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows but may also contain sparse parkland stunted trees. Very little 4072 occurs in the alpine and most of it appears to be most closely associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp
4073	CMA	00	FB	w	v	4073 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus.
4074	CMA	00	FM	s	j	4074 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4074 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
4075	CMA	00	FM	k	s	4075 areas were mapped on moderate to steep slopes (30-45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4075 occurs in the alpine and most of it appears to be associated with a moist heather type of vegetation more commonly found lower in the landscape in the ESSF xvp.
4076	CMA	00	RO	k	v	4076 areas were mapped on very steep slopes (> 45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Since trees should not grow in the alpine, we assume that these areas of very dark colors in shadow on N and W exposures consist of mainly of bare rock, rubble, scree and talus.
4077	CMA	00	DG	s	y	4077 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
4078	CMA	00	DG	s	y	4078 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.
4091	CMA	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4092	CMA	00	GW	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. No 4092 areas occur in the CMA.
4093	CMA	00	FC			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. No 4093 areas were permitted to occur in this PEM area. We elected to predict meadow classes ourselves instead of using the exception mapping.
4094	CMA	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures. No 4094 areas occur in the CMA
4095	CMA	00	BR			These areas were mapped visually as areas of scrub brush. No 4095 areas were permitted to occur in this PEM area. We elected to predict scrub brush ourselves instead of using the exception mapping.
4096	CMA	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series. No 4096 areas occur in the CMA
4098	CMA	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

### PEM Entity Extended Legend with Proportions of Site Series for: CMA

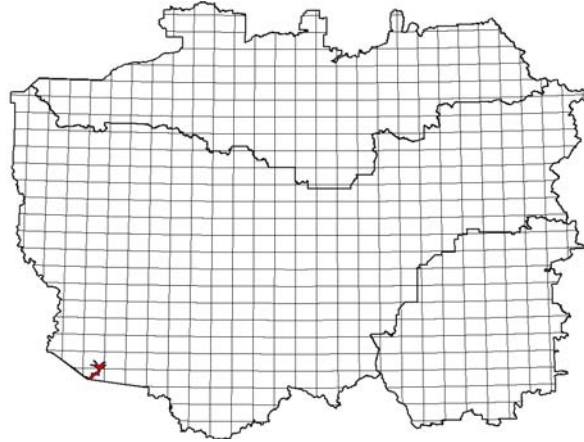
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4000	4000	RO	CMA	6	00	RO	r	s	4	00	FC			
4001	4001	AF	CMA	7	00	AF	s	j	3	00	RO			
4002	4002	AF	CMA	6	00	AF	w	s	4	00	RO			
4003	4003	RO	CMA	8	00	RO	w	v	2	00	FC			
4004	4004	AF	CMA	7	00	AF	s	j	3	00	RO			
4005	4005	RO	CMA	6	00	RO	k	s	4	00	FC			
4006	4006	RO	CMA	8	00	RO	k	v	2	00	FC			
4007	4007	RU	CMA	6	00	RU	s	y	4	00	CS			
4008	4008	CS	CMA	6	00	CS	s	y	4	00	RU			
4010	4000	RO	CMA	6	00	RO	r	s	4	00	FC			
4011	4011	FC	CMA	7	00	FC	s	j	3	00	RO			
4012	4012	FC	CMA	6	00	FC	w	s	4	00	RO			
4013	4003	RO	CMA	8	00	RO	w	v	2	00	FC			
4014	4014	FC	CMA	7	00	FC	s	j	3	00	RO			
4015	4005	RO	CMA	6	00	RO	k	s	4	00	FC			
4016	4006	RO	CMA	8	00	RO	k	v	2	00	FC			
4017	4007	RU	CMA	6	00	RU	s	y	4	00	CS			
4018	4008	CS	CMA	6	00	CS	s	y	4	00	RU			
4020	4020	RO	CMA	6	00	RO	r	s	4	00	AF			
4021	4021	TA	CMA	7	00	TA	s	j	3	00	AF			
4022	4022	RO	CMA	6	00	RO	w	s	4	00	AF			
4023	4023	RO	CMA	8	00	RO	w	v	2	00	AF			
4024	4024	RU	CMA	7	00	RU	s	j	3	00	AF			
4025	4025	RO	CMA	6	00	RO	k	s	4	00	AF			
4026	4026	RO	CMA	8	00	RO	k	v	2	00	AF			
4027	4027	RU	CMA	6	00	RU	s	y	4	00	CS			
4028	4028	CS	CMA	6	00	CS	s	y	4	00	RU			
4030	4030	AF	CMA	6	00	AF	r	s	4	00	RO			
4031	4031	SF	CMA	7	00	SF	s	j	3	00	RO			
4032	4032	SF	CMA	6	00	SF	w	s	4	00	RO			
4033	4033	RO	CMA	8	00	RO	w	v	2	00	SF			
4034	4034	SF	CMA	7	00	SF	s	j	3	00	RO			
4035	4035	RO	CMA	6	00	RO	k	s	4	00	SF			
4036	4036	RO	CMA	8	00	RO	k	v	2	00	SF			
4037	4067	RU	CMA	6	00	RU	s	y	4	00	CS			
4038	4008	CS	CMA	6	00	CS	s	y	4	00	RU			
4040	4040	SF	CMA	6	00	SF	r	s	4	00	RO			
4041	4041	FB	CMA	7	00	FB	s	j	3	00	RO			
4042	4042	FB	CMA	6	00	FB	w	s	4	00	RO			
4043	4043	FB	CMA	8	00	FB	w	v	2	00	SF			
4044	4044	FB	CMA	7	00	FB	s	j	3	00	RO			
4045	4045	FB	CMA	6	00	FB	k	s	4	00	SF			
4046	4046	FB	CMA	8	00	FB	k	v	2	00	SF			
4047	4047	DG	CMA	6	00	DG	s	y	4	00	RU			
4048	4048	DG	CMA	6	00	DG	s	y	4	00	RU			
4051	4051	TA	CMA	8	00	TA	r	s	2	00	AF			
4052	4052	GL	CMA	8	00	GL	s		2	00	RO			
4053	4053	GL	CMA	8	00	GL	r	s	2	00	RO			
4054	4054	GL	CMA	10	00	GL								
4060	4060	RO	CMA	6	00	RO	r	s	4	00	SF			
4061	4061	FM	CMA	7	00	FM	s	j	3	00	RO			
4062	4062	FM	CMA	6	00	FM	w	s	4	00	RO			
4063	4063	FM	CMA	8	00	FM	w	v	2	00	SF			
4064	4064	FM	CMA	7	00	FM	s	j	3	00	RO			
4065	4065	FM	CMA	6	00	FM	k	s	4	00	SF			
4066	4066	FM	CMA	8	00	FM	k	v	2	00	SF			



LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4067	4067	RU	CMA	6	00	RU	s	y	4	00	DG			
4068	4048	DG	CMA	6	00	DG	s	y	4	00	RU			
4070	4060	RO	CMA	6	00	RO	r	s	4	00	SF			
4071	4041	FB	CMA	7	00	FB	s	j	3	00	RO			
4072	4042	FB	CMA	8	00	FB	w	s	2	00	RO			
4073	4043	FB	CMA	6	00	FB	w	v	4	00	RO			
4074	4064	FM	CMA	7	00	FM	s	j	3	00	RO			
4075	4065	FM	CMA	8	00	FM	k	s	2	00	SF			
4076	4076	RO	CMA	6	00	RO	k	v	4	00	FM			
4077	4047	DG	CMA	6	00	DG	s	y	4	00	RU			
4078	4048	DG	CMA	6	00	DG	s	y	4	00	RU			
4091	4091	OW	CMA	10	00	OW								
4092	4092	GW	CMA	10	00	GW	d	y						
4093	4093	FC	CMA	10	00	FC								
4094	4094	PA	CMA	10	00	PA								
4095	4095	BR	CMA	10	00	BR								
4096	4096	DL	CMA	10	00	DL								
4098	4098	AV	CMA	10	00	AV								

**BGC Unit: CWH ds1****LMES Zone ID: 41****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	3,807.5	0.08%
100 Mile House TSA	0.0	0.00%
Cariboo Region	3,807.5	0.05%

**List of Site Series Codes Defined for use in CWH ds1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	HM	HwFd - Cat's-tail moss	submesic - mesic	All upper to lower water shedding slopes
02	DK	FdPI - Kinnikinnick	xeric	Shallow Crests
03	FF	FdHw - Falsebox	xeric - subxeric	Steep SW Slopes
04	DF	Fd - Fairybells	xeric - subxeric	Not Mapped
05	RS	Cw - Solomon's seal	submesic - mesic	Slightly moist, rich seepage in upper swales
06	HQ	Hw - Queen's cup	subhydryc-hygric	Slightly moist, less rich seepage, nearly level low to toe
07	RD	Cw - Devil's club	subhydryc-hygric	Rich moist seepage in sloping (10-30%) valleys and toes
08	SS	Ss - Salmonberry	subhydryc - hygric	High bench fluvial settings
09	CD	Act - Red-osier dogwood	subhydryc - hygric	Medium bench fluvial settings
10	CW	Act - Willow (Fl50 - Sitka willow - False lily-of-the-valley)	subhydryc - hygric	Low bench fluvial settings
11	LS	PI - Sphagnum	subhydryc	Very wet, level to depressional organic areas
12	RC	CwSs - Skunk cabbage (Ws54 - CwHw - Skunk cabbage)	subhydryc	Nearly level, flat, wet valleys (< 5%)
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #28, "A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: CWH ds1

No Landscape Profile Diagram available

### Example Attribute Class Rule File for CWH ds1 (arule4130)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13.00
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.20
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.80
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1.00
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.50
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1.00
16	formfile	QWETI	Sl_Wet	1	9.50	9.50	9.50	8.50	10.50	1.00
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.50
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.50
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.50
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2.00
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1.00
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1.00
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1.00
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5.00
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.50
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1.00
39	relzfile	Z2st	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
40	relzfile	Z2st	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00

## Example Fuzzy Ecological Class Rule File for CWH ds1 (crule4130)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH4102r	Crest	30	1	4102	02 Shallow Crest	MH4143s	Mid2Low	30	14	4143	01 Mod SW Low
MH4102r	VDry	30	1	4102		MH4143s	Dry2SDry	30	14	4143	
MH4102r	SlopeLT30	10	1	4102		MH4143s	SlopeLT30	20	14	4143	
MH4102r	Med2Crs	10	1	4102		MH4143s	SlopeGT10	10	14	4143	
MH4102r	Shallow	40	1	4102		MH4143s	SW_Aspect	10	14	4143	
MH4102r	Hi_Ridge	10	1	4102		MH4115n	Mid2Low	30	15	4115	01 Mod NE Low
MH4121c	Crest	30	2	4121	01 Deep Dry Ridge	MH4115n	Dry2SDry	30	15	4115	
MH4121c	VDry	30	2	4121		MH4115n	SlopeLT30	20	15	4115	
MH4121c	SlopeLT30	10	2	4121		MH4115n	SlopeGT10	10	15	4115	
MH4121c	Med2Crs	10	2	4121		MH4115n	NE_Aspect	10	15	4115	
MH4121c	Deep	10	2	4121		MH4110L	Mid2Low	30	16	4110	01 Gentle SW Low
MH4121c	Hi_Ridge	10	2	4121		MH4110L	Dry2SDry	30	16	4110	
MH4112k	Crest	30	3	4112	01 Dry Low Knoll	MH4110L	SlopeLT10	30	16	4110	
MH4112k	VDry	30	3	4112		MH4110L	SW_Aspect	10	16	4110	
MH4112k	SlopeLT30	10	3	4112		MH4114L	Mid2Low	30	17	4114	01 Gentle NE Low
MH4112k	Med2Crs	10	3	4112		MH4114L	Dry2SDry	30	17	4114	
MH4112k	Deep	10	3	4112		MH4114L	SlopeLT10	30	17	4114	
MH4112k	Low_Knoll	10	3	4112		MH4114L	NE_Aspect	10	17	4114	
MH4103s	Crest2Mid	30	4	4103	03 Steep SW Dry	MH4163L	Mid2Low	30	18	4163	07 Wet Lower Swale
MH4103s	VDry2SDry	30	4	4103		MH4163L	Wet	30	18	4163	
MH4103s	Steep_SW	20	4	4103		MH4163L	SlopeLT30	20	18	4163	
MH4103s	Med2Crs	10	4	4103		MH4163L	SlopeGT10	10	18	4163	
MH4103s	Deep	10	4	4103		MH4163L	Deep	10	18	4163	
MH4154n	Crest2Mid	30	5	4154	01 Steep NE	MH4164L	Mid2Low	30	19	4164	06 Flat Wet Swale
MH4154n	VDry2SDry	30	5	4154		MH4164L	Wet	30	19	4164	
MH4154n	Steep_NE	20	5	4154		MH4164L	SlopeLT10	30	19	4164	
MH4154n	Med2Crs	10	5	4154		MH4164L	Deep	10	19	4164	
MH4154n	Deep	10	5	4154		MH4113t	Low2Toe	30	20	4113	01 Steep SW Low
MH4134s	Crest2Mid	30	6	4134	01 Moderate SW	MH4113t	Sl_Wet	30	20	4113	
MH4134s	Dry	30	6	4134		MH4113t	Steep	20	20	4113	
MH4134s	SlopeLT30	20	6	4134		MH4113t	SW_Aspect	10	20	4113	
MH4134s	SlopeGT10	10	6	4134		MH4140t	Low2Toe	30	21	4145	01 Steep NE Low
MH4134s	SW_Aspect	10	6	4134		MH4140t	Sl_Wet	30	21	4145	
MH4141n	Crest2Mid	30	7	4141	01 Moderate NE	MH4140t	Steep	20	21	4145	
MH4141n	Dry	30	7	4141		MH4140t	NE_Aspect	10	21	4145	
MH4141n	SlopeLT30	20	7	4141		MH4111t	Low2Toe	30	22	4111	06/07 Mod Low Wet
MH4141n	SlopeGT10	10	7	4141		MH4111t	Sl_Wet	30	22	4111	
MH4141n	NE_Aspect	10	7	4141		MH4111t	SlopeLT30	20	22	4111	
MH4110s	Crest2Mid	30	8	4110	01 Gentle SW	MH4111t	SlopeGT10	10	22	4111	
MH4110s	Dry	30	8	4110		MH4111t	Deep	10	22	4111	
MH4110s	SlopeLT10	30	8	4110		MH4117t	Low2Toe	30	23	4117	06/07 Gentle Low
MH4110s	SW_Aspect	10	8	4110		MH4117t	Wet	30	23	4117	
MH4114n	Crest2Mid	30	9	4114	01 Gentle NE	MH4117t	SlopeLT10	30	23	4117	
MH4114n	Dry	30	9	4114		MH4117t	Deep	10	23	4117	
MH4114n	SlopeLT10	30	9	4114		MH4118t	Toe	30	24	4118	07/06 Mod Toe
MH4114n	NE_Aspect	10	9	4114		MH4118t	Sl_Wet	30	24	4118	
MH4136u	Crest2Mid	30	10	4136	05/06 Upper Swale	MH4118t	SlopeLT30	20	24	4118	
MH4136u	Wet	30	10	4136		MH4118t	SlopeGT10	10	24	4118	
MH4136u	SlopeLT30	20	10	4136		MH4118t	Deep	10	24	4118	
MH4136u	SlopeGT10	10	10	4136		MH4108t	Toe	30	25	4108	06/07 Flat Wet
MH4136u	Deep	10	10	4136		MH4108t	Wet	30	25	4108	
MH4146u	Crest2Mid	30	11	4146	06/05 Flat Swale	MH4108t	SlopeLT10	30	25	4108	
MH4146u	Wet	30	11	4146		MH4108t	Deep	10	25	4108	
MH4146u	SlopeLT10	30	11	4146		MH4180v	Valley	30	26	4180	07 Sloping Valley
MH4146u	Deep	10	11	4146		MH4180v	Wet2V_Wet	30	26	4180	
MH4113s	Mid2Low	30	12	4113	01/03 Steep SW Low	MH4180v	SlopeGT05	20	26	4180	
MH4113s	VDry2SDry	30	12	4113		MH4180v	Medium	10	26	4180	
MH4113s	Steep_SW	20	12	4113		MH4180v	Deep	10	26	4180	
MH4113s	Med2Crs	10	12	4113		MH4188v	Valley	30	27	4188	12 Flat, Wet Valley
MH4113s	Deep	10	12	4113		MH4188v	Wet2V_Wet	30	27	4188	
MH4145n	Mid2Low	30	13	4145	01/03 Steep NE Low	MH4188v	SlopeLT05	20	27	4188	
MH4145n	VDry2SDry	30	13	4145		MH4188v	Medium	10	27	4188	
MH4145n	Steep_NE	20	13	4145		MH4188v	Deep	10	27	4188	
MH4145n	Med2Crs	10	13	4145		MH4189m	WetZ_LT05	50	28	4189	12 Flat, Wet Margins
MH4145n	Deep	10	13	4145		MH4189m	WetL_LT200	50	28	4189	
						MH4166s	Hi_Seep	80	29	4166	05 Moist Seepage
						MH4166s	Med2Crs	20	29	4166	
						MH4109o	Organic	99	30	4109	11 Organics

**PEM Entity Descriptions for: CWH ds1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4102	CWH ds1	02	DK	r	s	4102 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 4102 occurs on the driest crest positions of high ridges that are shallow to bedrock. 4102 occurs in medium textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow medium textured soils over bedrock
4103	CWH ds1	03	FF	w		4103 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 4103 occupies only the UPPER portions of STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the upper portion of a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
4108	CWH ds1	06	HQ	d	j	4108 areas were mapped on gently sloping (< 10%) TOE slopes in areas of MEDIUM TEXTURED materials. 4108 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 4108 areas are predicted to be occupied by the less rich, moist 06 Site Series along with some rich, moist 07 Site Series. Gentle slope, deep, medium-textured soils.
4109	CWH ds1	11	LS	p	y	4109 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 11 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
4110	CWH ds1	01	HM	d	j	4110 areas were defined to occur on gentle (<10%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 4110 areas are predicted to be occupied by the normal mesic 01 site series. Gentle slope, warm aspect, deep, medium-textured soils.
4111	CWH ds1	06	HQ	d	j	4111 areas were mapped on moderately sloping (10-30%) LOWER to TOE slopes in areas of MEDIUM TEXTURED materials. 4111 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 4111 areas are predicted to be occupied by the moist 06 site series as well as some rich, moist 07 Site Series. Gentle slope, deep, medium-textured soils.
4112	CWH ds1	01	HM	d	x	4112 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 4112 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 Site Series along with some slightly drier site series. Gentle slope, deep, medium-textured soils.
4113	CWH ds1	01	HM	w	x	4113 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 4113 occupies only the MID TO LOWER portions of STEEP SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the lower portion of a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
4114	CWH ds1	01	HM	d	j	4114 areas were defined to occur on gentle (<10%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 4114 areas are predicted to be occupied by the normal mesic 01 site series as well as moister 06 Site Series. Gentle slope, cool aspect, deep, medium-textured soils.
4115	CWH ds1	01	HM	d	k	4115 areas were defined to occur on moderate (10-30%) NE-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 4115 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4117	CWH ds1	06	HQ	d	j	4117 areas were mapped in lowest, flattest and wettest portions of LOWER to TOE LANDFORM positions in areas of MEDIUM TEXTURED materials. 4117 areas were mapped to permit recognition of considerably moister conditions in nearly level lower to toe landform positions. 4117 areas are predicted to be occupied by the relatively nutrient poor, moist 06 site series along with some rich moist seepage 07 site series. Gentle slope, deep, medium-textured soils.
4118	CWH ds1	07	RD	d		4118 areas were mapped on moderately sloping (10-30%) TOE slopes in areas of MEDIUM TEXTURED materials. 4118 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 4118 areas are predicted to be occupied by the rich, moist 07 site series as well as some less rich, moist 06 Site Series. Gentle slope, deep, medium-textured soils.
4121	CWH ds1	01	HM	r	d	4121 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 4121 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 4121 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier or shallower site series in areas not mapped as shallow along with typical 01.
4123	CWH ds1	02	DK	c	s	4123 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 4123 occurs on the driest crest positions of high ridges that are shallow to bedrock. 4123 occurs in coarse textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow coarse textured soils over bedrock
4130	CWH ds1	01	HM	c	d	4130 areas were defined to occur on ALL ASPECTS of all level to moderate (< 30%) slopes on COARSE TEXTURED materials in UPPER to LOWER landform positions. 4130 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER to LOWER slopes in areas of COARSE TEXTURE. Moderate slope, deep, coarse-textured soils.
4131	CWH ds1	06	HQ	c	d	4131 areas were mapped on moderately sloping (10-30%) LOWER to TOE slopes in areas of COARSE TEXTURED materials. 4131 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 4131 areas are predicted to be occupied by the moist seepage 06 and 07 site series along with some normal mesic 01 site series. Gentle slope, deep, coarse-textured soils.
4132	CWH ds1	01	HM	c	r	4132 areas were mapped ONLY in areas of COARSE TEXTURED materials. 4132 areas occur on the tops of dry crests of high ridges with deep coarse soils that WERE NOT mapped as shallow. 4132 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier or shallower site series in areas not mapped as shallow along with typical 01.
4133	CWH ds1	03	FF	c	w	4133 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 4133 occupies all STEEP UPPER to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, coarse - textured soils
4134	CWH ds1	01	HM	d	w	4134 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER to MID landform positions. 4134 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER to MID SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
4135	CWH ds1	01	HM	c	k	4135 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 4135 occupies the ALL portions of STEEP SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by normal, mesic 01 Site Series and not by the drier 03 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, coarse - textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4136	CWH ds1	05	RS	d	j	4136 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to MID LANDFORM positions. 4136 areas were mapped to permit recognition of slightly moister conditions in swales in upper to mid landform positions. 4136 areas are predicted to be occupied by the moist, rich 05 site series as well as some moist, less rich 06 Site Series. Gentle slope, deep, medium-textured soils.
4137	CWH ds1	07	RD	c	d	4137 areas were mapped in all moist upper swales, hollows and concavities in areas of COARSE TEXTURED materials in all UPPER to LOWER LANDFORM positions. 4137 areas were mapped to permit recognition of slightly moister conditions in swales in upper to lower landform positions in coarse areas. 4137 areas are predicted to be occupied by the moist, rich 07 site series as well as some rich, less moist 05 and some moist, less rich 06 Site Series. Gentle slope, deep, coarse-textured soils.
4138	CWH ds1	06	HQ	c	d	4138 areas were mapped on gently sloping (< 10%) LOWER to TOE slopes in areas of COARSE TEXTURED materials. 4138 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 4138 areas are predicted to be occupied by the less rich, moist 06 Site Series along with some rich, moist 07 Site Series. Gentle slope, deep, medium-textured soils.
4139	CWH ds1	12	RC	c	y	4139 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 4139 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, coarse-textured soils.
4141	CWH ds1	01	HM	d	k	4141 areas were defined to occur on moderate (10-30%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 4141 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.
4143	CWH ds1	01	HM	d	w	4143 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 4143 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
4145	CWH ds1	01	HM	k	x	4145 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 4145 occupies the MID to LOWER portions of STEEP SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by normal, mesic 01 Site Series and not by the drier 03 Site Series. This is the lower portion of a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils
4146	CWH ds1	06	HQ	d	j	4146 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to MID LANDFORM positions. 4146 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 4146 areas are predicted to be occupied by the less, rich, moist 06 site series along with some rich moist seepage 05 site series. Gentle slope, deep, medium-textured soils.
4154	CWH ds1	01	HM	k		4154 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 4154 occupies the UPPER portions of STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by normal, mesic 01 Site Series and not by the drier 03 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4163	CWH ds1	07	RD	d	j	4163 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in MID to LOWER LANDFORM positions. 4163 areas were mapped to permit recognition of slightly moister conditions in swales in mid to lower landform positions. 4163 areas are predicted to be occupied by the moist, rich 07 site series as well as some rich, less moist 05 and some moist, less rich 06 Site Series. Gentle slope, deep, medium-textured soils.
4164	CWH ds1	06	HQ	d	j	4164 areas were mapped in lowest, flattest and wettest portions of swales, hollows and concavities in areas of MEDIUM TEXTURED materials in MID to LOWER LANDFORM positions. 4164 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in lower landform positions. 4164 areas are predicted to be occupied by the less, rich, moist 06 site series along with some rich moist seepage 07 site series. Gentle slope, deep, medium-textured soils.
4166	CWH ds1	05	RS	d	j	4166 areas were mapped in all locations where interpreters mapped unexpected seepage in areas of MEDIUM TEXTURED MATERIALS. These 4166 areas are moister than normal and are predicted to be dominated by the slightly moister 05 and 06 Site series. Gentle, lower slope, receiving sites or depressions; deep, medium- textured soil
4167	CWH ds1	05	RS	c	y	4167 areas were mapped in all locations where interpreters had mapped unexpected seepage in areas of COARSE TEXTURED MATERIALS. These 4167 areas are moister than normal and are predicted to be dominated by the slightly moister 05 and 06 Site series. Gentle, lower slope, receiving sites or depressions; deep, coarse- textured soil.
4171	CWH ds1	10	CW	c	d	4171 areas represent LOW BENCH units. LOW BENCHES were defined to include all areas that were located within 1 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. LOW BENCHES were considered to be occupied mainly by the 10 Site Series in CWH ds1.
4172	CWH ds1	09	CD	d	j	4172 areas represent MEDIUM BENCH units. MEDIUM BENCHES were defined to include all areas that were located within 3 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. MEDIUM BENCHES were considered to be occupied mainly by the 09 Site Series in CWH ds1.
4173	CWH ds1	08	SS	d	j	4173 areas represent High BENCH units. HIGH BENCHES were defined to include all areas that were located more than 3 m elevation above the base of a major river channel, within 500 m horizontal distance of the channel, with a slope gradient of less than 10% and that WERE NOT classified as NON-VEGETATED land cover type. HIGH BENCHES were considered to be occupied mainly by the 08 Site Series in CWH ds1.
4180	CWH ds1	07	RD	d		4180 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 4180 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep medium-textured soils.
4181	CWH ds1	00	RO	v		4181 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
4182	CWH ds1	00	RU	v		4182 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
4183	CWH ds1	00	RU	v		4183 areas are NON-FORESTED areas dominated by a land cover of emerging vegetation along with bare rock and rubble.
4184	CWH ds1	00	GL	v		4184 areas are NON-FORESTED areas dominated by a land cover of bare rock, snow and ice. Many such areas are located immediately adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4185	CWH ds1	00	GL	v		4185 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with glacier tongues that protrude into lower valley bottom locations.
4188	CWH ds1	12	RC	d	y	4188 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 4188 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils.
4189	CWH ds1	12	RC	d	y	4189 areas were mapped across ALL TEXTURES. 4189 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of moisture. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils
4191	CWH ds1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the manually prepared map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4192	CWH ds1	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by manual interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
4193	CWH ds1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
4194	CWH ds1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
4195	CWH ds1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. This description appears to apply quite well to these areas.
4196	CWH ds1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
4197	CWH ds1	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
4198	CWH ds1	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: CWH ds1**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4102	4102	02	CWH ds1	10	02	DK	r	s						
4103	4103	03	CWH ds1	8	03	FF	w		2	02	DK			
4108	4108	06	CWH ds1	6	06	HQ	d	j	4	07	RD			
4109	4109	11	CWH ds1	8	11	LS	p	y	2	06	HQ			
4110	4110	01	CWH ds1	8	01	HM	d	j	2	06				
4111	4111	06	CWH ds1	6	06	HQ	d	j	4	07	RD			
4112	4112	01	CWH ds1	8	01	HM	d	x	2	02	DK			
4113	4113	01	CWH ds1	7	01	HM	w	x	3	03	FF			
4114	4114	01	CWH ds1	8	01	HM	d	j	2	06				
4115	4141	01	CWH ds1	10	01	HM	d	k						
4117	4164	06	CWH ds1	6	06	HQ	d	j	4	07	RD			
4118	4118	07	CWH ds1	6	07	RD	d		4	06	HQ			
4121	4121	01	CWH ds1	7	01	HM	r	d	2	02	DK	1	03	FF
4123	4123	02	CWH ds1	10	02	DK	c	s						
4130	4130	01	CWH ds1	8	01	HM	c	d	2	03	FF			
4131	4131	06	CWH ds1	6	06	HQ	c	d	4	07	RD			
4132	4132	01	CWH ds1	7	01	HM	c	r	2	02	DK	1	03	FF
4133	4133	03	CWH ds1	8	03	FF	c	w	2	01	HM			
4134	4134	01	CWH ds1	8	01	HM	d	w	2	03	FF			
4135	4135	01	CWH ds1	8	01	HM	c	k	2	03	FF			
4136	4136	05	CWH ds1	6	05	RS	d	j	3	06	HQ	1	01	HM
4137	4137	07	CWH ds1	6	07	RD	c	d	2	05	RS	2	06	HQ
4138	4138	06	CWH ds1	6	06	HQ	c	d	4	07	RD			
4139	4139	12	CWH ds1	8	12	RC	c	y	2	06	HQ			
4141	4141	01	CWH ds1	8	01	HM	d	k	2	03	FF			
4143	4134	01	CWH ds1	10	01	HM	d	w						
4145	4154	01	CWH ds1	8	01	HM	k	x	2	03	FF			
4146	4164	06	CWH ds1	7	06	HQ	d	j	3	05	RS			
4154	4154	01	CWH ds1	7	01	HM	k		2	02	DK	1	03	FF
4163	4163	07	CWH ds1	6	07	RD	d	j	2	05	RS	2	06	HQ
4164	4164	06	CWH ds1	6	06	HQ	d	j	4	07	RD			
4166	4166	05	CWH ds1	6	05	RS	d	j	4	06	HQ			
4167	4167	05	CWH ds1	6	05	RS	c	y	4	06	HQ			
4171	4171	10	CWH ds1	10	10	CW	c	d						
4172	4172	09	CWH ds1	10	09	CD	d	j						
4173	4173	08	CWH ds1	10	08	SS	d	j						
4180	4180	07	CWH ds1	8	07	RD	d		2	05	RS			
4181	4181	RO	CWH ds1	10	00	RO	v							
4182	4182	RU	CWH ds1	8	00	RU	v		2	02	DK			
4183	4183	RU	CWH ds1	5	00	RU	v		5	02	DK			
4184	4184	GL	CWH ds1	6	00	GL	v		4	00	RO			
4185	4185	GL	CWH ds1	10	00	GL	v							
4188	4188	RC	CWH ds1	8	12	RC	d	y	2	06	HQ			
4189	4189	RC	CWH ds1	8	12	RC	d	y	2	06	HQ			
4191	4191	OW	CWH ds1	10	00	OW								
4192	4192	WE	CWH ds1	10	00	WE								
4193	4193	ME	CWH ds1	10	00	ME								
4194	4194	PA	CWH ds1	10	00	PA								
4195	4195	BR	CWH ds1	10	00	BR								
4196	4196	DL	CWH ds1	10	00	DL								
4197	4197	TA	CWH ds1	10	00	TA								
4198	4198	AV	CWH ds1	10	00	AV								



**BGC Unit: CWH un****LMES Zone ID: 42****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	1,628.6	0.03%
100 Mile House TSA	0.0	0.00%
Cariboo Region	1,628.6	0.02%

**List of Site Series Codes Defined for use in CWH un**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	AM		submesic - mesic	All upper to lower water shedding slopes
02	DK	FdPI - Kinnikinnick	xeric	Shallow Crests, Thin, Dry Soils
03	DF		xeric - subxeric	Steep SW Upper Slopes
04		Not Mapped	xeric - subxeric	Not Mapped
05		Not Mapped	submesic - mesic	Slightly moist, less rich seepage, nearly level low to toe
06	AD		subhydryc-hygric	Rich moist seepage in sloping (10-30%) valleys and toes
07	SS	Ss - Salmonberry	subhydryc-hygric	High bench fluvial settings
08	CD	Act - Red-osier dogwood	subhygric - hygric	Medium bench fluvial settings
09	CW	Act - Willow (F150 - Sitka willow - False lily-of-the-valley)	subhygric - hygric	Low bench fluvial settings
11	LS	PI - Sphagnum	subhydryc	Very wet, level to depressional organic areas
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Personal Communication, Ray Coupé, 2007.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #28, "A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: CWH un

No Landscape Profile Diagram available

### Example Attribute Class Rule File for CWH un (arule4230)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13.00
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.20
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.80
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1.00
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.50
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1.00
16	formfile	QWETI	Sl_Wet	1	9.50	9.50	9.50	8.50	10.50	1.00
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.50
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.50
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.50
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2.00
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1.00
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1.00
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1.00
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5.00
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.50
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1.00
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00

### Example Fuzzy Ecological Class Rule File for CWH un (crule4230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH4202r	Crest	30	1	4202	02 Shallow Crest	MH4243s	Mid2Low	30	14	4243	01 Moderate NW
MH4202r	VDry	30	1	4202		MH4243s	Dry2SIDry	30	14	4243	
MH4202r	SlopeLT30	10	1	4202		MH4243s	SlopeLT30	20	14	4243	
MH4202r	Med2Crs	10	1	4202		MH4243s	SlopeGT10	10	14	4243	
MH4202r	Shallow	40	1	4202		MH4243s	SW_Aspect	10	14	4243	
MH4202r	Hi_Ridge	10	1	4202		MH42315n	Mid2Low	30	15	4215	01 Moderate NE
MH4221c	Crest	30	2	4221	02 Deep Dry Crest	MH42315n	Dry2SIDry	30	15	4215	
MH4221c	VDry	30	2	4221		MH42315n	SlopeLT30	20	15	4215	
MH4221c	SlopeLT30	10	2	4221		MH42315n	SlopeGT10	10	15	4215	
MH4221c	Med2Crs	10	2	4221		MH42315n	NE_Aspect	10	15	4215	
MH4221c	Deep	10	2	4221		MH4213L	Mid2Low	30	16	4213	07 Moist High Bench
MH4221c	Hi_Ridge	10	2	4221		MH4213L	Dry2SIDry	30	16	4213	
MH4212k	Crest	30	3	4212	06 Seepage in FP	MH4213L	SlopeLT10	30	16	4213	
MH4212k	VDry	30	3	4212		MH4213L	SW_Aspect	10	16	4213	
MH4212k	SlopeLT30	10	3	4212		MH42314L	Mid2Low	30	17	4214	07 Moist High Bench
MH4212k	Med2Crs	10	3	4212		MH42314L	Dry2SIDry	30	17	4214	
MH4212k	Deep	10	3	4212		MH42314L	SlopeLT10	30	17	4214	
MH4212k	Low_Knoll	10	3	4212		MH42314L	NE_Aspect	10	17	4214	
MH4203s	Crest2Mid	30	4	4203	03 Steep SW	MH42363L	Mid2Low	30	18	4263	06 Sloping Seepage
MH4203s	VDry2SIDry	30	4	4203		MH42363L	Wet	30	18	4263	
MH4203s	Steep_SW	20	4	4203		MH42363L	SlopeLT30	20	18	4263	
MH4203s	Med2Crs	10	4	4203		MH42363L	SlopeGT10	10	18	4263	
MH4203s	Deep	10	4	4203		MH42363L	Deep	10	18	4263	
MH4254n	Crest2Mid	30	5	4254	01 Steep NE	MH42464L	Mid2Low	30	19	4264	07 Moist High Bench
MH4254n	VDry2SIDry	30	5	4254		MH42464L	Wet	30	19	4264	
MH4254n	Steep_NE	20	5	4254		MH42464L	SlopeLT10	30	19	4264	
MH4254n	Med2Crs	10	5	4254		MH42464L	Deep	10	19	4264	
MH4254n	Deep	10	5	4254		MH4230t	Low2Toe	30	20	4230	06 Steep SW Seepage
MH4234s	Crest2Mid	30	6	4234	01 Moderate SW	MH4230t	Sl_Wet	30	20	4230	
MH4234s	Dry	30	6	4234		MH4230t	Steep	20	20	4230	
MH4234s	SlopeLT30	20	6	4234		MH4230t	SW_Aspect	10	20	4230	
MH4234s	SlopeGT10	10	6	4234		MH4240t	Low2Toe	30	21	4240	01 Steep NE Low
MH4234s	SW_Aspect	10	6	4234		MH4240t	Sl_Wet	30	21	4240	
MH42341n	Crest2Mid	30	7	4241	01 Moderate NE	MH4240t	Steep	20	21	4240	
MH42341n	Dry	30	7	4241		MH4240t	NE_Aspect	10	21	4240	
MH42341n	SlopeLT30	20	7	4241		MH4211t	Low2Toe	30	22	4211	06 Sloping Seepage
MH42341n	SlopeGT10	10	7	4241		MH4211t	Sl_Wet	30	22	4211	
MH42341n	NE_Aspect	10	7	4241		MH4211t	SlopeLT30	20	22	4211	
MH4213s	Crest2Mid	30	8	4213	07 Moist High Bench	MH4211t	SlopeGT10	10	22	4211	
MH4213s	Dry	30	8	4213		MH4211t	Deep	10	22	4211	
MH4213s	SlopeLT10	30	8	4213		MH4217t	Low2Toe	30	23	4217	07 Moist High Bench
MH4213s	SW_Aspect	10	8	4213		MH4217t	Wet	30	23	4217	
MH42314n	Crest2Mid	30	9	4214	07 Moist High Bench	MH4217t	SlopeLT10	30	23	4217	
MH42314n	Dry	30	9	4214		MH4217t	Deep	10	23	4217	
MH42314n	SlopeLT10	30	9	4214		MH4218t	Toe	30	24	4218	01 Moderate Lower
MH42314n	NE_Aspect	10	9	4214		MH4218t	Sl_Wet	30	24	4218	
MH4236u	Crest2Mid	30	10	4236	06 Sloping Seepage	MH4218t	SlopeLT30	20	24	4218	
MH4236u	Wet	30	10	4236		MH4218t	SlopeGT10	10	24	4218	
MH4236u	SlopeLT30	20	10	4236		MH4218t	Deep	10	24	4218	
MH4236u	SlopeGT10	10	10	4236		MH4208t	Toe	30	25	4208	07 Level Seepage
MH4236u	Deep	10	10	4236		MH4208t	Wet	30	25	4208	
MH4246u	Crest2Mid	30	11	4246	06 Level Seepage	MH4208t	SlopeLT10	30	25	4208	
MH4246u	Wet	30	11	4246		MH4208t	Deep	10	25	4208	
MH4246u	SlopeLT10	30	11	4246		MH4280v	Valley	30	26	4280	06 Sloping Seepage
MH4246u	Deep	10	11	4246		MH4280v	Wet2V_Wet	30	26	4280	
MH4233s	Mid2Low	30	12	4233	01 Steep SW Lower	MH4280v	SlopeGT05	20	26	4280	
MH4233s	VDry2SIDry	30	12	4233		MH4280v	Medium	10	26	4280	
MH4233s	Steep_SW	20	12	4233		MH4280v	Deep	10	26	4280	
MH4233s	Med2Crs	10	12	4233		MH4288v	Valley	30	27	4288	07 Moist High Bench
MH4233s	Deep	10	12	4233		MH4288v	Wet2V_Wet	30	27	4288	
MH4245n	Mid2Low	30	13	4245		MH4288v	SlopeLT05	20	27	4288	
MH4245n	VDry2SIDry	30	13	4245	01 Steep NE Lower	MH4288v	Medium	10	27	4288	
MH4245n	Steep_NE	20	13	4245		MH4288v	Deep	10	27	4288	
MH4245n	Med2Crs	10	13	4245		MH4289m	WetZ_LT05	50	28	4289	08 Medium Bench
MH4245n	Deep	10	13	4245		MH4289m	WetL_LT200	50	28	4289	
						MH4277s	Hi_Seep	80	29	4277	06 Seepage
						MH4277s	Med2Crs	20	29	4277	
						MH4209o	Organic	99	30	4209	10 LS

**PEM Entity Descriptions for: CWH un**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4202	CWH un	02	DK	r	s	4202 was mapped across ALL TEXTURES in areas that were mapped as SHALLOW to BEDROCK. 4202 occurs on the driest crest positions of high ridges that are shallow to bedrock. 4202 occurs in areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow medium textured soils over bedrock
4203	CWH un	03	DF	w	s	4203 was mapped across ALL TEXTURES. 4203 occupies only the UPPER portions of STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the upper portion of a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
4208	CWH un	07	SS	t	y	4208 was mapped across ALL TEXTURES. 4208 occupies level to very gently sloping (< 10%) toe slopes. Review of 4208 areas revealed these areas to occur mainly within the active flood plain and to be occupied by moist HIGH BENCH 07 site series. Gentle slope; deep, medium - textured soils.
4209	CWH un	11	LS	p	y	4209 areas were mapped in all locations where with manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 10 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
4211	CWH un	06	AD	d	y	4211 was mapped across ALL TEXTURES. 4211 occupies moderately sloping (10-30%) lower to toe slopes. Review of 4211 areas revealed them to be occupied mainly by the rich, moist seepage 06 Site Series. Slightly wet low to toe slope (10-30%). Gentle slope; deep, medium - textured soils.
4212	CWH un	06	AD	d	y	4212 areas were mapped on the slightly drier crests of low knolls across ALL TEXTURES. 4212 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. Review of 4212 areas revealed that most low knolls occurred within the active flood plain where moister conditions were expected. 4212 areas were therefore predicted to be occupied mainly by the rich, moist seepage 06 Site Series. Gentle slope, deep, medium-textured soils.
4213	CWH un	07	SS	t	y	4213 areas were defined to occur on gentle (<10%) SW-facing slopes in UPPER to LOWER landform positions across ALL TEXTURES. Review of 4213 areas revealed that most occurred within the active flood plain where moister conditions were present. 4213 areas are therefore predicted to be dominated by the moist HIGH BENCH 07 Site Series. Gentle slope, warm aspect, deep, medium-textured soils.
4214	CWH un	07	SS	t	y	4214 areas were defined to occur on gentle (<10%) NE-facing slopes in UPPER to LOWER landform positions across ALL TEXTURES. Review of 4214 areas revealed that most occurred within the active flood plain where moister conditions were present. 4214 areas are therefore predicted to be dominated by the moist HIGH BENCH 07 Site Series. Gentle slope, cool aspect, deep, medium-textured soils.
4215	CWH un	01	AM	d	j	4215 areas were defined to occur on moderate (10-30%) NE-facing slopes in MID to LOWER landform positions across ALL TEXTURES. 4215 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.
4217	CWH un	07	SS	t	y	4217 was mapped across ALL TEXTURES. 4217 occupies very gently sloping to level (< 10%) lower to toe slopes. Review of 4246 areas revealed these areas to occur mainly within the active flood plain and to be occupied by moist HIGH BENCH 07 site series. Gentle slope, deep, medium-textured soils. Gentle slope; deep, medium - textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4218	CWH un	01	AM	d	y	4218 was mapped across ALL TEXTURES. 4218 occupies moderately sloping (10-30%) toe slopes. 4218 areas were expected to be occupied by the rich seepage 06 site series, however review of 4218 areas revealed them to be occupied mainly by the normal mesic 01 Site Series. Slightly wet toe slope (10-30%). Gentle slope; deep, medium - textured soils.
4221	CWH un	02	DK	r	s	4221 areas were mapped across ALL TEXTURES. 4221 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 4221 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier or shallower site series in areas not mapped as shallow along with typical 01.
4230	CWH un	06	AD	w	y	4230 was mapped across ALL TEXTURES. 4230 occupies only the lowest TOE portions of STEEP SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. Review of 4230 areas revealed them to be mainly steep SW facing gullies that were occupied by the rich seepage 06 Site Series. Significant slope, of warm aspects; deep, medium - textured soils.
4233	CWH un	01	AM	w	d	4233 was mapped across ALL TEXTURES. 4233 occupies only the MID TO LOWER portions of STEEP SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the lower portion of a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils.
4234	CWH un	01	AM	d	j	4234 areas were defined to occur on moderate (10-30%) SW-facing slopes in UPPER to MID landform positions across ALL TEXTURES. 4234 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER to MID SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
4236	CWH un	06	AD	d	y	4236 areas were mapped in slightly moist upper swales, hollows and concavities in UPPER to MID LANDFORM positions across ALL TEXTURES. 4236 areas were mapped to permit recognition of slightly moister conditions in swales in upper to mid landform positions. 4236 areas are predicted to be occupied by the moist, rich 06 seepage site series as well as some moist, less rich 05 Site Series. Gentle slope, deep, medium-textured soils.
4240	CWH un	01	AM	k	y	4240 was mapped across ALL TEXTURES. 4240 occupies only the lowest TOE portions of STEEP SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. Review of 4240 areas revealed them to be mainly steep NE facing planar slopes that were occupied mainly by the normal mesic 01 Site Series. Significant slope, of cool aspects; deep, medium - textured soils.
4241	CWH un	01	AM	d	j	4241 areas were defined to occur on moderate (10-30%) NE-facing slopes in UPPER to MID landform positions across ALL TEXTURES. 4241 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.
4243	CWH un	01	AM	d	j	4243 areas were defined to occur on moderate (10-30%) SW-facing slopes in MID to LOWER landform positions across ALL TEXTURES. 4243 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
4245	CWH un	01	AM	k	s	4245 was mapped across ALL TEXTURES. 4245 occupies only the MID TO LOWER portions of STEEP SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. This is the lower portion of a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4246	CWH un	06	AD	d	y	4246 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in UPPER to MID LANDFORM positions across ALL TEXTURES. 4246 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 4246 areas are predicted to be occupied by the rich, moist 06 site series along with some less rich moist 05 site series. Gentle slope, deep, medium-textured soils.
4254	CWH un	01	AM	k	s	4254 was mapped across ALL TEXTURES. 4254 occupies the UPPER portions of STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by normal, mesic 01 Site Series and not by the drier 03 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils
4263	CWH un	06	AD	d	y	4263 areas were mapped in slightly moist swales, hollows and concavities in MID to LOWER LANDFORM positions across ALL TEXTURES. 4263 areas were mapped to permit recognition of slightly moister conditions in swales in mid to lower landform positions. 4263 areas are predicted to be occupied by the moist, rich 06 seepage site series as well as some moist, less rich 05 Site Series. Gentle slope, deep, medium-textured soils.
4264	CWH un	07	SS	t	y	4264 areas were mapped in lowest, flattest and wettest portions of swales, hollows and concavities in MID to LOWER LANDFORM positions across ALL TEXTURES. 4264 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in mid to lower landform positions. Review of 4246 areas revealed these areas to occur mainly within the active flood plain and to be occupied by moist HIGH BENCH 07 site series. Gentle slope, deep, medium-textured soils.
4271	CWH un	09	CW	c	t	4271 areas represent LOW BENCH units. LOW BENCHES were defined to include all areas that were located within 1 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. LOW BENCHES were considered to be occupied mainly by the 09 Site Series in CWH un.
4272	CWH un	08	CD	t	j	4272 areas represent MEDIUM BENCH units. MEDIUM BENCHES were defined to include all areas that were located within 3 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. MEDIUM BENCHES were considered to be occupied mainly by the 08 Site Series in CWH un.
4273	CWH un	07	SS	t	j	4273 areas represent High BENCH units. HIGH BENCHES were defined to include all areas that were located more than 3 m elevation above the base of a major river channel, within 500 m horizontal distance of the channel, with a slope gradient of less than 10% and that WERE NOT classified as NON-VEGETATED land cover type. HIGH BENCHES were considered to be occupied mainly by the 07 Site Series in CWH un.
4280	CWH un	06	AD	d	y	4280 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% across ALL TEXTURES. 4280 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep medium-textured soils.
4281	CWH un	00	RO	v		4281 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
4282	CWH un	00	RU	v		4282 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
4283	CWH un	00	RU	v		4283 areas are NON-FORESTED areas dominated by a land cover of emerging vegetation along with bare rock and rubble.

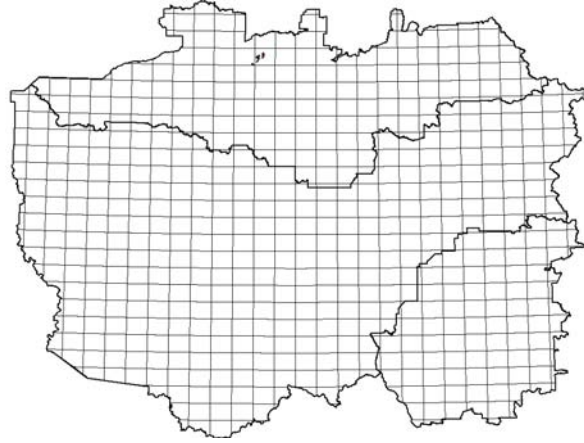
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4284	CWH un	00	GL	v		4284 areas are NON-FORESTED areas dominated by a land cover of bare rock, snow and ice. Many such areas are located immediately adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
4285	CWH un	00	GL	v		4285 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with glacier tongues that protrude into lower valley bottom locations.
4288	CWH un	07	SS	t	y	4288 areas were mapped in level to flat wet valleys with slopes < 5% across ALL TEXTURES. 4288 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils.
4289	CWH un	08	CD	t	y	4289 areas were mapped across ALL TEXTURES. 4289 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of moisture. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils
4291	CWH un	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4292	CWH un	00	GW			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by manual interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
4293	CWH un	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
4294	CWH un	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
4295	CWH un	00	BR			These areas were mapped visually as areas of scrub brush. This description appears to apply quite well to these areas of scrub brush.
4296	CWH un	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
4297	CWH un	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
4298	CWH un	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: CWH un**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4202	4202	02	CWH un	8	02	DK	r	s	2	04	AQ			
4203	4203	03	CWH un	6	03	DF	w	s	4	01	AM			
4208	4217	07	CWH un	7	07	SS	t	y	3	05	HQ			
4209	4209	11	CWH un	8	11	LS	p	y	2	07	SS			
4211	4211	06	CWH un	8	06	AD	d	y	2	05	HQ			
4212	4211	06	CWH un	6	06	AD	d	y	4	01	AM			
4213	4217	07	CWH un	6	07	SS	t	y	4	01	AM			
4214	4217	07	CWH un	6	07	SS	t	y	4	01	AM			
4215	4241	01	CWH un	8	01	AM	d	j	2	05	HQ			
4217	4217	07	CWH un	7	07	SS	t	y	3	05	HQ			
4218	4218	01	CWH un	7	01	AM	d	y	3	06	AD			
4221	4221	02	CWH un	6	02	DK	r	s	2	04	AQ	2	01	AM
4230	4230	06	CWH un	8	06	AD	w	y	2	05	HQ			
4233	4233	01	CWH un	6	01	AM	w	d	4	03	DF			
4234	4234	01	CWH un	8	01	AM	d	j	2	03	DF			
4236	4263	06	CWH un	8	06	AD	d	y	2	05	HQ			
4240	4245	01	CWH un	8	01	AM	k	y	2	04	AQ			
4241	4241	01	CWH un	8	01	AM	d	j	2	03	DF			
4243	4234	01	CWH un	8	01	AM	d	j	2	04	AQ			
4245	4245	01	CWH un	8	01	AM	k	s	2	03	DF			
4246	4263	06	CWH un	6	06	AD	d	y	4	05	HQ			
4254	4254	01	CWH un	8	01	AM	k	s	2	03	DF			
4263	4263	06	CWH un	8	06	AD	d	y	2	05	HQ			
4264	4217	07	CWH un	7	07	SS	t	y	3	05	HQ			
4271	4271	09	CWH un	10	09	CW	c	t						
4272	4272	08	CWH un	10	08	CD	t	j						
4273	4273	07	CWH un	10	07	SS	t	j						
4280	4263	06	CWH un	8	06	AD	d	y	2	05	HQ			
4281	4281	RO	CWH un	10	00	RO	v							
4282	4282	RU	CWH un	8	00	RU	v		2	02	DK			
4283	4282	RU	CWH un	5	00	RU	v		5	02	DK			
4284	4284	GL	CWH un	6	00	GL	v		4	00	RO			
4285	4285	GL	CWH un	10	00	GL	v							
4288	4288	07	CWH un	7	07	SS	t	y	3	05	HQ			
4289	4289	08	CWH un	6	08	CD	t	y	4	07	SS			
4291	4291	OW	CWH un	10	00	OW								
4292	4292	GW	CWH un	10	00	GW								
4293	4293	ME	CWH un	10	00	ME								
4294	4294	PA	CWH un	10	00	PA								
4295	4295	BR	CWH un	10	00	BR								
4296	4296	DL	CWH un	10	00	DL								
4297	4297	TA	CWH un	10	00	TA								
4298	4298	AV	CWH un	10	00	AV								

**BGC Unit: ESSF mv1****LMES Zone ID: 44****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	1,053.2	0.05%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	0.0	0.00%
Cariboo Region	1,053.2	0.01%

**List of Site Series Codes Defined for use in ESSF mv1**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	FR	Bl - Rhododendron - Feathermoss	mesic	All upper to lower water shedding slopes
02	LC	Pl - Huckleberry - Cladonia	xeric - subxeric	Shallow Crest (usually coarse textured as well)
03	FF	Bl - Huckleberry - Feathermoss	submesic	Coarse Gentle Slopes and Steep Dry SW Slopes
04	FG	Bl - Huckleberry - Gooseberry	subhygric - hygric	Sloping seepage with WT > 50 cm
05	FH	Bl - Horsetail - Glow moss (Ws08 - Bl - Sitka valerian - Common horsetail)	hygric - subhydric	Level to Gentle Slopes with WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Personal Communication, Ray Coupé, 2005 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in "A Field Guide for Site Identification and Interpretation for the Prince George Forest Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: ESSF mv1

No Landscape Profile Diagram available

### Example Attribute Class Rule File for ESSF mv1 (arule4430)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Mid2Low	1	25.00	25.00	25.00	10.00	40.00	15.00
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	14.00	14.00	4.00	24.00	10.00
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.20
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
11	formfile	QWETI	Dry	5	6.00	6.00	6.00	0.00	6.50	0.50
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1.00
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.50
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
15	formfile	QWETI	Med2SIWet	1	8.50	8.50	8.50	7.50	9.50	1.00
16	formfile	QWETI	Sl_Wet	1	9.50	9.50	9.50	8.50	10.50	1.00
17	formfile	QWETI	SLWet2Wet	1	10.50	10.50	10.50	9.50	11.50	1.00
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.50
19	formfile	QWETI	Wet2V_Wet	4	11.50	11.00	50.00	11.00	50.00	0.50
20	formfile	SLOPE	Steep	4	20.00	20.00	20.00	15.00	100.00	5.00
21	formfile	SLOPE	SlopeLT05	5	2.00	2.00	2.00	0.00	3.00	1.00
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1.00
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1.00
25	formfile	SLOPE	SlopeGT05	4	3.00	3.00	3.00	2.00	100.00	1.00
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
27	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	100.00	1.00
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	5.00
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	1.00
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	5.00
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	20.00
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	1.00
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	50.00
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50.00
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.50	1.00
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00

**Example Fuzzy Ecological Class Rule File for ESSF mv1 (crule4430)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
LC4402r	Crest	30	1	4402	02 Shallow Crest	FG4404s	Mid2Low	30	9	4404	04 Sloping Seepage
LC4402r	Dry	30	1	4402		FG4404s	Med2SIWet	30	9	4404	
LC4402r	SlopeLT20	20	1	4402		FG4404s	SlopeLT20	10	9	4404	
LC4402r	Med2CrS	10	1	4402		FG4404s	Gentle_SW	20	9	4404	
LC4402r	Shallow	80	1	4402		FG4404s	Deep	10	9	4404	
LC4402r	Hi_Ridge	10	1	4402		FG4414s	Mid2Low	30	10	4404	04 Sloping Seepage
FF4432r	Crest	30	2	4432	03 Deep Dry Crest	FG4414s	Med2SIWet	30	10	4404	
FF4432r	Dry	30	2	4432		FG4414s	SlopeGT20	10	10	4404	
FF4432r	SlopeLT30	10	2	4432		FG4414s	Gentle_SW	20	10	4404	
FF4432r	Med2CrS	10	2	4432		FG4414s	Deep	10	10	4404	
FF4432r	Deep	20	2	4432		FG4404L	Low2Toe	30	11	4404	04 Level Seepage
FF4432r	Hi_Ridge	10	2	4432		FG4404L	Sl_Wet	30	11	4404	
FR4401k	Crest	30	3	4401	01 Deep Low Knoll	FG4404L	SlopeLT10	20	11	4404	
FR4401k	Dry	30	3	4401		FG4404L	Med2CrS	10	11	4404	
FR4401k	SlopeLT30	10	3	4401		FG4404L	Deep	10	11	4404	
FR4401k	Med2CrS	10	3	4401		FG4414L	Low2Toe	30	12	4404	04 Sloping Seepage
FR4401k	Deep	20	3	4401		FG4414L	Sl_Wet	30	12	4404	
FR4401k	Low_Knoll	10	3	4401		FG4414L	SlopeGT10	20	12	4404	
FF4403s	Crest2Mid	30	4	4403	03 Steep SW Dry	FG4414L	Med2CrS	10	12	4404	
FF4403s	VDry2SIDry	30	4	4403		FG4414L	Deep	10	12	4404	
FF4403s	Steep_SW	20	4	4403		FH4445t	Toe	30	13	4405	05 Flat, Wet Toe
FF4403s	Med2CrS	10	4	4403		FH4445t	SLWet2Wet	30	13	4405	
FF4403s	Deep	10	4	4403		FH4445t	SlopeLT10	20	13	4405	
FR4413n	Crest2Mid	30	5	4413	01 Steep NE	FH4445t	Medium	10	13	4405	
FR4413n	VDry2SIDry	30	5	4413		FH4445t	Deep	10	13	4405	
FR4413n	Steep_NE	20	5	4413		FH4445v	Valley	30	14	4405	05 Flat, Wet Valley
FR4413n	Med2CrS	10	5	4413		FH4445v	Wet2V_Wet	30	14	4405	
FR4413n	Deep	10	5	4413		FH4445v	SlopeGT05	20	14	4405	
FR4401u	Up2Mid	30	6	4401	01 Upper Shedding	FH4445v	Medium	5	14	4405	
FR4401u	Dry2SIDry	30	6	4401		FH4445v	Deep	10	14	4405	
FR4401u	SlopeLT20	20	6	4401		FH4445v	Valley	30	15	4405	05 Sloping Valley
FR4401u	Med2CrS	10	6	4401		FH4445v	Wet2V_Wet	30	15	4405	
FR4401u	Deep	10	6	4401		FH4445v	SlopeLT05	20	15	4405	
FG4414n	Mid2Low	30	7	4404	04 Sloping Seepage	FH4445v	Medium	10	15	4405	
FG4414n	Med2SIWet	30	7	4404		FH4445v	Deep	10	15	4405	
FG4414n	SlopeLT20	10	7	4404		FG4454m	WetZ_LT05	50	16	4454	04 Moist Margins
FG4414n	Gentle_NE	20	7	4404		FG4454m	WetL_LT200	50	16	4454	
FG4414n	Deep	10	7	4404		FG4444s	Hi_Seep	80	17	4444	04 Moist Seepage
FR4401n	Mid2Low	30	8	4401	01 Upper Shedding	FG4444s	Med2CrS	20	17	4444	
FR4401n	Med2SIWet	30	8	4401		FH4405o	Organic	99	18	4405	05 Organic Wetland
FR4401n	SlopeGT20	10	8	4401							
FR4401n	Gentle_NE	20	8	4401							
FR4401n	Deep	10	8	4401							

**PEM Entity Descriptions for: ESSF mv1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4401	ESSF mv1	01	FR	j	d	4401 areas were mapped on all gentle to moderate lower to upper slopes with deep soils that were not dry or shallow crests or lower slope to toe slope seepage areas. Gentle slope; deep, medium - textured soil
4402	ESSF mv1	02	LC	r	v	4402 areas were ONLY mapped on the crests of high narrow ridges with SHALLOW soils. 02 is described as occurring on deep coarse textured soils. Interpreters did not map any coarse textured soils in the ESSF mv1 but we assume these areas of shallow soils are both coarse and drier than normal and therefore map them as 02. Gentle slope; deep, coarse - textured soil; poor nutrient regime
4403	ESSF mv1	03	FF	w	x	4403 areas were mapped on steep SW facing hillslopes that were presumed to be slightly drier than mesic and to therefore be occupied by the slightly drier than mesic Site Series 03. The Guidebook describes 03 as occurring on gentle slopes but there is no Site Series defined as occurring on steep warm aspects. It seems reasonable to predict the slightly drier 03 Site Series to be the most likely Site Series to occur on these warm aspect slopes. Gentle slope; deep, medium - textured soil
4404	ESSF mv1	04	FG	j	d	4404 areas were mapped in all lower to toe slope and sloping valley locations that were predicted to receive moisture via seepage from upslope but that had sufficient slope that the moisture was not likely to accumulate to create a permanently high water table. Gentle, lower slope, receiving sites or depressions; deep, medium- textured soil
4405	ESSF mv1	05	FH	j	y	4405 areas were mapped in level to depression locations in valleys, swales and hollows that accumulate moisture from upslope seepage and have low gradients or closed depressions that allow the moisture to accumulate and create high water tables. Level or depression; deep, medium- textured soil; high water table, poor soil drainage
4413	ESSF mv1	01	FR	k	x	4413 areas were mapped on steep NE facing hillslopes with deep soils and a cool aspect. 4413 areas may be slightly drier and cooler than normal mesic 01 however the Regional Ecologist indicated that these steep NE slopes would likely contain more mesic 01 than submesic 03. 4413 areas are therefore predicted to be dominated by 01 Site Series. Gentle slope; deep, medium - textured soil
4432	ESSF mv1	03	FF	r	x	4432 areas were mapped on gentle to moderate slopes on the dry crests of moderate to high ridges that were not mapped as having shallow soils. 4432 areas are predicted to be slightly drier than normal and to be dominated by the submesic 03 Site Series with perhaps some mixture of 01 and 02 Site Series. Gentle slope; deep, medium - textured soil
4444	ESSF mv1	04	FG	j	y	4444 areas were mapped in all locations where interpreters mapped unexpected seepage. These 4444 areas are moister than normal and are predicted to be dominated by the slightly moister 04 Site series. Gentle, lower slope, receiving sites or depressions; deep, medium- textured soil
4454	ESSF mv1	04	FG	j	d	4454 areas were mapped in the low-lying margins of non-forested wetlands or lakes. These areas are expected to be slightly more moist than normal and to therefore be dominated by the slightly more moist 04 Site Series. Gentle, lower slope, receiving sites or depressions; deep, medium- textured soil
4491	ESSF mv1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4492	ESSF mv1	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4493	ESSF mv1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
4494	ESSF mv1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures. No areas of 4494 were mapped in the ESSF mv1.
4495	ESSF mv1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
4496	ESSF mv1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.

### PEM Entity Extended Legend with Proportions of Site Series for: ESSF mv1

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4401	4401	01	ESSF mv1	8	01	FR	j	d	2	04	FG			
4402	4402	02	ESSF mv1	6	02	LC	r	v	3	01	FR	1	03	FF
4403	4403	03	ESSF mv1	6	03	FF	w	x	3	01	FR	1	02	LC
4404	4404	04	ESSF mv1	7	04	FG	j	d	2	01	FR	1	05	FH
4405	4405	05	ESSF mv1	7	05	FH	j	y	2	04	FG	1	01	FR
4413	4413	01	ESSF mv1	6	01	FR	k	x	3	03	FF	1	02	LC
4432	4432	03	ESSF mv1	6	03	FF	r	x	3	01	FR	1	02	LC
4444	4404	04	ESSF mv1	8	04	FG	j	y	1	01	FR	1	05	FH
4454	4404	04	ESSF mv1	6	04	FG	j	d	2	01	FR	2	05	FH
4491	4491	OW	ESSF mv1	10	00	OW								
4492	4492	WE	ESSF mv1	10	00	WE								
4493	4493	ME	ESSF mv1	10	00	ME								
4494	4494	PA	ESSF mv1	10	00	PA								
4495	4495	BR	ESSF mv1	10	00	BR								
4496	4496	DL	ESSF mv1	10	00	DL								





**BGC Unit: ESSF mw****LMES Zone ID: 45****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	31,623.4	0.64%
100 Mile House TSA	0.0	0.00%
Cariboo Region	31,623.4	0.38%

**List of Site Series Codes Defined for use in ESSF mw**

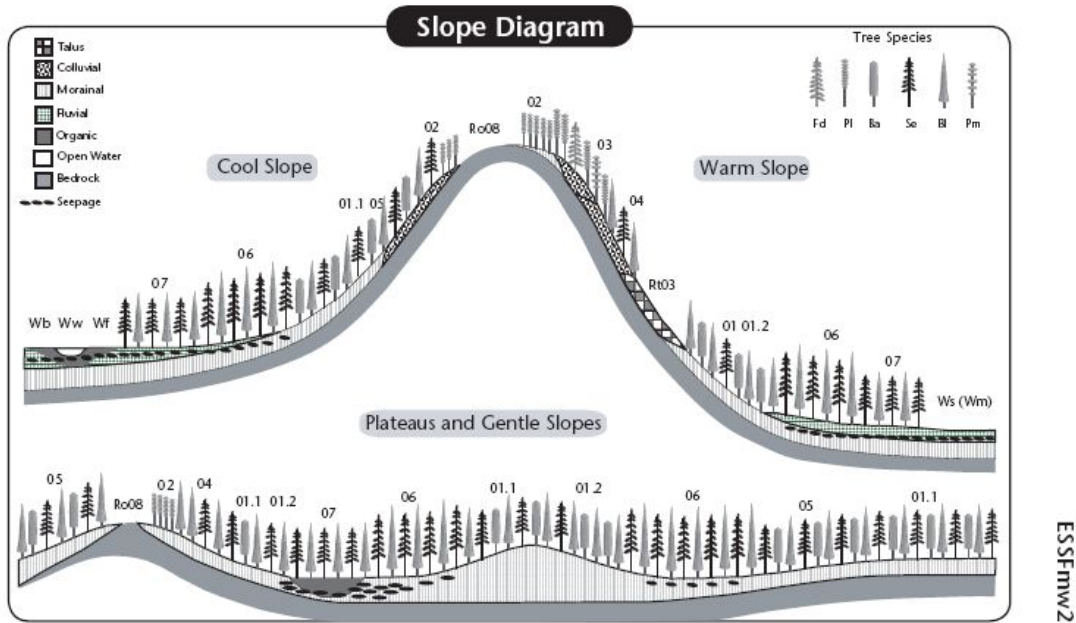
SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	FR	BIa - Rhododendron	submesic - mesic	All upper to lower water shedding slopes
02	LJ	BIPI - Juniper - Rhacomitrium	very xeric	Shallow Crests
03	DF	FdBI - Falsebox - Pinegrass	xeric - subxeric	Steep SW Upper Slopes
04	FH	BI - Huckleberry - Falsebox	subxeric - submesic	Slightly drier moderate SW Slopes
05	FA	BIa - Azalea - Pipecleaner moss	subhygric	Cool Dry, Steep NE Slopes
06	FV	BI - Gooseberry - Valerian	subhygric - hygric	Sloping seepage with WT > 50 cm
07	FO	BIa - Oak fern - Lady fern	hygric	Level to gentle slopes with WT < 50 cm
08	FG	BI - Gooseberry - Horsetail (Ws08 - BI - Sitka valerian - Common horsetail)	subhydric	Not predicted
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist.

**Landscape Profile Diagram: ESSF mw (Used ESSF mw2 diagram)**



**Example Attribute Class Rule File for ESSF mw (arule4530)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
5	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10.00
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
7	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
8	formfile	QWETI	VDry	5	5.90	5.90	5.90	0.00	6.10	0.20
9	formfile	QWETI	VDry2SDry	5	7.80	7.80	7.80	0.00	8.00	0.20
10	formfile	QWETI	Dry2SDry	1	7.20	7.20	7.20	6.20	8.20	1.00
11	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
12	formfile	QWETI	Sl_Wet	1	9.60	9.60	9.60	8.80	10.40	0.80
13	formfile	QWETI	SlWet2Wet	1	10.00	10.00	10.00	9.40	10.60	0.60
14	formfile	QWETI	Wet	1	10.90	10.90	10.90	10.00	11.80	0.90
15	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.50
16	formfile	SLOPE	Steep	4	32.00	32.00	32.00	30.00	100.00	2.00
17	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
18	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	1.00	10.00	1.00
19	formfile	SLOPE	SlopeLT15	5	14.00	0.00	15.00	0.00	15.00	1.00
20	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
21	formfile	SLOPE	SlopeLT30	5	28.00	28.00	28.00	0.00	30.00	2.00
22	formfile	SLOPE	SlopeGT15	4	16.00	15.00	100.00	15.00	100.00	1.00
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
26	geofile	ELEV	GT1800	4	1820.00	1800.00	5000.00	1800.00	5000.00	20.00
27	geofile	ELEV	LT1800	5	1780.00	0.00	1800.00	0.00	1800.00	20.00
28	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
29	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
30	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5.00
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
32	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	L2Wet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50.00
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.50
36	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
37	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
38	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00

### Example Fuzzy Ecological Class Rule File for ESSF mw (crule4530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH4502c	Crest	30	1	4502	02 Shallow Crest	MH4544s	Up2Mid	30	11	4544	04 Moderate SW Dry
MH4502c	VDry	30	1	4502		MH4544s	Dry2SIDry	30	11	4544	
MH4502c	SlopeLT30	10	1	4502		MH4544s	SW_Aspect	10	11	4544	
MH4502c	Med2Crs	10	1	4502		MH4544s	SlopeLT30	10	11	4544	
MH4502c	Shallow	20	1	4502		MH4544s	SlopeGT15	10	11	4544	
MH4502c	Hi_Ridge	10	1	4502		MH4544s	Deep	10	11	4544	
MH4524c	Crest	30	2	4524	05 Deep Dry Crest	MH4555n	Up2Mid	30	12	4555	05 Steep NE Mid
MH4524c	VDry	30	2	4524		MH4555n	Dry2SIDry	30	12	4555	
MH4524c	SlopeLT30	10	2	4524		MH4555n	Steep_NE	20	12	4555	
MH4524c	Med2Crs	10	2	4524		MH4555n	Med2Crs	10	12	4555	
MH4524c	Deep	20	2	4524		MH4555n	Deep	10	12	4555	
MH4524c	Hi_Ridge	10	2	4524		MH5616u	Up2Mid	30	13	4516	06 Sloping Up Swale
MH4521k	Crest	30	3	4521	01 Deep Low Knoll	MH5616u	Wet	30	13	4516	
MH4521k	VDry	30	3	4521		MH5616u	SlopeLT30	20	13	4516	
MH4521k	SlopeLT30	10	3	4521		MH5616u	SlopeGT05	10	13	4516	
MH4521k	Med2Crs	10	3	4521		MH5616u	Medium	5	13	4516	
MH4521k	Deep	20	3	4521		MH5616u	Deep	5	13	4516	
MH4521k	Low_Knoll	10	3	4521		MH5617u	Mid2Low	30	14	4517	06 Sloping Mid Swale
MH4503s	Crest2Mid	30	4	4503	03 Steep SW Dry	MH5617u	Wet2V_Wet	30	14	4517	
MH4503s	VDry2SIDry	30	4	4503		MH5617u	SlopeLT30	20	14	4517	
MH4503s	Steep_SW	20	4	4503		MH5617u	SlopeGT05	10	14	4517	
MH4503s	Med2Crs	10	4	4503		MH5617u	Medium	5	14	4517	
MH4503s	Hi_Ridge	10	4	4503		MH5617u	Deep	5	14	4517	
MH4504s	Crest2Mid	30	5	4504	04 Moderate SW Dry	MH4501L	Mid2Low	30	15	4501	01 Shedding Mid-Low
MH4504s	VDry2SIDry	30	5	4504		MH4501L	Dry2Med	30	15	4501	
MH4504s	SW_Aspect	10	5	4504		MH4501L	SlopeLT30	20	15	4501	
MH4504s	SlopeLT30	10	5	4504		MH4501L	Med2Crs	10	15	4501	
MH4504s	SlopeGT15	10	5	4504		MH4501L	Deep	10	15	4501	
MH4504s	Deep	10	5	4504		MH4506L	Low2Toe	30	16	4506	06 Sloping Moist Toe
MH4514s	Crest2Mid	30	6	4514	01 Gentle SW Upper	MH4506L	Sl_Wet	30	16	4506	
MH4514s	VDry2SIDry	30	6	4514		MH4506L	SlopeLT15	20	16	4506	
MH4514s	SW_Aspect	10	6	4514		MH4506L	Med2Crs	10	16	4506	
MH4514s	SlopeLT15	20	6	4514		MH4506L	Deep	10	16	4506	
MH4514s	Deep	10	6	4514		MH4567t	Toe	30	17	4567	07 Level Wet Toe
MH4505n	Crest2Mid	30	7	4505	05 Steep NE Upper	MH4567t	SLWet2Wet	30	17	4567	
MH4505n	VDry2SIDry	30	7	4505		MH4567t	SlopeLT10	20	17	4567	
MH4505n	Steep_NE	20	7	4505		MH4567t	Med2Crs	10	17	4567	
MH4505n	Med2Crs	10	7	4505		MH4567t	Deep	10	17	4567	
MH4505n	Deep	10	7	4505		MH4576v	Valley	30	18	4576	06 Sloping Valley
MH4551n	Crest2Mid	30	8	4551	01 Moderate NE Up	MH4576v	Wet2V_Wet	30	18	4576	
MH4551n	VDry2SIDry	30	8	4551		MH4576v	SlopeGT05	20	18	4576	
MH4551n	NE_Aspect	10	8	4551		MH4576v	Med2Crs	10	18	4576	
MH4551n	SlopeLT30	10	8	4551		MH4576v	Deep	10	18	4576	
MH4551n	SlopeGT15	10	8	4551		MH4507v	Valley	30	19	4507	07 Flat, Wet Valley
MH4551n	Deep	10	8	4551		MH4507v	Wet2V_Wet	30	19	4507	
MH4515n	Crest2Mid	30	9	4515	01 Gentle NE Upper	MH4507v	SlopeLT05	20	19	4507	
MH4515n	VDry2SIDry	30	9	4515		MH4507v	Med2Crs	10	19	4507	
MH4515n	NE_Aspect	10	9	4515		MH4507v	Deep	10	19	4507	
MH4515n	SlopeLT15	20	9	4515		MH4578m	WetZ_LT05	50	20	4578	07 Flat Margin
MH4515n	Deep	10	9	4515		MH4578m	WetL_LT200	50	20	4578	
MH4533s	Up2Mid	30	10	4535	03 Steep SW Mid	MH4566s	Hi_Seep	80	21	4566	06 Moist Seepage
MH4533s	Dry2SIDry	30	10	4535		MH4566s	Med2Crs	20	21	4566	
MH4533s	Steep_SW	20	10	4535		MH4579o	Organic	99	22	4579	07 None Mapped
MH4533s	Med2Crs	10	10	4535							
MH4533s	Deep	10	10	4535							

**PEM Entity Descriptions for: ESSF mw**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4501	ESSF mw	01	FR	d	j	4501 areas were mapped in areas of MEDIUM TEXTURED materials on ALL ASPECTS of gentle to moderate slopes (< 30%) in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
4502	ESSF mw	02	LJ	s	r	4502 areas mapped ONLY on dry crests with SHALLOW soils and MEDIUM TEXTURES. Moderate slopes on crests, medium textured shallow soils over bedrock.
4503	ESSF mw	03	DF	w	x	4503 areas were defined to occur on steep (>30%) UPPER SW-facing warm aspects and on deep, MEDIUM TEXTURED materials in UPPER LANDFORM positions. Significant slope, warm aspect, deep, medium-textured soils.
4504	ESSF mw	04	FH	w	x	4504 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 4504 areas were created to define a moderate SW entity intended to recognize the slightly drier 04 site series on moderate SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
4505	ESSF mw	05	FA	k	s	4505 areas were defined to occur on steep (>30%) upper NE-facing cool aspects on deep, MEDIUM TEXTURED materials in UPPER landform positions. 4505 areas are predicted to be dominated by the slightly drier 05 site series. Significant slope, cool aspect with deep, medium-textured soils
4506	ESSF mw	06	FV	j	y	4506 areas were mapped on gentle (< 15%) lower to toe slopes moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. 4506 areas tended to occur on the upper parts of slopes leading into valleys and may be transitional to 01 site series. Moist sites of lower slope receiving position, deep medium-textured soil.
4507	ESSF mw	07	FG	j	y	4507 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 4507 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet, cold 07 site series.
4514	ESSF mw	01	FR	d	j	4514 areas were defined to occur on gentle (<10%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 4514 areas were created to restrict the extent of the slightly drier 04 site series that occurs on moderate SW-facing upper slopes to only slopes > 10%. Gentle slope, warm aspect, deep, medium-textured soils.
4515	ESSF mw	01	FR	d	j	4515 areas were defined to occur on gentle (<10%) NE-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 4515 areas were created to restrict the extent of the slightly drier 04 site series that occurs on moderate SW-facing upper slopes to only slopes > 10%. Gentle slope, cool aspect, deep, medium-textured soils.
4516	ESSF mw	06	FV	d	j	4516 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 4516 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 4516 areas are predicted to be occupied by the slightly moist 06 site series. Gentle slope, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4517	ESSF mw	06	FV	d	j	4517 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 4517 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 4517 areas are predicted to be occupied by the flat moist 07 site series along with some moist seepage 06 site series. Gentle slope, deep, medium-textured soils.
4521	ESSF mw	01	FR	d	x	4521 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 4521 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 Site Series along with some slightly drier 04 or 05 site series. Gentle slope, deep, medium-textured soils.
4522	ESSF mw	02	LJ	s	r	4522 areas mapped ONLY on dry crests with SHALLOW soils and COARSE TEXTURES. Moderate slopes on crests, coarse textured shallow soils over bedrock.
4524	ESSF mw	05	FA	d	x	4524 areas were mapped on the slightly drier crests of high ridges with deep MEDIUM TEXTURED soils. 4524 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic 04 Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the slightly drier 05 or 04 Site Series along with some normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
4525	ESSF mw	01	FR	k	s	4525 areas were defined to occur on steep (>30%) NE-facing cool aspects on deep, COARSE TEXTURED materials in MID to LOWER landform positions. 4511 areas are predicted to be dominated by the normal mesic 01 site series along with some slightly drier 05 site series. Significant slope, cool aspect with deep, COARSE-textured soils
4530	ESSF mw	04	FH	w	x	4530 areas were defined to occur on steep (>30%) UPPER SW-facing warm aspects and on deep, COARSE TEXTURED materials in MID to LOWER LANDFORM positions. Significant slope, warm aspect, deep, COARSE-textured soils.
4533	ESSF mw	03	DF	w	x	4533 areas were defined to occur on steep (>30%) UPPER SW-facing warm aspects and on deep, COARSE TEXTURED materials in UPPER to MID LANDFORM positions. Significant slope, warm aspect, deep, COARSE-textured soils.
4535	ESSF mw	03	DF	w	x	4535 areas were defined to occur on steep (>30%) SW-facing warm aspects and on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. Significant slope, warm aspect, deep, medium-textured soils. The 4535 entity was added to ensure that steep SW-facing slopes lower in the landscape could be described as containing some less dry 04 site series in addition to the steep dry 03 site series.
4540	ESSF mw	04	FH	d	j	4540 areas were defined to occur on gentle (<10%) SW-facing slopes and on deep, COARSE TEXTURED materials in UPPER to LOWER landform positions. 4540 are lower gradient but remain dry in coarse areas. Gentle slope, warm aspect, deep, COARSE-textured soils.
4541	ESSF mw	04	FH	d	x	4541 areas were mapped on the slightly drier crests of low knolls with deep COARSE TEXTURED soils. 4541 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the slightly drier 04 or 05 site series along with some normal mesic 01 Site Series. Gentle slope, deep, COARSE-textured soils.
4542	ESSF mw	04	FH	d	x	4542 areas were mapped on the slightly drier crests of high ridges with deep COARSE TEXTURED soils. 4542 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic 04 Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the slightly drier 04 Site Series. Gentle slope, deep, COARSE-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4543	ESSF mw	04	FH	w	x	4543 areas were defined to occur on moderate (10-30%) SW-facing slopes and on COARSE TEXTURED materials in UPPER to LOWER landform positions. 4543 areas were created to define a moderate SW entity intended to recognize the slightly drier 04 site series on moderate SW slopes. Moderate slope, warm aspect, deep, COARSE-textured soils.
4544	ESSF mw	04	FH	w	x	4544 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in MID TO LOWER landform positions. 4544 areas were created to split the moderate SW 4504 entity intended to recognize the slightly drier 04 site series on moderate SW slopes into upper and lower components. Moderate slope, warm aspect, deep, medium-textured soils.
4545	ESSF mw	04	FH	d	j	4545 areas were mapped in areas of COARSE TEXTURED materials on ALL ASPECTS of gentle to moderate slopes (< 30%) in all convex or water shedding upper to lower landform positions. 4545 areas are coarse and aspect-neutral and are predicted to contain a mixture of the dry 04 and 05 site series. Gentle slope, deep, COARSE-textured soils.
4546	ESSF mw	01	FR	j	y	4546 areas were mapped on gentle (< 15%) lower to toe slopes moistened by seepage in areas of DEEP COARSE TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. 4546 areas tended to occur on the upper parts of slopes leading into valleys and may be transitional to 01 site series. Moist sites of lower slope receiving position, deep COARSE-textured soil.
4547	ESSF mw	07	FG	j	y	4547 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 4547 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet, cold 07 site series.
4548	ESSF mw	07	FG	j	y	4548 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in COARSE TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the wet, frosty 07 site series along with the typical moist 06 site series. Lower slope to depression, deep COARSE-textured soils.
4550	ESSF mw	05	FA	k	s	4550 areas were defined to occur on steep (>30%) upper NE-facing cool aspects on deep, COARSE TEXTURED materials in UPPER landform positions. 4550 areas are predicted to be dominated by the slightly drier 05 site series. Significant slope, cool aspect with deep, COARSE-textured soils
4551	ESSF mw	01	FR	k	d	4551 areas were defined to occur on moderate (10-30%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 4551 areas were created to balance a moderate SW entity defined to recognize the slightly drier 04 site series on moderate SW slopes. Moderate slope, cool aspect, deep, medium-textured soils.
4552	ESSF mw	05	FA	k	d	4552 areas were defined to occur on moderate (10-30%) NE-facing slopes and on COARSE TEXTURED materials in UPPER to LOWER landform positions. 4552 areas are coarse and therefore dry. 4552 areas are predicted to be occupied by the 05 site series due to the NE aspect. Moderate slope, cool aspect, deep, COARSE-textured soils.
4553	ESSF mw	04	FH	d	j	4553 areas were defined to occur on gentle (<10%) NE-facing slopes and on deep, COARSE TEXTURED materials in UPPER to LOWER landform positions. 4553 areas are predicted to be occupied by the dry 04 and 05 site series because they occur on coarse materials. Gentle slope, cool aspect, deep, COARSE-textured soils.
4554	ESSF mw	06	FV	d	j	4554 areas were mapped in slightly moist upper swales, hollows and concavities in areas of COARSE TEXTURED materials in UPPER to LOWER LANDFORM positions. 4554 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 4554 areas are predicted to be occupied by the slightly moist 06 site series along with considerable normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4555	ESSF mw	05	FA	k	s	4555 areas were defined to occur on steep (>30%) NE-facing cool aspects on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. 4555 areas are predicted to be dominated by the cool, dry 05 site series along with considerable amounts of the normal, mesic 01 site series. Significant slope, cool aspect with deep, medium-textured soils. The 4555 entity was added to ensure that steep NE-facing slopes lower in the landscape remained recognized as steep.
4556	ESSF mw	06	FV	j	y	4556 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of COARSE TEXTURED soils. 4556 areas are characterized by moving, aerated groundwater and rich, moist soils. 4556 areas are not as moist as 4547 areas due to the steeper slopes. Lower slope to depression, deep COARSE-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 06 along with some 07 site series.
4558	ESSF mw	06	FV	d	y	4558 areas were defined for all locations where interpreters had manually recognized SEEPAGE and COARSE TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister 06 Site Series. Moist sites of lower slope receiving position, deep COARSE-textured soil.
4564	ESSF mw	06	FV	j	y	4564 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP COARSE TEXTURED soils. 4564 areas were defined to try to model the wet, flat, frosty 07 site series. 4564 areas do NOT appear likely to be dominated by the wet, flat, frosty 07 site series rather by the more typical seepage 06 site series.
4566	ESSF mw	06	FV	d	y	4566 areas were defined for all locations where interpreters had manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister 06 Site Series. Moist sites of lower slope receiving position, deep medium-textured soil.
4567	ESSF mw	07	FG	j	y	4567 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP MEDIUM TEXTURED soils. 4567 areas were defined to try to model the wet, flat, frosty 07 site series. 4567 areas do appear likely to be dominated by the wet, flat, frosty 07 site series along with some typical seepage 06 site series.
4576	ESSF mw	06	FV	j	y	4576 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 4576 areas are characterized by moving, aerated groundwater and rich, moist soils. 4576 areas are not as moist as 4507 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 06 along with some 07 site series.
4578	ESSF mw	07	FG	j	y	4578 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in MEDIUM TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the wet, frosty 07 site series along with the typical moist 06 site series. Lower slope to depression, deep medium-textured soils.
4579	ESSF mw	07	FG	d	y	4579 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
4591	ESSF mw	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4592	ESSF mw	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. No 4792 areas occur in the EWL PEM area



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4593	ESSF mw	00	TF			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer. No 4793 areas were permitted to occur in this PEM area. We elected to predict meadow classes ourselves instead of using the exception mapping.
4594	ESSF mw	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
4595	ESSF mw	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
4596	ESSF mw	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
4597	ESSF mw	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
4598	ESSF mw	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ESSF mw**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4501	4501	01	ESSF mw	9	01	FR	d	j	1	06	FV			
4502	4502	02	ESSF mw	6	02	LJ	s	r	2	04	FH	2	03	DF
4503	4503	03	ESSF mw	7	03	DF	w	x	2	04	FH	1	02	LJ
4504	4504	04	ESSF mw	6	04	FH	w	x	3	01	FR	1	03	DF
4505	4505	05	ESSF mw	8	05	FA	k	s	2	01	FR			
4506	4576	06	ESSF mw	6	06	FV	j	y	4	01	FR			
4507	4507	07	ESSF mw	8	07	FG	j	y	2	06	FV			
4514	4501	01	ESSF mw	8	01	FR	d	j	2	04	FH			
4515	4501	01	ESSF mw	9	01	FR	d	j	1	05	FA			
4516	4576	06	ESSF mw	6	06	FV	d	j	4	01	FR			
4517	4576	06	ESSF mw	6	06	FV	d	j	4	07	FG			
4521	4501	01	ESSF mw	6	01	FR	d	x	2	04	FH	2	05	FA
4522	4522	02	ESSF mw	6	02	LJ	s	r	2	04	FH	2	03	DF
4524	4524	05	ESSF mw	6	05	FA	d	x	3	01	FR	1	02	LJ
4525	4525	01	ESSF mw	6	01	FR	k	s	4	05	FA			
4530	4530	04	ESSF mw	7	04	FH	w	x	2	01	FR	1	03	DF
4533	4533	03	ESSF mw	7	03	DF	w	x	2	04	FH	1	02	LJ
4535	4503	03	ESSF mw	7	03	DF	w	x	2	04	FH	1	02	LJ
4540	4540	04	ESSF mw	10	04	FH	d	j						
4541	4541	04	ESSF mw	5	04	FH	d	x	3	01	FR	2	05	FA
4542	4542	04	ESSF mw	6	04	FH	d	x	3	05	FA	1	02	LJ
4543	4545	04	ESSF mw	8	04	FH	w	x	2	03	DF			
4544	4504	04	ESSF mw	6	04	FH	w	x	3	01	FR	1	03	DF
4545	4545	04	ESSF mw	6	04	FH	d	j	2	05	FA	2	01	FR
4546	4546	01	ESSF mw	6	01	FR	j	y	4	06	FV			
4547	4547	07	ESSF mw	8	07	FG	j	y	2	06	FV			
4548	4548	07	ESSF mw	7	07	FG	j	y	3	06	FV			
4550	4550	05	ESSF mw	9	05	FA	k	s	1	04	FH			
4551	4501	01	ESSF mw	7	01	FR	k	d	3	05	FA			
4552	4552	05	ESSF mw	6	05	FA	k	d	4	04	FH			
4553	4545	04	ESSF mw	6	04	FH	d	j	4	05	FA			
4554	4556	06	ESSF mw	6	06	FV	d	j	4	01	FR			
4555	4505	05	ESSF mw	6	05	FA	k	s	4	01	FR			
4556	4556	06	ESSF mw	8	06	FV	j	y	2	07	FG			
4558	4558	06	ESSF mw	7	06	FV	d	y	3	04	FH			
4564	4556	06	ESSF mw	7	06	FV	j	y	3	07	FG			
4566	4566	06	ESSF mw	7	06	FV	d	y	3	01	FR			
4567	4547	07	ESSF mw	6	07	FG	j	y	4	06	FV			
4576	4576	06	ESSF mw	8	06	FV	j	y	2	07	FG			
4578	4578	07	ESSF mw	7	07	FG	j	y	3	06	FV			
4579	4579	07	ESSF mw	9	07	FG	d	y	1	06	FV			
4591	4591	OW	ESSF mw	10	00	OW								
4592	4592	WE	ESSF mw	10	00	WE								
4593	4593	TF	ESSF mw	10	00	TF								
4594	4594	PA	ESSF mw	10	00	PA								
4595	4595	BR	ESSF mw	10	00	BR								
4596	4596	DL	ESSF mw	10	00	DL								
4597	4597	TA	ESSF mw	10	00	TA								
4598	4598	AV	ESSF mw	10	00	AV								



**BGC Unit: ESSF mwp****LMES Zone ID: 47****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	22,038.2	0.45%
100 Mile House TSA	0.0	0.00%
Cariboo Region	22,038.2	0.27%

**List of Site Series Codes Defined for use in ESSF mwp**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
00	AF	White mountain-avens - Altai fescue tundra	submesic	Thin Dry Tundra
00	DF	Dry Closed Forest		Not Modelled
00	DG	Subalpine daisy - Arrow-leaved groundsel wet meadow	subhygric	Moist Meadow
00	DP	Dry Open Parkland Forest		Not Modelled
00	FB	Bl - Dwarf blueberry - Dicranum parkland	xeric - mesic	Sparse Dry Parkland (Mostly SW Slopes)
00	FM	Bl - Heather parkland	submesic - mesic	Sparse Cool Parkland (Mostly NE Slopes)
00	HT	Heather - Mountain sagewort tundra	submesic - subhygric	Moist Hollows and Draws with some vegetation
00	LB	Lichen - Bl parkland		Not Modelled
00	MF	Mesic Closed Forest	submesic - mesic	Not Modelled
00	MP	Mesic Open Parkland Forest	submesic - mesic	Not Modelled
00	SF	Moist (subhygric) Closed Forest	subhygric - hygric	Not Modelled
00	SL	Scrub-Lichen		Not Modelled
00	SP	Moist (subhygric) Open Forest	subhygric - hygric	Not Modelled
00	SS	Scrub birch - Ragged snow, shrub steppe	submesic - mesic	Not Modelled
00	TW	Two-toned sedge - Dwarf snow willow tundra	submesic - mesic	Not Modelled
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		
00	PN	Permanent Ice and Snow		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area and modified to better describe this parkland. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the ESSF mwp once a new classification of alpine and sub-alpine areas is completed and published.

**Landscape Profile Diagram: ESSF mwp)**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for ESSF mwp (arule4730)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.50
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.50
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.50
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.50
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2.00
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.50
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5.00
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2.00
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2.00
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5.00
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2.00
13	formfile	SLOPE	SlopeGT05	4	5.50	5.00	99.00	5.00	99.00	0.50
14	formfile	SLOPE	SlopeLT05	5	4.50	0.00	5.00	0.00	5.00	0.50
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5.00
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10.00
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10.00
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
22	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.50

**Example Fuzzy Ecological Class Rule File for ESSF mwp (crule4730)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
SH4730r	Crest	35	1	4730	FM Sparse Parkland	SH4734ne	Up2Low	35	5	4734	FM Sparse Parkland
SH4730r	Dry_WI	35	1	4730	Ridge Crest	SH4734ne	Dry2Med_WI	35	5	4734	< 30% NE Slope
SH4730r	SlopeLT20	20	1	4730		SH4734ne	SlopeLT30	20	5	4734	
SH4730r	Hi_Ridge	10	1	4730		SH4734ne	NE_Aspect	10	5	4734	
SH4731sw	Up2Low	35	2	4731	FM Sparse Parkland	SH4735ne	Up2Low	35	6	4735	FM Sparse Parkland
SH4731sw	Dry2Med_WI	35	2	4731	< 30% SW Slope	SH4735ne	Dry2Med_WI	35	6	4735	30-45% NE Slope
SH4731sw	SlopeLT30	20	2	4731		SH4735ne	SlopeLT45	10	6	4735	
SH4731sw	SW_Aspect	10	2	4731		SH4735ne	SlopeGT30	10	6	4735	
SH4732sw	Up2Low	35	3	4732	FB Sparse Parkland	SH4735ne	NE_Aspect	10	6	4735	
SH4732sw	Dry2Med_WI	35	3	4732	30-45% SW Slope	SH4736ne	Up2Low	35	7	4736	RO Bare Rock
SH4732sw	SlopeLT45	10	3	4732		SH4736ne	Dry2Med_WI	35	7	4736	> 45% NE Slope
SH4732sw	SlopeGT30	10	3	4732		SH4736ne	Steep	20	7	4736	
SH4732sw	SW_Aspect	10	3	4732		SH4736ne	NE_Aspect	10	7	4736	
SH4733sw	Up2Low	35	4	4733	FB Sparse Parkland	SH4737st	Hollow	35	8	4737	HT Brushy Hollow
SH4733sw	Dry2Med_WI	35	4	4733	> 45% SW Slope	SH4737st	Wet2V_Wet	35	8	4737	Sloping > 5%
SH4733sw	Steep	20	4	4733		SH4737st	SlopeGT05	30	8	4737	
SH4733sw	SW_Aspect	10	4	4733		SH4738lv	Hollow	35	9	4738	HT Brushy Hollow
						SH4738lv	Wet2V_Wet	35	9	4738	Level < 5%
						SH4738lv	SlopeLT05	30	9	4738	

**PEM Entity Descriptions for: ESSF mwp**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4700	ESSF mwp	00	AF	r	s	4700 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
4701	ESSF mwp	00	AF	s		4701 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, warm aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
4702	ESSF mwp	00	AF	w	s	4702 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4702 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
4703	ESSF mwp	00	RO	w	s	4703 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. Rubble or scree.
4704	ESSF mwp	00	AF	s		4704 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had sparse vegetation and were most likely occupied by moist tundra. Gentle slopes, Cool aspects, medium textured shallow soils, moist tundra types, sparsely vegetated
4705	ESSF mwp	00	AF	k	s	4705 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4705 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
4706	ESSF mwp	00	RU	k	s	4706 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. Rubble and scree.
4707	ESSF mwp	00	RU	s	y	4707 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
4708	ESSF mwp	00	DG	s	y	4708 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 0). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
4710	ESSF mwp	00	RO	r	v	4710 areas were mapped along the tops of sharp, narrow ridges or crests that had very thin vegetation and were interpreted as bare rock and forbs (e.g. very thin dry tundra cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, thin dry tundra vegetation. Shallow crests.
4711	ESSF mwp	00	AF	s		4711 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin dry tundra cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.
4712	ESSF mwp	00	AF	w	s	4712 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4722 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, warm aspect, medium textured shallow soils, and thin dry tundra.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4713	ESSF mwp	00	RO	w	s	4713 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
4714	ESSF mwp	00	AF	s		4714 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
4715	ESSF mwp	00	AF	k	s	4715 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4725 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, and thin dry tundra.
4716	ESSF mwp	00	RO	k	s	4716 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
4717	ESSF mwp	00	RU	s		4717 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
4718	ESSF mwp	00	DG	s		4718 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
4720	ESSF mwp	00	RO	r	v	4720 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
4721	ESSF mwp	00	RU	v		4721 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
4722	ESSF mwp	00	RU	w	v	4722 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4722 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4723	ESSF mwp	00	RO	w	v	4723 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
4724	ESSF mwp	00	RU	v		4724 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4725	ESSF mwp	00	RU	k	v	4725 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4725 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4726	ESSF mwp	00	RO	k	v	4726 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
4727	ESSF mwp	00	RU	v	y	4727 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes with some minor forbs and willow.
4728	ESSF mwp	00	RU	v	y	4728 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a minor cover of forbs and willows.
4730	ESSF mwp	00	FM	r	s	4730 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 4730 areas are transition areas from dry tundra to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition vegetation. Shallow crests.
4731	ESSF mwp	00	FM	s		4731 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 4731 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
4732	ESSF mwp	00	FB	w	s	4732 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by a dry tundra type vegetation. 4732 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
4733	ESSF mwp	00	FB	w	s	4733 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.
4734	ESSF mwp	00	FM	s		4734 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 4734 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
4735	ESSF mwp	00	FM	k	s	4735 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by covered by a dry tundra type vegetation. 4735 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
4736	ESSF mwp	00	RO	k	v	3636 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3636 areas appear to be covered by a mixture bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4737	ESSF mwp	00	HT	s	y	4737 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
4738	ESSF mwp	00	HT	s	y	4738 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
4740	ESSF mwp	00	FB	r	s	4740 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 4740 areas are transition areas from dry tundra to sparse parkland. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition. Shallow crests.
4741	ESSF mwp	00	FB	d	j	4741 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
4742	ESSF mwp	00	FB	w	d	4742 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
4743	ESSF mwp	00	RO	w	v	4743 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on warm aspects.
4744	ESSF mwp	00	FM	d	j	4744 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on cold aspects.
4745	ESSF mwp	00	FM	k	s	4745 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting sparse parkland vegetation; generally on cold aspects.
4746	ESSF mwp	00	RO	k	s	4746 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on cold aspects.
4747	ESSF mwp	00	RU	s	y	4747 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasing ground cover of sparse stunted trees; (class 40). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas transitional to sparse parkland ground cover.
4748	ESSF mwp	00	FM	s	y	4748 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasing ground cover of sparse stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet brushy gullies.
4751	ESSF mwp	00	FM	s	y	4751 areas were mapped in areas characterized by dark purple colors on the false color satellite image. In parkland environments, this dark purple color is interpreted to infer the presence of a sparse parkland forest cover. This color is associated with areas that were in shadow and not directly illuminated by sunlight from the SE. So most 4751 areas are expected to occur on N, NW or NE facing slopes with a sparse parkland forest cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4752	ESSF mwp	00	PN	k	s	4752 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 4752 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 4752 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
4753	ESSF mwp	00	RU			4753 areas were mapped to enclose what appear to be patches of bright rock, ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N, NW or NE facing slopes. 4753 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
4754	ESSF mwp	00	GL			4754 areas were mapped to enclose the cores of what appear to be permanent glaciers. 4754 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery. Most 4754 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
4760	ESSF mwp	00	RO	r	s	4760 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a continuous cover of stunted trees. Crest positions, gentle slopes, medium textured shallow soils, continuous stunted tree cover. Shallow crests.
4761	ESSF mwp	00	FB	d	j	4761 areas were mapped on gentle (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4762	ESSF mwp	00	FB	w	s	4762 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4763	ESSF mwp	00	FB	w	v	4763 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
4764	ESSF mwp	00	FM	d	j	4764 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4765	ESSF mwp	00	FM	k	s	4765 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4766	ESSF mwp	00	FM	k	s	4766 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
4767	ESSF mwp	00	RU	d	y	4767 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a sparse parkland stunted tree cover. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
4768	ESSF mwp	00	FM	d	y	4768 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4770	ESSF mwp	00	RO	r	s	4770 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine.. Crest positions, gentle slopes, medium textured shallow soils, sparse parkland stunted tree cover; Shallow crests.
4771	ESSF mwp	00	FB	d	j	4771 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4771 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF mwp.
4772	ESSF mwp	00	FB	k	s	4772 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows but may also contain sparse parkland stunted trees. Very little 4772 occurs and most of it appears to be most closely associated with a moist heather type of vegetation in the ESSF mwp
4773	ESSF mwp	00	RO	k	s	4773 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
4774	ESSF mwp	00	FM	d	j	4774 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4774 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF mwp.
4775	ESSF mwp	00	FM	k	s	4775 areas were mapped on moderate to steep slopes (30-45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 4775 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF mwp.
4776	ESSF mwp	00	RO	k	v	4776 areas were mapped on very steep slopes (> 45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied LandSat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
4777	ESSF mwp	00	RU	d	y	4777 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
4778	ESSF mwp	00	RU	d	y	4778 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.
4791	ESSF mwp	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4792	ESSF mwp	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by contract interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
4793	ESSF mwp	00	AF			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer. No 4793 areas were permitted to occur in this PEM area. We elected to predict meadow classes ourselves instead of using the exception mapping.
4794	ESSF mwp	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
4795	ESSF mwp	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
4796	ESSF mwp	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
4797	ESSF mwp	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
4798	ESSF mwp	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

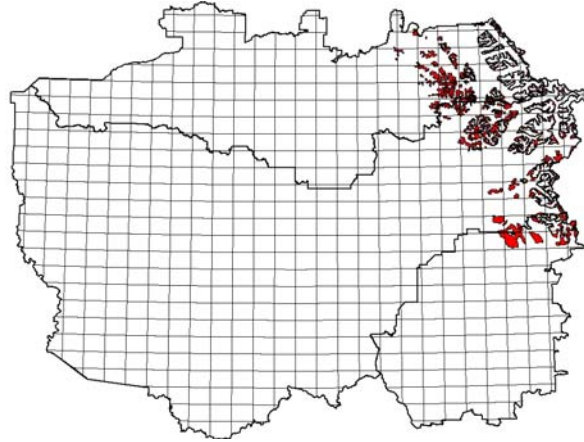
**PEM Entity Extended Legend with Proportions of Site Series for: ESSF mwp**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4700	4700	AF	ESSF mwp	5	00	AF	r	s	5	00	LC			
4701	4711	AF	ESSF mwp	10	00	AF	s							
4702	4712	AF	ESSF mwp	10	00	AF	w	s						
4703	4713	RO	ESSF mwp	10	00	RO	w	s						
4704	4714	AF	ESSF mwp	10	00	AF	s							
4705	4715	AF	ESSF mwp	10	00	AF	k	s						
4706	4706	RU	ESSF mwp	10	00	RU	k	s						
4707	4707	RU	ESSF mwp	10	00	RU	s	y						
4708	4718	DG	ESSF mwp	10	00	DG	s	y						
4710	4710	RO	ESSF mwp	5	00	RO	r	v	5	00	AF			
4711	4711	AF	ESSF mwp	10	00	AF	s							
4712	4712	AF	ESSF mwp	10	00	AF	w	s						
4713	4713	RO	ESSF mwp	10	00	RO	w	s						
4714	4714	AF	ESSF mwp	10	00	AF	s							
4715	4715	AF	ESSF mwp	10	00	AF	k	s						
4716	4716	RO	ESSF mwp	10	00	RO	k	s						
4717	4707	RU	ESSF mwp	10	00	RU	s							
4718	4718	DG	ESSF mwp	10	00	DG	s							
4720	4710	RO	ESSF mwp	5	00	RO	r	v	5	00	AF			
4721	4721	RU	ESSF mwp	10	00	RU	v							
4722	4722	RU	ESSF mwp	10	00	RU	w	v						
4723	4713	RO	ESSF mwp	10	00	RO	w	v						
4724	4724	RU	ESSF mwp	10	00	RU	v							
4725	4725	RU	ESSF mwp	10	00	RU	k	v						
4726	4716	RO	ESSF mwp	10	00	RO	k	v						
4727	4727	RU	ESSF mwp	10	00	RU	v	y						
4728	4728	RU	ESSF mwp	10	00	RU	v	y						
4730	4730	FM	ESSF mwp	10	00	FM	r	s						
4731	4731	FM	ESSF mwp	10	00	FM	s							
4732	4732	FB	ESSF mwp	10	00	FB	w	s						
4733	4733	FB	ESSF mwp	7	00	FB	w	s	3	00	RU			
4734	4744	FM	ESSF mwp	8	00	FM	s		2	00	AF			
4735	4745	FM	ESSF mwp	6	00	FM	k	s	4	00	AF			
4736	4736	RO	ESSF mwp	6	00	RO	k	v	4	00	AF			
4737	4737	HT	ESSF mwp	6	00	HT	s	y	4	00	RU			
4738	4738	HT	ESSF mwp	8	00	HT	s	y	2	00	RU			
4740	4740	FB	ESSF mwp	6	00	FB	r	s	4	00	AF			
4741	4741	FB	ESSF mwp	6	00	FB	d	j	4	00	AF			
4742	4742	FB	ESSF mwp	7	00	FB	w	d	3	00	RO			
4743	4743	RO	ESSF mwp	8	00	RO	w	v	2	00	FB			
4744	4744	FM	ESSF mwp	6	00	FM	d	j	4	00	SS			
4745	4745	FM	ESSF mwp	6	00	FM	k	s	4	00	SS			
4746	4736	RO	ESSF mwp	7	00	RO	k	s	3	00	FM			
4747	4747	RU	ESSF mwp	8	00	RU	s	y	2	00	FM			
4748	4748	FM	ESSF mwp	6	00	FM	s	y	4	00	RU			
4751	4751	FM	ESSF mwp	6	00	FM	s	y	4	00	RU			
4752	4752	PN	ESSF mwp	10	00	PN	k	s						
4753	4753	RU	ESSF mwp	10	00	RU								
4754	4754	GL	ESSF mwp	10	00	GL								
4760	4760	RO	ESSF mwp	7	00	RO	r	s	3	00	FM			
4761	4741	FB	ESSF mwp	10	00	FB	d	j	0					
4762	4742	FB	ESSF mwp	8	00	FB	w	s	2	00	RO			
4763	4763	FB	ESSF mwp	6	00	FB	w	v	4	00	RO			
4764	4744	FM	ESSF mwp	10	00	FM	d	j						
4765	4745	FM	ESSF mwp	8	00	FM	k	s	2	00	RO			
4766	4766	FM	ESSF mwp	6	00	FM	k	s	4	00	RO			

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4767	4767	RU	ESSF mwp	7	00	RU	d	y	3	00	FM			
4768	4768	FM	ESSF mwp	7	00	FM	d	y	3	00	DG			
4770	4760	RO	ESSF mwp	7	00	RO	r	s	3	00	FM			
4771	4741	FB	ESSF mwp	7	00	FB	d	j	3	00	RO			
4772	4742	FB	ESSF mwp	6	00	FB	k	s	4	00	RO			
4773	4743	RO	ESSF mwp	7	00	RO	k	s	3	00	FB			
4774	4744	FM	ESSF mwp	9	00	FM	d	j	1	00	RO			
4775	4745	FM	ESSF mwp	6	00	FM	k	s	4	00	RO			
4776	4736	RO	ESSF mwp	7	00	RO	k	v	3	00	FM			
4777	4767	RU	ESSF mwp	8	00	RU	d	y	2	00	FM			
4778	4778	RU	ESSF mwp	6	00	RU	d	y	4	00	FM			
4791	4791	OW	ESSF mwp	10	00	OW								
4792	4792	WE	ESSF mwp	10	00	WE	d	y						
4793	4793	AF	ESSF mwp	10	00	AF								
4794	4794	PA	ESSF mwp	10	00	PA								
4795	4795	BR	ESSF mwp	10	00	BR								
4796	4796	DL	ESSF mwp	10	00	DL								
4597	4597	TA	ESSF mwp	10	00	TA								
4798	4798	AV	ESSF mwp	10	00	AV								

**BGC Unit: ESSF wc3****LMES Zone ID: 48****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	67,115.6	3.23%
Williams Lake TSA	99,586.6	2.02%
100 Mile House TSA	24,511.4	1.99%
Cariboo Region	191,213.6	2.32%

**List of Site Series Codes Defined for use in ESSF wc3**

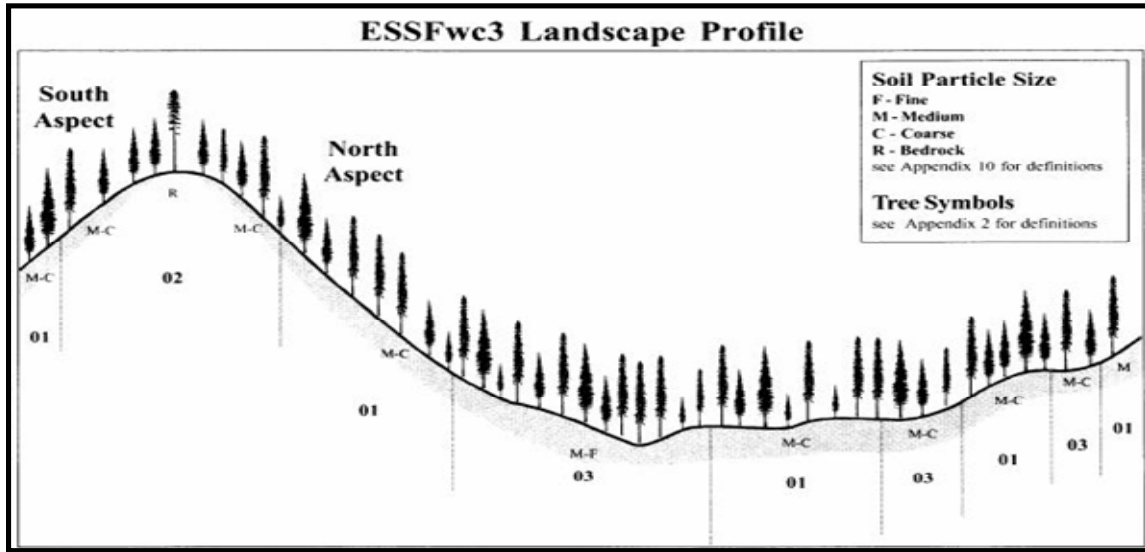
SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	FR	Bl - Rhododendron - Oak fern	mesic	All upper to lower shedding slopes
02	FQ	Bl - Rhododendron - Queen's cup	xeric - subxeric	Shallow Dry Crests
03	FG	Bl - Globeflower - Horsetail (Ws08 - Bl - Sitka valerian - Common horsetail)	hygic - subhygic	Moist toe slopes and depressions
04		Pl - Few-flowered sedge - Peat-moss (Wb10 - Pl - Few-flowered sedge - Peat-moss)		Not Modelled
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.



## Landscape Profile Diagram: ESSF wc3



## Example Attribute Class Rule File for ESSF wc3 (arule4830)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	5.50	5.50	5.50	0.00	5.70	0.20
2	formfile	LNQAREA	Crest2Up	5	6.00	6.00	6.00	0.00	6.50	0.50
3	formfile	LNQAREA	Crest2Toe	5	8.90	8.90	8.90	0.00	9.40	0.50
4	formfile	LNQAREA	Up2Mid	1	7.90	7.90	7.90	6.10	9.90	2.00
5	formfile	LNQAREA	Toe2Valley	4	9.80	9.80	9.80	9.30	20.00	0.50
6	formfile	LNQAREA	Valley	4	11.50	11.50	11.50	11.00	25.00	0.50
7	formfile	QWETI	Dry_WI	5	5.50	5.50	5.50	0.00	5.70	0.20
8	formfile	QWETI	Dry2SIDry	5	5.50	5.50	5.50	0.00	6.00	0.50
9	formfile	QWETI	Dry2Med_WI	1	7.00	7.00	7.00	5.50	8.50	1.50
10	formfile	QWETI	Med_WI	1	7.90	7.90	7.90	6.10	9.90	2.00
11	formfile	QWETI	SLWet_Wet	4	9.80	9.80	9.80	9.30	20.00	0.50
12	formfile	SLOPE	Steep	4	40.00	40.00	40.00	35.00	100.00	5.00
13	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5.00
14	formfile	SLOPE	SlopeLT35	5	30.00	30.00	30.00	0.00	35.00	5.00
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
17	geofile	DEPTH	Deep	4	99.00	99.00	99.00	99.00	900.00	1.00
18	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
19	geofile	TEXTURE	Crs2Med	4	50.00	50.00	50.00	30.00	70.00	20.00
20	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	70.00	20.00
21	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
22	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.50
24	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
25	relzfile	Z2St	Hi_Ridge	4	45.00	45.00	45.00	40.00	999.00	5.00
26	relzfile	Z2St	Low_Knoll	5	20.00	20.00	20.00	0.00	25.00	5.00

**Example Fuzzy Ecological Class Rule File for ESSF wc3 (crule4830)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH4802r	Crest2Up	15	1	4802	02 Shallow Crest	MH4801u	Up2Mid	30	5	4801	01 Upper Slope <35%
MH4802r	Dry2SIDry	15	1	4802		MH4801u	Dry2Med_WI	30	5	4801	
MH4802r	Shallow	60	1	4802		MH4801u	SlopeLT35	20	5	4801	
MH4802r	Crs2Med	10	1	4802		MH4801u	Crs2Med	10	5	4801	
MH4821r	Crest	30	2	4821	02 Deep Dry Crest	MH4801u	Deep	10	5	4801	
MH4821r	Dry_WI	20	2	4821		MH4801L	Crest2Toe	40	6	4801	01 Lower Slope <20%
MH4821r	Hi_Ridge	20	2	4821		MH4801L	Med_WI	30	6	4801	
MH4821r	Deep	20	2	4821		MH4801L	SlopeLT20	10	6	4801	
MH4821r	Med2Crs	10	2	4821		MH4801L	Crs2Med	10	6	4801	
MH4812s	Up2Mid	20	3	4812	01 Steep SW Dry	MH4801L	Deep	10	6	4801	
MH4812s	Dry2Med_WI	20	3	4812		MH4803v	Toe2Valley	40	7	4803	03 Moist Toe Slope
MH4812s	Steep_SW	20	3	4812		MH4803v	SLWet_Wet	30	7	4803	
MH4812s	Deep	20	3	4812		MH4803v	SlopeLT20	10	7	4803	
MH4812s	Hi_Ridge	10	3	4812		MH4803v	Crs2Med	10	7	4803	
MH4812s	Crs2Med	10	3	4812		MH4803v	Deep	10	7	4803	
MH4811n	Up2Mid	20	4	4811	01 Steep NE Dry	MH4833m	Wet_LT200	50	8	4833	03 Moist Margin
MH4811n	Dry2Med_WI	20	4	4811		MH4833m	WetZ_LT05	50	8	4833	
MH4811n	Steep_NE	20	4	4811		MH4833s	Hi_Seep	90	9	4833	03 Moist Seepage
MH4811n	Deep	20	4	4811		MH4833s	Crs2Med	10	9	4833	
MH4811n	Crs2Med	10	4	4811		MH4833o	Organic	99	10	4833	03 Wet Organic
MH4811n	Hi_Ridge	10	4	4811							

**PEM Entity Descriptions for: ESSF wc3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4801	ESSF wc3	01	FR	d	j	4801 was mapped across ALL TEXTURES of parent material. 4801 occupies all upper shedding landform positions with slopes less than 35% ranging from low gentle crests to upper to lower slopes. 4801 will occur across the tops of broad low knolls and ridges and will also occur on all steeper slopes in lower and toe slope landform positions. 4801 attempts to capture the concepts of a classic mesic site series. Gentle slope; deep medium - textured soils
4802	ESSF wc3	02	FQ	s	r	4802 areas were mapped on the dry crests of high ridges that had been mapped as SHALLOW to bedrock. Gentle slope; shallow medium textured soil; crest position.
4803	ESSF wc3	03	FG	d	y	4803 areas were defined to occur in all concave to receiving lower to toe slopes and in the bottoms of convergent swales, hollows and narrow valleys. The 03 Site series is the only moister than mesic ecological class defined for the ESSFwc3 so all sites that are moister than mesic are assigned to this Site Series. Moisture receiving lower slope position; gentle slope; deep, medium - textured soil
4811	ESSF wc3	01	FR	k	x	4811 areas were defined to occur on steep NE facing cooler aspects and on deep, medium textured materials. 4811 areas consist almost entirely of the normal mesic 01 Site Series but these steep NE facing hill slopes are extracted separately in order to permit recognition of the steeper slopes and slightly cooler conditions. Significant slope, cool aspect, deep, medium-textured soils.
4812	ESSF wc3	01	FR	w	x	4812 areas were defined to occur on steep SW facing warm aspects and on deep, medium textured materials. 4812 areas consists almost entirely of the normal mesic 01 Site Series but these steep SW facing hill slopes are extracted separately in order to permit recognition of the steeper slopes and slightly drier conditions. Significant slope, warm aspect, deep, medium-textured soils.
4813	ESSF wc3	03	FG	d	y	4813 areas were only mapped in one area near Big Timothy. 4813 areas were defied to separate wetter draws and hollows in upper slope landform positions. The 03 Site series is the only moister than mesic ecological class defined for the ESSFwc3 so all sites that are moister than mesic are assigned to this Site Series. Moisture receiving lower slope position; gentle slope; deep, medium - textured soil
4821	ESSF wc3	02	FQ	d	r	4821 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock. Gentle slope; deep medium textured soil; crest position.
4833	ESSF wc3	03	FG	j	y	4833 areas were mapped in locations where interpreters had recognized SEEPAGE or ORGANIC materials or in low-lying locations marginal to non-forested wetlands and lakes or in very wet sloping to level valley bottoms. The 03 Site series is the only moister than mesic ecological class defined for the ESSFwc3 so all sites that are moister than mesic are assigned to this Site Series. Moisture receiving lower slope position; gentle slope; deep, medium - textured soil
4891	ESSF wc3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4892	ESSF wc3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
4893	ESSF wc3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
4894	ESSF wc3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4895	ESSF wc3	00	BR			These areas were mapped visually as areas of scrub brush. This description appears to apply quite well to these areas of scrub brush.
4896	ESSF wc3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
4897	ESSF wc3	00	TA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
4898	ESSF wc3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process..

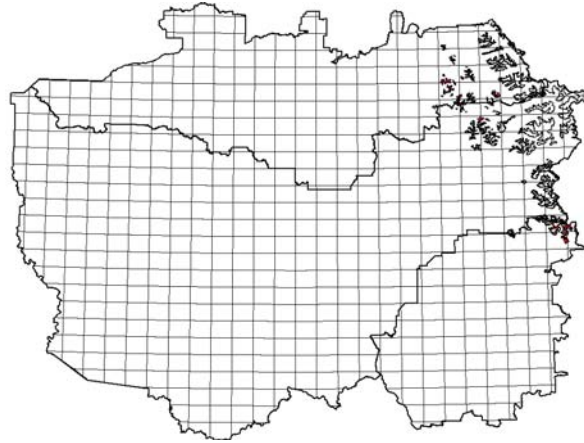
### PEM Entity Extended Legend with Proportions of Site Series for: ESSF wc3

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4801	4801	01	ESSF wc3	10	01	FR	d	j	0			0		
4802	4802	02	ESSF wc3	8	02	FQ	s	r	2	01	FR	0		
4803	4803	03	ESSF wc3	8	03	FG	d	y	2	01	FR	0		
4811	4811	01	ESSF wc3	10	01	FR	k	x	0			0		
4812	4812	01	ESSF wc3	10	01	FR	w	x	0			0		
4813	4803	03	ESSF wc3	8	03	FG	d	y	2	01	FR	0		
4821	4821	02	ESSF wc3	6	02	FQ	d	r	4	01	FR	0		
4833	4833	03	ESSF wc3	10	03	FG	j	y	0			0		
4891	4891	OW	ESSF wc3	10	00	OW			0			0		
4892	4892	WE	ESSF wc3	10	00	WE	d	y	0			0		
4893	4893	ME	ESSF wc3	10	00	ME			0			0		
4894	4894	PA	ESSF wc3	10	00	PA			0			0		
4895	4895	BR	ESSF wc3	10	00	BR			0			0		
4896	4896	DL	ESSF wc3	10	00	DL			0			0		
4897	4897	TA	ESSF wc3	10	00	TA			0			0		
4898	4898	AV	ESSF wc3	10	00	AV			0			0		



**BGC Unit: ESSF wcw****LMES Zone ID: 49****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	24,049.8	1.16%
Williams Lake TSA	28,967.2	0.59%
100 Mile House TSA	6,709.7	0.54%
Cariboo Region	59,726.7	0.72%

**List of Site Series Codes Defined for use in ESSF wcw**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
00	AF	Alder - Fern avalanche tract (Alder - Tall Forb)	subhygric - hygric	Not Used
00	FA	Subalpine fir - Mountain arnica mesic meadow (mesic forb meadow)	mesic	Stunted trees in meadow to brush transition
00	FD	Bl - Pale-stalked broom moss	subxeric - mesic	Thicker trees, on steeper and drier slopes
00	FE	Carex aquatilis - Calamagrostis canadensis - Equisetum arvense	hydric	Not Used
00	FH	Subalpine fir - Heather	mesic	Scattered krummholz trees, steep slopes
00	FJ	Bl - Juniper	subxeric - xeric	Treed steep slopes
00	FL	Bl - Heather - Lichen	submesic - subxeric	Not Used
00	FV	Bl - Valerian wet meadow	subhygric - hygric	Treed wetter hollows and draws
00	FW	Bl - Small-flowered woodrush		Treed wet gullies and chutes
00	GL	Glacier Permanent Ice and Snow		
00	HL	Heather - Lichen meadow (Dry heath meadow)	xeric	Very thin ground cover of lichens and forbs
00	MC	Moss campion - Coral lichen meadow (Dry meadow)		Very thin ground cover with lots of bare soil
00	PN	Permanent Ice and Snow		
00	RG	Rock Glacier		
00	RO	Rock		
00	RU	Rubble		
00	SD	Sedge - Dwarf willow moist meadow	mesic - subhygric	Thin but increasingly moist ground cover
00	SF	Scrub birch - Altai fescue shrub steppe	xeric - submesic	Thicker brush with scattered trees
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the East Cariboo Area and modified to better describe this BGC Unit. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the ESSF wcw once a new classification of alpine and sub-alpine areas is completed and published.

**Landscape Profile Diagram: ESSF wcw**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for ESSF wcw (arule4930)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.50
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.50
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.50
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.50
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2.00
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.50
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5.00
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2.00
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2.00
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5.00
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2.00
13	formfile	SLOPE	SlopeGT05	4	5.50	5.00	99.00	5.00	99.00	0.50
14	formfile	SLOPE	SlopeLT05	5	4.50	0.00	5.00	0.00	5.00	0.50
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5.00
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10.00
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10.00
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.50

**Example Fuzzy Ecological Class Rule File for ESSF wcv (crule4930)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
SH4930r	Crest	35	1	4930	SD Meadow to Brush	SH4934ne	Up2Low	35	5	4934	FA Trees in Tundra
SH4930r	Dry_WI	35	1	4930	Ridge Crest	SH4934ne	Dry2Med_WI	35	5	4934	< 30% NE Slope
SH4930r	SlopeLT20	20	1	4930		SH4934ne	SlopeLT30	20	5	4934	
SH4930r	Hi_Ridge	10	1	4930		SH4934ne	NE_Aspect	10	5	4934	
SH4931sw	Up2Low	35	2	4931	FH Sparse Parkland	SH4935ne	Up2Low	35	6	4935	FA Trees in Tundra
SH4931sw	Dry2Med_WI	35	2	4931	< 30% SW Slope	SH4935ne	Dry2Med_WI	35	6	4935	30-45% NE Slope
SH4931sw	SlopeLT30	20	2	4931		SH4935ne	SlopeLT45	10	6	4935	
SH4931sw	SW_Aspect	10	2	4931		SH4935ne	SlopeGT30	10	6	4935	
SH4932sw	Up2Low	35	3	4932	SF Sparse Parkland	SH4935ne	NE_Aspect	10	6	4935	
SH4932sw	Dry2Med_WI	35	3	4932	30-45% SW Slope	SH4936ne	Up2Low	35	7	4936	FH Sparse Parkland
SH4932sw	SlopeLT45	10	3	4932		SH4936ne	Dry2Med_WI	35	7	4936	> 45% NE Slope
SH4932sw	SlopeGT30	10	3	4932		SH4936ne	Steep	20	7	4936	
SH4932sw	SW_Aspect	10	3	4932		SH4936ne	NE_Aspect	10	7	4936	
SH4933sw	Up2Low	35	4	4933	FJ Thin Trees	SH4937st	Hollow	35	8	4937	RO Rocky Hollow
SH4933sw	Dry2Med_WI	35	4	4933	> 45% SW Slope	SH4937st	Wet2V_Wet	35	8	4937	Sloping > 5%
SH4933sw	Steep	20	4	4933		SH4937st	SlopeGT05	30	8	4937	
SH4933sw	SW_Aspect	10	4	4933		SH4938lv	Hollow	35	9	4938	FV Forested Hollow
						SH4938lv	Wet2V_Wet	35	9	4938	Level < 5%
						SH4938lv	SlopeLT05	30	9	4938	



**PEM Entity Descriptions for: ESSF wcw**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4900	ESSF wcw	00	RO	r	v	4900 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
4901	ESSF wcw	00	RU	v		4901 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
4902	ESSF wcw	00	RU	w	v	4902 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4902 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4903	ESSF wcw	00	RO	w	v	4903 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
4904	ESSF wcw	00	RU	v		4904 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4905	ESSF wcw	00	RU	w	v	4905 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4905 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
4906	ESSF wcw	00	RO	w	v	4906 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
4907	ESSF wcw	00	RO	v	y	4907 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with bare rock ground cover.
4908	ESSF wcw	00	RU	v	y	4908 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with bare rock ground cover.
4910	ESSF wcw	00	SD	r	v	4910 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
4911	ESSF wcw	00	HL	j	s	4911 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4912	ESSF wcw	00	MC	w	d	4912 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4912 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
4913	ESSF wcw	00	RO	w	v	4913 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
4914	ESSF wcw	00	HL	j	s	4914 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation.
4915	ESSF wcw	00	MC	w	d	4915 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4915 areas had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
4916	ESSF wcw	00	RO	w	v	4916 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
4917	ESSF wcw	00	RO			4917 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with very thin ground cover.
4918	ESSF wcw	00	RU	v	y	4918 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with very thin ground cover.
4920	ESSF wcw	00	SD	r	v	4920 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
4921	ESSF wcw	00	HL	j	s	4921 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation but were most likely occupied by dry tundra. Gentle slopes, warm aspects, medium textured shallow soils, dry tundra types, sparsely vegetated
4922	ESSF wcw	00	MC	w	d	4922 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 4922 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter than 4921 areas due to seepage from upslope.
4923	ESSF wcw	00	RO	w	v	4923 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
4924	ESSF wcw	00	HL	j	s	4924 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation but were most likely occupied by dry tundra. Gentle slopes, Cool aspects, medium textured shallow soils, dry tundra types, sparsely vegetated

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4925	ESSF wcw	00	MC	w	d	4925 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 4925 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter than 4924 areas due to seepage from upslope.
4926	ESSF wcw	00	RO	w	v	4926 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
4927	ESSF wcw	00	RO			4927 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with sparse ground cover.
4928	ESSF wcw	00	FV			4928 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with sparse ground cover.
4930	ESSF wcw	00	SD	r	v	4930 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of grasses and shrubs. 4930 areas are transition areas from meadow to a combination of brush and rock. Crest positions, gentle slopes, medium textured shallow soils; grass to shrub transition vegetation. Shallow crests.
4931	ESSF wcw	00	FH	w	j	4931 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by widely scattered trees within a matrix of dry tundra that grades into a lush moist meadow. 4931 areas are recognized by a light green color on the satellite imagery that is interpreted to indicate increasing density and lushness of grasses and forbs along with a few more scattered trees. Gentle slopes, deep, medium textured soils.
4932	ESSF wcw	00	SF	w	s	4932 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by widely scattered trees within a matrix of dry tundra that grades into a lush moist meadow. Moderate to steep slopes, shallow, medium textured soils. (Ray says these areas belong in the ESSF wcp as a mixture of entities MC and JK)
4933	ESSF wcw	00	FJ	w	v	4933 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that had a very light green to light pink color on the satellite imagery. These areas were interpreted to infer that the dominant ground cover was bare soil and rock with only a few scattered trees, forbs and grasses. Very steep slopes, shallow, rocky, medium textured soils. From visual review of 4933 areas they appear to be associated with the initiation points of brushed or treed avalanche tracks. (Ray says steep slopes with trees are to be called FJ from ESSF wc3)
4934	ESSF wcw	00	FA	k	j	4934 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by widely scattered trees within a matrix of dry tundra that grades into a lush moist meadow with greater amounts of heather than similar S facing 4931 areas. 4934 areas are recognized by a light green color on the satellite imagery that is interpreted to indicate increasing density and lushness of grasses and forbs along with a few more scattered trees. Gentle slopes, deep, medium textured soils.
4935	ESSF wcw	00	FA	k		4935 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses, shrubs and a few low, stunted trees. 4935 areas are transition areas from meadow to brush. Moderate to steep slopes, shallow, medium textured soils, shrub-steppe, well-developed moss layer.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4936	ESSF wcw	00	FH	k	s	4936 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that had a very light green to light pink color on the satellite imagery. These areas were interpreted to infer that the dominant ground cover was bare soil and rock with only a few scattered trees, forbs and moister cool aspect heather communities. Very steep slopes, shallow, rocky, medium textured soils.
4937	ESSF wcw	00	RO			4937 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with transitional forb to brush ground cover.
4938	ESSF wcw	00	FV			4938 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with transitional forb to brush ground cover.
4940	ESSF wcw	00	SD			4940 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of vigorously growing grasses and shrubs. 4940 areas are transition areas from meadow and shrub to thick continuous brush. Crest positions, gentle slopes, medium textured shallow soils; grass to shrub transition to vigorous shrub vegetation. Shallow crests.
4941	ESSF wcw	00	FA	w	j	4941 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with avalanche tracks and other areas that had sparse to absent tree cover but lush herbaceous ground cover. Generally on warm aspects.
4942	ESSF wcw	00	FA	w		4942 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with avalanche tracks and other areas that had sparse to absent tree cover but lush herbaceous ground cover. Steep slopes generally on warm aspects.
4943	ESSF wcw	00	FJ	w	s	4943 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with areas that had sparse to absent tree cover but possessed a lush herbaceous ground cover. Very steep slopes on warm aspects.
4944	ESSF wcw	00	FA	k	j	4944 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with areas that had sparse to absent tree cover but did possess a lush herbaceous ground cover including heathers. generally on cool moist aspects
4945	ESSF wcw	00	FA	k		4945 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with areas that had sparse to absent tree cover but did possess heather dominated communities with an herbaceous component. Steep slopes on cool aspects.
4946	ESSF wcw	00	FH	k	v	4946 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that had a light to mid green color on the satellite imagery. This light green color was visually correlated with areas that had sparse to absent tree cover but did possess heather dominated communities with a herbaceous component. Very steep slopes on cool aspects.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4947	ESSF wcw	00	RO			4947 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas transitional to vigorous brush ground cover.
4948	ESSF wcw	00	FV			4948 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas transitional to vigorous brush ground cover.
4951	ESSF wcw	00	RG	k	v	4951 areas were mapped in areas characterized by a mixture of bare rock, rubble, snow and ice that does not appear to be permanent snow or glacier ice. Some 4951 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 4951 areas do not appear to have any significant vegetative ground cover.
4952	ESSF wcw	00	RG	k	v	4952 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 4952 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 4952 areas do not appear to have any significant vegetative ground cover. Lee positions are dominantly NE but also include N, NW, E and SE orientations.
4953	ESSF wcw	00	PN			4953 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N or E facing slopes. 4953 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
4954	ESSF wcw	00	GL	k		4954 areas were mapped to enclose the cores of what appear to be permanent glaciers. These glaciers generally occur down slope of the lee lips of steep windswept upper slopes. 4954 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
4960	ESSF wcw	00	FH	r	s	4960 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a thick continuous cover of trees. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.
4961	ESSF wcw	00	FD	w		4961 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw. 4961 areas were mapped on gentle to moderate (0-30%) S and W facing slopes where the imagery indicated the presence of relatively continuous tree cover. (Ray says these areas belong in the ESSF wc3 as a mixture of entities FD and FJ)
4962	ESSF wcw	00	FD	w	s	4962 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects. 4962 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4963	ESSF wcw	00	FH	k	s	4963 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects. 4963 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw.
4964	ESSF wcw	00	FD	w		4964 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects. 4964 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw.
4965	ESSF wcw	00	FD	w	s	4965 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects. 4965 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw.
4966	ESSF wcw	00	FH	k	s	4966 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects. 4966 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcw. 4966 areas were mapped on very steep (> 45%) N and E facing slopes where the imagery indicated the presence of relatively continuous tree cover. (Ray says these areas belong in the ESSF wc3 as entity FH)
4967	ESSF wcw	00	FW	y		4967 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a continuous tree cover. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of continuous tree ground cover. 4967 areas were mapped in sloping hollows and draws that appeared to possess a ground cover consisting of continuous, but not thick, tree cover interspersed with bare rock, grasses and forbs. These are wet open forests. 4967 areas were defined using the same criteria of low reflectance in bands 1 and 3 used to define 4961 areas but had the additional feature of possessing a steep slope, a large upslope area and a high wetness index. These variables were used to identify wetter hollows, draws and depressions that were then assumed to be more likely to be occupied by wet open forests
4968	ESSF wcw	00	FW	y		4968 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with continuous tree ground cover. 4968 areas were mapped in level to depressional areas in hollows and draws that appeared to possess a ground cover consisting of continuous, but not thick, tree cover interspersed with bare rock, grasses and forbs. These are wet open forests. 4967 areas were defined using the same criteria of low reflectance in bands 1 and 3 used to define 4961 areas but had the additional feature of possessing a large upslope area and wetness index. These variables were used to identify wetter hollows, draws and depressions that were then assumed to be more likely to be occupied by wet open forests

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4970	ESSF wcw	00	FH	r	s	4970 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a thick continuous cover of dark trees. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.
4971	ESSF wcw	00	FA	w		4971 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4971 areas occur on gentle to moderate slopes (<30%) with S, SW and SE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
4972	ESSF wcw	00	FD	w		4972 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4972 areas occur on moderate to steep slopes (30- 45%) with S, SW and SE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
4973	ESSF wcw	00	FD	w		4973 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4973 areas occur on very steep slopes (> 45%) with S, SW and SE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
4974	ESSF wcw	00	FA	k	s	4974 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4974 areas occur on gentle to moderate slopes (<30%) with N, NE and NW aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
4975	ESSF wcw	00	FH	k	s	4975 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4975 areas occur on moderate to steep slopes (30-45%) with N, NE and NW aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
4976	ESSF wcw	00	FH	k	s	4976 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied LandSat imagery. 4976 areas occur on very steep slopes (> 45%) with N, NW and NE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
4977	ESSF wcw	00	PN			4977 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of dark shadows and bare rock or rubble.
4978	ESSF wcw	00	PN			4978 areas were mapped in wetter draws and hollows located on gentle to level slopes (< 5%) in areas of dark shadows in the alpine; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas n areas of dark shadows and bare rock or rubble.
4991	ESSF wcw	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers on information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
4992	ESSF wcw	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
4993	ESSF wcw	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
4994	ESSF wcw	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
4995	ESSF wcw	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
4996	ESSF wcw	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
4997	ESSF wcw	00	TA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
4998	ESSF wcw	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.



**PEM Entity Extended Legend with Proportions of Site Series for: ESSF mc3**

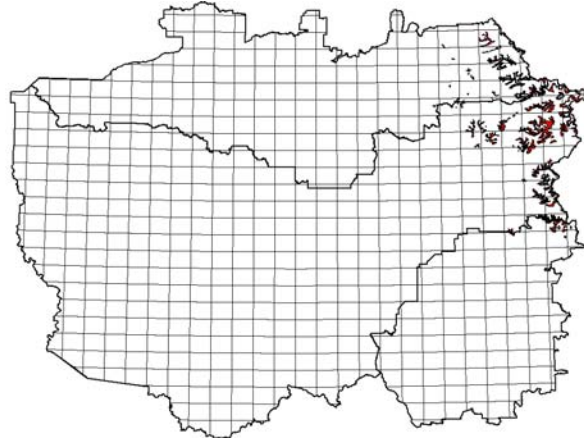
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4900	4900	RO	ESSF wcw	8	00	RO	r	v	2	00	HL			
4901	4901	RU	ESSF wcw	6	00	RU	v		4	00	HL			
4902	4902	RU	ESSF wcw	8	00	RU	w	v	2	00	SD			
4903	4903	RO	ESSF wcw	10	00	RO	w	v						
4904	4904	RU	ESSF wcw	6	00	RU	v		4	00	HL			
4905	4905	RU	ESSF wcw	8	00	RU	w	v	2	00	SD			
4906	4906	RO	ESSF wcw	10	00	RO	w	v						
4907	4907	RO	ESSF wcw	8	00	RU	v	y	2	00	FV			
4908	4908	RU	ESSF wcw	5	00	RU	v	y	5	00	FV			
4910	4910	SD	ESSF wcw	10	00	SD	r	v						
4911	4911	HL	ESSF wcw	10	00	HL	j	s						
4912	4912	MC	ESSF wcw	7	00	MC	w	d	3	00	JK			
4913	4903	RO	ESSF wcw	10	00	RO	w	v						
4914	4914	HL	ESSF wcw	10	00	HL	j	s						
4915	4915	MC	ESSF wcw	7	00	MC	w	d	3	00	JK			
4916	4906	RO	ESSF wcw	10	00	RO	w	v						
4917	4907	RO	ESSF wcw	6	00	RO			4	00	FV			
4918	4908	RU	ESSF wcw	7	00	FV			3	00	RU			
4920	4920	SD	ESSF wcw	10	00	SD	r	v						
4921	4921	HL	ESSF wcw	10	00	HL	j	s						
4922	4922	MC	ESSF wcw	7	00	MC	w	d	3	00	JK			
4923	4923	RO	ESSF wcw	10	00	RO	w	v						
4924	4924	HL	ESSF wcw	10	00	HL	j	s						
4925	4925	MC	ESSF wcw	7	00	MC	w	d	3	00	JK			
4926	4926	RO	ESSF wcw	10	00	RO	w	v						
4927	4927	RO	ESSF wcw	6	00	RO			4	00	FV			
4928	4928	FV	ESSF wcw	7	00	FV			3	00	RU			
4930	4930	SD	ESSF wcw	10	00	SD	r	v						
4931	4931	FH	ESSF wcw	6	00	FH	w	j	2	00	FA	2	00	HV
4932	4932	SF	ESSF wcw	10	00	SF	w	s						
4933	4933	FJ	ESSF wcw	10	00	FJ	w	v						
4934	4934	FA	ESSF wcw	10	00	FA	k	j						
4935	4935	FA	ESSF wcw	6	00	FA	k		4	00	FH			
4936	4936	FH	ESSF wcw	10	00	FH	k	s						
4937	4937	RO	ESSF wcw	6	00	RO			4	00	FV			
4938	4938	FV	ESSF wcw	7	00	FV			3	00	RU			
4940	4940	SD	ESSF wcw	10	00	SD								
4941	4941	FA	ESSF wcw	10	00	FA	w	j						
4942	4942	FA	ESSF wcw	10	00	FA	w							
4943	4933	FJ	ESSF wcw	4	00	FJ	w	s	3		FD	3	00	RO
4944	4944	FA	ESSF wcw	10	00	FA	k	j						
4945	4945	FA	ESSF wcw	10	00	FA	k							
4946	4946	FH	ESSF wcw	6	00	FH	k	v	4	00	RO			
4947	4937	RO	ESSF wcw	6	00	RO			4	00	FV			
4948	4938	FV	ESSF wcw	7	00	FV			3	00	RU			
4951	4951	RG	ESSF wcw	10	00	RG	k	v						
4952	4952	RG	ESSF wcw	10	00	RG	k	v						
4953	4953	PN	ESSF wcw	10	00	PN								
4954	4954	GL	ESSF wcw	10	00	GL	k							
4960	4960	FH	ESSF wcw	6	00	FH	r	s	4	00	RO			
4961	4961	FD	ESSF wcw	6	00	FD	w		4	00	FJ			
4962	4962	FD	ESSF wcw	6	00	FD	w	s	4	00	FJ			
4963	4963	FH	ESSF wcw	10	00	FH	k	s						
4964	4964	FD	ESSF wcw	6	00	FD	w		4	00	FJ			
4965	4965	FD	ESSF wcw	6	00	FD	w	s	4	00	FJ			
4966	4966	FH	ESSF wcw	10	00	FH	k	s						

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
4967	4967	FW	ESSF wcw	10	00	FW	y		0					
4968	4968	FW	ESSF wcw	10	00	FW	y		0					
4970	4970	FH	ESSF wcw	6	00	FH	r	s	4	00	RO			
4971	4971	FA	ESSF wcw	10	00	FA	w							
4972	4972	FD	ESSF wcw	6	00	FD	w		4	00	FJ			
4973	4973	FD	ESSF wcw	6	00	FD	w		4	00	FJ			
4974	4974	FA	ESSF wcw	6	00	FA	k	s	4	00	FH			
4975	4975	FH	ESSF wcw	6	00	FH	k	s	4	00	RO			
4976	4976	FH	ESSF wcw	6	00	FH	k	s	4	00	RO			
4977	4977	PN	ESSF wcw	10	00	PN								
4978	4978	PN	ESSF wcw	10	00	PN								
4991	4991	OW	ESSF wcw	10	00	OW								
4992	4992	WE	ESSF wcw	10	00	WE	d	y						
4993	4993	ME	ESSF wcw	10	00	ME								
4994	4994	PA	ESSF wcw	10	00	PA								
4995	4995	BR	ESSF wcw	10	00	BR								
4996	4996	DL	ESSF wcw	10	00	DL								
4997	4997	TA	ESSF wcw	10	00	TA								
4998	4998	AV	ESSF wcw	10	00	AV								



**BGC Unit: ESSF wcp****LMES Zone ID: 50****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	15,631.0	0.75%
Williams Lake TSA	51,294.1	1.04%
100 Mile House TSA	4,477.1	0.36%
Cariboo Region	71,402.3	0.87%

**List of Site Series Codes Defined for use in ESSF wcp**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
00	FA	unknown		Stunted trees in meadow to brush transition
00	FH	Subalpine fir - Heather	mesic	Thin scattered trees on cool aspects
00	FJ	Bl - Juniper	subxeric - xeric	Thin scattered trees on steep warm aspects
00	FL	Bl - Heather - Lichen	submesic - subxeric	Thin scattered trees on moderate NE aspects
00	FV	Bl - Sitka valerian		Shrubby, forested hollow or draw, moist
00	GL	Glacier Permanent Ice and Snow		
00	HV	Indian hellebore - Sitka valerian		Thin scattered trees on Steep, warm aspects
00	JK	Juniper - Kinnikinnick		Thin scattered trees on cool aspects
00	MC	Moss campion - Coral lichen meadow		Very thin ground cover on steeper slopes
00	PN	Permanent Ice and Snow		
00	RG	Rock Glacier		
00	RO	Rock		
00	RU	Rubble		
00	SD	Sedge - Dwarf willow moist meadow	mesic - subhygric	Very thin ground cover with few to no trees
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the East Cariboo Area and modified to better describe this BGC Unit. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the ESSF wcp.

**Landscape Profile Diagram: ESSF wcp**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for ESSF wcp (arule5031)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.50
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.50
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.50
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.50
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2.00
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.50
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5.00
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2.00
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2.00
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5.00
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2.00
13	formfile	SLOPE	SlopeGT05	4	5.50	5.00	99.00	5.00	99.00	0.50
14	formfile	SLOPE	SlopeLT05	5	4.50	0.00	5.00	0.00	5.00	0.50
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5.00
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10.00
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10.00
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.50

**Example Fuzzy Ecological Class Rule File for ESSF wcp (crule5031)**

<b>f_name</b>	<b>fuzattr</b>	<b>attrwt</b>	<b>facet_no</b>	<b>f_code</b>	<b>Predicts</b>	<b>f_name</b>	<b>fuzattr</b>	<b>attrwt</b>	<b>facet_no</b>	<b>f_code</b>	<b>Predicts</b>
SH5030r	Crest	35	1	5030	MC Grass to shrubs	SH5034ne	Up2Low	35	5	5034	FH Thin Trees
SH5030r	Dry_WI	35	1	5030	Ridge Crest	SH5034ne	Dry2Med_WI	35	5	5034	< 30% NE Slope
SH5030r	SlopeLT20	20	1	5030		SH5034ne	SlopeLT30	20	5	5034	
SH5030r	Hi_Ridge	10	1	5030		SH5034ne	NE_Aspect	10	5	5034	
SH5031sw	Up2Low	35	2	5031	FA Stunted Trees	SH5035ne	Up2Low	35	6	5035	FH Thin Trees
SH5031sw	Dry2Med_WI	35	2	5031	< 30% SW Slope	SH5035ne	Dry2Med_WI	35	6	5035	30-45% NE Slope
SH5031sw	SlopeLT30	20	2	5031		SH5035ne	SlopeLT45	10	6	5035	
SH5031sw	SW_Aspect	10	2	5031		SH5035ne	SlopeGT30	10	6	5035	
SH5032sw	Up2Low	35	3	5032	FA Stunted Trees	SH5035ne	NE_Aspect	10	6	5035	
SH5032sw	Dry2Med_WI	35	3	5032	30-45% SW Slope	SH5036ne	Up2Low	35	7	5036	SD Thin Meadow
SH5032sw	SlopeLT45	10	3	5032		SH5036ne	Dry2Med_WI	35	7	5036	> 45% NE Slope
SH5032sw	SlopeGT30	10	3	5032		SH5036ne	Steep	20	7	5036	
SH5032sw	SW_Aspect	10	3	5032		SH5036ne	NE_Aspect	10	7	5036	
SH5033sw	Up2Low	35	4	5033	HV Thin Trees	SH5037st	Hollow	35	8	5037	RO Rocky Chute
SH5033sw	Dry2Med_WI	35	4	5033	> 45% SW Slope	SH5037st	Wet2V_Wet	35	8	5037	Sloping > 5%
SH5033sw	Steep	20	4	5033		SH5037st	SlopeGT05	30	8	5037	
SH5033sw	SW_Aspect	10	4	5033		SH5038lv	Hollow	35	9	5038	FV Forested Hollow
						SH5038lv	Wet2V_Wet	35	9	5038	Level < 5%
						SH5038lv	SlopeLT05	30	9	5038	

**PEM Entity Descriptions for: ESSF wcp**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5000	ESSF wcp	00	RO	r	v	5000 areas were mapped along the tops of sharp, narrow ridges tops or crests that had little or no observable vegetation (e.g. bare soils or rock). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
5001	ESSF wcp	00	RU	v		5001 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
5002	ESSF wcp	00	RU	w	v	5002 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5002 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5003	ESSF wcp	00	RO	w	v	5003 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
5004	ESSF wcp	00	RU	v		5004 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5005	ESSF wcp	00	RU	w	v	5005 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5005 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5006	ESSF wcp	00	RO	w	v	5006 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
5007	ESSF wcp	00	RO	v	y	5007 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with bare rock ground cover.
5008	ESSF wcp	00	RU	v	y	5008 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with bare rock ground cover.
5010	ESSF wcp	00	SD	r	v	5010 areas were mapped along the tops of sharp, narrow ridges tops or crests that had little or no observable vegetation (e.g. bare soils or rock). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
5011	ESSF wcp	00	SD	j	d	5011 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5012	ESSF wcp	00	MC	w	j	5012 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5022 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
5013	ESSF wcp	00	RO	w	v	5013 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
5014	ESSF wcp	00	SD	j	d	5014 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and forbs, little observable vegetation.
5015	ESSF wcp	00	MC	w	j	5015 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5015 areas had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and forbs, little observable vegetation.
5016	ESSF wcp	00	RO	w	v	5016 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
5017	ESSF wcp	00	RO			5017 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with very thin ground cover.
5018	ESSF wcp	00	RU	v	y	5018 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with very thin ground cover.
5020	ESSF wcp	00	SD	r	v	5020 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
5021	ESSF wcp	00	SD	j	d	5021 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had that had a fairly consistent dry tundra land cover. Gentle slopes, warm aspects, medium textured shallow soils, dry tundra types, sparsely vegetated
5022	ESSF wcp	00	MC	w	j	5022 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5022 areas appeared to have continuous vegetation with few observable trees or low bushes. Gentle slopes, deep, medium textured soils, various grasses and forbs. Generally windswept exposures (S, SW, W, SE). (Ray suggested labeling these areas MC, JK)
5023	ESSF wcp	00	RO	w	v	5023 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable tree or shrub vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. (Ray suggested labeling these areas RO, JK)
5024	ESSF wcp	00	SD	j	d	5024 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation but were most likely occupied by dry tundra. Gentle slopes, Cool aspects, medium textured shallow soils, dry tundra types, sparsely vegetated



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5025	ESSF wcp	00	MC	w	j	5025 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5025 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter than 5024 areas due to seepage from upslope.
5026	ESSF wcp	00	RO	w	v	5026 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. (Ray says may be RO or AW)
5027	ESSF wcp	00	RO			5027 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with sparse ground cover.
5028	ESSF wcp	00	FV			5028 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 20). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with sparse ground cover.
5030	ESSF wcp	00	MC	r	v	5030 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of grasses and shrubs. 5030 areas are transition areas from meadow to a combination of brush and rock. Crest positions, gentle slopes, medium textured shallow soils; grass to shrub transition vegetation. Shallow crests.
5031	ESSF wcp	00	FA	w	j	5031 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of grasses, forbs and scattered shrubs and trees. 5031 areas are transition areas from dry tundra to grass-forb meadows. Gentle slopes, deep, medium textured soils. (Ray suggested labeling these areas as FA or VD, HV, depending upon how much stunted tree cover occurred)
5032	ESSF wcp	00	FA	w	s	5032 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by a mixture of grasses, forbs and scattered shrubs and trees. 5032 areas are transition areas from dry tundra to grass-forb meadows. Moderate to steep slopes, shallow, medium textured soils.
5033	ESSF wcp	00	HV	w	v	5033 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of a mixture of grasses, forbs and scattered shrubs and trees. 5033 areas are transition areas from dry tundra to grass-forb meadows. Steeper slopes tend to exhibit a greater variability in density of vegetative cover. Very steep slopes, shallow, rocky, medium textured soils. From visual review of 5033 areas they appear to be associated with the initiation points of brushed or treed avalanche tracks. (Ray suggested labeling these areas HV, RO, FL)
5034	ESSF wcp	00	FH	k	j	5034 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses, forbs and scattered shrubs and trees. 5034 areas are recognized by a light green color on the satellite imagery that is interpreted to indicate increasing density and lushness of grasses and forbs along with a few more scattered trees. Gentle slopes, deep, medium textured soils.
5035	ESSF wcp	00	FH	k	s	5035 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of grasses, forbs and scattered shrubs and trees. 5035 areas are transition areas from dry tundra to grass-forb meadows. Steeper slopes tend to exhibit a greater variability in density of vegetative cover. Moderate to steep slopes, shallow, medium textured soils. (Ray suggested labeling these areas FH, HV)

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5036	ESSF wcp	00	SD	k	s	5036 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered predominantly by heathers and bare rock surfaces. Very steep slopes, shallow, rocky, medium textured soils. (Ray suggested labeling these areas SD, FL)
5037	ESSF wcp	00	RO			5037 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas with transitional forb to brush ground cover.
5038	ESSF wcp	00	FV			5038 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of grasses, forbs and shrubs (class 31). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with transitional forb to brush ground cover.
5040	ESSF wcp	00	FL	r	s	5040 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of vigorously growing grasses and shrubs. 5040 areas are transition areas from meadow and shrub to thick continuous brush. Crest positions, gentle slopes, medium textured shallow soils, grass to shrub transition to vigorous shrub vegetation. Shallow crests.
5041	ESSF wcp	00	FA	w	j	5041 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to below crest landform positions that appeared to possess a ground cover consisting of a matrix of moist grass-forb meadows with inclusions of patches of krumholz forest. generally on warm aspects. 5041 areas had a light to mid green color on the satellite imagery that was visually correlated with avalanche tracks and other areas that had sparse to absent tree cover but lush herbaceous ground cover. (Ray suggested labeling these areas FA, FH)
5042	ESSF wcp	00	FH	w		5042 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of a matrix of moist grass-forb meadows with inclusions of patches of krumholz forest. 5042 areas had a light to mid green color on the satellite imagery that was visually correlated with avalanche tracks and other areas that had sparse to absent tree cover but lush herbaceous ground cover. Generally on warm aspects.
5043	ESSF wcp	00	FJ	w	s	5043 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of a matrix of moist grass-forb meadows with inclusions of patches of krumholz forest. 5043 areas had a light to mid green color on the satellite imagery that was visually correlated with areas that had sparse to absent tree cover but possessed a lush herbaceous ground cover. Very steep slopes on warm aspects.
5044	ESSF wcp	00	FH	k	j	5044 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of a matrix of moist grass-forb meadows with inclusions of patches of krumholz forest. Generally on cool aspects. (Ray suggested labeling these areas FH, FA)
5045	ESSF wcp	00	FH	k	s	5045 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of a matrix of moist grass-forb meadows with increasing amounts of heathers and inclusions of patches of krumholz forest. Generally on steep cool aspects.
5046	ESSF wcp	00	FL	k	v	5046 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover of a matrix of heather meadows with inclusions of patches of krumholz forest. Very steep slopes, cool aspects, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5047	ESSF wcp	00	FV			5047 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas transitional to vigorous brush ground cover.
5048	ESSF wcp	00	FV			5048 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of vigorously growing grass, forbs and low brush (class 40). Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas transitional to vigorous brush ground cover.
5051	ESSF wcp	00	RG	k	v	5051 areas were mapped in areas characterized by a mixture of bare rock, rubble, snow and ice that does not appear to be permanent snow or glacier ice. Some 5051 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 5051 areas do not appear to have any significant vegetative ground cover.
5052	ESSF wcp	00	RG	k	v	5052 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 5052 areas may consist of talus or rock glaciers. Others may be rubble or rock with persistent late snow. 5052 areas do not appear to have any significant vegetative ground cover. Lee positions are dominantly NE but also include N, NW, E and SE orientations.
5053	ESSF wcp	00	PN			5053 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N or E facing slopes. 5053 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
5054	ESSF wcp	00	GL	k		5054 areas were mapped to enclose the cores of what appear to be permanent glaciers. These glaciers generally occur down slope of the lee lips of steep windswept upper slopes. 5054 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
5060	ESSF wcp	00	FH	r	s	5060 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a thick continuous cover of trees. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.
5061	ESSF wcp	00	FH	w		5061 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively thick, but not continuous, tree cover in the ESSF wcp. 5061 areas were mapped on gentle to moderate (0-30%) S and W facing slopes where the imagery indicated the presence of somewhat thicker tree and shrub cover. It is predicted that 5061 areas will be dominated by a moderately thick cover of stunted trees developed on rocky soils. 5061 areas do not exhibit the very bright reflectance values that are associated with bare rock. 5061 areas appear to be largely treed. (Ray suggested labeling these areas as FB if shallow soils and FH if deeper)
5062	ESSF wcp	00	FJ	w		5062 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on warm aspects. 5062 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcp.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5063	ESSF wcp	00	FJ	w	s	5063 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively thick, but not continuous, tree cover in the ESSF wcp. 5063 areas were mapped on very steep (> 45%) S and W facing slopes where the imagery indicated the presence of somewhat thicker tree and shrub cover. It is predicted that 5063 areas will be dominated by a thick cover of stunted trees developed on rocky soils. 5063 areas do not exhibit the very bright reflectance values that are associated with bare rock. 5063 areas may be both moist and treed. (Ray suggested labeling these areas as FJ for steep warm aspect with trees in a forest island)
5064	ESSF wcp	00	FH	k	s	5064 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively thick, but not continuous, tree cover in the ESSF wcp. 5064 areas were mapped on gentle to moderate (0-30%) N and E facing slopes where the darker imagery indicated the presence of somewhat thicker tree and shrub cover. It is predicted that 5064 areas will be dominated by a moderately thick cover of stunted trees developed on rocky soils. 5064 areas do not exhibit the very bright reflectance values that are associated with bare rock. 5064 areas appear to be either treed or rock outcrops in shadow. (Ray suggested that if rock outcrops had trees then call FB, if deep and treed then probably should call FH)
5065	ESSF wcp	00	FL	k	s	5065 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of continuous tree cover; generally on cold aspects. 5065 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively continuous, but not thick, forest cover in the ESSF wcp.
5066	ESSF wcp	00	FL	k	s	5066 areas were recognized primarily on the basis of low reflectance values (dark colors) in bands 1 and 3 of the supplied LandSat imagery. These low reflectance values appeared to represent areas of relatively thick, but not continuous, tree cover in the ESSF wcp. 5066 areas were mapped on very steep (> 45%) N and E facing slopes where the imagery indicated the presence of somewhat thicker tree and shrub cover. It is predicted that 5066 areas will be dominated by a thick cover of stunted trees developed on rocky soils. 5066 areas do not exhibit the very bright reflectance values that are associated with bare rock. 5066 areas may be both moist and treed.
5067	ESSF wcp	00	FH	j	y	5067 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a continuous tree cover. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of continuous tree ground cover. 5067 areas were mapped in sloping hollows and draws that appeared to possess a ground cover consisting of continuous, but not thick, tree cover interspersed with bare rock, grasses and forbs. These are wet open forests. 5067 areas were defined using the same criteria of low reflectance in bands 1 and 3 used to define 5061 areas but had the additional feature of possessing a steep slope, a large upslope area and a high wetness index. These variables were used to identify wetter hollows, draws and depressions that were then assumed to be more likely to be occupied by wet open forests

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5068	ESSF wcp	00	SG	j	y	5068 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas with continuous tree ground cover. 5068 areas were mapped in level to depressional areas in hollows and draws that appeared to possess a ground cover consisting of continuous, but not thick, tree cover interspersed with bare rock, grasses and forbs. These are wet open forests. 5067 areas were defined using the same criteria of low reflectance in bands 1 and 3 used to define 5061 areas but had the additional feature of possessing a large upslope area and wetness index. These variables were used to identify wetter hollows, draws and depressions that were then assumed to be more likely to be occupied by wet open forests
5070	ESSF wcp	00	FH	r	s	5070 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a thick continuous cover of dark trees. Crest positions, gentle slopes, medium textured shallow soils, continuous tree cover. Shallow crests.
5071	ESSF wcp	00	FH	w		5071 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. 5071 areas occur on gentle to moderate slopes (<30%) with S, SW and SE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested. We infer from the dark shadows in the imagery and from the relatively steep slopes that these areas may exhibit a cool aspect form of vegetation along with considerable amounts of bare rock on steeper slopes. 5071 areas appear to be largely treed and to have warm aspects.
5072	ESSF wcp	00	FJ	w		5072 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. 5072 areas occur on moderate to steep slopes (30- 45%) with S, SW and SE aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested.
5073	ESSF wcp	00	JK	w		5073 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. These very low reflectance values appeared to represent areas of dark shadows in the satellite imagery. It is not possible to infer ground cover type in these areas of dark shadow. 5073 areas were mapped on very steep (> 45%) S and W facing slopes where the imagery was not able to infer vegetation cover. We infer from the dark shadows in the imagery and from the very steep slopes that these areas may be dominated by a ground cover consisting of bare soil, rock, rubble and scattered forbs and heathers; generally on cold aspects. 5073 areas have steep S and W orientations but, because they are in deep shadow, we infer that they probably possess cool aspect conditions and exhibit cool aspect vegetation where it is not rocky.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5074	ESSF wcp	00	FH	k		5074 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. These very low reflectance values appeared to represent areas of dark shadows in the satellite imagery. It is not possible to infer ground cover type in these areas of dark shadow. 5074 areas were mapped on gentle to moderate (0-30%) N and E facing slopes where the imagery was not able to infer vegetation cover. We infer from the dark shadows in the imagery and from the relatively steep NE slopes that these areas definitely exhibit a cool aspect form of vegetation along with considerable amounts of bare rock on steeper slopes. 5074 areas have cool aspects are predicted to be a combination of bare rocky soils along with cool aspect heath communities with scattered clumps of trees or all sizes. (Ray indicated that FH is the most likely on cool aspects, but FA is also possible)
5075	ESSF wcp	00	FH	k	s	5075 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. 5075 areas occur on moderate to steep slopes (30-45%) with N, NE and NW aspects. The very low reflectance values were interpreted upon visual review as being indicative of shadows that typically covered N, NE and NW facing slopes or some south facing slopes in the shadow of higher ridges. It was not possible to identify whether the ground cover in these shadowed areas was forested or not forested. It is only possible to guess that darker colored areas in shadow are similar to darker colored areas not in shadow that were forested. We infer from the dark shadows in the imagery and from the relatively steep NE slopes that these areas definitely exhibit a cool aspect form of vegetation along with considerable amounts of bare rock on steeper slopes. 5075 areas have cool aspects are predicted to be a combination of bare rocky soils along with cool aspect heath communities with scattered clumps of trees or all sizes
5076	ESSF wcp	00	FH	k	s	5076 areas were recognized primarily on the basis of very low reflectance values (very dark colors) in bands 1 and 3 of the supplied Landsat imagery. These very low reflectance values appeared to represent areas of dark shadows in the satellite imagery. It is not possible to infer ground cover type in these areas of dark shadow. 5076 areas were mapped on very steep (> 45%) N and E facing slopes where the imagery was not able to infer vegetation cover. We infer from the dark shadows in the imagery and from the very steep slopes NE that these areas may be dominated by a ground cover consisting of bare soil, rock, rubble and scattered forbs and heathers on cold aspects. 5076 areas have steep N and E orientations and are in deep shadow so we assume they are dominantly rocky and bare with scattered patches of cool aspect vegetation. (Ray indicated that FH is the most likely on cool aspects, but FA is also possible)
5077	ESSF wcp	00	PN			5077 areas were mapped in areas of very low reflectance in both bands 1 and 3 of the supplied satellite imagery. 5077 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 5% and wetness index is greater than 9. These are sloping draws and hollows in areas of dark shadows and bare rock or rubble.
5078	ESSF wcp	00	PN			5078 areas were mapped in areas of very low reflectance in both bands 1 and 3 of the supplied satellite imagery. 5078 areas were mapped in wetter draws and hollows located on gentle to level slopes (< 5%) in areas of dark shadows in the alpine; Slope gradients are less than 5% and wetness index is greater than 9. These are level to gently sloping draws and hollows in areas n areas of dark shadows and bare rock or rubble.
5091	ESSF wcp	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers on information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5092	ESSF wcp	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5093	ESSF wcp	00	TF			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5094	ESSF wcp	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5095	ESSF wcp	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5096	ESSF wcp	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5097	ESSF wcp	00	TA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
5098	ESSF wcp	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ESSF mc3**

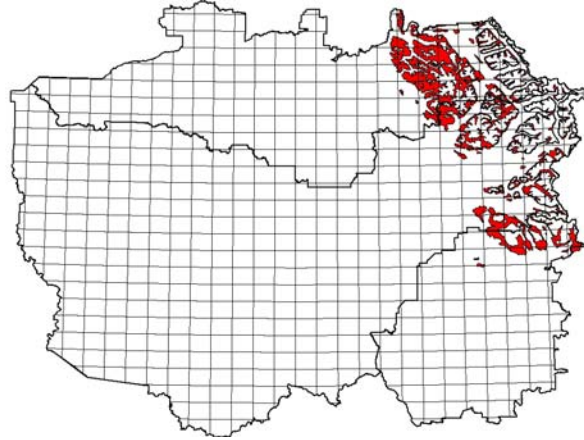
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5000	5000	RO	ESSF wcp	8	00	RO	r	v	2	00	HL			
5001	5001	RU	ESSF wcp	6	00	RU	v		4	00	HL			
5002	5002	RU	ESSF wcp	8	00	RU	w	v	2	00	SD			
5003	5003	RO	ESSF wcp	10	00	RO	w	v						
5004	5004	RU	ESSF wcp	6	00	RU	v		4	00	HL			
5005	5005	RU	ESSF wcp	8	00	RU	w	v	2	00	SD			
5006	5006	RO	ESSF wcp	10	00	RO	w	v						
5007	5007	RO	ESSF wcp	8	00	RU	v	y	2	00	FV			
5008	5008	RU	ESSF wcp	5	00	RU	v	y	5	00	FV			
5010	5010	SD	ESSF wcp	10	00	SD	r	v						
5011	5011	SD	ESSF wcp	6	00	SD	j	d	4	00	HL			
5012	5012	MC	ESSF wcp	6	00	MC	w	j	4	00	JK			
5013	5003	RO	ESSF wcp	6	00	RO	w	v	4	00	JK			
5014	5014	SD	ESSF wcp	6	00	SD	j	d	4	00	HL			
5015	5015	MC	ESSF wcp	7	00	MC	w	j	3	00	RO			
5016	5006	RO	ESSF wcp	6	00	RO	w	v	4	00	MC			
5017	5007	RO	ESSF wcp	6	00	RO			4	00	FV			
5018	5008	RU	ESSF wcp	5	00	RU	v	y	5	00	FV			
5020	5020	SD	ESSF wcp	10	00	SD	r	v						
5021	5021	SD	ESSF wcp	6	00	SD	j	d	4	00	HL			
5022	5022	MC	ESSF wcp	6	00	MC	w	j	4	00	JK			
5023	5023	RO	ESSF wcp	6	00	RO	w	v	4	00	JK			
5024	5024	SD	ESSF wcp	6	00	SD	j	d	4	00	HL			
5025	5025	MC	ESSF wcp	7	00	MC	w	j	3	00	RO			
5026	5026	RO	ESSF wcp	6	00	RO	w	v	4	00	MC			
5027	5027	RO	ESSF wcp	6	00	RO			4	00	FV			
5028	5028	FV	ESSF wcp	7	00	FV			3	00	RU			
5030	5030	MC	ESSF wcp	10	00	MC	r	v						
5031	5031	FA	ESSF wcp	6	00	FA	w	j	2	00	VD	2	00	HV
5032	5032	FA	ESSF wcp	6	00	FA	w	s	2	00	VD	2	00	HV
5033	5033	HV	ESSF wcp	6	00	HV	w	v	2	00	FL	2	00	RO
5034	5034	FH	ESSF wcp	6	00	FH	k	j	4	00	HV	0		
5035	5035	FH	ESSF wcp	6	00	FH	k	s	4	00	HV	0		
5036	5036	SD	ESSF wcp	6	00	SD	k	s	2	00	FL	2	00	RO
5037	5007	RO	ESSF wcp	6	00	RO			4	00	FV			
5038	5038	FV	ESSF wcp	7	00	FV			3	00	RU			
5040	5040	FL	ESSF wcp	7	00	FL	r	s	3	00	RO			
5041	5041	FA	ESSF wcp	6	00	FA	w	j	4	00	FH			
5042	5042	FH	ESSF wcp	8	00	FH	w		2	00	RO			
5043	5043	FJ	ESSF wcp	6	00	FJ	w	s	4	00	RO			
5044	5044	FH	ESSF wcp	8	00	FH	k	j	2	00	FA			
5045	5045	FH	ESSF wcp	6	00	FH	k	s	4	00	FL			
5046	5046	FL	ESSF wcp	6	00	FL	k	v	4	00	RO			
5047	5047	FV	ESSF wcp	5	00	FV			5	00	RU			
5048	5048	FV	ESSF wcp	7	00	FV			3	00	RU			
5051	5051	RG	ESSF wcp	10	00	RG	k	v						
5052	5052	RG	ESSF wcp	10	00	RG	k	v						
5053	5053	PN	ESSF wcp	10	00	PN								
5054	5054	GL	ESSF wcp	10	00	GL	k							
5060	5060	FH	ESSF wcp	6	00	FH	r	s	4	00	RO			
5061	5061	FH	ESSF wcp	6	00	FH	w		4	00	FB			
5062	5062	FJ	ESSF wcp	6	00	FJ	w		4	00	FH			
5063	5063	FJ	ESSF wcp	8	00	FJ	w	s	2	00	RO			
5064	5064	FH	ESSF wcp	6	00	FH	k	s	4	00	FB			
5065	5065	FL	ESSF wcp	6	00	FL	k	s	4	00	FB			
5066	5066	FL	ESSF wcp	8	00	FL	k	s	2	00	RO			



LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5067	5067	FH	ESSF wcp	6	00	FH	j	y	4	00	SG			
5068	5068	SG	ESSF wcp	6	00	SG	j	y	4	00	FV			
5070	5060	FH	ESSF wcp	7	00	FH	r	s	3	00	RO			
5071	5061	FH	ESSF wcp	6	00	FH	w		3	00	FL	1	00	FA
5072	5062	FJ	ESSF wcp	6	00	FJ	w		2	00	RO	2	00	JK
5073	5073	JK	ESSF wcp	7	00	JK	w		3	00	RO			
5074	5064	FH	ESSF wcp	6	00	FH	k		2	00	FA	2	00	RO
5075	5075	FH	ESSF wcp	6	00	FH	k	s	4	00	RO			
5076	5076	FH	ESSF wcp	6	00	FH	k	s	3	00	RO	1	00	FA
5077	5077	PN	ESSF wcp	10	00	PN								
5078	5078	PN	ESSF wcp	10	00	PN								
5091	5091	OW	ESSF wcp	10	00	OW								
5092	5092	WE	ESSF wcp	10	00	WE	d	y						
5093	5093	TF	ESSF wcp	10	00	TF								
5094	5094	PA	ESSF wcp	10	00	PA								
5095	5095	BR	ESSF wcp	10	00	BR								
5096	5096	DL	ESSF wcp	10	00	DL								
5097	5097	TA	ESSF wcp	10	00	TA								
5098	5098	AV	ESSF wcp	10	00	AV								

**BGC Unit: ESSF wk1****LMES Zone ID: 51****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	157,956.0	7.61%
Williams Lake TSA	121,563.8	2.47%
100 Mile House TSA	37,254.1	3.02%
Cariboo Region	316,773.9	3.84%

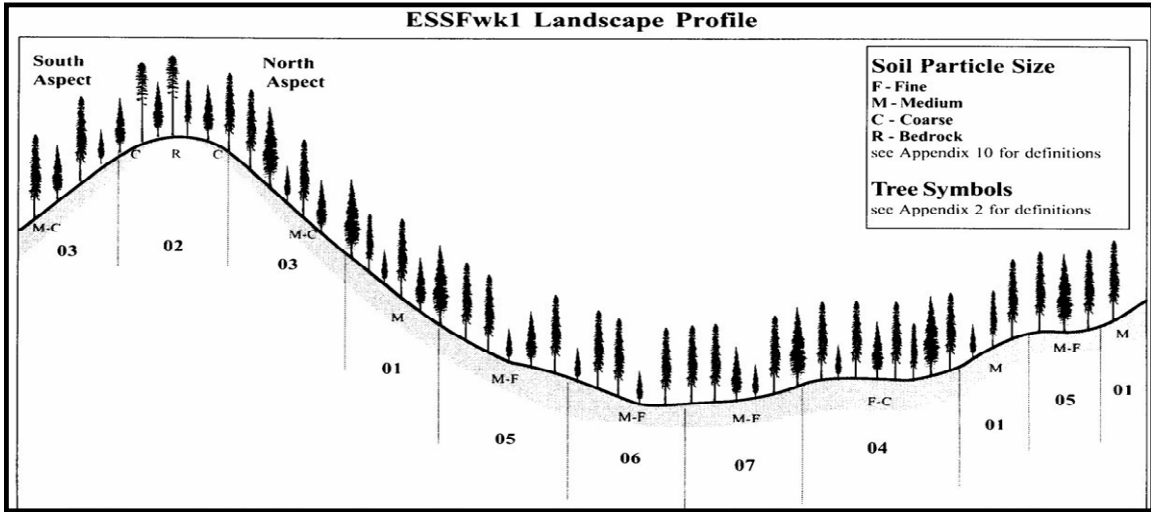
**List of Site Series Codes Defined for use in ESSF wk1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	FB	Bl - Oak fern - Brachythecium	mesic	All upper water shedding parts of the landscape
02	FF	Bl - Huckleberry - Feathermoss	submesic	Shallow Crests
03	FO	Bl - Oak fern - Knight's plume	submesic	Slightly Drier Steep SW and Ridge Tops
04	FT	Bl - Twinberry - Lady fern	subhygric	Cold, moist, frosty, water table > 50 cm
05	FD	Bl - Devil's club - Lady fern	subhygric	Moist, not-frosty, water table > 50 cm
06	FH	Bl - Horsetail - Sphagnum	hygric	Cold, wet, frosty, water table < 50 cm
07	FL	Bl - Lady fern - Horsetail (Ws08 - Bl - Sitka valerian - Common horsetail)	hygric	Wet, not frosty, water table < 50 cm
00	GB	Gravel Bar		
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb

**Landscape Profile Diagram: ESSF wk1**



**Example Attribute Class Rule File for ESSF wk1 (arule5130)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	formfile	LNQAREA	Crest2Up	5	7.50	7.50	7.50	0.00	8.00	0.50
3	formfile	LNQAREA	Crest2Mid	5	8.50	8.50	8.50	0.00	9.00	0.50
4	relzfile	PCTZ2ST	Up2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
5	relzfile	PCTZ2ST	Up2Low	1	50.00	50.00	50.00	20.00	80.00	30.00
6	relzfile	PCTZ2ST	Toe	1	15.00	15.00	15.00	7.00	23.00	8.00
7	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5.00
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.50
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.20
10	formfile	QWETI	Sl_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.50
11	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.50
12	formfile	QWETI	Dry2Med_WI	5	6.80	6.80	6.80	0.00	7.30	0.50
13	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.20
14	formfile	QWETI	Sl_Wet2Wet	1	10.00	10.00	10.00	9.00	11.00	1.00
15	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.20	1.50
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.80
17	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5.00
18	formfile	SLOPE	SlopeLT05	5	4.00	4.00	4.00	0.00	5.00	1.00
19	formfile	SLOPE	SlopeLT10	5	5.00	10.50	10.50	0.00	10.00	5.00
20	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5.00
21	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	35.00	5.00
22	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	100.00	1.00
23	formfile	SLOPE	SlopeGT05	4	6.00	6.00	6.00	6.00	100.00	1.00
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
26	geofile	DEPTH	Deep	4	99.00	99.00	99.00	99.00	900.00	1.00
27	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
28	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5.00
29	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10.00
30	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
31	geofile	TEXTURE	Med2Fine	5	55.00	55.00	55.00	0.00	60.00	5.00
32	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
33	geofile	ELEV	GT1450	4	1450.00	1450.00	1450.00	1400.00	3000.00	50.00
34	geofile	ELEV	LT1450	5	1400.00	1400.00	1400.00	0.00	1450.00	50.00
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
36	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.50
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
38	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
39	relzfile	Z2St	Low_Knoll	5	20.00	20.00	20.00	0.00	25.00	5.00
40	relzfile	Z2St	In_Valley	5	30.00	30.00	30.00	0.00	40.00	10.00

## Example Fuzzy Ecological Class Rule File for ESSF wk1 (crule5130)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH5102r	Crest2Up	30	1	5102	02 Shallow Crest	MH5105u	Up2Low	35	12	5105	05 Moist, Not Frosty
MH5102r	Dry2Med_WI	20	1	5102		MH5105u	Wet	25	12	5105	Below 1450 m
MH5102r	Hi_Ridge	20	1	5102		MH5105u	SlopeLT20	15	12	5105	
MH5102r	Shallow	50	1	5102		MH5105u	SlopeGT05	5	12	5105	
MH5102r	Coarse	10	1	5102		MH5105u	Medium	10	12	5105	
MH5123r	Crest2Up	30	2	5123		MH5105u	Deep	10	12	5105	
MH5123r	Dry2Med_WI	20	2	5123	03 Deep Dry Ridge	MH5105u	LT1450	10	12	5105	
MH5123r	Hi_Ridge	20	2	5123		MH5105u	Hi_Ridge	10	12	5105	
MH5123r	Deep	20	2	5123		MH5156u	Up2Low	35	13	5107	07 Wet, Not Frosty
MH5123r	Med2Crs	10	2	5123		MH5156u	Wet2V_Wet	25	13	5107	Below 1450 m
MH5133k	Crest2Up	35	3	5131	03 Deep Low Knoll	MH5156u	SlopeLT20	15	13	5107	
MH5133k	Dry2Med_WI	25	3	5131		MH5156u	SlopeLT05	5	13	5107	
MH5133k	Low_Knoll	20	3	5131		MH5156u	Medium	10	13	5107	
MH5133k	Deep	10	3	5131		MH5156u	Deep	10	13	5107	
MH5133k	Med2Crs	10	3	5131		MH5156u	LT1450	10	13	5107	
MH5132s	Up2Mid	35	4	5132	03 Steep SW	MH5156u	Hi_Ridge	10	13	5107	
MH5132s	Sl_Dry_WI	25	4	5132		MH5141h	Up2Low	35	14	5141	04 Cold Moist Frosty
MH5132s	Steep_SW	30	4	5132		MH5141h	Sl_Dry2Med	25	14	5141	Above 1450 m
MH5132s	Deep	5	4	5132		MH5141h	SlopeLT30	20	14	5141	In Valleys
MH5132s	Hi_Ridge	5	4	5132		MH5141h	Medium	10	14	5141	
MH5131n	Up2Mid	35	5	5135	03 Steep NE	MH5141h	Deep	10	14	5141	
MH5131n	Sl_Dry_WI	25	5	5135		MH5141h	GT1450	10	14	5141	
MH5131n	Steep_NE	30	5	5135		MH5141h	In_Valley	10	14	5141	
MH5131n	Deep	5	5	5135		MH5151v	Up2Low	35	15	5151	01 Normal Mesic
MH5131n	Hi_Ridge	5	5	5135		MH5151v	Sl_Dry2Med	25	15	5151	Below 1450 m
MH5103h	Up2Mid	35	6	5103	03 Dry Upper Shed	MH5151v	SlopeLT30	20	15	5151	In Valleys
MH5103h	Dry2Med_WI	25	6	5103	Above 1450 m	MH5151v	Medium	10	15	5151	** Problem unit **
MH5103h	SlopeLT30	20	6	5103		MH5151v	Deep	10	15	5151	
MH5103h	Med2Crs	10	6	5103		MH5151v	LT1450	10	15	5151	
MH5103h	Deep	10	6	5103		MH5151v	In_Valley	10	15	5151	
MH5103h	GT1450	10	6	5103		MH5144t	Toe	35	16	5144	04 Cold Moist Frosty
MH5103h	Hi_Ridge	10	6	5103		MH5144t	Sl_Wet2Wet	25	16	5144	Above 1450 m
MH5103L	Up2Mid	35	7	5103	03 Dry Upper Shed	MH5144t	SlopeLT20	15	16	5144	On Toe Slopes
MH5103L	Dry2Med_WI	25	7	5103	Below 1450 m	MH5144t	SlopeGT05	5	16	5144	
MH5103L	SlopeLT30	20	7	5103		MH5144t	Med2Crs	10	16	5144	
MH5103L	Med2Crs	10	7	5103		MH5144t	Deep	10	16	5144	
MH5103L	Deep	10	7	5103		MH5144t	GT1450	10	16	5144	
MH5103L	LT1450	10	7	5103		MH5155t	Toe	35	17	5155	05 Moist, Not Frosty
MH5103L	Hi_Ridge	10	7	5103		MH5155t	Sl_Wet2Wet	25	17	5155	Below 1450 m
MH5101m	Up2Low	35	8	5101	01 Upper shedding	MH5155t	SlopeLT20	15	17	5155	On Toe Slopes
MH5101m	Sl_Dry2Med	25	8	5101	Above 1450 m	MH5155t	SlopeGT05	5	17	5155	
MH5101m	SlopeLT30	20	8	5101		MH5155t	Med2Crs	10	17	5155	
MH5101m	Medium	10	8	5101		MH5155t	Deep	10	17	5155	
MH5101m	Deep	10	8	5101		MH5155t	LT1450	10	17	5155	
MH5101m	GT1450	10	8	5101		MH5107v	In_Valley	20	18	5107	07 Wet, Not Frosty
MH5101m	Hi_Ridge	10	8	5101		MH5107v	Valley	20	18	5107	Below 1450 m
MH5101m	Up2Low	35	9	5101	01 Upper shedding	MH5107v	Wet2V_Wet	20	18	5107	In Valleys
MH5101m	Sl_Dry2Med	25	9	5101	Below 1450 m	MH5107v	SlopeGT05	20	18	5107	
MH5101m	SlopeLT30	20	9	5101		MH5107v	Med2Crs	10	18	5107	
MH5101m	Medium	10	9	5101		MH5107v	LT1450	10	18	5107	
MH5101m	Deep	10	9	5101		MH5106h	In_Valley	20	19	5106	06 Cold Wet Frosty
MH5101m	LT1450	10	9	5101		MH5106h	Valley	20	19	5106	Above 1450 m
MH5101m	Hi_Ridge	10	9	5101		MH5106h	Wet2V_Wet	20	19	5106	In Valleys
MH5104u	Up2Low	35	10	5104	04 Cold Moist Frosty	MH5106h	SlopeGT05	20	19	5106	
MH5104u	Wet	25	10	5104	Above 1450 m	MH5106h	Med2Crs	10	19	5106	
MH5104u	SlopeLT20	15	10	5104		MH5106h	GT1450	10	19	5106	
MH5104u	SlopeGT05	5	10	5104		MH5106v	In_Valley	20	20	5106	06 Cold Wet Frosty
MH5104u	Medium	10	10	5104		MH5106v	Valley	20	20	5106	Below 1450 m
MH5104u	Deep	10	10	5104		MH5106v	Wet2V_Wet	20	20	5106	In Valleys
MH5104u	GT1450	10	10	5104		MH5106v	SlopeLT05	20	20	5106	
MH5104u	Hi_Ridge	10	10	5104		MH5106v	Med2Crs	10	20	5106	
MH5146u	Up2Low	35	11	5106	06 Cold Wet Frosty	MH5106v	LT1450	10	20	5106	
MH5146u	Wet2V_Wet	25	11	5106	Above 1450 m	MH5167m	WetL_LT200	50	21	5167	06 Cold Wet Frosty
MH5146u	SlopeLT20	15	11	5106		MH5167m	WetZ_LT05	50	21	5167	In Wetland Margins
MH5146u	SlopeLT05	5	11	5106		MH5166o	Organic	99	22	5166	06 Cold Wet Frosty
MH5146u	Medium	10	11	5106		MH5155s	Hi_Seep	90	23	5155	05 Moist, Not Frosty
MH5146u	Deep	10	11	5106		MH5155s	Med2Fine	10	23	5155	In Seepage Areas
MH5146u	GT1450	10	11	5106							
MH5146u	Hi_Ridge	10	11	5106							

**PEM Entity Descriptions for: ESSF wk1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5101	ESSF wk1	01	FB	d	j	5101 areas were mapped on a wide range of well to moderately well drained upper to lower slope positions in areas mapped as MEDIUM TEXTURED. Gentle slope, deep, medium-textured soils
5102	ESSF wk1	02	FF	s	r	5102 areas were mapped on the dry crests of high ridges that had been mapped as SHALLOW to bedrock. Crest position, medium to coarse textured shallow soil
5103	ESSF wk1	03	FO	d	x	5103 areas were mapped on the slightly drier tops of very gentle low knolls and ridges and spurs. These areas may be entirely mesic 01 or they may contain a component of slightly drier than mesic 03 site series. The field guide indicates that the submesic 03 Site Series is relatively common and often of moderate size so this entity was inserted to increase the extent predicted for the slightly drier submesic 03 Site Series. 5103 areas may end up being renumbered to 5131 in the end in order to reduce un-necessary detail. Relabeled from 03 to 01 October 28, 2007 and back to 03 Dec 5, 2007.
5104	ESSF wk1	04	FT	d	y	5104 areas were mapped in and adjacent to sloping draws, hollows and concavities in upper landscape positions above an elevation of 1450 m. The Regional Ecologist indicated that cold, frosty conditions were common in all draws and moisture receiving areas above an elevation of about 1450 m. He suggested that all moist draws and hollows above an elevation of 1450 m be predicted to be dominated by the cold, moist frosty 04 Site Series. 5104 areas are ONLY mapped above 1450 m. Steeper, upper slope moisture receiving sites; deep medium - textured soil
5105	ESSF wk1	05	FD	d	y	5105 areas were mapped in and adjacent to sloping draws, hollows and concavities in upper landscape positions BELOW an elevation of 1450 m. The Regional Ecologist indicated that below an elevation of about 1450 m moist seepage sites with gentle to moderate slopes were not likely to be cold or frosty. He suggested that all moist upper draws and hollows below an elevation of 1450 m be predicted to be dominated by the moist non-frosty 05 Site Series. 5105 areas are ONLY mapped below 1450 m. Steeper, upper to lower slope moisture receiving sites; deep medium - textured soil
5106	ESSF wk1	06	FH	d	y	5106 areas were mapped in the lowest and wettest portions of sloping valleys, hollows and draws at elevations ABOVE 1450 m. 5106 areas were also mapped in the wettest and flattest portions of valleys, hollows and draws at elevations BELOW 1450 m. These areas of very gentle to level slopes in the bottoms of valleys were expected to be both frosty and wet and were predicted to be occupied predominantly by the cold, wet frosty 06 Site Series. Gentle lower slope to depression; deep medium - textured soils
5107	ESSF wk1	07	FL	d	y	5107 areas were mapped in the lowest and wettest portions of gently to moderately sloping valleys, hollows and draws at elevations BELOW 1450 m. 5107 areas were excluded from the very flattest and wettest portions of valley bottoms, depressions and hollows. These most level areas of moisture accumulation were mapped as 5106. 5107 areas are predicted to be occupied principally by the wet, but not frosty, 07 Site Series but they may also contain components of wet frosty 06 Site Series and moist, not-frosty 05 Site Series. Gentle slope to depression; deep medium - textured soil
5113	ESSF wk1	03	FO	d	x	5113 areas were mapped on the slightly drier tops of very gentle low knolls and high ridges and spurs in MEDIUM TEXTURED areas of high relief and very long slopes. These areas may be entirely mesic 01 or they may contain slightly drier than mesic 03 site series. The field guide indicates that the submesic 03 Site Series is relatively common and often of moderate size so this entity was inserted to increase the extent predicted for the slightly drier submesic 03 Site Series. Relabeled from 03 to 01 October 28, 2007 and back to 03 Dec 5, 2007.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5114	ESSF wk1	01	FB	d		5114 areas were mapped ONLY in areas of HIGH RELIEF and LONG SLOPES in areas mapped as MEDIUM TEXTURED. 5114 areas occupy convex, water shedding landform positions in the lower portions of long continuous slopes. 5114 areas ONLY occur ABOVE 1450 m elevation. 5114 areas were defined within a specific region (the Big Timothy area) in order to classify as mesic areas that had been classified as moister seepage areas using the initially developed rules.
5115	ESSF wk1	01	FB	d		5115 areas were mapped ONLY in areas of HIGH RELIEF and LONG SLOPES in areas mapped as MEDIUM TEXTURED. 5115 areas occupy convex, water shedding landform positions in the lower portions of long continuous slopes. 5115 areas ONLY occur BELOW 1450 m elevation. 5115 areas were defined within a specific region (the Big Timothy area) in order to classify as mesic areas that had been classified as moister seepage areas using the initially developed rules.
5123	ESSF wk1	03	FO	d	x	5123 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock. 5123 areas are the deep equivalent of 5102 shallow crests. Crest position, medium textured deep soil
5131	ESSF wk1	03	FO	d	x	5131 areas were mapped on the slightly drier tops of low knolls and ridges. These areas may be entirely mesic 01 or they may contain a small component of slightly drier than mesic 03 site series. The field guide indicates that the submesic 03 Site Series is relatively common and often of moderate size. Relabeled from 03 to 01 October 28, 2007 and back to 03 Dec 5, 2007.
5132	ESSF wk1	03	FO	w	x	5132 areas were mapped in steep SW facing hillslopes (>35%) with warm aspects in areas mapped as both MEDIUM and COARSE TEXTURED. Significant slope, warm aspect, deep, medium-coarse textured soils. The 03 Site Series in the only drier than mesic Site Series defined for the ESSFwk1 and so it applies to all drier conditions. Some shallow 02 soils may be included in 5132 areas
5133	ESSF wk1	03	FO	c	x	5133 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 5133 areas occupy all upper shedding portions of the landscape in areas mapped as COARSE TEXTURED, unless these coarse areas are also recognized as being influenced by high water tables or seepage. 5133 areas are predicted to be occupied principally by the submesic 03 Site Series but may also contain some 01 and some moister 05 Site Series.
5135	ESSF wk1	03	FO	k	x	5135 areas were mapped on steep (>35%) NE facing slopes with cool aspects in areas mapped as both MEDIUM and FINE TEXTURED. Significant slope, cool aspect with deep, medium-textured soils. All steep slopes are described in the field guide as likely to be occupied by the submesic 03 Site Series. 5135 areas were extracted separately simply to permit separate recognition of the steep NE aspect should that information be of interest.
5141	ESSF wk1	04	FT	d		5141 areas were mapped just above and adjacent to sloping draws, hollows and concavities in upper landscape positions above an elevation of 1450 m. 5141 areas were also mapped in relatively level toe slope positions lower in the landscape below 1450 m that accumulated both cold air and seepage leading to moist frosty conditions. Steeper, upper slope moisture receiving sites and gentle lower moisture receiving sites; deep medium - textured soil
5144	ESSF wk1	04	FT	j	y	5144 areas were mapped in moist lower to toe slopes that accumulated both cold air and seepage. These lower to toe slopes experience cold frosty and moister conditions and are predicted to be occupied dominantly by the moist, frosty 04 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5146	ESSF wk1	06	FH	d	y	5146 areas were mapped in the lowest and wettest portions of sloping valleys, hollows and draws at elevations ABOVE 1450 m. Above 1450 m elevation these areas of high moisture accumulation were expected to be characterized by cold, frosty and wet conditions that would favor the development of the cold, frosty 06 Site Series. Gentle lower slope to depression; deep medium - textured soils. In November, 2006 all 5146 areas were renumbered to 5106 in the rules and 5146 was merged with 5106.
5151	ESSF wk1	01	FB	d	y	5151 areas were mapped on the gently to moderately sloping sides and margins of narrow valley bottoms BELOW 1450 m elevation. 5151 areas do not extend into the very bottoms of drainage channels or draws but are confined to the gentle to moderate slopes adjacent to channels and draws. 5151 areas were initially defined to recognize the seepage 05 Site Series. The dominant Site Series is now predicted to be normal mesic 01. In November, 2006 all 5151 areas were renumbered to 5155 for all areas EXCEPT the Big Timothy area. In October, 2007 this renumbering was reversed and 5151 areas were renumbered back to 5151.
5155	ESSF wk1	05	FD	d	y	5155 areas were mapped in slightly elevated landform positions in and adjacent to narrow valley bottoms BELOW an elevation of 1450 m. 5155 areas would have been mapped as mesic 01 Site Series if the 5155 entity had not been defined. 5155 was defined to prevent mesic 01 Site Series from extending down into valley bottoms as per a suggestion from the Regional Ecologist. 5155 areas tend to occur on gentle to moderate slopes that extend a few tens of meters upslope from the bottoms of well defined narrow valleys. Gentle to moderate lower to toe slope moisture receiving sites; deep medium - textured soil. Most 5155 areas are now renumbered back to 5151 (01).
5155	ESSF wk1	05	FD	d	y	5155 areas were also mapped in all areas where JMJ had recognized SEEPAGE. The intent of the JMJ SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 05 Site Series and moist, cold, frosty 04 Site Series to areas mapped as 5155.
5156	ESSF wk1	07	FL	j	y	5156 areas were mapped in the lowest and wettest portions of gently to moderately sloping valleys, hollows and draws at elevations BELOW 1450 m. 5156 areas were excluded from the very flattest and wettest portions of valley bottoms, depressions and hollows. These most level areas of moisture accumulation were mapped as 5106. 5156 areas are predicted to be occupied principally by the wet, but not frosty, 07 Site Series but they may also contain components of wet frosty 06 Site Series and moist, not-frosty 05 Site Series. Gentle slope to depression; deep medium - textured soil. In November, 2006 all 5156 areas were renumbered to 5107 in the rules and 5156 was merged with 5107.
5166	ESSF wk1	06	FH	p	y	5166 areas were mapped in ALL locations where interpreters had recognized forested ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by the cold, frosty, wet 06 Site Series with perhaps lesser components of cold, moist frosty 04 Site Series. Gentle slope or depressional areas with deep, medium - textured soils
5167	ESSF wk1	06	FH	j	y	5167 areas were mapped on all textures. 5167 areas occupy low lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of both moisture and frost. Water tables are frequently within 50 cm of the surface. 5167 areas are predicted to be occupied by a mixture of cold, wet frosty 06 Site Series along with lesser amounts of non-frosty 07 Site Series and moist, frosty 04 Site Series. Gentle slope or depressional areas with deep, medium - textured soils
5190	ESSF wk1	00	GB			Gravel bar as mapped by manual interpreters

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5191	ESSF wk1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
5192	ESSF wk1	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5193	ESSF wk1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
5194	ESSF wk1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5195	ESSF wk1	00	BR			These areas were mapped visually as areas of scrub brush.
5196	ESSF wk1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
5197	ESSF wk1	00	TA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
5198	ESSF wk1	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

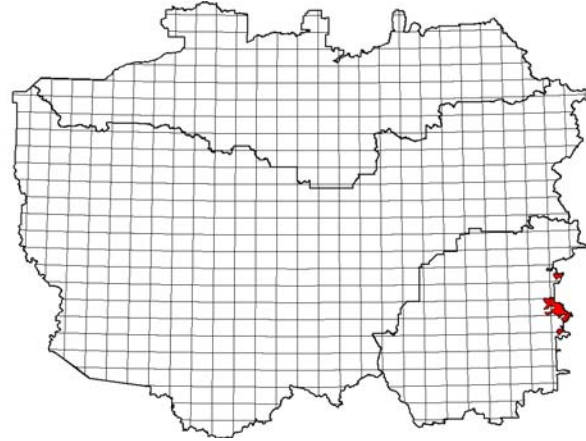


**PEM Entity Extended Legend with Proportions of Site Series for: ESSF wk1**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5101	5101	01	ESSF wk1	10	01	FB	d	j	0					
5102	5102	02	ESSF wk1	8	02	FF	s	r	1	01	FB	1	03	FO
5103	5131	03	ESSF wk1	6	03	FO	d	x	4	01	FB			
5104	5144	04	ESSF wk1	7	04	FT	d	y	2	01	FB	1	06	FH
5105	5105	05	ESSF wk1	7	05	FD	d	y	2	07	FL	1	01	FB
5106	5106	06	ESSF wk1	7	06	FH	d	y	2	04	FT	1	01	FB
5107	5107	07	ESSF wk1	7	07	FL	d	y	2	06	FH	1	05	FD
5113	5131	03	ESSF wk1	6	03	FO	d	x	4	01	FB			
5114	5101	01	ESSF wk1	9	01	FB	d		1	04	FT			
5115	5101	01	ESSF wk1	9	01	FB	d		1	05	FD			
5123	5123	03	ESSF wk1	8	03	FO	d	x	2	01	FB			
5131	5131	03	ESSF wk1	6	03	FO	d	x	4	01	FB			
5132	5132	03	ESSF wk1	8	03	FO	w	x	2	01	FB			
5133	5133	03	ESSF wk1	7	03	FO	c	x	2	01	FB	1	05	FD
5135	5135	03	ESSF wk1	8	03	FO	k	x	2	01	FB			
5141	5144	04	ESSF wk1	8	04	FT	d		2	01	FB			
5144	5144	04	ESSF wk1	8	04	FT	j	y	2	01	FB			
5146	5106	06	ESSF wk1	7	06	FH	d	y	2	04	FT	1	01	FB
5151	5101	01	ESSF wk1	8	01	FB	d	y	2	05	FD			
5155	5105	05	ESSF wk1	7	05	FD	d	y	3	01	FB			
5155	5105	05	ESSF wk1	7	05	FD	d	y	3	01	FB			
5156	5107	07	ESSF wk1	7	07	FL	j	y	2	06	FH	1	05	FD
5166	5166	06	ESSF wk1	8	06	FH	p	y	2	04	FT			
5167	5167	06	ESSF wk1	7	06	FH	j	y	2	07	FL	1	04	FT
5190	5190	GB	ESSF wk1	10	00	GB								
5191	5191	OW	ESSF wk1	10	00	OW								
5192	5192	WE	ESSF wk1	10	00	WE	d	y						
5193	5193	ME	ESSF wk1	10	00	ME								
5194	5194	PA	ESSF wk1	10	00	PA								
5195	5195	BR	ESSF wk1	10	00	BR								
5196	5196	DL	ESSF wk1	10	00	DL								
5197	5197	TA	ESSF wk1	10	00	TA								
5198	5198	AV	ESSF wk1	10	00	AV								

**BGC Unit: ESSF dc3****LMES Zone ID: 52****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	15,574.6	1.26%
Cariboo Region	15,574.6	0.19%

**List of Site Series Codes Defined for use in ESSF dc3**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	0	Not defined - interim classification from Kamloops	mesic	All upper water shedding parts of the landscape
02	0	Not defined - interim classification from Kamloops	very xeric	Shallow Crests
03	0	Not defined - interim classification from Kamloops	xeric - subxeric	Steep SW - Warm Dry slopes
04	0	Not defined - interim classification from Kamloops	subxeric - submesic	Slightly Dry, Ridges and moderate SW slopes
05	0	Not defined - interim classification from Kamloops	subxeric - submesic	Steep NE - Cool Dry slopes
06	0	Not defined - interim classification from Kamloops	subhygric	Slightly Moist Sloping Toe Slopes, WT > 50 cm
07	0	Not defined - interim classification from Kamloops	subhygric - hygric	Moist to Wet, Level Toe Slopes WT < 50 cm
08	0	Not defined - interim classification from Kamloops	subhydryc	Organic soils, WT < 20 cm
00	GL	Grassland		
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

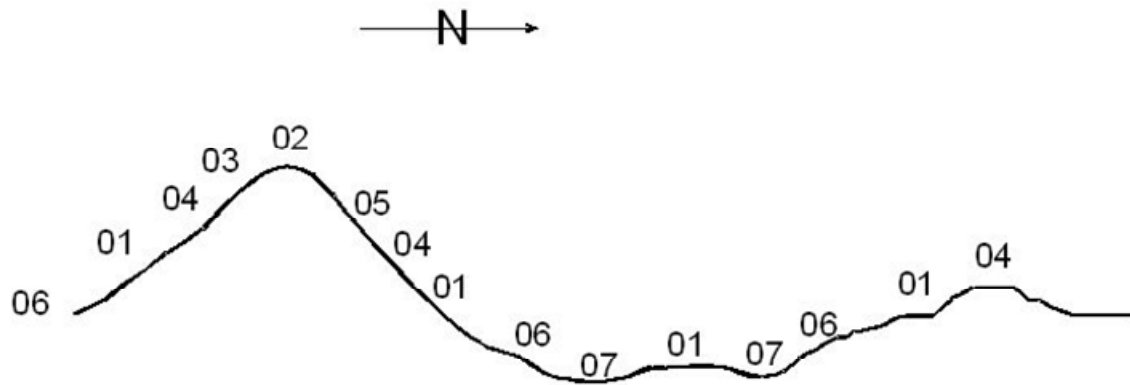
**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: ESSF dc3

Subzone: ESSFdc3 (52)



## Example Attribute Class Rule File for ESSF dc3 (arule5230)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20.00
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
6	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10.00
7	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
8	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
10	formfile	QWETI	VDry	5	5.90	5.90	5.90	0.00	6.10	0.20
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
12	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1.00
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
14	formfile	QWETI	Sl_Wet	1	9.60	9.60	9.60	8.80	10.40	0.80
15	formfile	QWETI	SLWet2Wet	1	10.00	10.00	10.00	9.40	10.60	0.60
16	formfile	QWETI	Wet	1	10.90	10.90	10.90	10.00	11.80	0.90
17	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.50
18	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5.00
19	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
20	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	1.00	10.00	1.00
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1.00
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
23	formfile	SLOPE	SlopeLT30	5	25.00	25.00	25.00	0.00	30.00	5.00
24	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
25	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
28	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
29	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
30	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5.00
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
32	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50.00
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.50
36	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
37	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
38	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00
39	relzfile	Z2St	Above_Base	4	30.00	25.00	999.00	25.00	999.00	5.00
40	relzfile	Z2St	Near_Base	5	20.00	0.00	25.00	0.00	25.00	5.00

## Example Fuzzy Ecological Class Rule File for ESSF dc3 (crule5230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH5202c	Crest	30	1	5202	02 Shallow Crest	MH5216L	Mid2Low	25	13	5206	06 < 10% MID-LOW SW
MH5202c	VDry	30	1	5202		MH5216L	Dry2Med	25	13	5206	
MH5202c	SlopeLT20	10	1	5202		MH5216L	SW_Aspect	10	13	5206	
MH5202c	Med2Crs	10	1	5202		MH5216L	SlopeLT10	20	13	5206	
MH5202c	Shallow	80	1	5202		MH5216L	Med2Crs	10	13	5206	
MH5202c	Hi_Ridge	10	1	5202		MH5216L	Deep	10	13	5206	
MH5224c	Crest	30	2	5204	04 Deep Dry Ridge	MH5213L	Mid2Low	25	14	5213	01 10-30% MID-LOW SW
MH5224c	VDry	30	2	5204		MH5213L	Dry2Med	25	14	5213	
MH5224c	SlopeLT30	10	2	5204		MH5213L	SW_Aspect	10	14	5213	
MH5224c	Med2Crs	10	2	5204		MH5213L	SlopeGT10	10	14	5213	
MH5224c	Deep	20	2	5204		MH5213L	SlopeLT30	10	14	5213	
MH5224c	Hi_Ridge	10	2	5204		MH5213L	Med2Crs	10	14	5213	
MH5214k	Crest	30	3	5214	03 Deep Low Knoll	MH5213L	Deep	10	14	5213	
MH5214k	VDry	30	3	5214		MH5206L	Mid2Low	25	15	5206	06 < 10% MID-LOW NE
MH5214k	SlopeLT30	10	3	5214		MH5206L	Dry2Med	25	15	5206	
MH5214k	Med2Crs	10	3	5214		MH5206L	NE_Aspect	10	15	5206	
MH5214k	Deep	20	3	5214		MH5206L	SlopeLT10	20	15	5206	
MH5214k	Low_Knoll	10	3	5214		MH5206L	Med2Crs	10	15	5206	
Mh5203s	Crest2Mid	30	4	5203	03 Steep SW	MH5206L	Deep	10	15	5206	
Mh5203s	VDry2SIDry	30	4	5203		MH5215L	Mid2Low	25	16	5215	01 10-30% MID-LOW NE
Mh5203s	Steep_SW	20	4	5203		MH5215L	Dry2Med	25	16	5215	
Mh5203s	Med2Crs	10	4	5203		MH5215L	NE_Aspect	10	16	5215	
Mh5203s	Hi_Ridge	10	4	5203		MH5215L	SlopeGT10	10	16	5215	
MH5205n	Crest2Mid	30	5	5205	05 Steep NE	MH5215L	SlopeLT30	10	16	5215	
MH5205n	VDry2SIDry	30	5	5205		MH5215L	Med2Crs	10	16	5215	
MH5205n	Steep_NE	20	5	5205		MH5215L	Deep	10	16	5215	
MH5205n	Med2Crs	10	5	5205		MH5216L	Low2Toe	30	17	5206	06 <15% LOW-TOE
MH5205n	Hi_Ridge	10	5	5205		MH5216L	SI_Wet	30	17	5206	
MH5234s	Crest2Mid	25	6	5234	04 10-30% SW	MH5216L	SlopeLT15	20	17	5206	
MH5234s	VDry2SIDry	25	6	5234		MH5216L	Med2Crs	10	17	5206	
MH5234s	SW_Aspect	10	6	5234		MH5216L	Deep	10	17	5206	
MH5234s	SlopeGT10	10	6	5234		MH5217t	Toe	30	18	5207	06 <10% Wet TOE
MH5234s	SlopeLT30	10	6	5234		MH5217t	SLWet2Wet	30	18	5207	
MH5234s	Med2Crs	10	6	5234		MH5217t	SlopeLT10	20	18	5207	
MH5234s	Deep	10	6	5234		MH5217t	Med2Crs	10	18	5207	
MH5214s	Crest2Mid	25	7	5201	01 < 10% SW	MH5217t	Deep	10	18	5207	
MH5214s	VDry2SIDry	25	7	5201		MH5261t	Toe	30	19	5261	06 10-30% Moist Toe
MH5214s	SW_Aspect	10	7	5201		MH5261t	Wet	30	19	5261	
MH5214s	SlopeLT10	20	7	5201		MH5261t	SlopeGT10	10	19	5261	
MH5214s	Med2Crs	10	7	5201		MH5261t	SlopeLT30	10	19	5261	
MH5214s	Deep	10	7	5201		MH5261t	Med2Crs	10	19	5261	
Mh5251n	Crest2Mid	25	8	5251	01 10-30% SW	MH5261t	Deep	10	19	5261	
Mh5251n	VDry2SIDry	25	8	5251		MH5207t	Toe	30	20	5207	07 <10% Wet Toe
Mh5251n	NE_Aspect	10	8	5251		MH5207t	Wet	30	20	5207	
Mh5251n	SlopeGT10	10	8	5251		MH5207t	SlopeLT10	20	20	5207	
Mh5251n	SlopeLT30	10	8	5251		MH5207t	Med2Crs	10	20	5207	
Mh5251n	Med2Crs	10	8	5251		MH5207t	Deep	10	20	5207	
Mh5251n	Deep	10	8	5251		MH5277v	Valley	30	21	5277	07 < 5% Flat Valley
MH5214n	Crest2Mid	25	9	5201	01 < 10% NE	MH5277v	Wet2V_Wet	30	21	5277	
MH5214n	VDry2SIDry	25	9	5201		MH5277v	SlopeLT05	20	21	5277	
MH5214n	NE_Aspect	10	9	5201		MH5277v	Med2Crs	10	21	5277	
MH5214n	SlopeLT10	20	9	5201		MH5277v	Deep	10	21	5277	
MH5214n	Med2Crs	10	9	5201		MH5266v	Valley	30	22	5266	06 > 5% Sloping Valley
MH5214n	Deep	10	9	5201		MH5266v	Wet2V_Wet	30	22	5266	
MH5201u	Up2Mid	30	10	5201	01 <30% Upper	MH5266v	SlopeGT05	10	22	5266	
MH5201u	Dry2SIDry	30	10	5201		MH5266v	SlopeLT30	10	22	5266	
MH5201u	SlopeLT30	20	10	5201		MH5266v	Med2Crs	10	22	5266	
MH5201u	Med2Crs	10	10	5201		MH5266v	Deep	10	22	5266	
MH5201u	Deep	10	10	5201		MH5276m	WetZ_LT05	50	23	5276	07 Wetland Margin
MH5233s	Up2Mid	30	11	5233	03 Steep SW Mid	MH5276m	WetL_LT200	50	23	5276	
MH5233s	Dry2SIDry	30	11	5233		MH5260s	Hi_Seep	80	24	5260	06 Drier Seepage area
MH5233s	Steep_SW	20	11	5233		MH5260s	SLWet2Wet	20	24	5260	
MH5233s	Med2Crs	10	11	5233		MH5270s	Hi_Seep	80	25	5270	07 Wetter Seepage area
MH5233s	Deep	10	11	5233		MH5270s	Wet2V_Wet	20	25	5270	
MH5255n	Up2Mid	30	12	5255	05 Steep NE Mid	MH5278o	Organic	99	26	5278	08 Organic
MH5255n	Dry2SIDry	30	12	5255							
MH5255n	Steep_NE	20	12	5255							
MH5255n	Med2Crs	10	12	5255							
MH5255n	Deep	10	12	5255							

**PEM Entity Descriptions for: ESSF dc3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5201	ESSF dc3	01		d	j	5201 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 5201 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 30%) and on ALL ASPECTS. This is the predominant site series in the BEC variant.
5202	ESSF dc3	02		s	r	5202 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 5202 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 5202 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
5203	ESSF dc3	03		w	x	5203 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5203 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP SW slopes are dominated by the drier 03 Site Series.
5204	ESSF dc3	04		d	x	5204 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 5204 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 04 site series along with some potential inclusions of 01 and 02 site series.
5205	ESSF dc3	05		k	d	5205 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5205 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 5205 areas are dominated by the cool, slightly dry 05 Site Series.
5206	ESSF dc3	06		d	j	5206 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5206 occupies very gently sloping lower to toe slopes (< 15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5206 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
5207	ESSF dc3	07		d	j	5207 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5207 occupies nearly level to very gently sloping (5-10%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 5207 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
5213	ESSF dc3	01		d	j	5213 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5213 occupies moderately to gently sloping (10-30%) SW-facing MID to LOWER slopes that were initially considered as transition areas from normal mesic 01 to slightly moister 06. Upon review, the regional ecologist indicated that these slightly moister mid to lower slopes would still be dominated by the normal mesic 01 Site Series. Deep, medium textured soils on gentle mid to lower slopes.
5214	ESSF dc3	01		d	x	5214 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 5214 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
5215	ESSF dc3	01		d	j	5215 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5215 occupies moderately to gently sloping (10-30%) NE-facing MID to LOWER slopes that were initially considered as transition areas from normal mesic 01 to slightly moister 06. Upon review, the regional ecologist indicated that these slightly moister mid to lower slopes would still be dominated by the normal mesic 01 Site Series. Deep, medium textured soils on gentle mid to lower slopes.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5233	ESSF dc3	03		w	x	5233 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5233 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP SW slopes are dominated by the drier 03 Site Series.
5234	ESSF dc3	04				5234 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5234 occurs on gentle to moderate (10-30%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 04 Site Series.
5251	ESSF dc3	01				5251 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5251 occurs on gentle to moderate (10-30%) NE facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderate NE slopes be classified as the normal mesic 01 Site Series.
5255	ESSF dc3	05		k	d	5255 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5255 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in MID to LOWER landform positions. 5255 areas are dominated by the cool, slightly dry 05 Site Series.
5260	ESSF dc3	06		d	j	5260 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 06 and 07 Site Series .
5261	ESSF dc3	06		d	j	5261 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5261 occupies gently to moderately sloping (10-30%) TOE slopes that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5261 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
5266	ESSF dc3	06		d	y	5266 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5266 areas occur in sloping valleys and draws and along the margins of active stream channels (> 5%). 5266 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
5270	ESSF dc3	07		d	j	5270 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the wet 07 and 06 site series.
5276	ESSF dc3	07		d	j	5276 areas were mapped only in areas mapped as MEDIUM TEXTURED. 5276 areas occupy the low-lying margins surrounding wetlands and open water bodies. 5276 areas are predicted to consist of a mixture of the wettest Site Series including 07 and 06.
5277	ESSF dc3	07		d	y	5277 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5277 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions (< 5%). 5277 areas are predicted to have permanently high water tables and very wet cool conditions (water table < 30 cm).
5278	ESSF dc3	08		p	j	5278 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 08 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
5291	ESSF dc3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5292	ESSF dc3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5293	ESSF dc3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5294	ESSF dc3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5295	ESSF dc3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5296	ESSF dc3	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5297	ESSF dc3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5298	ESSF dc3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
5299	ESSF dc3	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ESSF dc3**

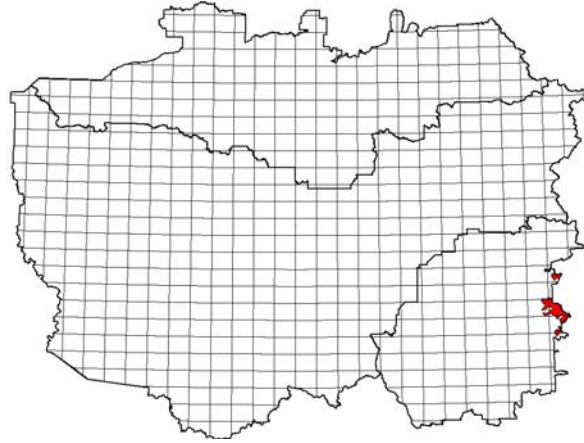
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5201	5201	01	ESSF dc3	9	01		d	j	1	05				
5202	5202	02	ESSF dc3	8	02		s	r	1	03		1	01	
5203	5203	03	ESSF dc3	10	03		w	x						
5204	5204	04	ESSF dc3	8	04		d	x	2	01				
5205	5205	05	ESSF dc3	8	05		k	d	2	01				
5206	5206	06	ESSF dc3	8	06		d	j	2	07				
5207	5207	07	ESSF dc3	8	07		d	j	2	06				
5213	5201	01	ESSF dc3	7	01		d	j	3	06				
5214	5214	01	ESSF dc3	7	01		d	x	3	04				
5215	5201	01	ESSF dc3	7	01		d	j	3	06				
5233	5203	03	ESSF dc3	8	03		w	x	2	04				
5234	5234	04	ESSF dc3	8	04				2	01				
5251	5201	01	ESSF dc3	8	01				2	04				
5255	5205	05	ESSF dc3	8	05		k	d	2	01				
5260	5260	06	ESSF dc3	8	06		d	j	2	07				
5261	5206	06	ESSF dc3	8	06		d	j	2	07				
5266	5206	06	ESSF dc3	8	06		d	y	2	07				
5270	5270	07	ESSF dc3	8	07		d	j	2	06				
5276	5276	07	ESSF dc3	7	07		d	j	3	06				
5277	5207	07	ESSF dc3	8	07		d	y	2	06				
5278	5278	08	ESSF dc3	9	08		p	j	1	07				
5291	5291	OW	ESSF dc3	10	00	OW								
5292	5292	WE	ESSF dc3	10	00	WE	d	y						
5293	5293	ME	ESSF dc3	10	00	ME								
5294	5294	PA	ESSF dc3	10	00	PA								
5295	5295	BR	ESSF dc3	10	00	BR								
5296	5296	DL	ESSF dc3	10	00	DL								
5297	5297	TA	ESSF dc3	10	00	TA								
5298	5298	AV	ESSF dc3	10	00	AV								
5299	5299	GL	ESSF dc3	10	00	GL								





**BGC Unit: ESSF xc3****LMES Zone ID: 53****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	8,017.5	0.65%
Cariboo Region	8,017.5	0.10%

**List of Site Series Codes Defined for use in ESSF xc3**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	0	Not defined - interim classification from Kamloops	mesic	All upper water shedding parts of the landscape
02	0	Not defined - interim classification from Kamloops	very xeric	Shallow Crests
03	0	Not defined - interim classification from Kamloops	xeric - subxeric	Steep SW - Warm Dry slopes
04	0	Not defined - interim classification from Kamloops	subxeric - submesic	Slightly Dry, Ridges and moderate SW slopes
05	0	Not defined - interim classification from Kamloops	subxeric - submesic	Steep NE - Cool Dry slopes
06	0	Not defined - interim classification from Kamloops	subhygric	Slightly Moist Sloping Toe Slopes, WT > 50 cm
07	0	Not defined - interim classification from Kamloops	subhygric - hygric	Moist to Wet, Level Toe Slopes WT < 50 cm
00	GL	Grassland		
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

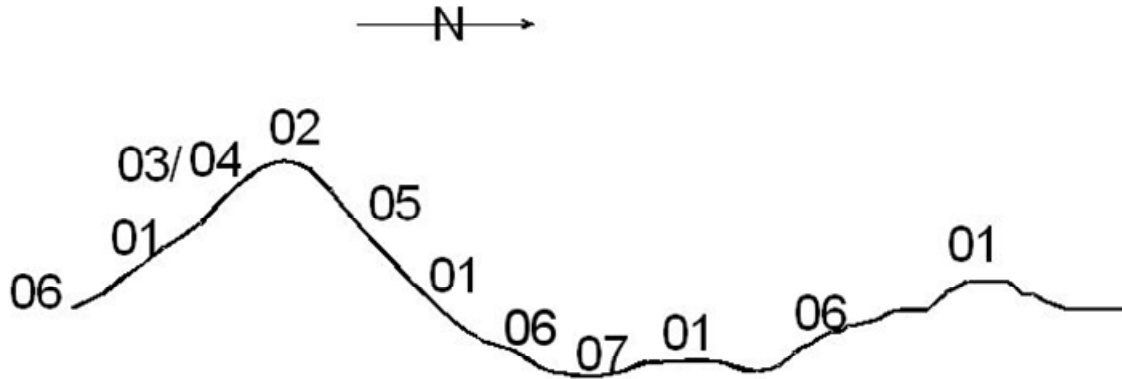
**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: ESSF xc3

Subzone: ESSFxc3 (53)



## Example Attribute Class Rule File for ESSF xc3 (arule5330)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20.00
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
6	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10.00
7	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
8	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
10	formfile	QWETI	VDry	5	5.90	5.90	5.90	0.00	6.10	0.20
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
12	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1.00
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
14	formfile	QWETI	SI_Wet	1	9.60	9.60	9.60	8.80	10.40	0.80
15	formfile	QWETI	SLWet2Wet	1	10.00	10.00	10.00	9.40	10.60	0.60
16	formfile	QWETI	Wet	1	10.90	10.90	10.90	10.00	11.80	0.90
17	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.50
18	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5.00
19	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
20	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	1.00	10.00	1.00
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1.00
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
23	formfile	SLOPE	SlopeLT30	5	25.00	25.00	25.00	0.00	30.00	5.00
24	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
25	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
28	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
29	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
30	geofile	TEXTURE	Med2CrS	4	40.00	40.00	40.00	40.00	100.00	5.00
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
32	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50.00
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.50
36	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
37	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
38	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00
39	relzfile	Z2St	Above_Base	4	30.00	25.00	999.00	25.00	999.00	5.00
40	relzfile	Z2St	Near_Base	5	20.00	0.00	25.00	0.00	25.00	5.00

## Example Fuzzy Ecological Class Rule File for ESSF xc3 (crule5330)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH5302c	Crest	30	1	5302	02 Shallow Crest	MH5313m	Mid2Low	25	13	5301	01 < 10% MID-LOW SW
MH5302c	VDry	30	1	5302		MH5313m	Dry2Med	25	13	5301	
MH5302c	SlopeLT20	10	1	5302		MH5313m	SW_Aspect	10	13	5301	
MH5302c	Med2CrS	10	1	5302		MH5313m	SlopeLT10	20	13	5301	
MH5302c	Shallow	80	1	5302		MH5313m	Med2CrS	10	13	5301	
MH5302c	Hi_Ridge	10	1	5302		MH5313m	Deep	10	13	5301	
MH5320c	Crest	30	2	5320	02 Deep Dry Ridge	MH5314m	Mid2Low	25	14	5314	04 10-30% MID-LOW SW
MH5320c	VDry	30	2	5320		MH5314m	Dry2Med	25	14	5314	
MH5320c	SlopeLT30	10	2	5320		MH5314m	SW_Aspect	10	14	5314	
MH5320c	Med2CrS	10	2	5320		MH5314m	SlopeGT10	10	14	5314	
MH5320c	Deep	20	2	5320		MH5314m	SlopeLT30	10	14	5314	
MH5320c	Hi_Ridge	10	2	5320		MH5314m	Med2CrS	10	14	5314	
MH5212k	Crest	30	3	5312	01 Deep Low Knoll	MH5314m	Deep	10	14	5314	
MH5212k	VDry	30	3	5312		MH5310L	Mid2Low	25	15	5301	01 < 10% MID-LOW NE
MH5212k	SlopeLT30	10	3	5312		MH5310L	Dry2Med	25	15	5301	
MH5212k	Med2CrS	10	3	5312		MH5310L	NE_Aspect	10	15	5301	
MH5212k	Deep	20	3	5312		MH5310L	SlopeLT10	20	15	5301	
MH5212k	Low_Knoll	10	3	5312		MH5310L	Med2CrS	10	15	5301	
MH5203s	Crest2Mid	30	4	5303	03 Steep SW	MH5310L	Deep	10	15	5301	
MH5203s	VDry2SIDry	30	4	5303		MH5311L	Mid2Low	25	16	5311	05 10-30% MID-LOW NE
MH5203s	Steep_SW	20	4	5303		MH5311L	Dry2Med	25	16	5311	
MH5203s	Med2CrS	10	4	5303		MH5311L	NE_Aspect	10	16	5311	
MH5203s	Hi_Ridge	10	4	5303		MH5311L	SlopeGT10	10	16	5311	
MH5305n	Crest2Mid	30	5	5305	05 Steep NE	MH5311L	SlopeLT30	10	16	5311	
MH5305n	VDry2SIDry	30	5	5305		MH5311L	Med2CrS	10	16	5311	
MH5305n	Steep_NE	20	5	5305		MH5311L	Deep	10	16	5311	
MH5305n	Med2CrS	10	5	5305		MH5316L	Low2Toe	30	17	5316	01 <15% LOW-TOE
MH5305n	Hi_Ridge	10	5	5305		MH5316L	SI_Wet	30	17	5316	
MH5343s	Crest2Mid	25	6	5343	04 10-30% SW	MH5316L	SlopeLT15	20	17	5316	
MH5343s	VDry2SIDry	25	6	5343		MH5316L	Med2CrS	10	17	5316	
MH5343s	SW_Aspect	10	6	5343		MH5316L	Deep	10	17	5316	
MH5343s	SlopeGT10	10	6	5343		MH5306t	Toe	30	18	5306	06 <10% Wet TOE
MH5343s	SlopeLT30	10	6	5343		MH5306t	SLWet2Wet	30	18	5306	
MH5343s	Med2CrS	10	6	5343		MH5306t	SlopeLT10	20	18	5306	
MH5343s	Deep	10	6	5343		MH5306t	Med2CrS	10	18	5306	
MH5313s	Crest2Mid	25	7	5301	01 < 10% SW	MH5306t	Deep	10	18	5306	
MH5313s	VDry2SIDry	25	7	5301		MH5361t	Toe	30	19	5361	06 10-30% Moist Toe
MH5313s	SW_Aspect	10	7	5301		MH5361t	Wet	30	19	5361	
MH5313s	SlopeLT10	20	7	5301		MH5361t	SlopeGT10	10	19	5361	
MH5313s	Med2CrS	10	7	5301		MH5361t	SlopeLT30	10	19	5361	
MH5313s	Deep	10	7	5301		MH5361t	Med2CrS	10	19	5361	
MH5351n	Crest2Mid	25	8	5351	05 10-30% SW	MH5361t	Deep	10	19	5361	
MH5351n	VDry2SIDry	25	8	5351		MH5307t	Toe	30	20	5307	07 <10% Wet Toe
MH5351n	NE_Aspect	10	8	5351		MH5307t	Wet	30	20	5307	
MH5351n	SlopeGT10	10	8	5351		MH5307t	SlopeLT10	20	20	5307	
MH5351n	SlopeLT30	10	8	5351		MH5307t	Med2CrS	10	20	5307	
MH5351n	Med2CrS	10	8	5351		MH5307t	Deep	10	20	5307	
MH5351n	Deep	10	8	5351		MH5377v	Valley	30	21	5307	07 < 5% Flat Valley
MH5315n	Crest2Mid	25	9	5301	01 < 10% NE	MH5377v	Wet2V_Wet	30	21	5307	
MH5315n	VDry2SIDry	25	9	5301		MH5377v	SlopeLT05	20	21	5307	
MH5315n	NE_Aspect	10	9	5301		MH5377v	Med2CrS	10	21	5307	
MH5315n	SlopeLT10	20	9	5301		MH5377v	Deep	10	21	5307	
MH5315n	Med2CrS	10	9	5301		MH5367v	Valley	30	22	5366	06 > 5% Sloping Valley
MH5315n	Deep	10	9	5301		MH5367v	Wet2V_Wet	30	22	5366	
MH5301u	Up2Mid	30	10	5301	01 <30% Upper	MH5367v	SlopeGT05	10	22	5366	
MH5301u	Dry2SIDry	30	10	5301		MH5367v	SlopeLT10	10	22	5366	
MH5301u	SlopeLT30	20	10	5301		MH5367v	Med2CrS	10	22	5366	
MH5301u	Med2CrS	10	10	5301		MH5367v	Deep	10	22	5366	
MH5301u	Deep	10	10	5301		MH5366v	Valley	30	23	5366	06 > 5% Sloping Valley
MH5334m	Up2Mid	30	11	5334	04 Steep SW Mid	MH5366v	Wet2V_Wet	30	23	5366	
MH5334m	Dry2SIDry	30	11	5334		MH5366v	SlopeGT10	10	23	5366	
MH5334m	Steep_SW	20	11	5334		MH5366v	SlopeLT30	10	23	5366	
MH5334m	Med2CrS	10	11	5334		MH5366v	Med2CrS	10	23	5366	
MH5334m	Deep	10	11	5334		MH5366v	Deep	10	23	5366	
MH5355m	Up2Mid	30	12	5355	05 Steep NE Mid	MH5376m	WetZ_LT05	50	24	5376	06 Wetland Margin
MH5355m	Dry2SIDry	30	12	5355		MH5376m	WetL_LT200	50	24	5376	
MH5355m	Steep_NE	20	12	5355		MH5360s	Hi_Seep	80	25	5360	06 Drier Seepage area
MH5355m	Med2CrS	10	12	5355		MH5360s	SI_Wet	20	25	5360	
MH5355m	Deep	10	12	5355		MH5370s	Hi_Seep	80	26	5370	07 Wetter Seepage area
						MH5370s	Wet2V_Wet	20	26	5370	
						MH5309o	Organic	99	27	5309	07 Organic

**PEM Entity Descriptions for: ESSF xc3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5301	ESSF xc3	01		d	j	5301 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 5301 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and broad, smooth (not sharp) crests to lower to toe slopes (< 10%) and on ALL ASPECTS. 5301 excludes most steeper (>10%) upper slopes. These steeper upper slopes are mapped as 5343 (SW) or 5351 (NE).
5302	ESSF xc3	02		s	r	5302 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 5302 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 5302 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
5303	ESSF xc3	03		w	x	5303 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5303 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
5305	ESSF xc3	05		k	d	5305 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5305 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 5305 areas are dominated by the cool, slightly dry 05 Site Series.
5306	ESSF xc3	06		d	j	5306 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5306 occupies very gently sloping lower to toe slopes (< 15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5306 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
5307	ESSF xc3	07		d	j	5307 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5307 occupies nearly level to very gently sloping (<10%) lower to toe slopes and flat valley bottoms in minor drainages or hollows. 5307 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, and sometimes within, stream channels.
5309	ESSF xc3	07		p	j	5309 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
5311	ESSF xc3	05		d	j	5311 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5311 occupies moderately to gently sloping (10-30%) NE-facing MID to LOWER slopes that were initially considered as transition areas from slightly drier 05 to normal mesic 01. Upon review, the regional ecologist indicated that these NE-facing mid to lower slopes would likely be dominated by the slightly drier 05 Site Series along with considerable amounts of normal mesic 01 Site Series. Deep, medium textured soils on gentle mid to lower slopes.
5312	ESSF xc3	01		d	x	5312 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 5312 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5314	ESSF xc3	04		d	j	5314 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5314 occupies moderately to gently sloping (10-30%) SW-facing MID to LOWER slopes that were initially considered as transition areas from slightly drier 04 to normal mesic 01. Upon review, the regional ecologist indicated that these SW-facing mid to lower slopes would likely be dominated by the slightly drier 04 Site Series along with a considerable amount of normal mesic 01. Deep, medium textured soils on gentle mid to lower slopes.
5316	ESSF xc3	01		d	j	5316 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5316 occupies level to gently sloping (< 15%) LOWER to TOE slopes that were initially considered as transition areas from normal mesic 01 to slightly moist 06. Upon review, the regional ecologist indicated that these gentle lower to toe slopes would likely be dominated by the normal mesic 01 Site Series along with a very small amount of slightly moist 06. Deep, medium textured soils on gentle lower to toe slopes.
5320	ESSF xc3	02		d	r	5320 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 5320 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 02 site series along with some potential inclusions of 01 and 04 site series.
5334	ESSF xc3	04		w	x	5334 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5334 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. LOWER portions of STEEP SW slopes are dominated by the somewhat dry 04 Site Series.
5343	ESSF xc3	04		d	j	5343 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5343 occurs on gentle to moderate (10-30%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 04 Site Series (with some 03).
5351	ESSF xc3	05		d	j	5351 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5351 occurs on gentle to moderate (10-30%) NE facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderate NE slopes be classified as the slightly drier 05 Site Series along with some normal mesic 01 Site Series.
5355	ESSF xc3	05		k	d	5355 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5355 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in MID to LOWER landform positions. 5355 areas are dominated by the cool, slightly dry 05 Site Series.
5360	ESSF xc3	06		d	j	5360 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 06 and 07 Site Series.
5361	ESSF xc3	06		d	j	5361 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5361 occupies gently to moderately sloping (10-30%) TOE slopes that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5361 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
5366	ESSF xc3	06		d	y	5366 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS as mapped by TFIC. 5366 areas occur in sloping valleys and draws and along the margins of active stream channels (> 5%). 5366 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
5370	ESSF xc3	07		d	j	5370 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the wet 07 and 06 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5376	ESSF xc3	06		d	j	5376 areas were mapped only in areas mapped as MEDIUM TEXTURED. 5376 areas occupy the low-lying margins surrounding wetlands and open water bodies. 5376 areas are predicted to consist of a mixture of the wettest Site Series including 06 and 07.
5391	ESSF xc3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
5392	ESSF xc3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5393	ESSF xc3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5394	ESSF xc3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5395	ESSF xc3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5396	ESSF xc3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5397	ESSF xc3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5398	ESSF xc3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
5399	ESSF xc3	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ESSF xc3**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5301	5301	01	ESSF xc3	9	01		d	j	1	05				
5302	5302	02	ESSF xc3	8	02		s	r	1	03		1	01	
5303	5303	03	ESSF xc3	10	03		w	x		04				
5305	5305	05	ESSF xc3	8	05		k	d	2	01				
5306	5306	06	ESSF xc3	8	06		d	j	2	01				
5307	5307	07	ESSF xc3	8	07		d	j	2	06				
5309	5309	07	ESSF xc3	10	07		p	j						
5311	5311	05	ESSF xc3	6	05		d	j	4	01				
5312	5301	01	ESSF xc3	7	01		d	x	3	04				
5314	5314	04	ESSF xc3	6	04		d	j	4	01				
5316	5301	01	ESSF xc3	7	01		d	j	3	06				
5320	5320	02	ESSF xc3	8	02		d	r	2	01				
5334	5334	04	ESSF xc3	10	04		w	x		03				
5343	5343	04	ESSF xc3	8	04		d	j	2	03				
5351	5351	05	ESSF xc3	8	05		d	j	2	01				
5355	5305	05	ESSF xc3	8	05		k	d	2	01				
5360	5360	06	ESSF xc3	8	06		d	j	2	07				
5361	5306	06	ESSF xc3	8	06		d	j	2	01				
5366	5306	06	ESSF xc3	8	06		d	y	2	07				
5370	5370	07	ESSF xc3	8	07		d	j	2	06				
5376	5376	06	ESSF xc3	7	06		d	j	3	07				
5391	5391	OW	ESSF xc3	10	00	OW								
5392	5392	WE	ESSF xc3	10	00	WE	d	y						
5393	5393	ME	ESSF xc3	10	00	ME								
5394	5394	PA	ESSF xc3	10	00	PA								
5395	5395	BR	ESSF xc3	10	00	BR								
5396	5396	DL	ESSF xc3	10	00	DL								
5397	5397	TA	ESSF xc3	10	00	TA								
5398	5398	AV	ESSF xc3	10	00	AV								
5399	5399	GL	ESSF xc3	10	00	GL								





**BGC Unit: ESSF xcp****LMES Zone ID: 54****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	2,633.4	0.21%
Cariboo Region	2,633.4	0.03%

**List of Site Series Codes Defined for use in ESSF xcp**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
00	AF	White mountain-avens - Altai fescue tundra	submesic	Thin ground cover, Mostly Thin Dry Tundra
00	DG	Subalpine daisy - Arrow-leaved groundsel wet meadow	subhygric	Moist Hollows and Draws with some open forest
00	FB	Bl - Dwarf blueberry - Dicranum parkland	xeric - mesic	Sparse Dry Parkland (Mostly SW Slopes)
00	FM	Bl - Heather parkland	submesic - mesic	Sparse Cool Parkland (Mostly NE Slopes)
00	HT	Heather - Mountain sagewort tundra	submesic - subhygric	Moist Hollows and Draws with some vegetation
00	LF	Lichen - Bl parkland	subhygric - hygric	Moist open forest in wetter forested hollows and draws
00	SF	Moist (subhygric) Closed Forest	subhygric - hygric	PROBLEM - Need code for scrub birch not closed forest!!
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area and modified to better describe this BGC Unit. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the ESSF xcp once a new classification of alpine and sub-alpine areas is completed and published.

**Landscape Profile Diagram: ESSF xcp**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for ESSF xcp (arule5461)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT15	4	15.50	15.00	99.00	15.00	99.00	0.5
14	formfile	SLOPE	SlopeLT15	5	14.50	0.00	15.00	0.00	15.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

**Example Fuzzy Ecological Class Rule File for ESSF xcp (crule5461)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
TR5460r	Crest	35	1	5460	FB Sparse Parkland	TR5464ne	Up2Low	35	5	5464	FM Sparse Parkland
TR5460r	Dry_WI	35	1	5460	Ridge Crest	TR5464ne	Dry2Med_WI	35	5	5464	< 30% NE Slope
TR5460r	SlopeLT20	20	1	5460		TR5464ne	SlopeLT30	20	5	5464	
TR5460r	Hi_Ridge	10	1	5460		TR5464ne	NE_Aspect	10	5	5464	
TR5461sw	Up2Low	35	2	5461	FB Sparse Parkland	TR5465ne	Up2Low	35	6	5465	FM Sparse Parkland
TR5461sw	Dry2Med_WI	35	2	5461	< 30% SW Slope	TR5465ne	Dry2Med_WI	35	6	5465	30-45% NE Slope
TR5461sw	SlopeLT30	20	2	5461		TR5465ne	SlopeLT45	10	6	5465	
TR5461sw	SW_Aspect	10	2	5461		TR5465ne	SlopeGT30	10	6	5465	
TR5462sw	Up2Low	35	3	5462	FB Sparse Parkland	TR5465ne	NE_Aspect	10	6	5465	
TR5462sw	Dry2Med_WI	35	3	5462	30-45% SW Slope	TR5466ne	Up2Low	35	7	5466	FM Sparse Parkland
TR5462sw	SlopeLT45	10	3	5462		TR5466ne	Dry2Med_WI	35	7	5466	> 45% NE Slope
TR5462sw	SlopeGT30	10	3	5462		TR5466ne	Steep	20	7	5466	
TR5462sw	SW_Aspect	10	3	5462		TR5466ne	NE_Aspect	10	7	5466	
TR5463sw	Up2Low	35	4	5463	FB Sparse Parkland	TR5467st	Hollow	35	8	5467	LF Forested Hollow
TR5463sw	Dry2Med_WI	35	4	5463	> 45% SW Slope	TR5467st	Wet2V_Wet	35	8	5467	Sloping > 5%
TR5463sw	Steep	20	4	5463		TR5467st	SlopeGT15	30	8	5467	
TR5463sw	SW_Aspect	10	4	5463		TR5468lv	Hollow	35	9	5468	LF Forested Hollow
						TR5468lv	Wet2V_Wet	35	9	5468	Level < 5%
						TR5468lv	SlopeLT15	30	9	5468	

**PEM Entity Descriptions for: ESSF xcp**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5400	ESSF xcp	00	RO	r	s	5400 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin dry tundra cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
5401	ESSF xcp	00	AF	s	j	5401 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin dry tundra cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.
5402	ESSF xcp	00	RO	w	s	5402 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5402 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, warm aspect, medium textured shallow soils, and thin dry tundra.
5403	ESSF xcp	00	RO	w	v	5403 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
5404	ESSF xcp	00	AF	s	j	5404 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
5405	ESSF xcp	00	RO	k	s	5405 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5405 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils; thin dry tundra.
5406	ESSF xcp	00	RO	k	v	5406 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
5407	ESSF xcp	00	RU	s	y	5407 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
5408	ESSF xcp	00	DG	s	y	5408 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
5410	ESSF xcp	00	RO	r	s	5410 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
5411	ESSF xcp	00	AF	s	j	5411 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin dry tundra cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5412	ESSF xcp	00	AF	w	s	5412 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5412 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
5413	ESSF xcp	00	RO	w	v	5413 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. Rubble or scree.
5414	ESSF xcp	00	AF	s	j	5414 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
5415	ESSF xcp	00	AF	k	s	5415 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5415 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
5416	ESSF xcp	00	RO	k	v	5416 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. Rubble and scree.
5417	ESSF xcp	00	RU	s	y	5417 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 10). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
5418	ESSF xcp	00	DG	s	y	5418 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 10). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
5420	ESSF xcp	00	RO	r	s	5420 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
5421	ESSF xcp	00	TA	s	j	5421 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
5422	ESSF xcp	00	RO	w	s	5422 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5422 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5423	ESSF xcp	00	RO	w	v	5423 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
5424	ESSF xcp	00	RO	s	j	5424 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5425	ESSF xcp	00	RO	k	s	5425 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5425 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5426	ESSF xcp	00	RO	k	v	5426 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
5427	ESSF xcp	00	RU	s	y	5427 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes with some minor forbs and willow.
5428	ESSF xcp	00	DG	s	y	5428 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a minor cover of forbs and willows.
5430	ESSF xcp	00	AF	r	s	5430 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 5430 areas are transition areas from dry tundra to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition vegetation. Shallow crests.
5431	ESSF xcp	00	SF	d	j	5431 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 5431 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
5432	ESSF xcp	00	SF	w	s	5432 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by dry tundra vegetation. 5432 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
5433	ESSF xcp	00	RO	w	v	5433 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.
5434	ESSF xcp	00	SF	s	j	5434 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 5434 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
5435	ESSF xcp	00	SF	k	s	5435 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by covered by a dry tundra vegetation. 5435 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
5436	ESSF xcp	00	RO	k	v	3636 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3636 areas appear to be covered by a mixture bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5437	ESSF xcp	00	RU	s	y	5437 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
5438	ESSF xcp	00	SF	s	y	5438 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
5440	ESSF xcp	00	SF	r	s	5440 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of vigorous brush, dry tundra and sparse parkland. 5440 areas are transition areas from dry tundra to scrub birch to sparse parkland. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition. Shallow crests.
5441	ESSF xcp	00	FB	d	j	5441 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
5442	ESSF xcp	00	FB	w	s	5442 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
5443	ESSF xcp	00	RU	w	v	5443 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on warm aspects.
5444	ESSF xcp	00	FM	s	j	5444 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on cold aspects.
5445	ESSF xcp	00	FM	k	s	5445 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting sparse parkland vegetation; generally on cold aspects.
5446	ESSF xcp	00	RO	k	v	5446 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on cold aspects.
5447	ESSF xcp	00	RU	s	y	5447 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasing ground cover of sparse stunted trees; (class 40). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas transitional to sparse parkland ground cover.
5448	ESSF xcp	00	SF	s	y	5448 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasing ground cover of sparse stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet brushy gullies.
5451	ESSF xcp	00	FM	k	s	5451 areas were mapped in areas characterized by dark purple colors on the false color satellite image. In parkland environments, this dark purple color is interpreted to infer the presence of a sparse parkland forest cover. This color is associated with areas that were in shadow and not directly illuminated by sunlight from the SE. So most 5451 areas are expected to occur on N, NW or NE facing slopes with a sparse parkland forest cover.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5452	ESSF xcp	00	RU	k	s	5452 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 5452 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 5452 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
5453	ESSF xcp	00	GL	k		5453 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee of shadowed portions of steep N, NW or NE facing slopes. 5453 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
5454	ESSF xcp	00	GL			5454 areas were mapped to enclose the cores of what appear to be permanent glaciers. 5454 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery. Most 5454 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
5460	ESSF xcp	00	FB	r	s	5460 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a continuous cover of stunted trees. Crest positions, gentle slopes, medium textured shallow soils, continuous stunted tree cover. Shallow crests.
5461	ESSF xcp	00	FB	d	j	5461 areas were mapped on gentle (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5462	ESSF xcp	00	FB	w	s	5462 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5463	ESSF xcp	00	FB	w	v	5463 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5464	ESSF xcp	00	FM	s	j	5464 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5465	ESSF xcp	00	FM	k	s	5465 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5466	ESSF xcp	00	FM	k	v	5466 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5467	ESSF xcp	00	LF	s	y	5467 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a sparse parkland stunted tree cover. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
5468	ESSF xcp	00	LF	s	y	5468 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5470	ESSF xcp	00	FB	r	s	5470 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine.. Crest positions, gentle slopes, medium textured shallow soils, sparse parkland stunted tree cover; Shallow crests.
5471	ESSF xcp	00	FM	d	j	5471 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5471 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5472	ESSF xcp	00	FM	w	s	5472 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows but may also contain sparse parkland stunted trees. Very little 5472 occurs and most of it appears to be most closely associated with a moist heather type of vegetation in the ESSF xvp
5473	ESSF xcp	00	RO	w	v	5473 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
5474	ESSF xcp	00	FM	s	j	5474 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5474 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5475	ESSF xcp	00	FM	k	s	5475 areas were mapped on moderate to steep slopes (30-45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5475 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5476	ESSF xcp	00	RO	k	v	5476 areas were mapped on very steep slopes (> 45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
5477	ESSF xcp	00	LF	s	y	5477 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
5478	ESSF xcp	00	LF	s	y	5478 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.
5491	ESSF xcp	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5492	ESSF xcp	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5493	ESSF xcp	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5494	ESSF xcp	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5495	ESSF xcp	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5496	ESSF xcp	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5497	ESSF xcp	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5498	ESSF xcp	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

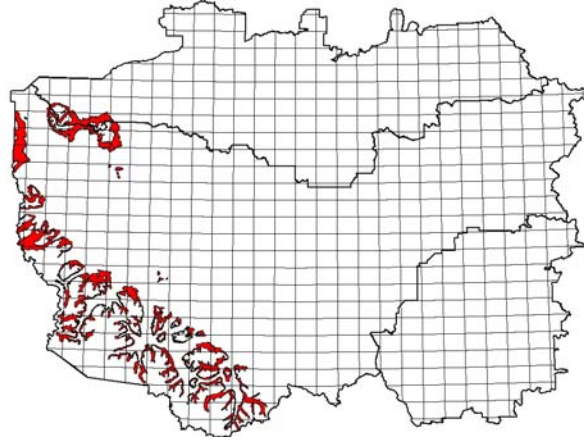
**PEM Entity Extended Legend with Proportions of Site Series for: ESSF xcp**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5400	5400	RO	ESSF xcp	6	00	RO	r	s	4	00	MW			
5401	5411	AF	ESSF xcp	6	00	AF	s	j	4	00	RO			
5402	5402	RO	ESSF xcp	6	00	RO	w	s	4	00	MW			
5403	5403	RO	ESSF xcp	9	00	RO	w	v	1	00	MW			
5404	5414	AF	ESSF xcp	6	00	AF	s	j	4	00	RO			
5405	5405	RO	ESSF xcp	6	00	RO	k	s	4	00	MW			
5406	5406	RO	ESSF xcp	9	00	RO	k	v	1	00	MW			
5407	5407	RU	ESSF xcp	6	00	RU	s	y	4	00	DG			
5408	5408	DG	ESSF xcp	6	00	DG	s	y	4	00	RU			
5410	5410	RO	ESSF xcp	6	00	RO	r	s	4	00	AF			
5411	5411	AF	ESSF xcp	6	00	AF	s	j	4	00	RO			
5412	5412	AF	ESSF xcp	6	00	AF	w	s	4	00	RU			
5413	5403	RO	ESSF xcp	9	00	RO	w	v	1	00	MW			
5414	5414	AF	ESSF xcp	6	00	AF	s	j	4	00	FC			
5415	5415	AF	ESSF xcp	6	00	AF	k	s	4	00	RO			
5416	5406	RO	ESSF xcp	9	00	RO	k	v	1	00	AF			
5417	5417	RU	ESSF xcp	6	00	RU	s	y	4	00	DG			
5418	5418	DG	ESSF xcp	6	00	DG	s	y	4	00	RU			
5420	5400	RO	ESSF xcp	6	00	RO	r	s	4	00	MW			
5421	5421	TA	ESSF xcp	6	00	TA	s	j	4	00	MW			
5422	5422	RO	ESSF xcp	6	00	RO	w	s	4	00	AF			
5423	5403	RO	ESSF xcp	9	00	RO	w	v	1	00	MW			
5424	5424	RO	ESSF xcp	6	00	RO	s	j	4	00	AF			
5425	5425	RO	ESSF xcp	6	00	RO	k	s	4	00	AF			
5426	5406	RO	ESSF xcp	9	00	RO	k	v	1	00	MW			
5427	5407	RU	ESSF xcp	6	00	RU	s	y	4	00	DG			
5428	5408	DG	ESSF xcp	6	00	DG	s	y	4	00	RU			
5430	5430	AF	ESSF xcp	6	00	AF	r	s	4	00	FB			
5431	5431	SF	ESSF xcp	6	00	SF	d	j	4	00	FB			
5432	5432	SF	ESSF xcp	6	00	SF	w	s	4	00	AF			
5433	5403	RO	ESSF xcp	9	00	RO	w	v	1	00	AF			
5434	5434	SF	ESSF xcp	6	00	SF	s	j	4	00	FM			
5435	5435	SF	ESSF xcp	6	00	SF	k	s	4	00	FM			
5436	5406	RO	ESSF xcp	9	00	RO	k	v	1	00	SF			
5437	5437	RU	ESSF xcp	6	00	RU	s	y	4	00	DG			
5438	5438	SF	ESSF xcp	6	00	SF	s	y	4	00	DG			
5440	5440	SF	ESSF xcp	6	00	SF	r	s	4	00	FB			
5441	5441	FB	ESSF xcp	6	00	FB	d	j	4	00	SF			
5442	5442	FB	ESSF xcp	6	00	FB	w	s	4	00	SF			
5443	5443	RU	ESSF xcp	9	00	RU	w	v	1	00	FB			
5444	5464	FM	ESSF xcp	6	00	FM	s	j	4	00	SF			
5445	5465	FM	ESSF xcp	6	00	FM	k	s	4	00	SF			
5446	5446	RO	ESSF xcp	9	00	RO	k	v	1	00	FM			
5447	5437	RU	ESSF xcp	6	00	RU	s	y	4	00	SF			
5448	5448	SF	ESSF xcp	6	00	SF	s	y	4	00	DG			
5451	5451	FM	ESSF xcp	6	00	FM	k	s	4	00	SF			
5452	5452	RU	ESSF xcp	6	00	RU	k	s	4	00	GL			
5453	5453	GL	ESSF xcp	8	00	GL	k		2	00	RT			
5454	5454	GL	ESSF xcp	10	00	GL								
5460	5460	FB	ESSF xcp	6	00	FB	r	s	4	00	LF			
5461	5461	FB	ESSF xcp	8	00	FB	d	j	2	00	SF			
5462	5462	FB	ESSF xcp	8	00	FB	w	s	2	00	RT			
5463	5463	FB	ESSF xcp	9	00	FB	w	v	1	00	RT			
5464	5464	FM	ESSF xcp	6	00	FM	s	j	4	00	SF			
5465	5465	FM	ESSF xcp	6	00	FM	k	s	4	00	SF			
5466	5466	FM	ESSF xcp	8	00	FM	k	v	2	00	RT			

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5467	5467	LF	ESSF xcp	6	00	LF	s	y	4	00	DG			
5468	5468	LF	ESSF xcp	6	00	LF	s	y	4	00	DG			
5470	5470	FB	ESSF xcp	6	00	FB	r	s	4	00	LF			
5471	5471	FM	ESSF xcp	8	00	FM	d	j	2	00	SF			
5472	5472	FM	ESSF xcp	8	00	FM	w	s	2	00	RT			
5473	5403	RO	ESSF xcp	9	00	RO	w	v	1	00	FB			
5474	5464	FM	ESSF xcp	6	00	FM	s	j	4	00	SF			
5475	5465	FM	ESSF xcp	6	00	FM	k	s	4	00	SF			
5476	5406	RO	ESSF xcp	8	00	RO	k	v	2	00	FM			
5477	5467	LF	ESSF xcp	6	00	LF	s	y	4	00	DG			
5478	5468	LF	ESSF xcp	6	00	LF	s	y	4	00	DG			
5491	5491	OW	ESSF xcp	10	00	OW								
5492	5492	WE	ESSF xcp	10	00	WE	d	y						
5493	5493	ME	ESSF xcp	10	00	ME								
5494	5494	PA	ESSF xcp	10	00	PA								
5495	5495	BR	ESSF xcp	10	00	BR								
5496	5496	DL	ESSF xcp	10	00	DL								
5497	5497	TA	ESSF xcp	10	00	TA								
5498	5498	AV	ESSF xcp	10	00	AV								

**BGC Unit: ESSF xv1****LMES Zone ID: 55****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	18,647.8	0.90%
Williams Lake TSA	246,676.3	5.00%
100 Mile House TSA	0.0	0.00%
Cariboo Region	265,324.1	3.22%

**List of Site Series Codes Defined for use in ESSF xv1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	AC	Bl - Arnica - Cladonia	mesic	All upper water shedding parts of the landscape
02	WJ	BlPa - Juniper - Cladonia	very xeric - subxeric	Shallow Crests
03	LC	Pl - Cladonia - Stereocaulon	xeric - subxeric	Coarse Dry
04	JG	BlPa - Juniper - Grouseberry	subxeric - submesic	Steep SW - Warm Dry slopes
05	AT	BlPa - Arnica - Twinflower	submesic	Steep NE - Cool Dry slopes
06	FR	Bl - Rhododendron - Crowberry	submesic - mesic	Cool, Slightly moist seepage slopes
07	FV	Bl - Valerian - Arnica	subhygric	Slightly Moist Sloping Toe Slopes, WT > 50 cm
08	FH	Bl - Horsetail - Glow moss	hygric - subhydric	Cold Wet, Frosty, Level Toe Slopes WT < 50 cm
09	FT	Bl - Twinberry - Hellebore	hygric - subhydric	Rich, Moist to Wet, Sloping Valleys
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	GB	Gravel Bar		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: ESSF xv1**

No Landscape Profile diagram available

**Example Attribute Class Rule File for ESSF xv1 (arule5530)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10
7	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
8	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
10	formfile	QWETI	VDry	5	5.90	5.90	5.90	0.00	6.10	0.2
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
12	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Sl_Wet	1	9.60	9.60	9.60	8.80	10.40	0.8
15	formfile	QWETI	SlWet2Wet	1	10.00	10.00	10.00	9.40	10.60	0.6
16	formfile	QWETI	Wet	1	10.90	10.90	10.90	10.00	11.80	0.9
17	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
18	formfile	SLOPE	Steep	4	25.00	25.00	25.00	20.00	100.00	5
19	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
20	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	1.00	10.00	1
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeLT30	5	25.00	25.00	25.00	0.00	30.00	5
24	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
25	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
29	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
30	geofile	TEXTURE	Med2CrS	4	40.00	40.00	40.00	40.00	100.00	5
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
32	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	L2Wet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
37	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
38	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5
39	relzfile	Z2St	Above_Base	4	30.00	25.00	999.00	25.00	999.00	5
40	relzfile	Z2St	Near_Base	5	20.00	0.00	25.00	0.00	25.00	5

## Example Fuzzy Ecological Class Rule File for ESSF xv1 (crule5530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
WJ5502c	Crest	30	1	5502	02 Shallow Crest	AC5501L	Mid2Low	25	13	5510	01 < 10% SW MID
WJ5502c	VDry	30	1	5502		AC5501L	Dry2Med	25	13	5510	
WJ5502c	SlopeLT20	10	1	5502		AC5501L	SW_Aspect	10	13	5510	
WJ5502c	Med2CrS	10	1	5502		AC5501L	SlopeLT10	20	13	5510	
WJ5502c	Shallow	80	1	5502		AC5501L	Med2CrS	10	13	5510	
WJ5502c	Hi_Ridge	10	1	5502		AC5501L	Deep	10	13	5510	
JG5504c	Crest	30	2	5524	05 Deep Dry Ridge	AC5540L	Mid2Low	25	14	5540	01 10-30% SW MID
JG5504c	VDry	30	2	5524		AC5540L	Dry2Med	25	14	5540	
JG5504c	SlopeLT30	10	2	5524		AC5540L	SW_Aspect	10	14	5540	
JG5504c	Med2CrS	10	2	5524		AC5540L	SlopeGT10	10	14	5540	
JG5504c	Deep	20	2	5524		AC5540L	SlopeLT30	10	14	5540	
JG5504c	Hi_Ridge	10	2	5524		AC5540L	Med2CrS	10	14	5540	
AC5514k	Crest	30	3	5514	01 Deep Low Knoll	AC5540L	Deep	10	14	5540	
AC5514k	VDry	30	3	5514		AC5511L	Mid2Low	25	15	5511	01 < 10% NE MID
AC5514k	SlopeLT30	10	3	5514		AC5511L	Dry2Med	25	15	5511	
AC5514k	Med2CrS	10	3	5514		AC5511L	NE_Aspect	10	15	5511	
AC5514k	Deep	20	3	5514		AC5511L	SlopeLT10	20	15	5511	
AC5514k	Low_Knoll	10	3	5514		AC5511L	Med2CrS	10	15	5511	
JG5504s	Crest2Mid	30	4	5504	04 Steep SW	AC5511L	Deep	10	15	5511	
JG5504s	VDry2SIDry	30	4	5504		AC5516L	Mid2Low	25	16	5516	06 10-30% NE MID
JG5504s	Steep_SW	20	4	5504		AC5516L	Dry2Med	25	16	5516	
JG5504s	Med2CrS	10	4	5504		AC5516L	NE_Aspect	10	16	5516	
JG5504s	Hi_Ridge	10	4	5504		AC5516L	SlopeGT10	10	16	5516	
AT5505n	Crest2Mid	30	5	5505	05 Steep NE	AC5516L	SlopeLT30	10	16	5516	
AT5505n	VDry2SIDry	30	5	5505		AC5516L	Med2CrS	10	16	5516	
AT5505n	Steep_NE	20	5	5505		AC5516L	Deep	10	16	5516	
AT5505n	Med2CrS	10	5	5505		FV5507L	Low2Toe	30	17	5570	07 < 15% SI Wet Toe
AT5505n	Hi_Ridge	10	5	5505		FV5507L	SI_Wet	30	17	5570	
AC5541s	Crest2Mid	25	6	5541	01 10-30% SW UP	FV5507L	SlopeLT15	20	17	5570	
AC5541s	VDry2SIDry	25	6	5541		FV5507L	Med2CrS	10	17	5570	
AC5541s	SW_Aspect	10	6	5541		FV5507L	Deep	10	17	5570	
AC5541s	SlopeGT10	10	6	5541		FV5507t	Toe	30	18	5507	07 < 10% SI Wet Toe
AC5541s	SlopeLT30	10	6	5541		FV5507t	SLWet2Wet	30	18	5507	
AC5541s	Med2CrS	10	6	5541		FV5507t	SlopeLT10	20	18	5507	
AC5541s	Deep	10	6	5541		FV5507t	Med2CrS	10	18	5507	
AC5546s	Crest2Mid	25	7	5546	01 < 10% SW UP	FV5507t	Deep	10	18	5507	
AC5546s	VDry2SIDry	25	7	5546		FH5576t	Toe	30	19	5576	07 10-30% Wet Toe
AC5546s	SW_Aspect	10	7	5546		FH5576t	Wet	30	19	5576	
AC5546s	SlopeLT10	20	7	5546		FH5576t	SlopeGT10	10	19	5576	
AC5546s	Med2CrS	10	7	5546		FH5576t	SlopeLT30	10	19	5576	
AC5546s	Deep	10	7	5546		FH5576t	Med2CrS	10	19	5576	
AC5526n	Crest2Mid	25	8	5526	06 10-30% NE UP	FH5576t	Deep	10	19	5576	
AC5526n	VDry2SIDry	25	8	5526		FH5508t	Toe	30	20	5508	08 < 10% Wet Toe
AC5526n	NE_Aspect	10	8	5526		FH5508t	Wet	30	20	5508	
AC5526n	SlopeGT10	10	8	5526		FH5508t	SlopeLT10	20	20	5508	
AC5526n	SlopeLT30	10	8	5526		FH5508t	Med2CrS	10	20	5508	
AC5526n	Med2CrS	10	8	5526		FH5508t	Deep	10	20	5508	
AC5526n	Deep	10	8	5526		FH5508v	Valley	30	21	5589	08 < 5% Flat Valley
AC5521n	Crest2Mid	25	9	5521	01 < 10% NE UP	FH5508v	Wet2V_Wet	30	21	5589	
AC5521n	VDry2SIDry	25	9	5521		FH5508v	SlopeLT05	20	21	5589	
AC5521n	NE_Aspect	10	9	5521		FH5508v	Med2CrS	10	21	5589	
AC5521n	SlopeLT10	20	9	5521		FH5508v	Deep	10	21	5589	
AC5521n	Med2CrS	10	9	5521		FT5509v	Valley	30	22	5509	09 5-10% Sloping Valley
AC5521n	Deep	10	9	5521		FT5509v	Wet2V_Wet	30	22	5509	
AC5501u	Up2Mid	30	10	5501	01 < 30% Upper	FT5509v	SlopeGT05	10	22	5509	
AC5501u	Dry2SIDry	30	10	5501		FT5509v	SlopeLT10	10	22	5509	
AC5501u	SlopeLT30	20	10	5501		FT5509v	Med2CrS	10	22	5509	
AC5501u	Med2CrS	10	10	5501		FT5509v	Deep	10	22	5509	
AC5501u	Deep	10	10	5501		FT5577v	Valley	30	23	5577	07 10-30% Sloping Valley
JG5504u	Up2Mid	30	11	5544	04 Steep SW MID	FT5577v	Wet2V_Wet	30	23	5577	
JG5504u	Dry2SIDry	30	11	5544		FT5577v	SlopeGT10	10	23	5577	
JG5504u	Steep_SW	20	11	5544		FT5577v	SlopeLT30	10	23	5577	
JG5504u	Med2CrS	10	11	5544		FT5577v	Med2CrS	10	23	5577	
JG5504u	Deep	10	11	5544		FT5577v	Deep	10	23	5577	
AT5505u	Up2Mid	30	12	5515	06 Steep NE MID	FH5587m	WetZ_LT05	50	24	5587	08 Wetland Margins
AT5505u	Dry2SIDry	30	12	5515		FH5587m	WetLT200	50	24	5587	
AT5505u	Steep_NE	20	12	5515		FT5579s	Hi_Seep	80	25	5579	09 Seepage Areas
AT5505u	Med2CrS	10	12	5515		FT5579s	Med2CrS	20	25	5579	
AT5505u	Deep	10	12	5515		WS5588o	Organic	99	26	5588	08 Organics



**PEM Entity Descriptions for: ESSF xv1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5500	ESSF xv1	00	GB			These areas consist of all areas manually digitized by interpreters as being GRAVEL BARS.
5501	ESSF xv1	01	AC	j	d	5501 areas were mapped on gentle slopes (< 30%) across a wide range of upper to lower landform positions and on all aspects in areas of MEDIUM TEXTURE. 5501 areas were excluded only from areas characterized by dry crests on high ridges, steep slopes, shallow soils or areas of seepage and moisture accumulation in toe slopes and hollows. Gentle slopes; deep medium - textured soils
5502	ESSF xv1	02	WJ	r	s	5502 areas were mapped ONLY on the crests of high ridges mapped as MEDIUM TEXTURE and SHALLOW to bedrock. Gentle slope; crest position; medium textured shallow soil over bedrock
5503	ESSF xv1	03	LC	c	j	03 Site Series occurs on coarse materials adjacent to streams, meadows and wetlands. 5503 occurs ONLY in areas mapped as COARSE TEXTURED. Gentle slopes; deep, coarse - textured soils
5504	ESSF xv1	04	JG	w	x	5504 areas were mapped in several drier than normal situations. 5504 areas were mapped on steep SW-facing slopes (>25%) in UPPER LANDFORM positions in areas mapped as MEDIUM TEXTURED. 5504 areas are predicted to be occupied mainly by the warm, dry 04 site series. Significant slope, warm aspect; deep coarse - textured soils
5505	ESSF xv1	05	AT	k	x	5505 areas were mapped in several cooler and drier than normal situations. 5505 areas were mapped on steep NE-facing slopes in UPPER LANDFORM positions in areas mapped as MEDIUM TEXTURED. 5505 areas are predicted to be mainly occupied by the cool, dry 05 site series. Significant slope; cool aspect; deep, coarse - textured soils.
5506	ESSF xv1	06	FR	k	j	5506 areas were mapped on gentle to moderate (< 20%) NE facing slopes in UPPER LANDFORM positions that were believed to be slightly moister than normal. 5506 areas ONLY occur in areas mapped as MEDIUM TEXTURED and ONLY in the original Quesnel PEM map area. In later mapping 5506 areas were further subdivided into 5516 and 5521. The 5506 concept predicts moister 06 site series on moderate slopes on cool aspects. Moderate slope; deep, medium - textured soils; intermittent seepage
5507	ESSF xv1	07	FV	j	d	5507 was mapped in lower to toe slope positions that were predicted to receive moisture via seepage from upslope. 5507 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5507 areas have sufficient slope that both moisture and cold air continue to drain down slope and do not accumulate to create permanently high water tables or cold frosty conditions. 5507 areas are currently over-predicted and include a considerable extent of normal mesic 01 site series. Gentle lower slope, receiving position; deep, medium - textured soils
5508	ESSF xv1	08	FH	j	y	5508 areas were mapped in level to depression lower to toe slope landform positions in areas predicted to receive and accumulate both cold air (frosty) and seepage. 5508 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5508 areas were restricted to toe slope and valley locations with slope gradients less than 10%. Toe slope to depression, deep, medium - textured soils; cold air drainage.
5509	ESSF xv1	09	FT	j	y	5509 areas were mapped in sloping valley bottoms with slope gradients greater than 5% but less than 10%. 5509 areas were predicted to be characterized by high levels of moisture and high water tables but not to be strongly affected by frost and cold air accumulation. The Regional Ecologist indicated that the areas mapped as 5509 did not correspond well with his knowledge of the locations where the rich, wet 09 Site Series occurred. Areas mapped as 5509 may, in fact, be more likely to be occupied by moist frosty 08 Site Series. Toe slope to depression, deep, medium - textured soils; high water table

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5510	ESSF xv1	01	AC	d	j	5510 was mapped on gentle slopes (<10%) with SW aspects in mid to lower landform positions. 5510 areas were treated as transition zones from normal mesic 01 to moister seepage 07. 5510 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5510 areas are predicted to be dominated by normal mesic 01 site series but they tend to occur on gentler slopes in lower slope positions that are adjacent to and transitional to moister seepage areas. 5510 areas were used to extend the range of the normal mesic 01 site series and to reduce the extent of area predicted to be occupied by moister seepage entities. Gentle lower slope, receiving position; deep, medium - textured soils
5511	ESSF xv1	01	AC	d	j	5511 was mapped on gentle slopes (<10%) with NE aspects in mid to lower landform positions. 5511 areas were treated as transition zones from normal mesic 01 to moister seepage 07. 5511 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5511 areas are predicted to be dominated by normal mesic 01 site series but they tend to occur on gentler slopes in lower slope positions that are adjacent to and transitional to moister seepage areas. 5511 areas were used to extend the range of the normal mesic 01 site series and to reduce the extent of area predicted to be occupied by moister seepage entities. Gentle lower slope, receiving position; deep, medium - textured soils
5514	ESSF xv1	01	AC	r	x	5514 areas were mapped on the slightly drier crests of low knolls and ridges. 5514 areas were originally mapped in the expectation that these crests of low knolls would be occupied by slightly drier than normal 04 Site Series. The Regional Ecologist indicated that these areas would mostly be occupied by 01 Site Series unless the crest was sharp and narrow. Gentle slopes; deep medium - textured soils
5515	ESSF xv1	06	FR	k	x	5515 areas were mapped on steep NE-facing slopes in MID to LOWER LANDFORM positions in areas mapped as MEDIUM TEXTURED. 5515 areas are predicted to be mainly occupied by the cool, slightly moist 06 site series and the cool, dry 05 site series. Significant slope; cool aspect; deep, medium - textured soils.
5516	ESSF xv1	06	FR	d	j	5516 was mapped on moderate slopes (10-30%) with NE aspects in mid to lower landform positions. 5516 areas were treated as transition zones from normal mesic 01 to moister seepage 07. 5516 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5516 areas are predicted to be dominated by moister seepage 06 Site Series along with a considerable extent of normal mesic 01 Site Series. 5516 areas were used to cut into the range of the normal mesic 01 site series. Moderate lower slope, receiving position; deep, medium - textured soils
5521	ESSF xv1	01	AC	d	j	5521 areas were mapped on gentle (<10%) NE facing slopes in UPPER LANDFORM positions that were believed to be slightly moister than normal. 5521 areas ONLY occur in areas mapped as MEDIUM TEXTURED. The 5521 concept predicts normal, mesic 01 site series on gentle slopes on cool aspects. Gentle slope; deep, medium - textured soils; no seepage
5523	ESSF xv1	02	WJ	r	s	5523 areas were mapped ONLY on the crests of high ridges that JMJ had mapped as COARSE TEXTURE and SHALLOW to bedrock. Gentle slope; crest position; coarse textured shallow soil over bedrock
5524	ESSF xv1	05	AT	r	x	5524 areas were mapped on the somewhat drier crests of high ridges in areas mapped as MEDIUM TEXTURED. 5524 areas were mapped in the expectation that these high crests would be occupied by slightly drier than normal 05 Site Series along with some normal 01 and some shallow 02 site series. Gentle slopes; deep medium - textured soils
5525	ESSF xv1	02	WJ	r	s	5525 areas were mapped ONLY in specific areas of GRANITE bedrock on the crests of high ridges across ALL TEXTURES that were mapped as SHALLOW to bedrock. Gentle slope; crest position; medium textured shallow soil over bedrock

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5526	ESSF xv1	06	FR	k	j	5526 areas were mapped on moderate (10-30%) NE facing slopes in UPPER LANDFORM positions that were believed to be slightly moister than normal. 5526 areas ONLY occur in areas mapped as MEDIUM TEXTURED. The 5526 concept predicts moister 06 site series on moderate slopes on cool aspects. Moderate slope; deep, medium - textured soils; intermittent seepage
5530	ESSF xv1	05	AT	c	r	5530 areas were mapped on the slightly drier crests of low knolls and ridges in areas of COARSE TEXTURED materials. 5530 areas were mapped in the expectation that these crests of low knolls in coarse areas would be occupied by slightly drier than normal 05 Site Series. Gentle slopes; deep coarse - textured soils
5531	ESSF xv1	05	AT	c	x	5531 areas were mapped on moderate to gentle SW-facing upper slopes in UPPER LANDFORM positions in areas mapped as COARSE TEXTURED by TFIC. 5531 areas were defined as a counterpoint to the 5536 entity used to recognize moderate NE-facing upper slopes. Gentle slope; deep, coarse - textured soils; intermittent seepage
5532	ESSF xv1	03	LC	c	r	5532 areas were mapped on the somewhat drier crests of high ridges in areas mapped as COARSE TEXTURED. 5532 areas are predicted to be occupied mainly by the coarse dry 03 site series. Gentle slopes; deep coarse - textured soils
5534	ESSF xv1	04	JG	c	w	5534 areas were mapped on steep SW-facing slopes (>25%) in UPPER LANDFORM positions in areas mapped as COARSE TEXTURED. 5534 areas are predicted to be occupied mainly by the warm, dry 04 site series. Significant slope, warm aspect; deep coarse - textured soils
5535	ESSF xv1	05	AT	c	k	5535 areas were mapped on steep NE-facing slopes in UPPER LANDFORM positions in areas mapped as COARSE TEXTURED. 5535 areas are predicted to be mainly occupied by the cool, dry 05 site series. Significant slope; cool aspect; deep, coarse - textured soils (use aspect modifiers)
5536	ESSF xv1	05	AT	c	x	5536 areas were mapped on moderate to gentle NE facing upper slopes in UPPER LANDFORM positions. 5536 areas ONLY occur in areas mapped as COARSE TEXTURED by TFIC. 5536 areas are predicted to be occupied mainly by the coarse, dry 05 and 03 site series. Gentle slope; deep, coarse - textured soils.
5537	ESSF xv1	07	FV	c	y	5537 was mapped in lower to toe slope positions that are interpreted as areas moistened by seepage. 5537 ONLY occurs in areas mapped as COARSE TEXTURE. 5537 areas are mostly associated with glaciofluvial fans and aprons that develop where larger streams discharge into major river valleys. 5537 areas were created in an attempt to recognize the coarse dry glaciofluvial 03 site series. However, most occurrences of 5537 areas appeared to be influenced by moist seepage from upslope. If these fans and aprons are dry, then the most likely site series is 03. If these areas are moistened by seepage then the most likely site series is 07. Gentle lower slope, receiving position; deep, medium - textured soils.
5538	ESSF xv1	07	FV	c	y	5538 areas were mapped in level to depression lower to toe slope landform positions in areas predicted to receive and accumulate both cold air (frosty) and seepage. 5538 ONLY occurs in areas mapped as COARSE TEXTURE. 5538 areas were restricted to toe slope and valley locations with slope gradients less than 10%. These areas tended to be the lowest and flattest tail portions of fans and aprons on the sides of major river valleys. Toe slope to depression, deep, medium - textured soils; cold air drainage.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5540	ESSF xv1	01	AC	d	y	5540 was mapped on moderate slopes (10-30%) with SW aspects in mid to lower landform positions. 5540 areas were treated as transition zones from normal mesic 01 to moister seepage 07. 5540 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5540 areas are predicted to be dominated by normal mesic 01 site series but they tend to occur on gentler slopes in lower slope positions that are adjacent to and transitional to moister seepage areas. 5540 areas were used to extend the range of the normal mesic 01 site series and to reduce the extent of area predicted to be occupied by moister seepage entities. Gentle lower slope, receiving position; deep, medium - textured soils
5541	ESSF xv1	01	AC	w	j	5541 areas were mapped on moderate (10-30%) SW-facing slopes in UPPER LANDFORM positions. 5541 areas ONLY occur in areas mapped as MEDIUM TEXTURED. 5541 areas were defined as a counterpoint to the 5551 entity used to recognize moderate NE-facing upper slopes. Moderate slope; deep, medium - textured soils.
5544	ESSF xv1	04	JG	w	x	5544 areas were mapped in several drier than normal situations. 5544 areas were mapped on steep SW-facing slopes (>25%) in MID to LOWER LANDFORM positions in areas mapped as MEDIUM TEXTURED. 5544 areas are predicted to be occupied mainly by the warm, dry 04 site series with perhaps considerable 01 site series. Significant slope, warm aspect; deep medium - textured soils
5546	ESSF xv1	01	AC	d	j	5546 areas were mapped on level to gentle (< 10%) SW-facing slopes in UPPER LANDFORM positions. 5546 areas ONLY occur in areas mapped as MEDIUM TEXTURED. 5546 areas were defined as a counterpoint to the 5556 entity used to recognize gentle NE-facing upper slopes. Gentle slope; deep, medium - textured soils.
5550	ESSF xv1	05	AT	c	j	5550 areas were mapped ONLY in specific areas of GRANITE bedrock on gentle slopes (< 30%) across a wide range of upper to lower landform positions and on all aspects across ALL TEXTURES. 5550 areas were excluded only from areas characterized by dry crests on high ridges, steep slopes, shallow soils or areas of seepage and moisture accumulation in toe slopes and hollows. Gentle slopes; deep coarse - textured soils
5551	ESSF xv1	01	AC	d	j	5551 was mapped ONLY in specific areas of GRANITE bedrock on gentle slopes (<10%) with ALL aspects in mid to lower landform positions. 5551 areas were treated as transition zones from the drier 05 Site Series that dominates the landscape in these areas to a normal mesic 01 Site Series that occupies areas of intermittent seepage in these GRANITE areas. 5551 occurs across ALL TEXTURES. 5551 areas are predicted to be dominated by normal mesic 01 site series but they tend to occur on gentler slopes in lower slope positions that are adjacent to and transitional to moister seepage areas. 5551 areas were used to place the normal mesic 01 site series into landscape positions normally predicted to be occupied by moister seepage entities such as 07. Gentle lower slope, receiving position; deep, medium - textured soils
5552	ESSF xv1	05	AT	r	x	5552 areas were mapped ONLY in specific areas of GRANITE bedrock on the somewhat drier crests of high ridges or low knolls across ALL TEXTURES. 5552 areas were mapped in the expectation that these crests and knolls would be occupied by slightly drier than normal 05 Site Series along with some normal 01 and some shallow 02 site series. Gentle slopes; deep medium - textured soils
5553	ESSF xv1	03	LC	c	w	5553 areas were mapped ONLY in specific areas of GRANITE bedrock on steep SW-facing slopes (>25%) in UPPER to LOWER LANDFORM positions across ALL TEXTURES. 5553 areas are predicted to be occupied mainly by the warm, dry coarse 03 site series. Significant slope, warm aspect; deep coarse - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5555	ESSF xv1	05	AT	k	x	5555 areas were mapped ONLY in specific areas of GRANITE bedrock in cooler and drier than normal situations. 5555 areas were mapped on steep NE-facing slopes in UPPER to LOWER LANDFORM positions across ALL TEXTURES. 5555 areas are predicted to be mainly occupied by the cool, dry 05 site series. Significant slope; cool aspect; deep, coarse - textured soils.
5556	ESSF xv1	06	FR	d	j	5556 was mapped ONLY in specific areas of GRANITE bedrock on gentle slopes (<10%) with NE aspects in mid to lower landform positions. 5556 areas were predicted to be occupied by the moister seepage 06 Site Series. 5556 occurs across ALL TEXTURES. 5556 areas tend to occur on gentler slopes in lower slope positions that are transitional to moister seepage areas. Gentle lower slope, receiving position; deep, medium - textured soils.
5557	ESSF xv1	07	FV	j	d	5557 was mapped ONLY in specific areas of GRANITE bedrock in lower to toe slope positions. 5557 occurs across ALL TEXTURES. 5557 areas are predicted to be dominated by the moist seepage 07 site series but will also contain a considerable extent of normal mesic 01 site series. Gentle lower slope, receiving position; deep, medium - textured soils. 5557 areas may be incorrectly interpreted and may be need to be described as being dominantly normal mesic 01.
5558	ESSF xv1	08	FH	j	y	5558 areas were mapped ONLY in specific areas of GRANITE bedrock in level to depressional lower to toe slope landform positions in areas predicted to receive and accumulate both cold air (frosty) and seepage. 5558 occurs across ALL TEXTURES. 5558 areas were restricted to toe slope and valley locations with slope gradients less than 10%. Toe slope to depression, deep, medium - textured soils; cold air drainage.
5559	ESSF xv1	09	FT	c	y	5559 areas were mapped ONLY in specific areas of GRANITE bedrock in sloping valley bottoms with slope gradients greater than 5% but less than 30%. 5559 areas were predicted to be characterized by high levels of moisture and high water tables but not to be strongly affected by frost and cold air accumulation. Toe slope to depression, deep, medium - textured soils; high water table
5560	ESSF xv1	05	AT	c	j	5560 areas were mapped on moderate to gentle slopes (< 30%) across a wide range of upper to lower landform positions and on all aspects in areas of COARSE TEXTURE. Most 5560 areas occurred outside of valley bottoms and in higher landscape positions not likely to be associated with glaciofluvial deposition. 5560 areas were therefore predicted to be dominated by the non-glaciofluvial dry site series 05 and 06 that commonly occur on coarse-skeletal colluvial materials. Gentle slopes; deep coarse - textured soils
5561	ESSF xv1	05	AT	c	j	5561 areas were mapped on moderate to gentle slopes (< 30%) in MID to LOWER landform positions and on all aspects in areas of COARSE TEXTURE. Most 5561 areas occurred on mid to lower slopes on the sides of major valleys. 5561 areas appear to be associated with fans and aprons that develop at the edges of valleys where major lateral streams discharge into the valleys. 5561 areas are not typical of the kames and eskers that are associated with the 03 site series and so it is predicted that 5561 areas will be dominated by the coarse, dry 05 and 06 site series. Gentle slopes; deep coarse - textured soils.
5563	ESSF xv1	04	JG	c	w	5563 areas were mapped on steep SW-facing slopes (>25%) in MID to LOWER LANDFORM positions in areas mapped as COARSE TEXTURED. 5563 areas are predicted to be occupied mainly by the warm, dry 04 site series. Significant slope, warm aspect; deep coarse - textured soils
5565	ESSF xv1	06	FR	c	k	5565 areas were mapped on steep NE-facing slopes in MID to LOWER LANDFORM positions in areas mapped as COARSE TEXTURED. 5565 areas are predicted to be mainly occupied by the cool, dry to slightly moist 06 site series. We assume that snow accumulates to a greater extent in the lower portions of steep NE-facing slopes. Significant slope; cool aspect; deep, coarse - textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5567	ESSF xv1	07	FV	c	y	5567 areas were mapped in lower to toe slope positions that were predicted to receive moisture via seepage from upslope. 5567 ONLY occurs in areas mapped as COARSE TEXTURED. 5567 areas have sufficient slope that both moisture and cold air continue to drain down slope and do not accumulate to create permanently high water tables or cold frosty conditions. Even though 5567 areas develop on coarse textured materials, the effects of moistening by seepage are believed to dominate and to result in these areas being occupied by moist seepage 07 site series. Gentle lower slope, receiving position; deep, medium - textured soils
5568	ESSF xv1	09	FT	c	y	5568 areas were mapped in sloping valley bottoms with slope gradients greater than 5% in areas mapped as COARSE TEXTURED. 5568 areas represent sloping valleys in areas of coarse textured materials. These areas are predicted to be occupied by the rich, moist 09 site series. Toe slope to depression, deep, medium - textured soils; high water table
5569	ESSF xv1	08	FH	c	y	5569 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas mapped as COARSE TEXTURED. 5569 areas were predicted to be characterized by high levels of moisture and high water tables and to be strongly affected by frost and cold air accumulation. Areas mapped as 5569 are expected to be occupied by moist frosty 08 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
5570	ESSF xv1	07	FV	j	d	5570 was mapped in lower to toe slope positions that were treated as transition zones from normal mesic 01 to moister seepage 07. 5570 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5570 areas are predicted to be dominated by the moist seepage 07 site series but will also contain a considerable extent of normal mesic 01 site series. Gentle lower slope, receiving position; deep, medium - textured soils. 5570 areas may be incorrectly interpreted and may be need to be described as being dominantly normal mesic 01.
5576	ESSF xv1	07	FV	d	j	5576 areas were mapped in gently sloping lower to toe slope landform positions in areas predicted to receive and accumulate both cold air (frosty) and seepage. 5576 ONLY occurs in areas mapped as MEDIUM TEXTURE. 5576 areas were restricted to toe slope and valley locations with slope gradients of 10-30%. Toe slope to depression, deep, medium - textured soils; cold air drainage.
5577	ESSF xv1	07	FV	d	y	5577 areas were mapped in sloping valley bottoms with slope gradients of 10-30%. 5577 areas were predicted to be characterized by high levels of moisture and high water tables but not to be strongly affected by frost and cold air accumulation. The Regional Ecologist indicated that the areas mapped as 5577 were expected to be occupied by the 07 and 09 site series. Toe slope to depression, deep, medium - textured soils; high water table
5578	ESSF xv1	07	FV	c	y	5578 areas were mapped in all locations where interpreters had recognized seepage in upper landform positions in areas mapped as COARSE TEXTURED. The Regional Ecologist indicated that these areas of seepage located on coarse textured materials were most likely occupied by the 07 and 06 Site Series. Toe slope to depression, deep, medium - textured soils; high water table.
5579	ESSF xv1	09	FT	d	y	5579 areas were mapped in all locations where interpreters had recognized seepage in upper landform positions in areas mapped as MEDIUM TEXTURED. Interpreters only delineated a very few locations of un-expected seepage and these areas were all located in mid to upper landform positions that would normally be expected to be associated with normal mesic 01 Site Series. The Regional Ecologist indicated that these areas of rich seepage located above valley bottoms and lower landform positions were most likely occupied by the 09 Site Series. Toe slope to depression, deep, medium - textured soils; high water table.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5581	ESSF xv1	00	RU	v	x	5581 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
5582	ESSF xv1	00	RU	v	x	5582 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
5583	ESSF xv1	00	RU	v	x	5583 areas are NON-FORESTED areas dominated by a land cover of emerging vegetation along with bare rock and rubble.
5584	ESSF xv1	00	RU	v		5584 areas are NON-FORESTED areas dominated by a land cover of bare rock, snow and ice. Many such areas are located immediately adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
5585	ESSF xv1	00	GL			5585 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with glacier tongues that protrude into lower valley bottom locations.
5586	ESSF xv1	08	FH	c	y	5586 areas were mapped in low-lying areas around the margins of non-forested wetlands and lakes in areas mapped as COARSE textured. These low-lying areas around the margins of wetlands and lakes are predicted to accumulate both cold air (frosty) and seepage water (high water tables). 5586 areas likely contain a mixture of colder (08) and moister (07) Site Series along with possibly some drier 05 or 06 site series. Toe slope to depression, deep, medium - textured soils; cold air drainage
5587	ESSF xv1	08	FH	j	y	5587 areas were mapped in low-lying areas around the margins of non-forested wetlands and lakes in areas mapped as MEDIUM textured. These low-lying areas around the margins of wetlands and lakes are predicted to accumulate both cold air (frosty) and seepage water (high water tables). 5587 areas likely contain a mixture of colder (08) and moister (07) Site Series along with possibly some mesic 01. Toe slope to depression, deep, medium - textured soils; cold air drainage
5588	ESSF xv1	08	FH	p	d	5588 areas were mapped in all locations where interpreters had mapped forested organic materials. The Regional Ecologist indicated that these forested organic wetlands were often a mosaic of 08 along with wet meadows, wetlands and shrub carrs. Mixed willow, scrub birch and sedge over variable thickness of organic.
5589	ESSF xv1	08	FH	j	y	5589 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas of MEDIUM TEXTURE. 5589 areas were predicted to be characterized by high levels of moisture and high water tables and to be strongly affected by frost and cold air accumulation. Areas mapped as 5589 are expected to be occupied by moist frosty 08 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
5591	ESSF xv1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
5592	ESSF xv1	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5593	ESSF xv1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5594	ESSF xv1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5595	ESSF xv1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5596	ESSF xv1	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5597	ESSF xv1	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5598	ESSF xv1	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
5599	ESSF xv1	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.



**PEM Entity Extended Legend with Proportions of Site Series for: ESSF xv1**

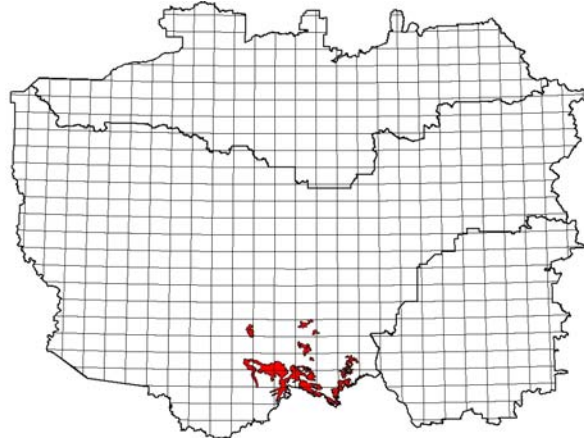
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5500	5500	GB	ESSF xv1	10	00	GB								
5501	5501	01	ESSF xv1	8	01	AC	j	d	2	07	FV			
5502	5502	02	ESSF xv1	7	02	WJ	r	s	2	01	AC	1	04	JG
5503	5503	03	ESSF xv1	10	03	LC	c	j						
5504	5504	04	ESSF xv1	6	04	JG	w	x	3	01	AC	1	02	WJ
5505	5505	05	ESSF xv1	6	05	AT	k	x	3	01	AC	1	06	FR
5506	5526	06	ESSF xv1	7	06	FR	k	j	3	01	AC			
5507	5507	07	ESSF xv1	8	07	FV	j	d	2	01	AC			
5508	5508	08	ESSF xv1	7	08	FH	j	y	2	07	FV	1	09	FT
5509	5509	09	ESSF xv1	5	09	FT	j	y	4	08	FH	1	07	FV
5510	5501	01	ESSF xv1	7	01	AC	d	y	3	07	FV			
5511	5501	01	ESSF xv1	7	01	AC	d	y	3	07	FV			
5514	5501	01	ESSF xv1	7	01	AC	r	x	3	04	JG			
5515	5515	06	ESSF xv1	6	06	FR	k	x	3	05	AT	1	01	AC
5516	5526	06	ESSF xv1	6	06	FR	d	j	4	01	AC			
5521	5501	01	ESSF xv1	7	01	AC	d	j	3	06	FR			
5523	5523	02	ESSF xv1	7	02	WJ	r	s	2	04	JG	1	05	AT
5524	5524	05	ESSF xv1	7	05	AT	r	x	3	01	AC			
5525	5525	02	ESSF xv1	7	02	WJ	r	s	2	05	AT	1	01	AC
5526	5526	06	ESSF xv1	7	06	FR	k	j	3	01	AC			
5530	5530	05	ESSF xv1	7	05	AT	c	r	3	04	JG			
5531	5531	05	ESSF xv1	8	05	AT	c	x	2	03	LC			
5532	5532	03	ESSF xv1	7	03	LC	c	r	3	05	AT			
5534	5534	04	ESSF xv1	8	04	JG	c	w	2	02	WJ			
5535	5535	05	ESSF xv1	8	05	AT	c	k	2	06	FR			
5536	5536	05	ESSF xv1	7	05	AT	c	x	3	03	LC			
5537	5537	07	ESSF xv1	6	07	FV	c	y	4	03	LC			
5538	5537	07	ESSF xv1	8	07	FV	c	y	2	08	FH			
5540	5501	01	ESSF xv1	8	01	AC	d	y	2	07	FV			
5541	5501	01	ESSF xv1	8	01	AC	w	j	2	04	JG			
5544	5504	04	ESSF xv1	6	04	JG	w	x	4	01	AC			
5546	5501	01	ESSF xv1	8	01	AC	d	j	2	06	FR			
5550	5550	05	ESSF xv1	8	05	AT	c	j	2	01	AC			
5551	5551	01	ESSF xv1	7	01	AC	d	j	3	07	FV			
5552	5552	05	ESSF xv1	6	05	AT	r	x	3	02	WJ	1	01	AC
5553	5553	03	ESSF xv1	8	03	LC	c	w	2	02	WJ			
5555	5555	05	ESSF xv1	8	05	AT	k	x	2	01	AC			
5556	5556	06	ESSF xv1	6	06	FR	d	j	2	07	FV	2	01	AC
5557	5557	07	ESSF xv1	6	07	FV	j	d	4	01	AC			
5558	5558	08	ESSF xv1	7	08	FH	j	y	2	07	FV	1	09	FT
5559	5559	09	ESSF xv1	5	09	FT	c	y	4	07	FV	1	08	FH
5560	5560	05	ESSF xv1	6	05	AT	c	j	4	06	FR			
5561	5561	05	ESSF xv1	6	05	AT	c	j	4	06	FR			
5563	5534	04	ESSF xv1	8	04	JG	c	w	2	02	WJ			
5565	5565	06	ESSF xv1	8	06	FR	c	k	2	05	AT			
5567	5537	07	ESSF xv1	8	07	FV	c	y	2	03	LC			
5568	5568	09	ESSF xv1	6	09	FT	c	y	4	07	FV			
5569	5569	08	ESSF xv1	7	08	FH	c	y	3	07	FV			
5570	5507	07	ESSF xv1	6	07	FV	j	d	4	01	AC			
5576	5577	07	ESSF xv1	8	07	FV	d	j	2	08	FH			
5577	5577	07	ESSF xv1	6	07	FV	d	y	3	09	FT	1	08	FH
5578	5578	07	ESSF xv1	6	07	FV	c	y	4	06	FR			
5579	5579	09	ESSF xv1	8	09	FT	d	y	2	07	FV			
5581	5581	RU	ESSF xv1	8	00	RU	v	x	2	02				
5582	5582	RU	ESSF xv1	8	00	RU	v	x	2	02				
5583	5583	CU	ESSF xv1	5	00	CU	v		5	00	RU			

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5584	5584	RU	ESSF xv1	5	00	RU	v		5	00	PN			
5585	5585	GL	ESSF xv1	10	00	GL								
5586	5586	08	ESSF xv1	6	08	FH	c	y	3	07	FV	1	06	FR
5587	5587	08	ESSF xv1	6	08	FH	j	y	3	07	FV	1	01	AC
5588	5588	08	ESSF xv1	10	08	FH	p	d						
5589	5508	08	ESSF xv1	7	08	FH	j	y	3	07	FV			
5591	5591	OW	ESSF xv1	10	00	OW								
5592	5592	WE	ESSF xv1	10	00	WE								
5593	5593	ME	ESSF xv1	10	00	ME								
5594	5594	PA	ESSF xv1	10	00	PA								
5595	5595	BR	ESSF xv1	10	00	BR								
5596	5596	DL	ESSF xv1	10	00	DL								
5597	5597	TA	ESSF xv1	10	00	TA								
5598	5598	AV	ESSF xv1	10	00	AV								
5599	5599	GL	ESSF xv1	10	00	GL								



**BGC Unit: ESSF xv2****LMES Zone ID: 56****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	65,486.9	1.33%
100 Mile House TSA	0.0	0.00%
Cariboo Region	65,486.9	0.79%

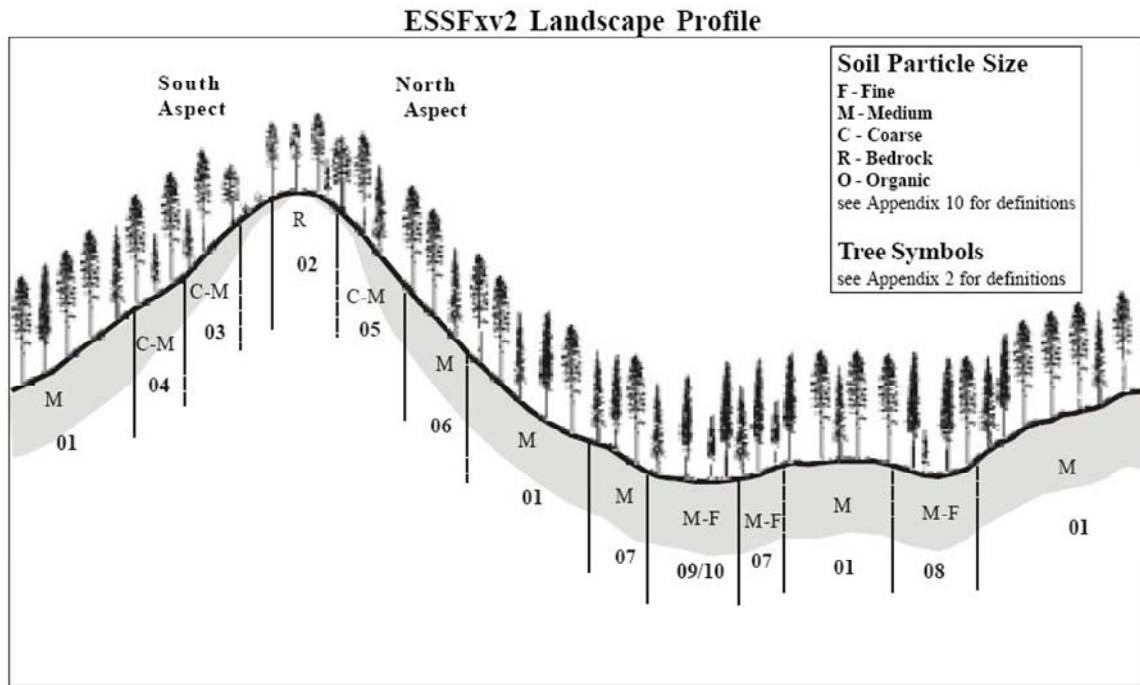
**List of Site Series Codes Defined for use in ESSF xv2**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	FA	Bl - Arnica - Cladonia	mesic - submesic	All upper water shedding parts of the landscape
02	LJ	Pl - Juniper - Cladonia	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03		BlPa - Kinnikinnick		Steep SW - Warm Dry slopes
04	JK	BlPa - Juniper - Kinnikinnick	subxeric - xeric	Moderate SW- Slightly drier and warmer slopes
05	FP	BlPa - Grouseberry		Steep NE - Cool Dry slopes above 1800 m
06	FR	Bl - Rhododendron - Crowberry		Steep NE - Cool Dry slopes below 1800 m
07	FL	Bl - Lousewort - Glowmoss	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
08	FH	Bl - Horsetail - Glow moss	hygric	Cold Wet, Frosty, Level Toe Slopes WT < 50 cm
09		Se - Trapper's Tea - Glow moss		Not Modelled, None Predicted
10	SK	Se - Willow - Glow moss		Moist to Wet, Not Frosty, Sloping Seepage Areas
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 (Supplement, 2001, ESSF xv2) and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: ESSF xv2**



**Example Attribute Class Rule File for ESSF xv2 (arule5630)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	Z2ST	Near_Base	5	25.00	0.00	25.00	0.00	25.00	5
8	relzfile	Z2ST	Above_Base	4	35.00	30.00	500.00	30.00	500.00	5
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
10	formfile	QWETI	VDry	5	5.90	5.90	5.90	0.00	6.10	0.2
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
12	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Sl_Wet	1	10.00	10.00	10.00	9.20	10.80	0.8
15	formfile	QWETI	SLWet2Wet	1	11.00	11.00	11.00	10.00	11.00	1
16	formfile	QWETI	Wet	1	11.50	11.50	11.50	11.00	12.00	0.5
17	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
18	formfile	SLOPE	Steep	4	25.00	25.00	25.00	20.00	100.00	5
19	formfile	SLOPE	SlopeLT05	5	3.00	0.00	3.50	0.00	3.50	0.5
20	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	1.00	10.00	1
21	formfile	SLOPE	SlopeLT15	5	14.00	0.00	15.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeGT15	4	16.00	15.00	100.00	15.00	100.00	1
24	formfile	SLOPE	SlopeLT25	5	25.00	25.00	25.00	0.00	30.00	5
25	formfile	SLOPE	SlopeGT05	4	4.00	3.50	100.00	3.50	100.00	0.5
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	ELEV	GT1800	4	1820.00	1800.00	5000.00	1800.00	5000.00	20
29	geofile	ELEV	LT1800	5	1780.00	0.00	1800.00	0.00	1800.00	20
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetLT200	5	150.00	150.00	150.00	0.00	200.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for ESSF xv2 (crule5630)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH5602c	Crest	30	1	5602	02 Shallow Crest	MH5640s	Up2Mid	30	15	5640	04 15-25% SW MID
MH5602c	VDry	30	1	5602		MH5640s	Dry2SIDry	30	15	5640	
MH5602c	SlopeLT25	10	1	5602		MH5640s	SW_Aspect	10	15	5640	
MH5602c	Med2CrS	10	1	5602		MH5640s	SlopeLT25	10	15	5640	
MH5602c	Shallow	20	1	5602		MH5640s	SlopeGT15	10	15	5640	
MH5602c	Hi_Ridge	10	1	5602		MH5640s	Deep	10	15	5640	
MH5624c	Crest	30	2	5624	05 Deep Dry Ridge	MH5655n	Up2Mid	30	16	5655	05 Steep NE MID
MH5624c	VDry	30	2	5624		MH5655n	Dry2SIDry	30	16	5655	Above 1800 m
MH5624c	SlopeLT25	10	2	5624		MH5655n	Steep_NE	20	16	5655	
MH5624c	Med2CrS	10	2	5624		MH5655n	Med2CrS	10	16	5655	
MH5624c	Deep	20	2	5624		MH5655n	GT1800	10	16	5655	
MH5624c	Hi_Ridge	10	2	5624		MH5666n	Up2Mid	30	17	5666	06 Steep NE MID
MH5641k	Crest	30	3	5641	01 Deep Low Knoll	MH5666n	Dry2SIDry	30	17	5666	Below 1800 m
MH5641k	VDry	30	3	5641		MH5666n	Steep_NE	20	17	5666	
MH5641k	SlopeLT25	10	3	5641		MH5666n	Med2CrS	10	17	5666	
MH5641k	Med2CrS	10	3	5641		MH5666n	LT1800	10	17	5666	
MH5641k	Deep	20	3	5641		MH5617u	Up2Mid	30	18	5617	07 Sloping Swale UP
MH5641k	Low_Knoll	10	3	5641		MH5617u	Wet	30	18	5617	
MH5603s	Crest2Mid	30	4	5603	03 Steep SW UPPER	MH5617u	SlopeLT25	20	18	5617	
MH5603s	VDry2SIDry	30	4	5603		MH5617u	SlopeGT05	10	18	5617	
MH5603s	Steep_SW	20	4	5603		MH5617u	Medium	5	18	5617	
MH5603s	Med2CrS	10	4	5603		MH5617u	Deep	5	18	5617	
MH5603s	Hi_Ridge	10	4	5603		MH5618u	Mid2Low	30	19	5618	07 Sloping Swale LOW
MH5604s	Crest2Mid	30	5	5604	04 15-25% SW UPPER	MH5618u	Wet2V_Wet	30	19	5618	
MH5604s	VDry2SIDry	30	5	5604		MH5618u	SlopeLT25	20	19	5618	
MH5604s	SW_Aspect	10	5	5604		MH5618u	SlopeGT05	10	19	5618	
MH5604s	SlopeLT25	10	5	5604		MH5618u	Medium	5	19	5618	
MH5604s	SlopeGT15	10	5	5604		MH5618u	Deep	5	19	5618	
MH5604s	Deep	10	5	5604		MH5601L	Mid2Low	30	20	5601	01 < 30% MID-LOW
MH5614s	Crest2Mid	30	6	5614	01 < 15% SW UPPER	MH5601L	Dry2Med	30	20	5601	
MH5614s	VDry2SIDry	30	6	5614		MH5601L	SlopeLT30	20	20	5601	
MH5614s	SW_Aspect	10	6	5614		MH5601L	Med2CrS	10	20	5601	
MH5614s	SlopeLT15	20	6	5614		MH5601L	Deep	10	20	5601	
MH5614s	Deep	10	6	5614		MH5607L	Low2Toe	30	21	5607	07 < 15% Wet Low-Toe
MH5605n	Crest2Mid	30	7	5605	05 Steep NE UPPER	MH5607L	Sl_Wet	30	21	5607	Near Base Level
MH5605n	VDry2SIDry	30	7	5605	Above 1800 m	MH5607L	SlopeLT15	20	21	5607	
MH5605n	Steep_NE	20	7	5605		MH5607L	Med2CrS	10	21	5607	
MH5605n	Med2CrS	10	7	5605		MH5607L	Near_Base	10	21	5607	
MH5605n	GT1800	10	7	5605		MH5670L	Low2Toe	30	22	5670	01 < 15% Wet Low-Toe
MH5653n	Crest2Mid	30	8	5653	01 15-25% NE UPPER	MH5670L	Sl_Wet	30	22	5670	Above Base Level
MH5653n	VDry2SIDry	30	8	5653	Above 1800 m	MH5670L	SlopeLT15	20	22	5670	
MH5653n	NE_Aspect	10	8	5653		MH5670L	Med2CrS	10	22	5670	
MH5653n	SlopeLT25	10	8	5653		MH5670L	Above_Base	10	22	5670	
MH5653n	SlopeGT15	10	8	5653		MH5608t	Toe	30	23	5608	08 < 10% Wet Toe
MH5653n	GT1800	10	8	5653		MH5608t	SLWet2Wet	30	23	5608	
MH5615n	Crest2Mid	30	9	5615	01 < 15% NE UPPER	MH5608t	SlopeLT10	20	23	5608	
MH5615n	VDry2SIDry	30	9	5615	Above 1800 m	MH5608t	Med2CrS	10	23	5608	
MH5615n	NE_Aspect	10	9	5615		MH5608t	Deep	10	23	5608	
MH5615n	SlopeLT15	20	9	5615		MH5688v	Valley	30	24	5688	10 > 5% Sloping Valley
MH5615n	GT1800	10	9	5615		MH5688v	Wet2V_Wet	30	24	5688	
MH5606n	Crest2Mid	30	10	5606	06 Steep NE UPPER	MH5688v	SlopeGT05	20	24	5688	
MH5606n	VDry2SIDry	30	10	5606	Below 1800 m	MH5688v	SlopeLT15	10	24	5688	
MH5606n	Steep_NE	20	10	5606		MH5688v	Deep	10	24	5688	
MH5606n	Med2CrS	10	10	5606		MH5609v	Valley	30	25	5609	08 < 5% Flat Valley
MH5606n	LT1800	10	10	5606		MH5609v	Wet2V_Wet	30	25	5609	
MH5663n	Crest2Mid	30	11	5663	01 15-25% NE UPPER	MH5609v	SlopeLT05	20	25	5609	
MH5663n	VDry2SIDry	30	11	5663	Below 1800 m	MH5609v	Med2CrS	10	25	5609	
MH5663n	NE_Aspect	10	11	5663		MH5609v	Deep	10	25	5609	
MH5663n	SlopeLT25	10	11	5663		MH5689m	Wet_LT05	45	26	5689	08 < 15% Wet Margins
MH5663n	SlopeGT15	10	11	5663		MH5689m	Wet_LT200	45	26	5689	
MH5663n	LT1800	10	11	5663		MH5689m	SlopeLT05	10	26	5689	
MH5616n	Crest2Mid	30	12	5616	01 < 15% NE UPPER	MH5669m	Wet_LT05	45	27	5669	10 > 15% Wet Margins
MH5616n	VDry2SIDry	30	12	5616	Below 1800 m	MH5669m	Wet_LT200	45	27	5669	
MH5616n	NE_Aspect	10	12	5616		MH5669m	SlopeGT05	10	27	5669	
MH5616n	SlopeLT15	20	12	5616		MH5677s	Hi_Seep	80	28	5677	07 Seepage Areas
MH5616n	LT1800	10	12	5616		MH5677s	Med2CrS	20	28	5677	
MH5611u	Up2Mid	30	13	5611	01 < 25% UPPER	MH5610o	Organic	99	29	5610	08 Wet Organics
MH5611u	Dry2SIDry	30	13	5611		MH5678v	Valley	30	30	5678	07 > 15% Sloping Valley
MH5611u	SlopeLT25	20	13	5611		MH5678v	Wet2V_Wet	30	30	5678	
MH5611u	Med2CrS	10	13	5611		MH5678v	SlopeGT15	20	30	5678	
MH5611u	Deep	10	13	5611		MH5678v	Med2CrS	10	30	5678	
MH5633s	Up2Mid	30	14	5633	03 Steep SW MID	MH5678v	Deep	10	30	5678	
MH5633s	Dry2SIDry	30	14	5633							
MH5633s	Steep_SW	20	14	5633							
MH5633s	Med2CrS	10	14	5633							
MH5633s	Deep	10	14	5633							

**PEM Entity Descriptions for: ESSF xv2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5601	ESSF xv2	01	FA	d	j	5601 areas were defined as being the drier portions of the same parts of the landscape as 5617 and 5618 in areas with MEDIUM TEXTURED materials. 5601 areas were created to restrict the extent of the wetter 07 and 10 site series within upper hollows and draws. 5601 areas are predicted to be occupied mainly by normal mesic 01 site series.
5602	ESSF xv2	02	LJ	s	r	5602 areas mapped ONLY on dry crests with SHALLOW soils and MEDIUM TEXTURES. Moderate slopes on crests, medium textured shallow soils over bedrock.
5603	ESSF xv2	03		w	x	5603 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. 5603 areas occur on steep UPPER SW facing slopes. A separate entity (5633) occurs on steep LOWER SW facing slopes. Significant slope, warm aspect, deep, medium-textured soils.
5604	ESSF xv2	04	JK	w	d	5604 areas were defined to occur on moderate (10-25%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 5604 areas were created to recognize the slightly drier 04 site series that occurs on moderate SW-facing upper slopes. Moderate slope, warm aspect, deep, medium-textured soils.
5605	ESSF xv2	05	FP	k	s	5605 areas were defined to occur on steep (>25%) NE-facing cool aspects ABOVE 1800 m on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 5605 areas were created to recognize the 05 site series. Significant slope, cool aspect with deep, medium-textured soils
5606	ESSF xv2	06	FR	k	s	5606 areas were defined to occur on steep (>25%) NE-facing cool aspects BELOW 1800 m on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 5606 areas were created to recognize the 06 site series. Significant slope, cool aspect with deep, medium-textured soils
5607	ESSF xv2	07	FL	j	y	5607 areas were mapped on gentle lower to toe slopes (< 15%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. The modeled extent of 5607 areas was restricted by defining a competing 5670 entity that occurred in a similar landform position but at a higher elevation above the local stream channel level (> 25 m). Moist sites of lower slope receiving position, deep medium-textured soil.
5608	ESSF xv2	08	FH	j	y	5608 areas were mapped on very gentle toe slopes (< 10%) in areas of permanently high water tables and DEEP MEDIUM TEXTURED soils. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. Deep, fine-textured soil.
5609	ESSF xv2	08	FH	j	y	5609 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 5609 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils.
5610	ESSF xv2	08	FH	p	y	5610 areas were mapped in all locations where interpreters had mapped forested organic materials. The Regional Ecologist indicated that these forested organic wetlands were dominated by the wet, poor 08 Site Series.
5611	ESSF xv2	01	FA	d	j	5611 areas were mapped in areas of MEDIUM TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
5612	ESSF xv2	01	FA	d	j	5612 areas were defined as being the drier portions of the same parts of the landscape as 5671 and 5681 in areas with COARSE TEXTURED materials. 5612 areas were created to restrict the extent of the wetter 07 and 10 site series within upper hollows and draws. 5612 areas are predicted to be occupied mainly by normal mesic 01 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5614	ESSF xv2	01	FA	d	j	5614 areas were mapped on gentle (<15%) UPPER SW-facing slopes in areas of MEDIUM TEXTURED soils. 5614 areas were created to limit the extent of the moderate SW slope unit 5604 so it didn't extend onto gentler slopes. 5614 areas are predicted to be dominated by the normal mesic 01 site series. Gentle slope, deep, medium-textured soils
5615	ESSF xv2	01	FA	d	j	5615 areas were mapped on gentle (<15%) UPPER NE-facing slopes ABOVE 1800 m in areas of MEDIUM TEXTURED soils. 5615 areas were created to limit the extent of the moderate NE slope units 5653 and 5663 so they didn't extend onto gentler slopes. 5615 areas are predicted to be dominated by the normal mesic 01 site series. Gentle slope, deep, medium-textured soils
5616	ESSF xv2	01	FA	d	j	5616 areas were mapped on gentle (<15%) UPPER NE-facing slopes BELOW 1800 m in areas of MEDIUM TEXTURED soils. 5616 areas were created to limit the extent of the moderate NE slope units 5653 and 5663 so they didn't extend onto gentler slopes. 5616 areas are predicted to be dominated by the normal mesic 01 site series. Gentle slope, deep, medium-textured soils
5617	ESSF xv2	07	FL	d	y	5617 areas were mapped in concave draws, hollows and swales in upper landform positions in areas of MEDIUM TEXTURED materials. 5617 areas are predicted to be occupied by the slightly moist 07 seepage site series along with components of normal mesic 01 and wetter 10 site series.
5618	ESSF xv2	10	SK	d	y	5618 areas were mapped in lowest and wettest portions of concave draws, hollows and swales in upper landform positions in areas of MEDIUM TEXTURED materials. 5618 areas are predicted to be occupied by the wet 10 site series along with components of the slightly moist 07 and normal mesic 01 site series.
5622	ESSF xv2	02	LJ	s	c	5622 areas mapped ONLY on dry crests with SHALLOW soils and COARSE TEXTURES. Moderate slopes on crests, coarse textured shallow soils over bedrock.
5624	ESSF xv2	02	LJ	d	x	5624 areas were mapped on the slightly drier crests of high ridges with deep MEDIUM TEXTURED soils. 5624 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 02 Site Series along with some normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
5630	ESSF xv2	03		w	c	5630 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, COARSE TEXTURED materials. Significant slope, warm aspect, deep, COARSE-textured soils.
5633	ESSF xv2	03		w	x	5633 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. 5603 areas occur on steep LOWER SW facing slopes. A separate entity (5603) occurs on steep UPPER SW facing slopes. Significant slope, warm aspect, deep, medium-textured soils.
5634	ESSF xv2	02	LJ	c	x	5634 areas were mapped on the slightly drier crests of high ridges with deep COARSE TEXTURED soils. 5634 areas were mapped to allow for the possibility of recognizing the drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 02 Site Series along with some normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils.
5640	ESSF xv2	04	JK	w	d	5640 areas were defined to occur on moderate (10-25%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. 5604 areas were created to recognize the slightly drier 04 site series that occurs on moderate SW-facing mid to lower slopes. Moderate slope, warm aspect, deep, medium-textured soils.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5641	ESSF xv2	01	FA	d	x	5641 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 5641 areas were mapped to differentiate deep crests on low knolls (5641) from deep crests on high ridges (5624). The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 site series along with some drier 02 Site Series. Gentle slope, deep, medium-textured soils.
5643	ESSF xv2	04	JK	w	c	5643 areas were defined to occur on moderate (10-25%) SW-facing slopes and on deep, COARSE TEXTURED materials in ALL landform positions. 5643 areas were created to recognize the slightly drier 04 site series that occurs on moderate SW-facing slopes. Moderate slope, warm aspect, deep, COARSE-textured soils.
5644	ESSF xv2	01	FA	d	j	5644 areas were mapped on gentle (<15%) UPPER SW-facing slopes in areas of COARSE TEXTURED soils. 5644 areas were created to limit the extent of the moderate SW slope unit 5643 so it didn't extend onto gentler slopes. 5644 areas are predicted to be dominated by the drier 04 site series. Gentle slope, deep, COARSE-textured soils
5645	ESSF xv2	01	FA	d	j	5645 areas were mapped in areas of COARSE TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, COARSE-textured soils.
5648	ESSF xv2	07	FL	c	y	5648 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 15% in areas of COARSE TEXTURED soils. 5648 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep COARSE-textured soils.
5651	ESSF xv2	01	FA	d	j	5651 areas were mapped on gentle (<15%) UPPER NE-facing slopes ABOVE 1800 m in areas of COARSE TEXTURED soils. 5651 areas were created to limit the extent of the moderate NE slope units 5656 and 5664 so they didn't extend onto gentler slopes. 5651 areas are predicted to be dominated by the normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils
5653	ESSF xv2	01	FA	k	d	5653 areas were defined to occur on moderate (10-25%) NE-facing slopes ABOVE 1800 m and on deep, MEDIUM TEXTURED materials. 5653 areas were created to counter-balance rules used to define a moderate SW facing entity occupied by the 04 site series. 5653 areas are predicted to be occupied by the normal, mesic 01 site series. Moderate slope, cool aspect, deep, medium-textured soils.
5654	ESSF xv2	01	FA	k	d	5654 areas were defined to occur on moderate (10-25%) NE-facing slopes ABOVE 1800 m and on deep, COARSE TEXTURED materials. 5654 areas were created to counter-balance rules used to define a moderate SW facing entity occupied by the 04 site series. 5654 areas are predicted to be occupied by the normal, mesic 01 site series. Moderate slope, cool aspect, deep, COARSE-textured soils.
5655	ESSF xv2	05	FP	k	s	5655 areas were defined to occur on steep (>25%) NE-facing cool aspects ABOVE 1800 m on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. 5605 areas were created to recognize the 05 site series. Significant slope, cool aspect with deep, medium-textured soils
5656	ESSF xv2	05	FP	k	c	5656 areas were defined to occur on steep (>25%) NE-facing cool aspects ABOVE 1800 m on deep, COARSE TEXTURED materials in ALL landform positions. 5656 areas were created to recognize the 05 site series. Significant slope, cool aspect with deep, COARSE-textured soils
5661	ESSF xv2	01	FA	d	j	5661 areas were mapped on gentle (<15%) UPPER NE-facing slopes BELOW 1800 m in areas of COARSE TEXTURED soils. 5661 areas were created to limit the extent of the moderate NE slope units 5654 and 5664 so they didn't extend onto gentler slopes. 5661 areas are predicted to be dominated by the normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5663	ESSF xv2	01	FA	k	d	5663 areas were defined to occur on moderate (10-25%) NE-facing slopes BELOW 1800 m and on deep, MEDIUM TEXTURED materials. 5663 areas were created to counter-balance rules used to define a moderate SW facing entity occupied by the 04 site series. 5663 areas are predicted to be occupied by the normal, mesic 01 site series. Moderate slope, cool aspect, deep, medium-textured soils.
5664	ESSF xv2	01	FA	k	d	5664 areas were defined to occur on moderate (10-25%) NE-facing slopes BELOW 1800 m and on deep, COARSE TEXTURED materials. 5664 areas were created to counter-balance rules used to define a moderate SW facing entity occupied by the 04 site series. 5664 areas are predicted to be occupied by the normal, mesic 01 site series. Moderate slope, cool aspect, deep, COARSE-textured soils.
5665	ESSF xv2	06	FR	k	c	5665 areas were defined to occur on steep (>25%) NE-facing cool aspects BELOW 1800 m on deep, COARSE TEXTURED materials in UPPER to MID landform positions. 5665 areas were created to recognize the 06 site series. Significant slope, cool aspect with deep, COARSE-textured soils
5666	ESSF xv2	06	FR	k	s	5666 areas were defined to occur on steep (>25%) NE-facing cool aspects BELOW 1800 m on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. 5666 areas were created to recognize the 06 site series. Significant slope, cool aspect with deep, medium-textured soils
5669	ESSF xv2	10	SK	j	y	5669 areas were mapped in ALL low-lying areas marginal to non-forested wetlands and lakes. At the suggestion of the Regional Ecologist, low-lying margins were separated into areas with slopes > 2% (5669) and areas with slopes < 2% (5689) to associate site series 10 with sloping areas and 08 with level areas. Lower slope to depression, deep medium-textured soils.
5670	ESSF xv2	01	FA	d	j	5670 areas were mapped on gentle lower to toe slopes (< 15%) that would normally be expected to be moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. The 5670 entity was created to restrict the modeled extent of the 5607 entity that occurred in a similar landform position. 5670 areas occur at least 25 m above the local stream channel level (> 25 m) and are not expected to accumulate significant seepage moisture. Slightly moist sites of lower slope receiving position, deep medium-textured soil.
5671	ESSF xv2	07	FL	c	y	5671 areas were mapped in concave draws, hollows and swales in upper landform positions in areas of COARSE TEXTURED materials. 5671 areas are predicted to be occupied by the slightly moist 07 seepage site series along with components of normal mesic 01 and wetter 10 site series.
5672	ESSF xv2	07	FL	c	y	5672 areas were mapped on gentle lower to toe slopes (< 15%) moistened by seepage in areas of DEEP COARSE TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. The modeled extent of 5672 areas was restricted by defining a competing 5674 entity that occurred in a similar landform position but at a higher elevation above the local stream channel level (> 25 m). Moist sites of lower slope receiving position, deep COARSE-textured soil.
5674	ESSF xv2	01	FA	d	j	5674 areas were mapped on gentle lower to toe slopes (< 15%) that would normally be expected to be moistened by seepage in areas of DEEP COARSE TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. The 5674 entity was created to restrict the modeled extent of the 5672 entity that occurred in a similar landform position. 5674 areas occur at least 25 m above the local stream channel level (> 25 m) and are not expected to accumulate significant seepage moisture. Slightly moist sites of lower slope receiving position, deep COARSE-textured soil.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5676	ESSF xv2	07	FL	c	y	5676 areas were mapped in all locations where interpreters had manually recognized SEEPAGE and COARSE TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 10. Moist sites of lower slope receiving position, deep COARSE-textured soil.
5677	ESSF xv2	07	FL	d	y	5677 areas were mapped in all locations where interpreters had manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 10. Moist sites of lower slope receiving position, deep medium-textured soil.
5678	ESSF xv2	07	FL	j	y	5678 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 5678 areas are characterized by moving, aerated groundwater and rich, moist soils. 5678 areas are not as moist as 5688 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils.
5679	ESSF xv2	08	FH	c	y	5679 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 5679 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils.
5681	ESSF xv2	10	SK	c	y	5681 areas were mapped in lowest and wettest portions of concave draws, hollows and swales in upper landform positions in areas of COARSE TEXTURED materials. 5681 areas are predicted to be occupied by the wet 10 site series along with components of the slightly moist 07 and normal mesic 01 site series.
5684	ESSF xv2	08	FH	c	y	5684 areas were mapped on very gentle toe slopes (< 10%) in areas of permanently high water tables and DEEP COARSE TEXTURED soils. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. Deep, fine-textured soil.
5687	ESSF xv2	10	SK	c	y	5687 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of COARSE TEXTURED soils. 5687 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep COARSE-textured soils.
5688	ESSF xv2	10	SK	j	y	5688 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 5688 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep medium-textured soils.
5689	ESSF xv2	08	FH	j	y	5689 areas were mapped in ALL low-lying areas marginal to non-forested wetlands and lakes. At the suggestion of the Regional Ecologist, low-lying margins were separated into areas with slopes > 2% (5669) and areas with slopes < 2% (5689) to associate site series 10 with sloping areas and 08 with level areas. Lower slope to depression, deep medium-textured soils.
5691	ESSF xv2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
5692	ESSF xv2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5693	ESSF xv2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5694	ESSF xv2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5695	ESSF xv2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5696	ESSF xv2	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5697	ESSF xv2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5698	ESSF xv2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
5699	ESSF xv2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

### PEM Entity Extended Legend with Proportions of Site Series for: ESSF xv2

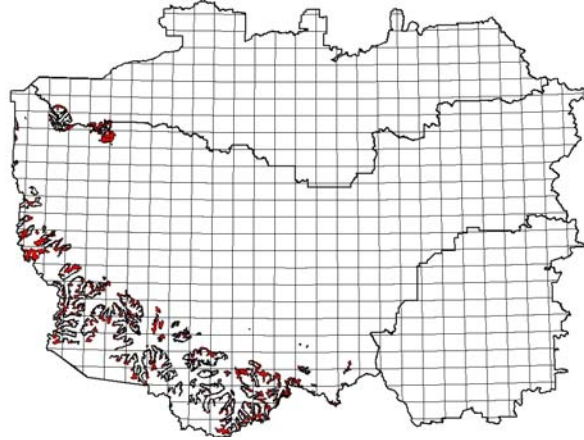
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5601	5611	01	ESSF xv2	9	01	FA	d	j	1	07	FL			
5602	5602	02	ESSF xv2	6	02	LJ	s	r	2	03	JK	2	01	FA
5603	5603	03	ESSF xv2	7	03		w	x	2	02	LJ	1	04	LP
5604	5604	04	ESSF xv2	7	04	JK	w	d	2	03	JK	1	01	FA
5605	5605	05	ESSF xv2	7	05	FP	k	s	2	02	LJ	1	06	FR
5606	5606	06	ESSF xv2	7	06	FR	k	s	2	02	LJ	1	05	FP
5607	5607	07	ESSF xv2	7	07	FL	j	y	2	01	FA	1	08	FH
5608	5608	08	ESSF xv2	7	08	FH	j	y	2	07	FL	1	01	FA
5609	5608	08	ESSF xv2	10	08	FH	j	y						
5610	5610	08	ESSF xv2	10	08	FH	p	y						
5611	5611	01	ESSF xv2	9	01	FA	d	j	1	07	FL			
5612	5645	01	ESSF xv2	9	01	FA	d	j	1	07	FL			
5614	5611	01	ESSF xv2	9	01	FA	d	j	1	04	LP			
5615	5611	01	ESSF xv2	9	01	FA	d	j	1	05	FP			
5616	5611	01	ESSF xv2	9	01	FA	d	j	1	06	FR			
5617	5607	07	ESSF xv2	7	07	FL	d	y	2	01	FA	1	10	SK
5618	5688	10	ESSF xv2	7	10	SK	d	y	2	07	FL	1	01	FA
5622	5622	02	ESSF xv2	6	02	LJ	s	c	2	03	JK	2	01	FA
5624	5624	02	ESSF xv2	6	02	LJ	d	x	4	01	FA			
5630	5630	03	ESSF xv2	7	03		w	c	2	02	LJ	1	04	LP
5633	5603	03	ESSF xv2	7	03		w	x	2	02	LJ	1	04	LP
5634	5634	02	ESSF xv2	6	02	LJ	c	x	4	01	FA			
5640	5604	04	ESSF xv2	7	04	JK	w	d	2	03	JK	1	01	FA
5641	5611	01	ESSF xv2	6	01	FA	d	x	4	02	LJ			
5643	5643	04	ESSF xv2	7	04	JK	w	c	2	03	JK	1	01	FA
5644	5645	01	ESSF xv2	9	01	FA	d	j	1	04	LP			
5645	5645	01	ESSF xv2	9	01	FA	d	j	1	07	FL			
5648	5648	07	ESSF xv2	6	07	FL	c	y	3	10	SK	1	08	FH
5651	5645	01	ESSF xv2	9	01	FA	d	j	1	05	FP			
5653	5611	01	ESSF xv2	8	01	FA	k	d	2	05	FP			
5654	5645	01	ESSF xv2	8	01	FA	k	d	2	05	FP			
5655	5605	05	ESSF xv2	7	05	FP	k	s	2	02	LJ	1	06	FR
5656	5656	05	ESSF xv2	7	05	FP	k	c	2	02	LJ	1	06	FR
5661	5645	01	ESSF xv2	9	01	FA	d	j	1	06	FR			
5663	5611	01	ESSF xv2	6	01	FA	k	d	4	06	FR			
5664	5645	01	ESSF xv2	6	01	FA	k	d	4	06	FR			
5665	5665	06	ESSF xv2	7	06	FR	k	c	2	02	LJ	1	05	FP
5666	5606	06	ESSF xv2	7	06	FR	k	s	2	02	LJ	1	05	FP
5669	5669	10	ESSF xv2	5	10	SK	j	y	3	08	FH	2	01	FA
5670	5611	01	ESSF xv2	7	01	FA	d	j	3	07	FL			
5671	5648	07	ESSF xv2	7	07	FL	c	y	2	01	FA	1	10	SK
5672	5672	07	ESSF xv2	7	07	FL	c	y	2	01	FA	1	08	FH
5674	5645	01	ESSF xv2	7	01	FA	d	j	3	07	FL			
5676	5676	07	ESSF xv2	6	07	FL	c	y	2	10	SK	2	01	DP
5677	5677	07	ESSF xv2	6	07	FL	d	y	2	10	SK	2	01	DP
5678	5607	07	ESSF xv2	6	07	FL	j	y	3	10	SK	1	08	FH
5679	5684	08	ESSF xv2	10	08	FH	c	y						
5681	5687	10	ESSF xv2	7	10	SK	c	y	2	07	FL	1	01	FA
5684	5684	08	ESSF xv2	7	08	FH	c	y	2	07	FL	1	01	FA
5687	5687	10	ESSF xv2	6	10	SK	c	y	3	07	FL	1	08	FH
5688	5688	10	ESSF xv2	6	10	SK	j	y	3	08	FH	1	07	FL
5689	5689	08	ESSF xv2	5	08	FH	j	y	3	10	SK	2	01	FA
5691	5691	OW	ESSF xv2	10	00	OW								
5692	5692	WE	ESSF xv2	10	00	WE	d	y						
5693	5693	ME	ESSF xv2	10	00	ME								
5694	5694	PA	ESSF xv2	10	00	PA								

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5695	5695	BR	ESSF xv2	10	00	BR								
5696	5696	DL	ESSF xv2	10	00	DL								
5697	5697	TA	ESSF xv2	10	00	TA								
5698	5698	AV	ESSF xv2	10	00	AV								
5699	5699	GL	ESSF xv2	10	00	GL								



**BGC Unit: ESSF xvp****LMES Zone ID: 58****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	3,353.2	0.16%
Williams Lake TSA	163,444.7	3.31%
100 Mile House TSA	0.0	0.00%
Cariboo Region	166,797.9	2.02%

**List of Site Series Codes Defined for use in ESSF xvp**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
00	AF	White mountain-avens - Altai fescue tundra		Thin Dry Tundra
00	DG	Subalpine daisy - Arrow-leaved groundsel wet meadow		Not Modelled
00	DP	Dry Open Parkland Forest		Not Modelled
00	FB	Bl - Dwarf blueberry - Dicranum parkland		Sparse Dry Parkland (Mostly SW Slopes)
00	FM	Bl - Heather parkland		Sparse Cool Parkland (Mostly NE Slopes)
00	LB	Lichen - Bl parkland		Not Modelled
00	LF			Moist Hollows and Draws with some vegetation
00	MF	Mesic Closed Forest		Not Modelled
00	MP	Mesic Open Parkland Forest		Not Modelled
00	SF	Moist (subhygric) Closed Forest		Moist Hollows and Draws with some vegetation
00	SL	Scrub-Lichen		
00	SP	Moist (subhygric) Open Forest		Not Modelled
00	SS	Scrub birch - Ragged snow, shrub steppe		RAY - USE SS instead of SF for scrub birch areas?
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were adapted from a previously completed TEM of the Itcha-Ilgachuz Area and modified to better describe this BGC Unit. The Regional Ecologist anticipates a future need to update the concepts and codes used to describe site units in the ESSF xvp once a new classification of alpine and sub-alpine areas is completed and published.



**Landscape Profile Diagram: ESSF xvp**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for ESSF xvp (arule5861)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT15	4	15.50	15.00	99.00	15.00	99.00	0.5
14	formfile	SLOPE	SlopeLT15	5	14.50	0.00	15.00	0.00	15.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

**Example Fuzzy Ecological Class Rule File for ESSF xvp (crule5861)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
TR5860r	Crest	35	1	5860	FB Sparse Parkland	TR5864ne	Up2Low	35	5	5864	FM Sparse Parkland
TR5860r	Dry_WI	35	1	5860	Ridge Crest	TR5864ne	Dry2Med_WI	35	5	5864	< 30% NE Slope
TR5860r	SlopeLT20	20	1	5860		TR5864ne	SlopeLT30	20	5	5864	
TR5860r	Hi_Ridge	10	1	5860		TR5864ne	NE_Aspect	10	5	5864	
TR5861sw	Up2Low	35	2	5861	FB Sparse Parkland	TR5865ne	Up2Low	35	6	5865	FM Sparse Parkland
TR5861sw	Dry2Med_WI	35	2	5861	< 30% SW Slope	TR5865ne	Dry2Med_WI	35	6	5865	30-45% NE Slope
TR5861sw	SlopeLT30	20	2	5861		TR5865ne	SlopeLT45	10	6	5865	
TR5861sw	SW_Aspect	10	2	5861		TR5865ne	SlopeGT30	10	6	5865	
TR5862sw	Up2Low	35	3	5862	FB Sparse Parkland	TR5865ne	NE_Aspect	10	6	5865	
TR5862sw	Dry2Med_WI	35	3	5862	30-45% SW Slope	TR5866ne	Up2Low	35	7	5866	FM Sparse Parkland
TR5862sw	SlopeLT45	10	3	5862		TR5866ne	Dry2Med_WI	35	7	5866	> 45% NE Slope
TR5862sw	SlopeGT30	10	3	5862		TR5866ne	Steep	20	7	5866	
TR5862sw	SW_Aspect	10	3	5862		TR5866ne	NE_Aspect	10	7	5866	
TR5863sw	Up2Low	35	4	5863	FB Sparse Parkland	TR5867st	Hollow	35	8	5867	LF Forested Hollow
TR5863sw	Dry2Med_WI	35	4	5863	> 45% SW Slope	TR5867st	Wet2V_Wet	35	8	5867	Sloping > 5%
TR5863sw	Steep	20	4	5863		TR5867st	SlopeGT15	30	8	5867	
TR5863sw	SW_Aspect	10	4	5863		TR5868lv	Hollow	35	9	5868	LF Forested Hollow
						TR5868lv	Wet2V_Wet	35	9	5868	Level < 5%
						TR5868lv	SlopeLT15	30	9	5868	

**PEM Entity Descriptions for: ESSF xvp**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5800	ESSF xvp	00	RO	r	s	5800 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin dry tundra cover). Gentle slopes, medium textured shallow soils, bare rock and forbs, little observable vegetation. Shallow crests.
5801	ESSF xvp	00	AF	s	j	5801 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin dry tundra cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.
5802	ESSF xvp	00	RO	w	s	5802 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5802 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, warm aspect, medium textured shallow soils, thin dry tundra.
5803	ESSF xvp	00	RO	w	v	5803 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
5804	ESSF xvp	00	AF	s	j	5804 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
5805	ESSF xvp	00	RO	k	s	5805 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5805 areas had a thin vegetation cover of dry tundra (e.g. very thin cover). Moderate to steep slopes, cool aspect, medium textured shallow soils, and thin dry tundra.
5806	ESSF xvp	00	RO	k	v	5806 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
5807	ESSF xvp	00	RU	s	y	5807 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
5808	ESSF xvp	00	DG	s	y	5808 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and forbs (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
5810	ESSF xvp	00	RO	r	s	5810 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation but were most likely occupied by dry tundra (e.g. sparse dry tundra). Gentle slopes, medium textured shallow soils, dry tundra types, sparsely vegetated. Shallow crests.
5811	ESSF xvp	00	AF	s	j	5811 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin dry tundra cover). Gentle slopes, warm aspects, medium textured shallow soils, thin dry tundra.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5812	ESSF xvp	00	AF	w	s	5812 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5812 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, warm aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
5813	ESSF xvp	00	RO	w	v	5813 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect. Rubble or scree.
5814	ESSF xvp	00	AF	s	j	5814 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a thin vegetation cover of dry tundra (e.g. very thin cover). Gentle slopes, Cool aspects, medium textured shallow soils, thin dry tundra.
5815	ESSF xvp	00	AF	k	s	5815 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5815 areas had little or no observable vegetation and are most likely occupied by dry tundra. Moderate to steep slopes, cool aspect, medium textured shallow soils, dry tundra types, sparsely vegetated. On longer, continuous slopes, these may be wetter due to seepage from upslope.
5816	ESSF xvp	00	RO	k	v	5816 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. dry tundra to bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect. Rubble and scree.
5817	ESSF xvp	00	RU	s	y	5817 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 10). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
5818	ESSF xvp	00	DG	s	y	5818 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a very sparse ground cover of grasses and forbs (class 10). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
5820	ESSF xvp	00	RO	r	s	5820 areas were mapped along the tops of sharp, narrow ridges or crests that had no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, medium textured shallow soils, bare rock and rubble, no observable vegetation. Shallow crests.
5821	ESSF xvp	00	TA	s	j	5821 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, warm aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation
5822	ESSF xvp	00	RO	w	s	5822 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 5822 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, warm aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5823	ESSF xvp	00	RO	w	v	5823 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Warm aspect.
5824	ESSF xvp	00	RO	s	j	5824 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Gentle slopes, Cool aspects, medium textured shallow soils, bare rock and rubble, no observable vegetation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5825	ESSF xvp	00	RO	k	s	5825 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 5825 areas had little or no observable vegetation and were interpreted as bare rock and rubble (e.g. high reflectance rock). Moderate to steep slopes, cool aspect, medium textured shallow soils, bare rock and rubble, no observable vegetation.
5826	ESSF xvp	00	RO	k	v	5826 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Cool aspect.
5827	ESSF xvp	00	RU	s	y	5827 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes with some minor forbs and willow.
5828	ESSF xvp	00	DG	s	y	5828 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock and rubble (e.g. high reflectance rock). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a minor cover of forbs and willows.
5830	ESSF xvp	00	AF	r	s	5830 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of dry tundra to sparse parkland. 5830 areas are transition areas from dry tundra to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition vegetation. Shallow crests.
5831	ESSF xvp	00	SF	d	j	5831 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 5831 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
5832	ESSF xvp	00	SF	w	s	5832 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by dry tundra vegetation. 5832 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
5833	ESSF xvp	00	RO	w	v	5833 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.
5834	ESSF xvp	00	SF	s	j	5834 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by a mixture of dry tundra to sparse parkland vegetation. 5834 areas are transition areas from dry tundra to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
5835	ESSF xvp	00	SF	k	s	5835 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by covered by dry tundra vegetation. 5835 areas are transition areas from dry tundra to a combination of dry tundra, sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
5836	ESSF xvp	00	RO	k	v	3636 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3636 areas appear to be covered by a mixture bare rock and some dry tundra. Very steep slopes, shallow, rocky, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5837	ESSF xvp	00	RU	s	y	5837 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
5838	ESSF xvp	00	SF	s	y	5838 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
5840	ESSF xvp	00	SF	r	s	5840 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a mixture of vigorous brush, dry tundra and sparse parkland. 5840 areas are transition areas from dry tundra to scrub birch to sparse parkland. Crest positions, gentle slopes, medium textured shallow soils, dry tundra to sparse parkland transition. Shallow crests.
5841	ESSF xvp	00	FB	d	j	5841 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
5842	ESSF xvp	00	FB	w	s	5842 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on warm aspects.
5843	ESSF xvp	00	RU	w	v	5843 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on warm aspects.
5844	ESSF xvp	00	FM	s	j	5844 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland vegetation; generally on cold aspects.
5845	ESSF xvp	00	FM	k	s	5845 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting sparse parkland vegetation; generally on cold aspects.
5846	ESSF xvp	00	RO	k	v	5846 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of bare rock with sparse stunted trees; generally on cold aspects.
5847	ESSF xvp	00	RU	s	y	5847 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasing ground cover of sparse stunted trees; (class 40). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas transitional to sparse parkland ground cover.
5848	ESSF xvp	00	SF	s	y	5848 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasing ground cover of sparse stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet brushy gullies.
5851	ESSF xvp	00	FM	k	s	5851 areas were mapped in areas characterized by dark purple colors on the false color satellite image. In parkland environments, this dark purple color is interpreted to infer the presence of a sparse parkland forest cover. This color is associated with areas that were in shadow and not directly illuminated by sunlight from the SE. So most 5851 areas are expected to occur on N, NW or NE facing slopes with a sparse parkland forest cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5852	ESSF xvp	00	RU	k	s	5852 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 5852 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 5852 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
5853	ESSF xvp	00	GL	k		5853 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee of shadowed portions of steep N, NW or NE facing slopes. 5853 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery.
5854	ESSF xvp	00	GL			5854 areas were mapped to enclose the cores of what appear to be permanent glaciers. 5854 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied LandSat false color imagery. Most 5854 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
5860	ESSF xvp	00	FB	r	s	5860 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by a continuous cover of stunted trees. Crest positions, gentle slopes, medium textured shallow soils, continuous stunted tree cover. Shallow crests.
5861	ESSF xvp	00	FB	d	j	5861 areas were mapped on gentle (< 30%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5862	ESSF xvp	00	FB	w	s	5862 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5863	ESSF xvp	00	FB	w	v	5863 areas were mapped on very steep (> 45%) S and W facing (windward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on warm aspects.
5864	ESSF xvp	00	FM	s	j	5864 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5865	ESSF xvp	00	FM	k	s	5865 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5866	ESSF xvp	00	FM	k	v	5866 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes in mid to crest landform positions that appeared to possess a ground cover consisting of sparse parkland stunted tree cover; generally on cold aspects.
5867	ESSF xvp	00	LF	s	y	5867 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having a sparse parkland stunted tree cover. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
5868	ESSF xvp	00	LF	s	y	5868 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having a continuous tree cover; Slope gradients are less than 5% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5870	ESSF xvp	00	FB	r	s	5870 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by dark shadows that could be confused with thick trees in the alpine.. Crest positions, gentle slopes, medium textured shallow soils, sparse parkland stunted tree cover; Shallow crests.
5871	ESSF xvp	00	FM	d	j	5871 areas were mapped on gentle to moderate slopes (<30%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5871 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5872	ESSF xvp	00	FM	w	s	5872 areas were mapped on moderate to steep slopes (30-45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows but may also contain sparse parkland stunted trees. Very little 5872 occurs and most of it appears to be most closely associated with a moist heather type of vegetation in the ESSF xvp
5873	ESSF xvp	00	RO	w	v	5873 areas were mapped on very steep slopes (> 45%) with a S or W exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
5874	ESSF xvp	00	FM	s	j	5874 areas were mapped on gentle to moderate slopes (<30%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5874 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5875	ESSF xvp	00	FM	k	s	5875 areas were mapped on moderate to steep slopes (30-45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. Very little 5875 occurs and most of it appears to be associated with a moist heather type of vegetation in the ESSF xvp.
5876	ESSF xvp	00	RO	k	v	5876 areas were mapped on very steep slopes (> 45%) with a N or E exposure in areas of very low reflectance in both bands 1 and 3 of the supplied Landsat image. These areas of very low reflectance were mostly associated with dark shadows that could be confused with thick trees in the alpine. We assume that these areas of very dark colors in shadow on S and W exposures consist of mainly of bare rock, rubble and talus but may include some sparse, stunted trees.
5877	ESSF xvp	00	LF	s	y	5877 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas of dark shadows in the alpine. Slope gradients are greater than 15% and wetness index is greater than 9. These are vegetated forb-willow chutes in areas of sparse parkland stunted tree cover.
5878	ESSF xvp	00	LF	s	y	5878 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas of dark shadows in the alpine; Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated forb-willow valleys in areas of sparse parkland stunted tree cover.
5891	ESSF xvp	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5892	ESSF xvp	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5893	ESSF xvp	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5894	ESSF xvp	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5895	ESSF xvp	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
5896	ESSF xvp	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
5897	ESSF xvp	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5898	ESSF xvp	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ESSF xvp**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5800	5800	RO	ESSF xvp	6	00	RO	r	s	4	00	MW			
5801	5811	AF	ESSF xvp	6	00	AF	s	j	4	00	RO			
5802	5802	RO	ESSF xvp	6	00	RO	w	s	4	00	MW			
5803	5803	RO	ESSF xvp	9	00	RO	w	v	1	00	MW			
5804	5814	AF	ESSF xvp	6	00	AF	s	j	4	00	RO			
5805	5805	RO	ESSF xvp	6	00	RO	k	s	4	00	MW			
5806	5806	RO	ESSF xvp	9	00	RO	k	v	1	00	MW			
5807	5807	RU	ESSF xvp	6	00	RU	s	y	4	00	DG			
5808	5808	DG	ESSF xvp	6	00	DG	s	y	4	00	RU			
5810	5810	RO	ESSF xvp	6	00	RO	r	s	4	00	AF			
5811	5811	AF	ESSF xvp	6	00	AF	s	j	4	00	RO			
5812	5812	AF	ESSF xvp	6	00	AF	w	s	4	00	RU			
5813	5803	RO	ESSF xvp	9	00	RO	w	v	1	00	MW			
5814	5814	AF	ESSF xvp	6	00	AF	s	j	4	00	FC			
5815	5815	AF	ESSF xvp	6	00	AF	k	s	4	00	RO			
5816	5806	RO	ESSF xvp	9	00	RO	k	v	1	00	AF			
5817	5817	RU	ESSF xvp	6	00	RU	s	y	4	00	DG			
5818	5818	DG	ESSF xvp	6	00	DG	s	y	4	00	RU			
5820	5800	RO	ESSF xvp	6	00	RO	r	s	4	00	MW			
5821	5821	TA	ESSF xvp	6	00	TA	s	j	4	00	MW			
5822	5822	RO	ESSF xvp	6	00	RO	w	s	4	00	AF			
5823	5803	RO	ESSF xvp	9	00	RO	w	v	1	00	MW			
5824	5824	RO	ESSF xvp	6	00	RO	s	j	4	00	AF			
5825	5825	RO	ESSF xvp	6	00	RO	k	s	4	00	AF			
5826	5806	RO	ESSF xvp	9	00	RO	k	v	1	00	MW			
5827	5807	RU	ESSF xvp	6	00	RU	s	y	4	00	DG			
5828	5808	DG	ESSF xvp	6	00	DG	s	y	4	00	RU			
5830	5830	AF	ESSF xvp	6	00	AF	r	s	4	00	FB			
5831	5831	SF	ESSF xvp	6	00	SF	d	j	4	00	FB			
5832	5832	SF	ESSF xvp	6	00	SF	w	s	4	00	AF			
5833	5803	RO	ESSF xvp	9	00	RO	w	v	1	00	AF			
5834	5834	SF	ESSF xvp	6	00	SF	s	j	4	00	FM			
5835	5835	SF	ESSF xvp	6	00	SF	k	s	4	00	FM			
5836	5806	RO	ESSF xvp	9	00	RO	k	v	1	00	SF			
5837	5837	RU	ESSF xvp	6	00	RU	s	y	4	00	DG			
5838	5838	SF	ESSF xvp	6	00	SF	s	y	4	00	DG			
5840	5840	SF	ESSF xvp	6	00	SF	r	s	4	00	FB			
5841	5841	FB	ESSF xvp	6	00	FB	d	j	4	00	SF			
5842	5842	FB	ESSF xvp	6	00	FB	w	s	4	00	SF			
5843	5843	RU	ESSF xvp	9	00	RU	w	v	1	00	FB			
5844	5864	FM	ESSF xvp	6	00	FM	s	j	4	00	SF			
5845	5865	FM	ESSF xvp	6	00	FM	k	s	4	00	SF			
5846	5846	RO	ESSF xvp	9	00	RO	k	v	1	00	FM			
5847	5837	RU	ESSF xvp	6	00	RU	s	y	4	00	SF			
5848	5848	SF	ESSF xvp	6	00	SF	s	y	4	00	DG			
5851	5851	FM	ESSF xvp	6	00	FM	k	s	4	00	SF			
5852	5852	RU	ESSF xvp	6	00	RU	k	s	4	00	GL			
5853	5853	GL	ESSF xvp	8	00	GL	k		2	00	RT			
5854	5854	GL	ESSF xvp	10	00	GL								
5860	5860	FB	ESSF xvp	6	00	FB	r	s	4	00	LF			
5861	5861	FB	ESSF xvp	8	00	FB	d	j	2	00	SF			
5862	5862	FB	ESSF xvp	8	00	FB	w	s	2	00	RT			
5863	5863	FB	ESSF xvp	9	00	FB	w	v	1	00	RT			
5864	5864	FM	ESSF xvp	6	00	FM	s	j	4	00	SF			
5865	5865	FM	ESSF xvp	6	00	FM	k	s	4	00	SF			
5866	5866	FM	ESSF xvp	8	00	FM	k	v	2	00	RT			

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5867	5867	LF	ESSF xvp	6	00	LF	s	y	4	00	DG			
5868	5868	LF	ESSF xvp	6	00	LF	s	y	4	00	DG			
5870	5870	FB	ESSF xvp	6	00	FB	r	s	4	00	LF			
5871	5871	FM	ESSF xvp	8	00	FM	d	j	2	00	SF			
5872	5872	FM	ESSF xvp	8	00	FM	w	s	2	00	RT			
5873	5803	RO	ESSF xvp	9	00	RO	w	v	1	00	FB			
5874	5864	FM	ESSF xvp	6	00	FM	s	j	4	00	SF			
5875	5865	FM	ESSF xvp	6	00	FM	k	s	4	00	SF			
5876	5806	RO	ESSF xvp	8	00	RO	k	v	2	00	FM			
5877	5867	LF	ESSF xvp	6	00	LF	s	y	4	00	DG			
5878	5868	LF	ESSF xvp	6	00	LF	s	y	4	00	DG			
5891	5891	OW	ESSF xvp	10	00	OW								
5892	5892	WE	ESSF xvp	10	00	WE	d	y						
5893	5893	ME	ESSF xvp	10	00	ME								
5894	5894	PA	ESSF xvp	10	00	PA								
5895	5895	BR	ESSF xvp	10	00	BR								
5896	5896	DL	ESSF xvp	10	00	DL								
5897	5897	TA	ESSF xvp	10	00	TA								
5898	5898	AV	ESSF xvp	10	00	AV								

**BGC Unit: ICH dk****LMES Zone ID: 59****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	34,641.8	2.81%
Cariboo Region	34,641.8	0.42%

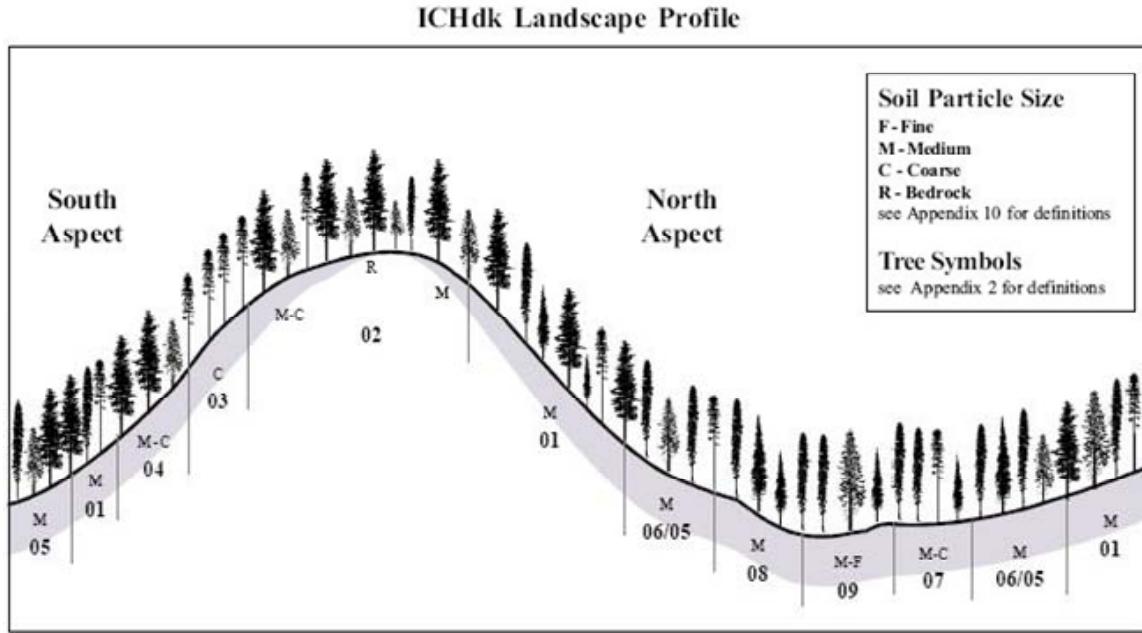
**List of Site Series Codes Defined for use in ICH dk**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	RF	CwSxw - Falsebox - Wintergreen	mesic	All upper water shedding parts of the landscape
02	RS	CwSxw - Soopolallie, Typic	subxeric - xeric	Steep SW - Warm Dry Upper slopes
02	RS	CwSxw - Soopolallie, Shallow	subxeric - xeric	Shallow Crests, Thin, Dry Soils
02	RS	CwSxw - Soopolallie	subxeric - xeric	
03	FS	CwSxw - Falsebox - Soopolallie	subxeric	Coarse textured Areas - All upper shedding slopes
04	FF	CwSxw - Falsebox - Feathermoss	submesic	Steep SW LOW- Slightly drier and warmer slopes
05	RT	CwSxw - Thimbleberry	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
06	RR	CwSxw - Raspberry - Oak fern	subhygric	Non-frosty, Slightly Moist Upper Swales
07	ST	Sxw - Twinberry - Oak fern	subhygric	Cold Wet, Frosty, Level Toe Slopes WT < 50 cm
08	SD	Sxw - Devil's club - Lady fern	subhygric - hygric	Rich, Moist Seepage, Mainly in Sloping Valleys
09	SH	Sxw - Horsetail (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric - subhydric	Lowest, wettest and flattest depressions and toes
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: ICH dk**



**Example Attribute Class Rule File for ICH dk (arule5930)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNOAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNOAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	12.00	12.00	12.00	4.00	20.00	8
7	relzfile	PCTZ2ST	Toe2Valley	1	5.00	5.00	5.00	2.00	8.00	5
8	formfile	LNOAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
11	formfile	QWETI	Sl_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	25.00	25.00	25.00	20.00	100.00	5
18	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
19	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
20	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
21	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
22	formfile	SLOPE	SlopeLT30	5	25.00	42.50	42.50	0.00	30.00	5
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
26	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
27	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
28	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
29	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
30	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
31	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
32	geofile	L2Wet	WetL_LT200	5	200.00	200.00	200.00	0.00	250.00	50
33	geofile	Z2wet	WetZ_LT05	5	3.50	3.50	3.50	0.00	5.00	1.5
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
37	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for ICH dk (crule5930)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH5902r	Crest	35	1	5902	02b Shallow Crest	MH5961u	Up2Mid	35	11	5961	06 5-20% Wet Swale
MH5902r	Dry_WI	25	1	5902		MH5961u	Wet2V_Wet	25	11	5961	
MH5902r	Hi_Ridge	20	1	5902		MH5961u	SlopeLT20	15	11	5961	
MH5902r	Shallow	10	1	5902		MH5961u	SlopeLT05	5	11	5961	
MH5902r	Med2Crs	10	1	5902		MH5961u	Med2Crs	10	11	5961	
MH5924r	Crest	35	2	5924		MH5961u	Deep	10	11	5961	
MH5924r	Dry_WI	25	2	5924	04 Deep Dry Ridge	MH5915L	Mid2Toe	35	12	5915	01 < 20% MID-LOW
MH5924r	Hi_Ridge	20	2	5924		MH5915L	Med2Sl_Wet	25	12	5915	
MH5924r	Deep	10	2	5924		MH5915L	SlopeLT20	20	12	5915	
MH5924r	Med2Crs	10	2	5924		MH5915L	Med2Crs	10	12	5915	
MH5914k	Crest	35	3	5914		MH5915L	Deep	10	12	5915	
MH5914k	Dry_WI	25	3	5914		MH5905s	Toe	35	13	5905	05 5-20% Moist Toe
MH5914k	Low_Knoll	20	3	5914	01 Deep Low Knoll	MH5905s	Sl_Wet2Wet	25	13	5905	
MH5914k	Deep	10	3	5914		MH5905s	SlopeLT20	15	13	5905	
MH5914k	Med2Crs	10	3	5914		MH5905s	SlopeGT05	5	13	5905	
MH5922s	Crest2Mid	35	4	5942	02a Steep SW UPPER	MH5905s	Med2Crs	10	13	5905	
MH5922s	Dry2Med_WI	25	4	5942		MH5905s	Deep	10	13	5905	
MH5922s	Steep_SW	30	4	5942		MH5975s	Toe	35	14	5975	07 5-10% Wet Toe
MH5922s	Med2Crs	5	4	5942		MH5975s	Sl_Wet2Wet	25	14	5975	
MH5922s	Deep	5	4	5942		MH5975s	SlopeLT10	15	14	5975	
MH5942s	Mid2Toe	35	5	5904	04 Steep SW LOWER	MH5975s	SlopeLT05	5	14	5975	
MH5942s	Sl_Dry_WI	25	5	5904		MH5975s	Med2Crs	10	14	5975	
MH5942s	Steep_SW	30	5	5904		MH5975s	Deep	10	14	5975	
MH5942s	Med2Crs	5	5	5904		MH5976t	Toe2Valley	35	15	5975	07 Flat Wet Toe
MH5942s	Deep	5	5	5904		MH5976t	Wet	25	15	5975	
MH5911n	Crest2Mid	35	6	5911	01 Steep NE UPPER	MH5976t	SlopeLT10	15	15	5975	
MH5911n	Dry2Med_WI	25	6	5911		MH5976t	SlopeLT05	5	15	5975	
MH5911n	Steep_NE	30	6	5911		MH5976t	Med2Crs	10	15	5975	
MH5911n	Med2Crs	5	6	5911		MH5976t	Deep	10	15	5975	
MH5911n	Deep	5	6	5911		MH6067t	Toe2Valley	35	16	5967	07 Sloping Wet Toe
MH5911L	Mid2Toe	35	7	5911	01 Steep NE LOWER	MH6067t	Wet	25	16	5967	
MH5911L	Sl_Dry_WI	25	7	5911		MH6067t	SlopeLT10	15	16	5967	
MH5911L	Steep_NE	30	7	5911		MH6067t	SlopeGT05	5	16	5967	
MH5911L	Med2Crs	5	7	5911		MH6067t	Med2Crs	10	16	5967	
MH5911L	Deep	5	7	5911		MH6067t	Deep	10	16	5967	
MH5901u	Crest2Mid	35	8	5901	01 < 20% UPPER	MH5908v	Valley	35	17	5908	08 Sloping Wet Valley
MH5901u	Dry2Med_WI	25	8	5901		MH5908v	Wet2V_Wet	25	17	5908	
MH5901u	SlopeLT20	20	8	5901		MH5908v	SlopeGT05	20	17	5908	
MH5901u	Med2Crs	10	8	5901		MH5908v	Med2Crs	10	17	5908	
MH5901u	Deep	10	8	5901		MH5908v	Deep	10	17	5908	
MH5901m	Up2Mid	35	9	5901	01 < 30% MID-LOW	MH5909v	Valley	35	18	5909	09 Flat Wet Valley
MH5901m	Sl_Dry2Med	25	9	5901		MH5909v	Wet2V_Wet	25	18	5909	
MH5901m	SlopeLT30	10	9	5901		MH5909v	SlopeLT05	20	18	5909	
MH5901m	Med2Crs	10	9	5901		MH5909v	Med2Crs	10	18	5909	
MH5901m	Deep	10	9	5901		MH5909v	Deep	10	18	5909	
MH5901m	Hi_Ridge	10	9	5901		MH5955s	Hi_Seep	90	19	5955	05 Drier Seepage
MH5951u	Up2Mid	35	10	5951	05 5-20% Upper Swale	MH5955s	Sl_Dry_WI	10	19	5955	
MH5951u	Wet	25	10	5951		MH5968s	Hi_Seep	90	20	5978	07 Wetter Seepage
MH5951u	SlopeLT20	15	10	5951		MH5968s	Wet	10	20	5978	
MH5951u	SlopeGT05	5	10	5951		MH5969o	Organic	99	21	5969	09 Organic Areas
MH5951u	Med2Crs	10	10	5951		MH5957m	WetL_LT200	40	22	5957	07 Drier Margins
MH5951u	Deep	10	10	5951		MH5957m	WetZ_LT05	40	22	5957	
						MH5957m	Sl_Dry_WI	15	22	5957	
						MH5957m	SlopeGT05	5	22	5957	
						MH5959m	WetL_LT200	40	23	5959	09 Wetter Margins
						MH5959m	WetZ_LT05	40	23	5959	
						MH5959m	Wet	15	23	5959	
						MH5959m	SlopeLT05	5	23	5959	

**PEM Entity Descriptions for: ICH dk**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5901	ICH dk	01	RF	d	j	5901 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 5901 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 20%) and on ALL ASPECTS. This is the predominant site series in the BEC variant.
5902	ICH dk	02 b	RS	s	r	5902 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 5902 occurs on the driest crest positions of high ridges that are shallow to bedrock. 5902 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
5903	ICH dk	03	FS	c	j	5903 was mapped ONLY on COARSE TEXTURED MATERIALS. 5903 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 20%) and on ALL ASPECTS. This is the predominant site series in areas of COARSE TEXTURED materials.
5904	ICH dk	04	FF	w	x	5904 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5904 occupies STEEP SLOPES with a WARM SW ASPECT in MID to LOWER landform positions. Slope gradient must be greater than 20% and the aspect must be from 135 to 315. The regional ecologist indicated that the MID TO LOWER portions of STEEP SW slopes tended to be dominated by the somewhat less dry 04 Site Series.
5905	ICH dk	05	RT	d	j	5905 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5905 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5905 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
5908	ICH dk	08	SD	d	y	5908 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5908 areas occur in sloping valleys and draws and along the margins of active stream channels. 5908 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. Rich, moist devil's club unit in sloping valleys.
5909	ICH dk	09	SH	d	y	5909 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5909 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 5909 areas are predicted to have permanently high water tables and very wet cool conditions (water table < 30 cm).
5911	ICH dk	01	RF	k	d	5911 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5911 occurs on steep, cool NE facing slopes in UPPER to LOWER landform positions. Slope gradient is greater than 20% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to LOWER landform positions. 5911 areas are dominated by the normal mesic 01 Site Series but the entity is mapped separately in order to recognize the cool aspect site modifier.
5913	ICH dk	01	RF	c	y	5913 was mapped ONLY on COARSE TEXTURED MATERIALS. 5913 occurs on mid to lower landform positions with slopes less than 20% and on ALL ASPECTS. 5913 areas are often slightly concave and tend to receive and accumulate some moisture from above. 5913 areas were mapped as a transition zone in the lower extent of the normal coarse dry 03 Site Series range. Upon review the regional ecologist indicated that 5913 areas would likely be dominated by the normal mesic 01 Site Series along with the coarse dry 03 Site Series.
5914	ICH dk	01	RF	d	x	5914 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 5914 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5915	ICH dk	01	RF	d	j	5915 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 5915 occurs on mid to lower landform positions with slopes less than 20% and on ALL ASPECTS. 5915 areas are often slightly concave and tend to receive and accumulate some moisture from above. 5915 areas were mapped as a transition zone in the lower extent of the normal mesic 01 range. Upon review the regional ecologist indicated that 5915 areas would likely be dominated by the normal mesic 01 Site Series with only minor occurrence of slightly moister 05 and 06 Site Series.
5923	ICH dk	02 b	RS	s	r	5923 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 5923 occurs on the driest crest positions of high ridges that are coarse and shallow to bedrock. 5923 occurs in areas of COARSE texture as mapped by TFIC where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
5924	ICH dk	04	FF	d	x	5924 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 5924 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 04 site series along with some potential inclusions of 01 and 02 site series.
5930	ICH dk	03	FS	c	r	5930 was mapped on the slightly drier tops of low knolls or ridges in areas of COARSE TEXTURED MATERIALS. 5930 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of COARSE TEXTURES and moderate to high relief. It is predicted to be dominated by the 03 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
5931	ICH dk	03	FS	k	c	5931 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5931 occurs on steep, cool NE facing slopes in UPPER to LOWER landform positions. Slope gradient is greater than 20% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to LOWER landform positions in COARSE areas. 5931 areas are dominated by the COARSE DRY 03 Site Series but the entity is mapped separately in order to recognize the cool aspect site modifier.
5932	ICH dk	03	FS	c	r	5932 was mapped on deep dry ridges and crests on COARSE TEXTURED MATERIALS. 5932 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of COARSE TEXTURES and moderate to high relief. It is predicted to contain a mixture of predominantly 03 site series along with some potential inclusions of 04 and 02 site series.
5933	ICH dk	02 a	RS	w	c	5933 was mapped ONLY in areas of COARSE TEXTURED materials. 5933 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 20% and the aspect must be from 135 to 315. The regional ecologist indicated that the UPPER portions of STEEP SW slopes tended to be dominated by the drier 02a Site Series, even in COARSE areas.
5934	ICH dk	03	FS	w	c	5934 was mapped ONLY in areas of COARSE TEXTURED materials. 5934 occupies STEEP SLOPES with a WARM SW ASPECT in MID to LOWER landform positions. Slope gradient must be greater than 20% and the aspect must be from 135 to 315. The regional ecologist indicated that the MID TO LOWER portions of STEEP SW slopes tended to be dominated by the drier 03 Site Series along with a minor component of somewhat less dry 04 Site Series.
5935	ICH dk	01	RF	c	y	5935 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5935 areas occur in sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these sloping upper draws would most likely be dominated by the slightly less dry 01 Site Series.
5936	ICH dk	06	RR	c	j	5936 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5936 areas occur in level to very gently sloping (<5%) valleys and draws in upper to mid landform positions in coarse areas. The regional ecologist indicated that these level upper draws in COARSE areas would most likely be dominated by the slightly moist 06 and 05 Site Series.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5937	ICH dk	07	ST	c	j	5937 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5937 occupies nearly level to very gently sloping (<5%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 5937 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
5938	ICH dk	08	SD	c	y	5938 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5938 areas occur in sloping valleys and draws and along the margins of active stream channels. 5938 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. Rich, moist devil's club unit in sloping valleys.
5939	ICH dk	09	SH	c	y	5939 was mapped ONLY in areas of COARSE TEXTURED materials. 5939 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 5939 areas are predicted to have permanently high water tables and very wet cool conditions (water table < 30 cm).
5942	ICH dk	02 a	RS	w	x	5942 was mapped ONLY in areas of MEDIUM TEXTURED materials. 5942 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 20% and the aspect must be from 135 to 315. The regional ecologist indicated that the UPPER portions of STEEP SW slopes tended to be dominated by the drier 02a Site Series.
5945	ICH dk	05	RT	c	j	5945 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 05 and 06 Site Series.
5947	ICH dk	07	ST	c	j	5947 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5947 occupies gently sloping (5-10%) lower to toe slopes and some gently sloping valley sides. 5947 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
5947	ICH dk	07	ST	c	j	5947 areas were mapped only in areas mapped as COARSE TEXTURED. 5947 areas occur on slopes GREATER THAN 5% in the drier portions of low-lying margins surrounding wetlands and open water bodies. 5947 areas are predicted to consist of a mixture of wetter Site Series including 07 and 08.
5948	ICH dk	07	ST	c	j	5948 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the relatively moist 07 and rich, moist 08 site series.
5949	ICH dk	09	SH	c	j	5949 areas were mapped only in areas mapped as COARSE TEXTURED. 5949 areas occur on slopes LESS THAN 5% in the wetter portions of low-lying margins surrounding wetlands and open water bodies. 5949 areas are predicted to consist dominantly of the very wet 09 Site Series.
5951	ICH dk	05	RT	d	j	5951 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5951 areas occur in sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these sloping upper draws would most likely be dominated by the slightly moist 05 and 06 Site Series.
5953	ICH dk	05	RT	c	j	5953 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 5953 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 5953 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5955	ICH dk	05	RT	d	j	5955 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 05 and 06 Site Series.
5957	ICH dk	07	ST	d	j	5957 areas were mapped only in areas mapped as MEDIUM TEXTURED. 5957 areas occur on slopes GREATER THAN 5% in the drier portions of low-lying margins surrounding wetlands and open water bodies. 5957 areas are predicted to consist of a mixture of wetter Site Series including 07 and 08.
5959	ICH dk	09	SH	d	j	5959 areas were mapped only in areas mapped as MEDIUM TEXTURED. 5957 areas occur on slopes LESS THAN 5% in the wetter portions of low-lying margins surrounding wetlands and open water bodies. 5959 areas are predicted to consist dominantly of the very wet 09 Site Series.
5961	ICH dk	06	RR	d	j	5961 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5961 areas occur in level to very gently sloping (<5%) valleys and draws in upper to mid landform positions. The regional ecologist indicated that these level upper draws would most likely be dominated by the slightly moist 06 and 05 Site Series.
5967	ICH dk	07	ST	d	j	5967 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5967 occupies gently sloping (5-10%) lower to toe slopes and some gently sloping valley sides. 5967 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
5969	ICH dk	09	SH	p	j	5969 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 09 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
5975	ICH dk	07	ST	d	j	5975 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 5975 occupies nearly level to very gently sloping (<5%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 5975 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
5978	ICH dk	07	ST	d	j	5978 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the relatively moist 07 and rich, moist 08 site series.
5991	ICH dk	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
5992	ICH dk	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
5993	ICH dk	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
5994	ICH dk	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
5995	ICH dk	00	BR			These areas were mapped visually by as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
5996	ICH dk	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
5997	ICH dk	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
5998	ICH dk	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
5999	ICH dk	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

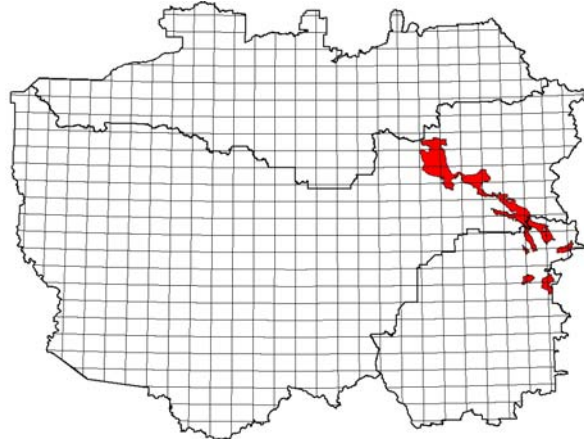
**PEM Entity Extended Legend with Proportions of Site Series for: ICH dk**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
5901	5901	01	ICH dk	9	01	RF	d	j	1	05	RT			
5902	5902	02b	ICH dk	8	02b	RS	s	r	1	04	FF	1	01	RF
5903	5903	03	ICH dk	9	03	FS	c	j	1	04	FF			
5904	5904	04	ICH dk	8	04	FF	w	x	2	01	RF			
5905	5905	05	ICH dk	7	05	RT	d	j	3	06	RR			
5908	5908	08	ICH dk	7	08	SD	d	y	3	05	RT			
5909	5909	09	ICH dk	8	09	SH	d	y	2	07	ST			
5911	5911	01	ICH dk	7	01	RF	k	d	2	04	FF	1	02b	RS
5913	5913	01	ICH dk	6	01	RF	c	y	4	03	FS			
5914	5901	01	ICH dk	7	01	RF	d	x	3	04	FF			
5915	5915	01	ICH dk	8	01	RF	d	j	1	05	RT	1	06	RR
5923	5923	02b	ICH dk	8	02b	RS	s	r	1	04	FF	1	03	FS
5924	5924	04	ICH dk	8	04	FF	d	x	2	01	RF			
5930	5903	03	ICH dk	9	03	FS	c	r	1	04	FF			
5931	5931	03	ICH dk	7	03	FS	k	c	2	04	FF	1	02b	RS
5932	5932	03	ICH dk	9	03	FS	c	r	1	04	FF			
5933	5933	02a	ICH dk	10	02a	RS	w	c	0	04	FF			
5934	5934	03	ICH dk	7	03	FS	w	c	3	04	FF			
5935	5935	01	ICH dk	7	01	RF	c	y	2	05	RT	1	06	RR
5936	5936	06	ICH dk	7	06	RR	c	j	3	05	RT			
5937	5937	07	ICH dk	7	07	ST	c	j	3	05	RT			
5938	5938	08	ICH dk	7	08	SD	c	y	3	05	RT			
5939	5939	09	ICH dk	8	09	SH	c	y	2	07	ST			
5942	5942	02a	ICH dk	10	02a	RS	w	x	0	04	FF			
5945	5945	05	ICH dk	9	05	RT	c	j	1	06	RR			
5947	5937	07	ICH dk	7	07	ST	c	j	3	05	RT			
5947	5947	07	ICH dk	7	07	ST	c	j	3	08	SD			
5948	5948	07	ICH dk	7	07	ST	c	j	3	08	SD			
5949	5949	09	ICH dk	9	09	SH	c	j	1	07	ST			
5951	5951	05	ICH dk	7	05	RT	d	j	3	06	RR			
5953	5953	05	ICH dk	7	05	RT	c	j	3	06	RR			
5955	5955	05	ICH dk	9	05	RT	d	j	1	06	RR			
5957	5957	07	ICH dk	7	07	ST	d	j	3	08	SD			
5959	5959	09	ICH dk	9	09	SH	d	j	1	07	ST			
5961	5961	06	ICH dk	7	06	RR	d	j	3	05	RT			
5967	5975	07	ICH dk	7	07	ST	d	j	3	05	RT			
5969	5969	09	ICH dk	9	09	SH	p	j	1	07	ST			
5975	5975	07	ICH dk	7	07	ST	d	j	3	05	RT			
5978	5978	07	ICH dk	7	07	ST	d	j	3	08	SD			
5991	5991	OW	ICH dk	10	00	OW								
5992	5992	WE	ICH dk	10	00	WE	d	y						
5993	5993	ME	ICH dk	10	00	ME								
5994	5994	PA	ICH dk	10	00	PA								
5995	5995	BR	ICH dk	10	00	BR								
5996	5996	DL	ICH dk	10	00	DL								
5997	5997	TA	ICH dk	10	00	TA								
5998	5998	AV	ICH dk	10	00	AV								
5999	5999	GL	ICH dk	10	00	GL								



**BGC Unit: ICH mk3****LMES Zone ID: 60****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	78,263.1	1.59%
100 Mile House TSA	28,778.4	2.33%
Cariboo Region	107,041.4	1.30%

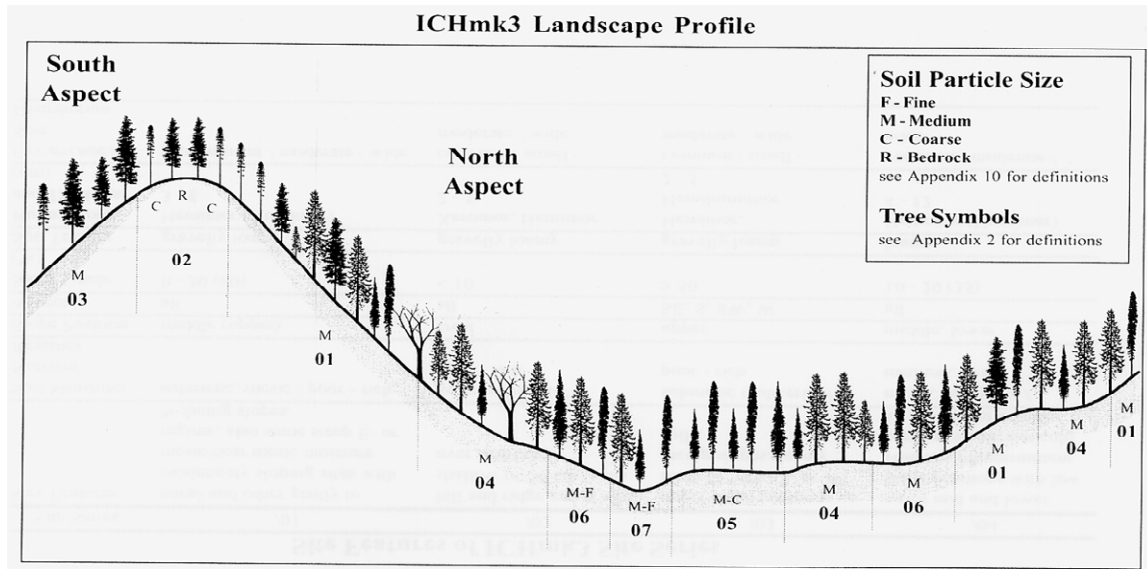
**List of Site Series Codes Defined for use in ICH mk3**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	RF	CwSxw - Falsebox - Knight's plume	mesic	All upper water shedding parts of the landscape
02	RM	FdCw - Wavy-leaved moss	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03	RS	CwSxw - Soopolallie	subxeric - submesic	Steep SW - Warm Dry Upper slopes
04	SO	CwSxw - Oak fern - Cat's-tail moss	subhygric	Non-frosty, Slightly Moist Upper Swales
05	SF	SxwCw - Oak fern	subhygric	Cold Moist, Frosty, Level Toe Slopes WT < 50 cm
06	RD	CwHw - Devil's club - Lady fern	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
07	RH	CwSxw - Devil's club - Horsetail	hygric	Cold Wet, Frosty, Level Toe Slopes WT < 50 cm
08	PI	Water sedge - Peat-moss (Wb07 - PI - Water sedge - Peat-moss)		Not Modelled, None Predicted
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock, snow or ice		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

### Landscape Profile Diagram: ICH mk3



### Example Attribute Class Rule File for ICH mk3 (arule6030)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
11	formfile	QWETI	SI_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	SI_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2SI_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	SI_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
18	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
19	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
20	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
21	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
22	formfile	SLOPE	SlopeLT30	5	25.00	42.50	42.50	0.00	30.00	5
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
26	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
27	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
28	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
29	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
30	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
31	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
32	geofile	L2Wet	Wet_LT200	5	200.00	200.00	200.00	0.00	250.00	50
33	geofile	Z2wet	WetZ_LT05	5	3.50	3.50	3.50	0.00	5.00	1.5
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
37	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for ICH mk3 (crule6030)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6002r	Crest	35	1	6002	02b Shallow Crest	MH6006s	Toe	35	10	6006	06 Not Frosty, Moist Toe
MH6002r	Dry_WI	25	1	6002		MH6006s	Sl_Wet2Wet	25	10	6006	
MH6002r	Hi_Ridge	20	1	6002		MH6006s	SlopeLT20	15	10	6006	
MH6002r	Shallow	10	1	6002		MH6006s	SlopeGT05	5	10	6006	
MH6002r	Coarse	10	1	6002		MH6006s	Med2Crs	10	10	6006	
MH6021r	Crest	35	2	6021	01 Deep Dry Ridge	MH6006s	Deep	10	10	6006	
MH6021r	Dry_WI	25	2	6021		MH6056s	Toe	35	11	6056	05 Frosty, Flat, Wet Toe
MH6021r	Hi_Ridge	20	2	6021		MH6056s	Sl_Wet2Wet	25	11	6056	
MH6021r	Deep	10	2	6021		MH6056s	SlopeLT10	15	11	6056	
MH6021r	Med2Crs	10	2	6021		MH6056s	SlopeLT05	5	11	6056	
MH6003s	Up2Low	35	3	6003	03 Steep SW Dry	MH6056s	Med2Crs	10	11	6056	
MH6003s	Sl_Dry_WI	25	3	6003		MH6056s	Deep	10	11	6056	
MH6003s	Steep_SW	30	3	6003		MH6005t	Toe2Valley	35	12	6005	05 Frosty, Flat, Wet Toe
MH6003s	Med2Crs	5	3	6003		MH6005t	Wet	25	12	6005	
MH6003s	Deep	5	3	6003		MH6005t	SlopeLT10	15	12	6005	
MH6013n	Up2Low	35	4	6013	01k Steep NE cool	MH6005t	SlopeLT05	5	12	6005	
MH6013n	Sl_Dry_WI	25	4	6013		MH6005t	Med2Fine	10	12	6005	
MH6013n	Steep_NE	30	4	6013		MH6005t	Deep	10	12	6005	
MH6013n	Med2Crs	5	4	6013		MH6065t	Toe2Valley	35	13	6065	06 Not Frosty, Moist Toe
MH6013n	Deep	5	4	6013		MH6065t	Wet	25	13	6065	
MH6001u	Crest2Mid	35	5	6001	01 < 30% UPPER	MH6065t	SlopeLT10	15	13	6065	
MH6001u	Dry2Med_WI	25	5	6001		MH6065t	SlopeGT05	5	13	6065	
MH6001u	SlopeLT30	20	5	6001		MH6065t	Med2Fine	10	13	6065	
MH6001u	Medium	10	5	6001		MH6065t	Deep	10	13	6065	
MH6001u	Deep	10	5	6001		MH6006v	Valley	35	14	6067	07 Frosty, Sloping Valley
MH6001m	Up2Mid	35	6	6001	01 < 30% MID	MH6006v	Wet2V_Wet	25	14	6067	
MH6001m	Sl_Dry2Med	25	6	6001		MH6006v	SlopeGT05	20	14	6067	
MH6001m	SlopeLT30	10	6	6001		MH6006v	Med2Fine	10	14	6067	
MH6001m	Medium	10	6	6001		MH6006v	Deep	10	14	6067	
MH6001m	Deep	10	6	6001		MH6007v	Valley	35	15	6007	07 Frosty, Flat Valley
MH6001m	Hi_Ridge	10	6	6001		MH6007v	Wet2V_Wet	25	15	6007	
MH6041u	Up2Mid	35	7	6041	01 5-20% Upper Draws	MH6007v	SlopeLT05	20	15	6007	
MH6041u	Wet	25	7	6041		MH6007v	Med2Fine	10	15	6007	
MH6041u	SlopeLT20	15	7	6041		MH6007v	Deep	10	15	6007	
MH6041u	SlopeGT05	5	7	6041		MH6057m	WetL_LT200	50	16	6057	07 Wet, Frosty Margins
MH6041u	Medium	10	7	6041		MH6057m	WetZ_LT05	50	16	6057	
MH6041u	Deep	10	7	6041		MH6077o	Organic	99	17	6077	07 Frosty Organics
MH6061u	Up2Mid	35	8	6061	06 Moist Upper Draw	MH6066s	Hi_Seep	80	18	6066	06 Moist, Drier Seepage
MH6061u	Wet2V_Wet	25	8	6061		MH6066s	Sl_Wet2Wet	10	18	6066	
MH6061u	SlopeLT20	15	8	6061		MH6066s	SlopeGT05	10	18	6066	
MH6061u	SlopeGT05	5	8	6061		MH6076s	Hi_Seep	80	19	6076	07 Wet, Frosty Seepage
MH6061u	Medium	10	8	6061		MH6076s	Wet2V_Wet	10	19	6076	
MH6061u	Deep	10	8	6061		MH6076s	SlopeLT05	10	19	6076	
MH6004L	Mid2Toe	35	9	6004	04 Sl Moist Toe						
MH6004L	Med2Sl_Wet	25	9	6004							
MH6004L	SlopeLT30	20	9	6004							
MH6004L	Medium	10	9	6004							
MH6004L	Deep	10	9	6004							



**PEM Entity Descriptions for: ICH mk3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6001	ICH mk3	01	RF	d	j	6001 areas were mapped on a wide range of well to moderately well drained upper to lower slope positions in areas mapped as MEDIUM TEXTURED. Gentle slope, deep, medium-textured soils
6002	ICH mk3	02	RM	s	r	6002 areas were mapped on the dry crests of high ridges that had been mapped as SHALLOW to bedrock. Crest position, medium textured shallow soil
6003	ICH mk3	03	RS	w	x	6003 areas were mapped on very steep (>50%) slopes with warm SW facing aspects. 6003 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. Significant slope, warm, aspect with deep, medium-textured soil
6004	ICH mk3	04	SO	d	y	6004 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6004 areas occupied hollows and swales in upper landform positions or lower to toe slope positions on long or gentle slopes that were just slightly moister than normal mesic 01. 6004 areas did not extend into lower and wetter locations in the bottoms of hollows or draws or even into the wetter toe slope seepage locations. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6005	ICH mk3	05	SF	j	y	6005 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6005 areas occupy gently sloping to nearly level positions on toe-slopes and in swales, hollows and valleys that accumulate and retain high levels of both sub-soil moisture and cold air. These wet frosty areas are predicted to be occupied mainly by the wet, frosty 05 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6006	ICH mk3	06	RD	d	j	6006 areas were mapped on gentle to moderate slopes in lower to toe slope landform positions in areas mapped as MEDIUM TEXTURED that were moistened by seepage from upslope but that had sufficient slope in the down slope direction that they did not accumulate moisture or cold air and develop permanently high water tables or frequent frosts. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6007	ICH mk3	07	RH	j	y	6007 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6007 areas occupy the lowest and wettest portions of level to depressional landform positions such as toe slopes, valleys, draws and hollows that accumulate and hold high levels of both moisture and frost. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils
6011	ICH mk3	01	RF	d	x	6011 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED and as having low to moderate relief. 6011 areas were mapped on the dry crests of low knolls and ridges that had been mapped as DEEP to bedrock. 6011 areas are predicted to be just a slightly drier phase of typical 01. Crest position, medium textured deep soil.
6013	ICH mk3	01	RF	k	x	6013 areas were mapped on very steep (>50%) slopes with cooler NE facing aspects. 6013 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6013 areas were mapped only to counter-balance definitions for the steep SW facing 6003 unit. Significant slope, cool aspect with deep, medium-textured soil. 6013 areas are predicted to be dominated by the 01 Site Series.
6021	ICH mk3	01	RF	d	r	6021 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock. Crest position, medium textured deep soil.
6041	ICH mk3	01	RF	d	y	6041 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6041 areas occupy shallow hollows and draws in mid to upper landform positions that are slightly more moist than normal mesic 01 but that are not sufficiently moist to support development of a moist site series (04/06) or frosty and wet site series (05). 6041 areas were originally intended to delineate areas of slightly moist 04 Site Series. 6041 areas are now predicted to consist dominantly of normal mesic 01 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6048	ICH mk3	04	SO	d	y	6048 areas were mapped ONLY in areas of VERY HIGH RELIEF and MEDIUM TEXTURES. 6048 areas occupy lower to toe slope positions similar to those of 6006 except that they occur at the base of very long gentle slopes that are just slightly moister than normal mesic 01. 6048 areas do not extend into lower and wetter locations in the bottoms of hollows or draws or even into the wetter toe slope seepage locations. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6056	ICH mk3	05	SF	j	y	6056 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6056 areas occupy the same relative landform positions as 6006 areas except that slope gradients are less than 5%. It is assumed that cold air is more likely to accumulate on these lower gradient slopes and to lead to an increased incidence of frost. 6056 areas are the frosty equivalent of 6006 areas. These wet frosty areas are predicted to be occupied mainly by the wet, frosty 05 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6057	ICH mk3	07	RH	j	y	6057 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6057 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of both moisture and frost. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils
6058	ICH mk3	05	SF	j	y	6058 areas were mapped ONLY in areas of very high relief and MEDIUM TEXTURES. 6058 areas occupy flat, wet, low lying valley bottoms with slope gradients less than 5%. It is assumed that cold air is very likely to accumulate in these low gradient areas and to lead to an increased incidence of frost. These wet frosty areas are predicted to be occupied mainly by the wet, frosty 05 Site Series along with the very wet and frosty 07 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6061	ICH mk3	06	RD	d	y	6061 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6061 areas occupy the lowest and wettest portions of shallow hollows and draws in mid to upper landform positions. 6061 areas receive moisture from seepage but pass it on down slope and do not retain it to develop permanently high water tables. 6061 areas also allow cold air to drain further down slope and so are not strongly affected by frequent frosts. Moist, receiving, gentle, lower slope position; deep, medium-textured soils.
6065	ICH mk3	06	RD	j	y	6065 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6065 areas occupy the same relative landform positions as 6005 areas except that slope gradients are greater than 5%. It is assumed that cold air is less likely to accumulate on these higher gradient slopes and that there will be a decreased incidence of frost. 6065 areas are the non-frosty equivalent of 6005 areas. These wet non-frosty areas are predicted to be occupied mainly by the wet, seepage 06 Site Series with some component of moist, frosty 05 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6066	ICH mk3	06	RD	d	y	6066 areas were mapped in all areas where interpreters had recognized SEEPAGE. The intent of the SEEPAGE class was normally to recognize areas that were just slightly wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, slightly wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 06 Site Series and moist, cold, frosty 05 Site Series to areas mapped as 6066..
6067	ICH mk3	07	RH	d	y	6067 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 6067 areas occupy gently sloping (>5%) valleys, draws and hollows that accumulate high levels of moisture and may accumulate cold air and frost. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6068	ICH mk3	06	RD	d	y	6068 areas were mapped ONLY in areas of very high relief and MEDIUM TEXTURES. 6068 areas occupy gently to moderately sloping valley side slopes with slope gradients greater than 5%. These areas would normally have been modeled as mesic 01 Site Series or perhaps slightly moist 04 Site Series. 6068 areas were defined and mapped to force lower to toe slopes on the sides of main valleys in areas of very high relief to be recognized as being affected by non-frosty seepage conditions consistent with recognition of the 06 Site Series. Moist, receiving, gentle, lower slope position; deep, medium-textured soils
6076	ICH mk3	07	RH	d	y	6076 areas were mapped in the lower, flatter and moister portions of areas where interpreters had recognized SEEPAGE. The intent of the SEEPAGE class was normally to recognize areas that were just slightly wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, just slightly wetter than mesic. These lower, flatter and wetter portions of seepage areas were split out as separate entities in Dec 2007 for areas located within the 100 Mile House TSA ONLY.
6077	ICH mk3	07	RH	p	y	6077 areas were mapped in ALL locations where interpreters had recognized forested ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by the cold, frosty, wet 07 Site Series with perhaps lesser components of cold, moist frosty 05 Site Series. Gentle slope or depressional areas with deep, medium - textured soils
6091	ICH mk3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6092	ICH mk3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6093	ICH mk3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
6094	ICH mk3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6095	ICH mk3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
6096	ICH mk3	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
6097	ICH mk3	00	RO			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.

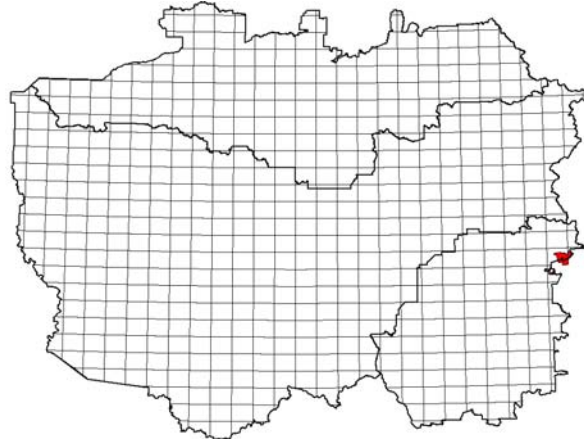
**PEM Entity Extended Legend with Proportions of Site Series for: ICH mk3**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6001	6001	01	ICH mk3	9	01	RF	d	j	1	06	RD			
6002	6002	02	ICH mk3	8	02	RM	s	r	2	01	RF			
6003	6003	03	ICH mk3	9	03	RS	w	x	1	01	RF			
6004	6004	04	ICH mk3	7	04	SO	d	y	3	01	RF			
6005	6005	05	ICH mk3	8	05	SF	j	y	2	06	RD			
6006	6006	06	ICH mk3	8	06	RD	d	j	2	01	RF			
6007	6007	07	ICH mk3	8	07	RH	j	y	2	05	SF			
6011	6001	01	ICH mk3	10	01	RF	d	x						
6013	6013	01	ICH mk3	10	01	RF	k	x						
6021	6021	01	ICH mk3	6	01	RF	d	r	4	02	RM			
6041	6001	01	ICH mk3	8	01	RF	d	y	2	04	SO			
6048	6004	04	ICH mk3	6	04	SO	d	y	4	01	RF			
6056	6005	05	ICH mk3	7	05	SF	j	y	3	06	RD			
6057	6057	07	ICH mk3	8	07	RH	j	y	2	05	SF			
6058	6005	05	ICH mk3	6	05	SF	j	y	4	07	RH			
6061	6006	06	ICH mk3	8	06	RD	d	y	2	07	RH			
6065	6006	06	ICH mk3	6	06	RD	j	y	4	05	SF			
6066	6066	06	ICH mk3	7	06	RD	d	y	3	05	SF			
6067	6067	07	ICH mk3	7	07	RH	d	y	3	06	RD			
6068	6006	06	ICH mk3	8	06	RD	d	y	2	04	SO			
6076	6076	07	ICH mk3	7	07	RH	d	y	3	06	RD			
6077	6077	07	ICH mk3	8	07	RH	p	y	2	05	SF			
6091	6091	OW	ICH mk3	10	00	OW								
6092	6092	WE	ICH mk3	10	00	WE	d	y						
6093	6093	ME	ICH mk3	10	00	ME								
6094	6094	PA	ICH mk3	10	00	PA								
6095	6095	BR	ICH mk3	10	00	BR								
6096	6096	DL	ICH mk3	10	00	DL								
6097	6097	RO	ICH mk3	10	00	RO								



**BGC Unit: ICH mw3****LMES Zone ID: 61****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	5,358.9	0.43%
Cariboo Region	5,358.9	0.07%

**List of Site Series Codes Defined for use in ICH mw3**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	HF	HwCw - Falsebox - Feathermoss	mesic	All upper water shedding parts of the landscape
02	DJ	Fd - Juniper - Cladina	xeric - very xeric	Shallow Crests, Thin, Dry Soils
05	RF	CwFd - Falsebox	submesic - mesic	Steep SW & Steep NE- Drier Upper slopes
06	HO	CwHw - Oak fern	subhygric	Non-frosty, Slightly Moist Upper Swales
08	RC	CwSxw - Skunk cabbage (Ws10 - CwSx - Skunk cabbage)		Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
10		Sb - Buckbean - Peat-moss (Wb11 - Sb - Buckbean - Peat-moss)		Cold Wet, Level Toe Slopes WT < 50 cm
11				Sloping, Moist, Organic Depressions WT < 100 cm
12				Flat, Wet, Organic Depressions WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

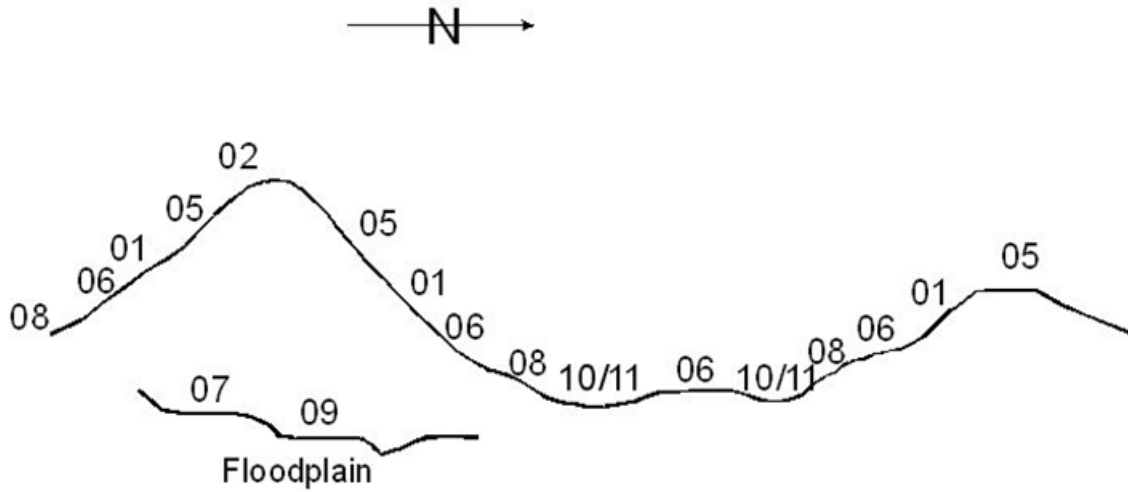
**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007.

Concepts and alpha codes for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist.

**Landscape Profile Diagram: ICH mw3**

Subzone: ICHmw3 (61)



**Example Attribute Class Rule File for ICH mw3 (arule6130)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	5	90.00	80.00	80.00	85.00	100.00	5
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	40.00	80.00	20
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
7	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1
13	formfile	LNQAREA	Drier	1	7.30	7.30	7.30	6.40	8.10	0.9
14	formfile	LNQAREA	Less_dry	1	8.80	8.80	8.80	8.20	9.40	0.6
15	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
16	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
17	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
18	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
19	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
20	formfile	SLOPE	Steep	4	30.00	30.00	30.00	30.00	100.00	2.5
21	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
22	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
23	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
24	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
25	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
26	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
30	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
31	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
32	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
35	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
37	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for ICH mw3 (crule6030)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6102r	Crest	35	1	6102	02 Shallow Crest	MH6116u	Up2Mid	35	13	6161	06 Sl Moist Up Draw
MH6102r	Dry_WI	25	1	6102		MH6116u	Wet	25	13	6161	
MH6102r	Hi_Ridge	20	1	6102		MH6116u	SlopeLT20	15	13	6161	
MH6102r	Shallow	40	1	6102		MH6116u	SlopeGT05	5	13	6161	
MH6102r	Med2Crs	10	1	6102		MH6116u	Med2Crs	5	13	6161	
MH6152r	Crest	35	2	6152	05 Deep Dry Ridge	MH6116u	Deep	5	13	6161	
MH6152r	Dry_WI	25	2	6152		MH6118u	Up2Mid	35	14	6110	10 Flat, Wet UP Draw
MH6152r	Hi_Ridge	20	2	6152		MH6118u	Wet2V_Wet	25	14	6110	
MH6152r	Deep	10	2	6152		MH6118u	SlopeLT20	15	14	6110	
MH6152r	Med2Crs	10	2	6152		MH6118u	SlopeLT05	5	14	6110	
MH6105k	Crest	35	3	6105	05 Deep Low Knoll	MH6118u	Med2Crs	10	14	6110	
MH6105k	Dry_WI	25	3	6105		MH6118u	Deep	10	14	6110	
MH6105k	Low_Knoll	20	3	6105		MH6161L	Mid2Toe	35	15	6161	06 Sl Moist Lower Slope
MH6105k	Deep	10	3	6105		MH6161L	Med2Sl_Wet	25	15	6161	
MH6105k	Med2Crs	10	3	6105		MH6161L	SlopeLT30	20	15	6161	
MH6153n	Crest2Mid	30	4	6153	05 Steep NE cool dry	MH6161L	Med2Crs	10	15	6161	
MH6153n	Dry2Med_WI	20	4	6153		MH6161L	Deep	10	15	6161	
MH6153n	Steep	50	4	6153		MH6108s	Toe	35	16	6108	08 Moist, Sloping Toe
MH6153n	NE_Aspect	30	4	6153		MH6108s	Sl_Wet2Wet	25	16	6108	
MH6153n	Med2Crs	10	4	6153		MH6108s	SlopeLT20	15	16	6108	
MH6153n	Deep	10	4	6153		MH6108s	SlopeGT05	5	16	6108	
MH6153s	Crest2Mid	30	5	6154	05 Steep SW warm dry	MH6108s	Med2Crs	10	16	6108	
MH6153s	Dry2Med_WI	20	5	6154		MH6108s	Deep	10	16	6108	
MH6153s	Steep	50	5	6154		MH6188s	Toe	35	17	6110	10 Wet Level Toe
MH6153s	SW_Aspect	30	5	6154		MH6188s	Sl_Wet2Wet	25	17	6110	
MH6153s	Med2Crs	10	5	6154		MH6188s	SlopeLT10	15	17	6110	
MH6153s	Deep	10	5	6154		MH6188s	SlopeLT05	5	17	6110	
MH6151s	Up2Mid	30	6	6151	01 Steep SW MID-LOW	MH6188s	Med2Crs	10	17	6110	
MH6151s	Med2Sl_Wet	20	6	6151		MH6188s	Deep	10	17	6110	
MH6151s	Steep	50	6	6151		MH6110t	Toe2Valley	35	18	6110	10 Wet Level Toe
MH6151s	SW_Aspect	30	6	6151		MH6110t	Wet	25	18	6110	
MH6151s	Med2Crs	10	6	6151		MH6110t	SlopeLT10	15	18	6110	
MH6151s	Deep	10	6	6151		MH6110t	SlopeLT05	5	18	6110	
MH6141n	Up2Mid	30	7	6141	01 Steep NE MID-LOW	MH6110t	Med2Crs	10	18	6110	
MH6141n	Dry2Med_WI	20	7	6141		MH6110t	Deep	10	18	6110	
MH6141n	Steep	50	7	6141		MH6111t	Toe2Valley	35	19	6118	10 Wet Sloping Toe
MH6141n	NE_Aspect	30	7	6141		MH6111t	Wet	25	19	6118	
MH6141n	Med2Crs	10	7	6141		MH6111t	SlopeLT10	15	19	6118	
MH6141n	Deep	10	7	6141		MH6111t	SlopeGT05	5	19	6118	
MH6111n	Crest2Mid	35	8	6101	01 < 10% NE UPPER	MH6111t	Med2Crs	10	19	6118	
MH6111n	Dry2Med_WI	25	8	6101		MH6111t	Deep	10	19	6118	
MH6111n	NE_Aspect	15	8	6101		MH6180v	Valley	35	20	6180	08 Moist, Sloping Valley
MH6111n	SlopeLT10	30	8	6101		MH6180v	Wet2V_Wet	25	20	6180	
MH6111n	Med2Crs	5	8	6101		MH6180v	SlopeGT05	20	20	6180	
MH6111n	Deep	5	8	6101		MH6180v	Med2Crs	10	20	6180	
MH6111s	Crest2Mid	35	9	6101	01 < 10% SW UPPER	MH6180v	Deep	10	20	6180	
MH6111s	Dry2Med_WI	25	9	6101		MH6100v	Valley	35	21	6110	10 Wet Flat Valley
MH6111s	SW_Aspect	15	9	6101		MH6100v	Wet2V_Wet	25	21	6110	
MH6111s	SlopeLT10	30	9	6101		MH6100v	SlopeLT05	20	21	6110	
MH6111s	Med2Crs	5	9	6101		MH6100v	Med2Crs	10	21	6110	
MH6111s	Deep	5	9	6101		MH6100v	Deep	10	21	6110	
MH6151u	Crest2Mid	35	10	6152	05 10-30% Dry UPPER	MH6169m	WetL_LT200	50	22	6169	10 Wet Margin
MH6151u	Dry2Med_WI	25	10	6152		MH6169m	WetL_LT05	50	22	6169	
MH6151u	Drier	10	10	6152		MH6186s	Hi_Seep	90	23	6186	06 Sl. Moist Seepage
MH6151u	SlopeLT30	20	10	6152		MH6186s	Sl_Wet2Wet	10	23	6186	
MH6151u	SlopeGT10	10	10	6152		MH6186s	Hi_Seep	90	24	6186	10 Wetter Seepage
MH6151u	Med2Crs	5	10	6152		MH6186s	Wet2V_Wet	10	24	6186	
MH6151u	Deep	5	10	6152		MH6166t	Mid2Toe	35	25	6108	08 Sl Moist Seepage Toe
MH6115u	Crest2Mid	35	11	6101	01 10-30% Mesic UPPER	MH6166t	Wet	25	25	6108	
MH6115u	Dry2Med_WI	25	11	6101		MH6166t	SlopeLT20	15	25	6108	
MH6115u	Less_dry	10	11	6101		MH6166t	SlopeGT05	5	25	6108	
MH6115u	SlopeLT30	20	11	6101		MH6166t	Med2Crs	5	25	6108	
MH6115u	SlopeGT10	10	11	6101		MH6166t	Deep	5	25	6108	
MH6115u	Med2Crs	5	11	6101		MH6111o	Organic	80	26	6111	11 Wet Organics
MH6115u	Deep	5	11	6101		MH6111o	Sl_Wet2Wet	15	26	6111	
MH6101m	Up2Mid	35	12	6101	01 < 30% Mesic UPPER	MH6111o	SlopeGT05	5	26	6111	
MH6101m	Sl_Dry2Med	25	12	6101		MH6111o	Organic	80	27	6112	12 Very Wet Organics
MH6101m	SlopeLT30	20	12	6101		MH6111o	Wet2V_Wet	15	27	6112	
MH6101m	Med2Crs	5	12	6101		MH6111o	SlopeLT05	5	27	6112	
MH6101m	Deep	5	12	6101							
MH6101m	Hi_Ridge	10	12	6101							



**PEM Entity Descriptions for: ICH mw3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6101	ICH mw3	01		d	j	6101 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 6101 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and low, broad crests to lower to toe slopes (< 30%) and on ALL ASPECTS. This is the predominant site series in the BEC variant.
6102	ICH mw3	02		s	r	6102 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 6102 occurs on the driest crest positions of high ridges that are shallow to bedrock. 6102 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
6105	ICH mw3	05		d	x	6105 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 6105 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 05 Site Series along with perhaps a minor component of normal mesic 01 Site Series.
6108	ICH mw3	08		d	j	6108 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6108 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6108 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6110	ICH mw3	10		d	j	6110 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6110 areas occur in the wettest and flattest portions of valleys and draws in upper to lower landform positions (< 5%). The regional ecologist indicated that these wet, level draws would most likely be dominated by the very moist 10 Site Series.
6112	ICH mw3	12		p	j	6112 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 12 site series. Hygric toe, level or depressions. Deep, organic-textured soil. NO areas of 6112 were mapped.
6118	ICH mw3	10		d	j	6118 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6118 occupies level to gently sloping lower to toe slopes (5-10%) that are quite wet. 6118 is a very moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6141	ICH mw3	01		k	d	6141 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6141 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in MID to LOWER landform positions. 6141 areas are dominated by the normal mesic 01 Site Series.
6151	ICH mw3	01		w	x	6151 was mapped ONLY in areas of MEDIUM TEXTURED materials. 6151 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP MID to LOWER SW slopes are dominated by the normal mesic 01 Site Series.
6152	ICH mw3	05		d	x	6152 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 6152 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 05 site series along with some potential inclusions of 01 and 02 site series.
6153	ICH mw3	05		k	d	6153 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6153 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 6153 areas are dominated by the slightly drier 05 Site Series.

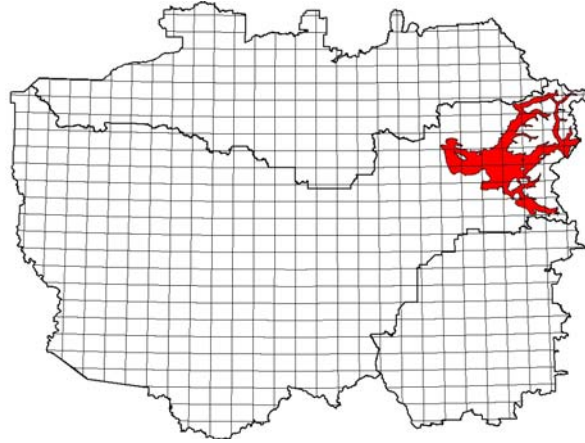
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6154	ICH mw3	05		w	x	6154 was mapped ONLY in areas of MEDIUM TEXTURED materials. 6154 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 05 Site Series.
6161	ICH mw3	06		d	j	6161 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6161 areas occur in gently sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these gently sloping upper draws would most likely be dominated by the slightly moist 06 Site Series.
6168	ICH mw3	06		d	j	6168 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 06 and 08 Site Series.
6169	ICH mw3	10		d	j	6169 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6169 areas occupy the low-lying margins surrounding wetlands and open water bodies. 6169 areas are predicted to consist of a mixture of the wettest Site Series including 10 and 08.
6180	ICH mw3	08		d	y	6180 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6180 areas occur in sloping valleys and draws and along the margins of active stream channels. 6180 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
6186	ICH mw3	10		d	j	6186 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the very wet 10 and 08 site series.
6191	ICH mw3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6192	ICH mw3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6193	ICH mw3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
6194	ICH mw3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6195	ICH mw3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
6196	ICH mw3	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
6197	ICH mw3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6198	ICH mw3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6199	ICH mw3	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ICH mw3**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6101	6101	01	ICH mw3	9	01		d	j	1	05				
6102	6102	02	ICH mw3	8	02		s	r	1	03		1	01	
6105	6105	05	ICH mw3	7	05		d	x	3	01				
6108	6108	08	ICH mw3	7	08		d	j	3	06				
6110	6110	10	ICH mw3	8	10		d	j	2	06				
6112	6112	12	ICH mw3	9	12		p	j	1	11				
6118	6118	10	ICH mw3	6	10		d	j	4	11				
6141	6141	01	ICH mw3	7	01		k	d	3	05				
6151	6151	01	ICH mw3	8	01		w	x	2	05				
6152	6152	05	ICH mw3	8	05		d	x	2	01				
6153	6153	05	ICH mw3	7	05		k	d	3	01				
6154	6154	05	ICH mw3	8	05		w	x	2	01				
6161	6161	06	ICH mw3	10	06		d	j						
6168	6168	06	ICH mw3	9	06		d	j	1	08				
6169	6169	10	ICH mw3	7	10		d	j	3	08				
6180	9180	08	ICH mw3	7	08		d	y	3	06				
6186	6186	10	ICH mw3	7	10		d	j	3	08				
6191	6191	OW	ICH mw3	10	00	OW								
6192	6192	WE	ICH mw3	10	00	WE	d	y						
6193	6193	ME	ICH mw3	10	00	ME								
6194	6194	PA	ICH mw3	10	00	PA								
6195	6195	BR	ICH mw3	10	00	BR								
6196	6196	DL	ICH mw3	10	00	DL								
6197	6197	TA	ICH mw3	10	00	TA								
6198	6198	AV	ICH mw3	10	00	AV								
6199	6199	GL	ICH mw3	10	00	GL								

**BGC Unit: ICH wk2****LMES Zone ID: 62****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	203,761.6	4.13%
100 Mile House TSA	0.0	0.00%
Cariboo Region	203,761.6	2.47%

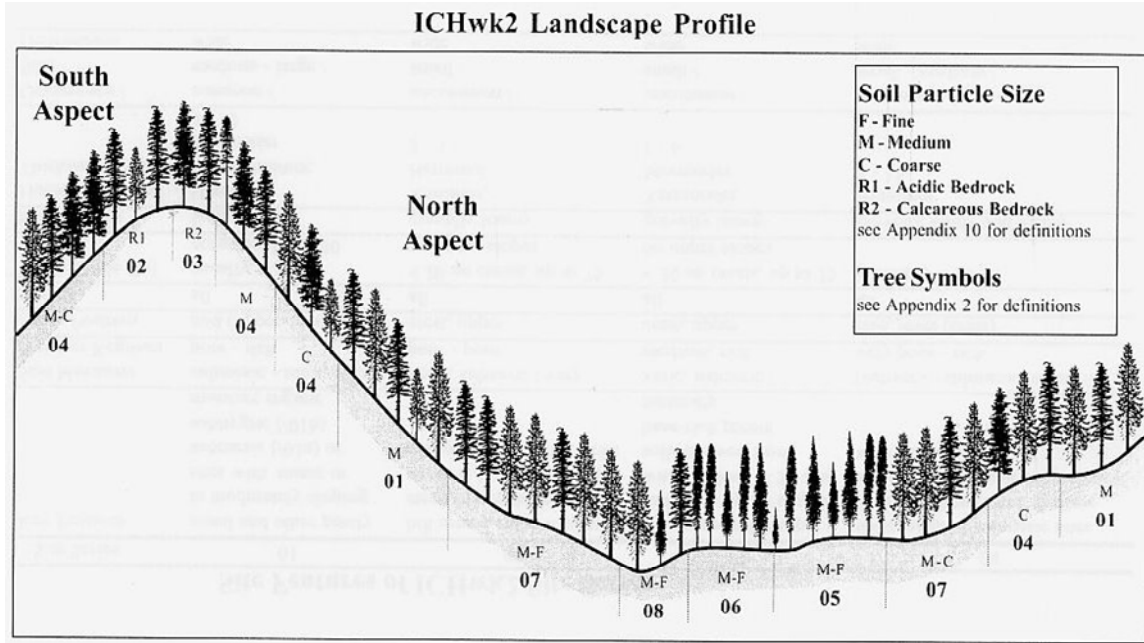
**List of Site Series Codes Defined for use in ICH wk2**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	HO	CwHw - Oak fern, Typic		All upper water shedding parts of the landscape
02	HC	HwCw - Cladonia	xeric - subxeric	ACIDIC, Shallow Crests, Thin, Dry Soils
03	RJ	CwFd - Juniper - Falsebox	xeric - subxeric	BASIC, Shallow Crests, Thin, Dry Soils
04	HM	HwCw - Step moss	submesic - subxeric	Steep SW , Steep NE & COARSE- Drier Upper slopes
05	SO	SxwCw - Oak fern	subhygric	Cold, Moist, Frosty Toe Slopes, WT > 50 cm
06	ST	Sxw - Twinberry - Oak fern	subhygric	Cold Wet, Level Frosty Toe Slopes WT < 50 cm
07	RD	CwHw - Devil's club - Lady fern	subhygric	Non-frosty, Slightly Moist Seepage Slopes, WT > 50 cm
08	RC	CwSxw - Skunk cabbage (Ws10 - CwSx - Skunk cabbage)	hygric - subhygric	Flat, Wet, Frosty Valleys & Depressions WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: ICH wk2**



**Example Attribute Class Rule File for ICH mw3 (arule6230)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	20.00	20.00	20.00	8.00	32.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	7.00	7.00	7.00	1.00	13.00	6
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	6.80	6.80	6.80	0.00	7.30	0.5
11	formfile	QWETI	Sl_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.50	10.50	10.50	9.00	12.00	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
18	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
19	formfile	SLOPE	SlopeGT10	4	8.00	8.00	8.00	6.00	99.00	2
20	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	99.00	2
21	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
22	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
23	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
24	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
25	formfile	SLOPE	SlopeLT30	5	25.00	42.50	42.50	0.00	30.00	5
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Med2CrS	4	45.00	40.00	40.00	40.00	100.00	10
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
32	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
35	geofile	L2Wet	Wett_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5
37	relzfile	Z2st	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
38	relzfile	Z2st	Low_Knoll	5	20.00	20.00	20.00	0.00	25.00	5
39	geofile	TEXTURE	Acidic	4	50.00	50.00	50.00	45.00	100.00	5
40	geofile	TEXTURE	Basic	5	45.00	40.00	40.00	0.00	50.00	5

### Example Fuzzy Ecological Class Rule File for ICH wk2 (crule6230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6202r	Crest	30	1	6202 02	Acid Shallow Crest	MH6281u	Up2Mid	35	11	6281 08	Up Wet Level Swale
MH6202r	Dry_WI	20	1	6202		MH6281u	Wet2V_Wet	25	11	6281	
MH6202r	Hi_Ridge	20	1	6202		MH6281u	SlopeLT20	15	11	6281	
MH6202r	Shallow	40	1	6202		MH6281u	SlopeLT05	5	11	6281	
MH6202r	Med2Crs	10	1	6202		MH6281u	Med2Crs	10	11	6281	
MH6202r	Acidic	10	1	6202		MH6281u	Deep	10	11	6281	
MH6222r	Crest	30	2	6222 04	Acid Deep Ridge	MH6201L	Mid2Toe	35	12	6201 01	Lower Shedding
MH6222r	Dry_WI	20	2	6222		MH6201L	Med2Sl_Wet	25	12	6201	
MH6222r	Hi_Ridge	20	2	6222		MH6201L	SlopeLT30	20	12	6201	
MH6222r	Deep	10	2	6222		MH6201L	Med2Crs	10	12	6201	
MH6222r	Med2Crs	10	2	6222		MH6201L	Deep	10	12	6201	
MH6222r	Acidic	10	2	6222		MH6207s	Toe	35	13	6207 07	Moist Sloping Toe
MH6203r	Crest	30	3	6203 03	Basic Shallow Crest	MH6207s	Sl_Wet2Wet	25	13	6207	
MH6203r	Dry_WI	20	3	6203		MH6207s	SlopeLT30	10	13	6207	
MH6203r	Hi_Ridge	20	3	6203		MH6207s	SlopeGT10	10	13	6207	
MH6203r	Shallow	40	3	6203		MH6207s	Med2Crs	10	13	6207	
MH6203r	Med2Crs	10	3	6203		MH6207s	Deep	10	13	6207	
MH6203r	Basic	10	3	6203		MH6205s	Toe	35	14	6206 06	Wet, Frosty Toe
MH6231r	Crest	30	4	6233 04	Basic Deep Ridge	MH6205s	Sl_Wet2Wet	25	14	6206	
MH6231r	Dry_WI	20	4	6233		MH6205s	SlopeLT20	10	14	6206	
MH6231r	Hi_Ridge	20	4	6233		MH6205s	SlopeLT10	10	14	6206	
MH6231r	Deep	10	4	6233		MH6205s	Med2Crs	10	14	6206	
MH6231r	Med2Crs	10	4	6233		MH6205s	Deep	10	14	6206	
MH6231r	Basic	10	4	6233		MH6206t	Toe2Valley	35	15	6206	
MH6242k	Crest	35	5	6242 01	Deep Low Knoll	MH6206t	Wet	25	15	6206 06	Wet, Frosty Toe
MH6242k	Dry_WI	25	5	6242		MH6206t	SlopeLT10	15	15	6206	
MH6242k	Low_Knoll	20	5	6242		MH6206t	SlopeLT05	5	15	6206	
MH6242k	Deep	10	5	6242		MH6206t	Med2Fine	10	15	6206	
MH6242k	Med2Crs	10	5	6242		MH6206t	Deep	10	15	6206	
MH6204s	Up2Low	35	6	6204 04	Steep SW warm dry	MH6265t	Toe2Valley	35	16	6206 06	Wet, Frosty Toe
MH6204s	Sl_Dry_WI	25	6	6204		MH6265t	Wet	25	16	6206	
MH6204s	Steep_SW	30	6	6204		MH6265t	SlopeLT10	15	16	6206	
MH6204s	Med2Crs	5	6	6204		MH6265t	SlopeGT05	5	16	6206	
MH6204s	Deep	5	6	6204		MH6265t	Med2Fine	10	16	6206	
MH6204n	Up2Low	35	7	6241 04	Steep NE cool dry	MH6265t	Deep	10	16	6206	
MH6204n	Sl_Dry_WI	25	7	6241		MH6286v	Valley	35	17	6286 06	Wet, Sloping Valley
MH6204n	Steep_NE	30	7	6241		MH6286v	Wet2V_Wet	25	17	6286	
MH6204n	Med2Crs	5	7	6241		MH6286v	SlopeGT05	20	17	6286	
MH6204n	Deep	5	7	6241		MH6286v	Med2Fine	10	17	6286	
MH6204u	Crest2Mid	35	8	6244 04	Dry Upper Crowns	MH6286v	Deep	10	17	6286	
MH6204u	Dry2Med_WI	25	8	6244		MH6008v	Valley	35	18	6208 08 V.	Wet, Flat Valley
MH6204u	SlopeLT30	20	8	6244		MH6008v	Wet2V_Wet	25	18	6208	
MH6204u	Medium	10	8	6244		MH6008v	SlopeLT05	20	18	6208	
MH6204u	Deep	10	8	6244		MH6008v	Med2Fine	10	18	6208	
MH6201m	Up2Mid	35	9	6201 01	Up - Low Shedding	MH6008v	Deep	10	18	6208	
MH6201m	Sl_Dry2Med	25	9	6201		MH6287m	WetL_LT200	50	19	6287 08 V.	Wet, Margins
MH6201m	SlopeLT30	20	9	6201		MH6287m	WetL_LT05	50	19	6287	
MH6201m	Med2Crs	10	9	6201		MH6288o	Organic	99	20	6288 08 V.	Wet, Organics
MH6201m	Deep	10	9	6201		MH6277s	Hi_Seep	90	21	6277 07	Moist Seepage
MH6271u	Up2Mid	35	10	6271 07	Up Sloping Swale	MH6277s	Med2Fine	10	21	6277	
MH6271u	Wet	25	10	6271							
MH6271u	SlopeLT20	15	10	6271							
MH6271u	SlopeGT05	5	10	6271							
MH6271u	Med2Crs	10	10	6271							
MH6271u	Deep	10	10	6271							

**PEM Entity Descriptions for: ICH wk2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6201	ICH wk2	01	HO	d	j	6201 areas were mapped on a wide range of well to moderately well drained upper to lower slope positions in areas mapped as MEDIUM TEXTURED. Gentle slope, deep, medium-textured soils.
6202	ICH wk2	02	HC	s	r	6202 areas were mapped on the dry crests of high ridges with ACIDIC parent materials that had been mapped as SHALLOW to bedrock. The regional ecologist indicated that it was possible to draw a simple boundary that would separate areas of ACIDIC rock from areas of BASIC rock. The rules presently contain a reference to an input payer that does not yet exist that will ultimately provide a means of separating acidic from basic rocks. 6202 is ONLY predicted for areas mapped as shallow to bedrock and where the regional ecologist had indicated the parent rocks were ACIDIC. Crest position, medium to coarse textured shallow soil
6203	ICH wk2	03	RJ	s	r	6203 areas were mapped on the dry crests of high ridges with BASIC parent materials that had been mapped as SHALLOW to bedrock. The regional ecologist indicated that it was possible to draw a simple boundary that would separate areas of ACIDIC rock from areas of BASIC rock. The rules presently contain a reference to an input payer that does not yet exist that will ultimately provide a means of separating acidic from basic rocks. 6203 is ONLY predicted for areas mapped as shallow to bedrock and where the regional ecologist had indicated the parent rocks were BASIC. Crest position, medium to coarse textured shallow soil
6204	ICH wk2	04	HM	w	x	6204 areas were mapped in steep SW facing hillslopes (>35%) with warm aspects in areas mapped as both MEDIUM and COARSE TEXTURED. Significant slope, warm aspect, deep, medium-coarse textured soils. The 04 Site Series is the only drier than mesic Site Series defined for the ICHwk2 and so it applies to all drier conditions. Some shallow 02 or 03 Site series may be included in 6204 areas. Upper slope position, deep, medium textured soil.
6205	ICH wk2	05	SO	j	y	6205 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED and ONLY in areas of VERY LOW RELIEF. 6205 areas occupy a narrow zone that occurs in upper toe slopes that occur topographically above wetter, frostier areas of 6206. 6205 areas are of very limited extent and are predicted to be occupied principally by the cold, moist frosty 05 Site Series but may also contain some frostier 06 and some less frosty, but still moist 07 Site Series. Gentle slope; deep, medium- textured soils, moisture receiving sites.
6206	ICH wk2	06	ST	j	y	6206 areas were mapped in moist lower to toe slopes that accumulated both cold air and seepage in areas mapped as MEDIUM TEXTURED. These lower to toe slopes experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6206 areas generally occur topographically below 6207 areas and above channels, hollows and draws occupied by wetter Site Series such as 08. Lower slope, receiving site; deep, medium - textured soils
6207	ICH wk2	07	RD	d	y	6207 areas were mapped on gentle to moderate slopes in lower to toe slope landform positions in areas mapped as MEDIUM TEXTURED that were moistened by seepage from upslope but that had sufficient slope in the down slope direction that they did not accumulate moisture or cold air and develop permanently high water tables or frequent frosts. 6207 areas are predicted to be occupied by slightly moist, NON-FROSTY seepage conditions consistent with the concepts of the non-frosty 07 Site Series. Lower to toe slope, non-frosty, moisture receiving site; deep, medium - textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6208	ICH wk2	08	RC	j	y	6208 areas were mapped on ALL TEXTURES of materials. 6208 areas occur in the lowest, wettest and flattest portions of draws, hollows and depressions with slopes less than 5%. 6208 areas mostly occur in level to very gently sloping valley bottoms. These level valley bottoms tend to have persistent seepage within 50 cm of the surface and are also usually very frosty. 6208 areas are predicted to contain mainly very wet, very frosty 08 Site Series along with some moist frosty 06 Site Series. (Flat Valleys). Toe slope or depression; deep, medium to coarse - textured soil
6217	ICH wk2	07	RD	c	y	6217 areas were mapped in gently to moderately sloping draws, hollows and swales in mid to upper landform positions in areas mapped as COARSE TEXTURED. 6217 areas were meant to allow for recognition of moister seepage areas in draws and hollows in upper slope positions in coarse areas. 6217 areas are predicted to be occupied by slightly moist, non-frosty seepage conditions consistent with the concepts of the non-frosty 07 Site Series. Mid to upper slope, receiving site; deep, medium - textured soils
6218	ICH wk2	08	RC	c	y	6218 areas were mapped in the lowest, flattest (< 5% slope) and wettest portions of gently to moderately sloping draws, hollows and swales in mid to upper landform positions in areas mapped as COARSE TEXTURED. 6218 areas were meant to allow for recognition of wet, flat conditions in draws and hollows in upper slope positions. 6218 areas are predicted to be occupied by wet, possibly frosty seepage conditions consistent with the concepts of the wet frosty 08 Site Series. Mid to upper slope, flat receiving site; deep, medium - textured soils
6222	ICH wk2	04	HM	d	r	6222 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock and had been identified as being under-laid by ACIDIC bedrock by the Regional Ecologist. 6222 areas are the deep equivalent of 6202 shallow crests. 6222 areas are predicted to be occupied dominantly by the drier submesic 04 Site Series. Crest position, medium textured deep acidic soil
6233	ICH wk2	04	HM	d	r	6233 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock and had been identified as being under-laid by BASIC bedrock by the Regional Ecologist. 6233 areas are the deep equivalent of 6203 shallow crests. 6233 areas are predicted to be occupied dominantly by the submesic 04 Site Series but may also contain a significant component of dry, basic 03 Site Series. Crest position, medium textured deep basic soil
6240	ICH wk2	04	HM	c	d	6240 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6240 areas occupy all upper shedding portions of the landscape in areas mapped as COARSE TEXTURED, unless these coarse areas are also recognized as being influenced by high water tables or seepage. 6240 areas are predicted to be occupied principally by the submesic 04 Site Series but may also contain some 01 and some moister 07 Site Series.
6241	ICH wk2	04	HM	k	x	6241 areas were mapped on steep (>35%) NE facing slopes with cool aspects in areas mapped as both MEDIUM and FINE TEXTURED. Significant slope, cool aspect with deep, medium-textured soils. All steep slopes are described in the field guide as likely to be occupied by the submesic 04 Site Series. 6241 areas were extracted separately simply to permit separate recognition of the steep NE aspect should that information be of interest. Upper slope position, deep, medium textured soil.
6242	ICH wk2	01	HO	d	r	6242 areas were mapped on the slightly drier tops of low knolls and ridges in areas of low to moderate relief and MEDIUM TEXTURED materials. These areas may be entirely mesic 01 or they may contain a significant component of drier than mesic 04 site series. The field guide indicates that the submesic 04 Site Series is relatively common and often of moderate size. Gentle slope; deep, medium - textured soils



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6244	ICH wk2	04	HM	d	x	6244 areas were mapped on slightly drier upper slopes, just below the crests or crowns or moderate to high ridges and ONLY in areas mapped as MEDIUM TEXTURED. The Regional Ecologist and the Field Guide both indicated that drier than mesic sites were more common and more extensive in the ICHwk2 than in many other Subzones. 6244 areas were defined and mapped to allow for the possibility of recognizing a more extensive area of drier than mesic Site Series in upper slope positions just below the crowns of ridges and knolls. 6244 areas are predicted to contain a mixture of slightly drier than mesic 04 Site Series and mesic 01 Site Series. Upper slope position, deep, medium textured soil
6245	ICH wk2	05	SO	c	y	6245 areas were mapped ONLY in areas mapped as COARSE TEXTURED and ONLY in areas of VERY LOW RELIEF. 6245 areas occupy a narrow zone that occurs in upper toe slopes that occur topographically above wetter, frostier areas of 6246. 6245 areas are of very limited extent and are predicted to be occupied principally by the cold, moist frosty 05 Site Series but may also contain some frostier 06 and some less frosty, but still moist 07 Site Series. Gentle slope; deep, medium- textured soils, moisture receiving sites.
6246	ICH wk2	06	ST	c	y	6246 areas were mapped in moist lower to toe slopes that accumulated both cold air and seepage in areas mapped as COARSE TEXTURED. These lower to toe slopes experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6246 areas generally occur topographically below 6247 areas and above channels, hollows and draws occupied by wetter Site Series such as 08. Lower slope, receiving site; deep, medium - textured soils
6247	ICH wk2	07	RD	c	j	6247 areas were mapped on gentle to moderate slopes in lower to toe slope landform positions in areas mapped as COARSE TEXTURED that were moistened by seepage from upslope but that had sufficient slope in the down slope direction that they did not accumulate moisture or cold air and develop permanently high water tables or frequent frosts. 6247 areas are predicted to be occupied by slightly moist, NON-FROSTY seepage conditions consistent with the concepts of the non-frosty 07 Site Series. Lower to toe slope, non-frosty, moisture receiving site; deep, coarse - textured soils.
6271	ICH wk2	07	RD	j	y	6271 areas were mapped in gently to moderately sloping draws, hollows and swales in mid to upper landform positions in areas mapped as MEDIUM TEXTURED. 6271 areas were meant to allow for recognition of moister seepage areas in draws and hollows in upper slope positions. 6271 areas are predicted to be occupied by slightly moist, non-frosty seepage conditions consistent with the concepts of the non-frosty 07 Site Series. Mid to upper slope, receiving site; deep, medium - textured soils
6276	ICH wk2	06	ST	j	y	6276 areas were mapped in moist lower to toe slopes with SLOPES > 10% that accumulated both cold air and seepage in areas mapped as MEDIUM TEXTURED. These lower to toe slopes experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6276 areas generally occur topographically below 6207 areas and above channels, hollows and draws occupied by wetter Site Series such as 08. 6287 areas may end up being joined with 6206 areas. 6276 areas were kept separate during testing to see if they should be associated with a different Site Series (non-frosty 07). Lower slope, receiving site; deep, medium - textured soils
6277	ICH wk2	07	RD	d	y	6277 areas were mapped in all areas where interpreters had recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 07 Site Series and moist, cold, frosty 06 Site Series to areas mapped as 6277.

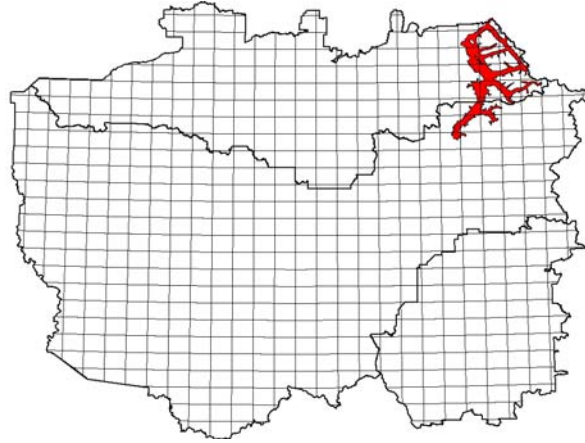
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6281	ICH wk2	08	RC	j	y	6281 areas were mapped in the lowest, flattest (< 5% slope) and wettest portions of gently to moderately sloping draws, hollows and swales in mid to upper landform positions in areas mapped as MEDIUM TEXTURED. 6281 areas were meant to allow for recognition of wet, flat conditions in draws and hollows in upper slope positions. 6281 areas are predicted to be occupied by wet, possibly frosty seepage conditions consistent with the concepts of the wet frosty 08 Site Series. Mid to upper slope, flat receiving site; deep, medium - textured soils
6286	ICH wk2	06	ST	d	y	6286 areas were mapped on ALL TEXTURES of materials. 6286 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. 6286 areas mostly occur above and outside of main valley bottoms. These sloping draws tend to have persistent seepage within 50 cm of the surface and may be slightly frosty, but some of the cold air drains away. 6286 areas are predicted to contain mainly moist, slightly frosty 06 Site Series along with wetter frosty 08 Site Series and moist but not frosty 07 Site Series. (Sloping Valleys)
6287	ICH wk2	08	RC	j	y	6287 areas were mapped on ALL TEXTURES of materials. 6287 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of both moisture and frost. Water tables are frequently within 50 cm of the surface. 6287 areas are predicted to be occupied by a mixture of wet frosty 08 site Series, moist, frosty 06 Site Series and moist, non-frosty 07 Site Series. Gentle slope or depressional areas with deep, medium - textured soils
6288	ICH wk2	08	RC	p	y	6288 areas were mapped in ALL locations where interpreters had recognized forested ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by the cold, frosty, wet 08 Site Series with perhaps lesser components of cold, moist frosty 06 Site Series. Gentle slope or depressional areas with deep, medium - textured soils
6291	ICH wk2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6292	ICH wk2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6293	ICH wk2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
6294	ICH wk2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6295	ICH wk2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
6296	ICH wk2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
6297	ICH wk2	00	RO			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
6298	ICH wk2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: ICH wk2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6201	6201	01	ICH wk2	9	01	HO	d	j	1	07	RD			
6202	6202	02	ICH wk2	9	02	HC	s	r	1	01	HO			
6203	6203	03	ICH wk2	9	03	RJ	s	r	1	01	HO			
6204	6204	04	ICH wk2	8	04	HM	w	x	1	02	HC	1	03	RJ
6205	6205	05	ICH wk2	7	05	SO	j	y	2	06	ST	1	07	RD
6206	6206	06	ICH wk2	8	06	ST	j	y	2	08	RC			
6207	6207	07	ICH wk2	8	07	RD	d	y	2	01	HO			
6208	6208	08	ICH wk2	9	08	RC	j	y	1	06	ST			
6217	6207	07	ICH wk2	8	07	RD	c	y	2	01	HO			
6218	6218	08	ICH wk2	8	08	RC	c	y	2	06	ST			
6222	6222	04	ICH wk2	6	04	HM	d	r	4	01	HO			
6233	6233	04	ICH wk2	6	04	HM	d	r	4	01	HO			
6240	6240	04	ICH wk2	8	04	HM	c	d	1	01	HO	1	07	RD
6241	6241	04	ICH wk2	9	04	HM	k	x	1	01	HO			
6242	6201	01	ICH wk2	7	01	HO	d	r	3	04	HM			
6244	6222	04	ICH wk2	6	04	HM	d	x	4	01	HO			
6245	6245	05	ICH wk2	8	05	SO	c	y	1	06	ST	1	07	RD
6246	6246	06	ICH wk2	8	06	ST	c	y	1	05	SO	1	07	RD
6247	6247	07	ICH wk2	9	07	RD	c	j	1	05	SO			
6271	6207	07	ICH wk2	9	07	RD	j	y	1	01	HO			
6276	6206	06	ICH wk2	8	06	ST	j	y	1	08	RC	1	07	RD
6277	6277	07	ICH wk2	8	07	RD	d	y	2	01	HO			
6281	6208	08	ICH wk2	8	08	RC	j	y	2	06	ST			
6286	6206	06	ICH wk2	7	06	ST	d	y	2	08	RC	1	07	RD
6287	6287	08	ICH wk2	7	08	RC	j	y	2	06	ST	1	07	RD
6288	6288	08	ICH wk2	10	08	RC	p	y						
6291	6291	OW	ICH wk2	10	00	OW								
6292	6292	WE	ICH wk2	10	00	WE	d	y						
6293	6293	ME	ICH wk2	10	00	ME								
6294	9264	PA	ICH wk2	10	00	PA								
6295	6295	BR	ICH wk2	10	00	BR								
6296	6296	DL	ICH wk2	10	00	DL								
6297	6297	RO	ICH wk2	10	00	RO								
6298	6298	AV	ICH wk2	10	00	AV								

**BGC Unit: ICH wk4****LMES Zone ID: 63****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	78,676.8	3.79%
Williams Lake TSA	20,761.7	0.42%
100 Mile House TSA	0.0	0.00%
Cariboo Region	99,438.4	1.21%

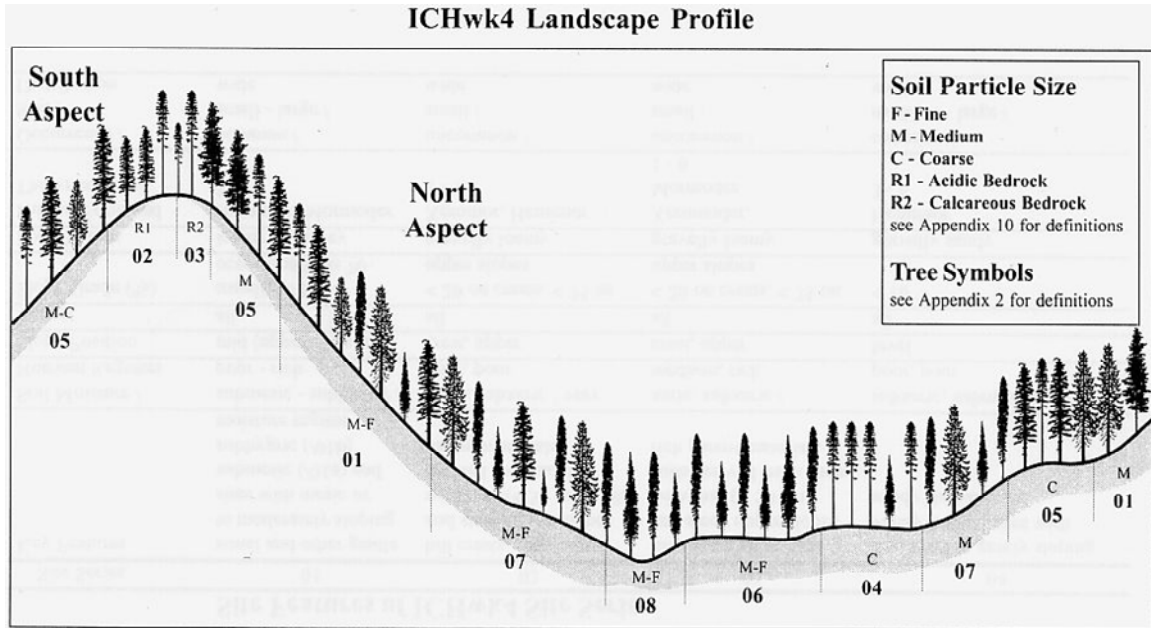
**List of Site Series Codes Defined for use in ICH wk4**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	HO	CwHw - Oak fern	mesic	All upper water shedding parts of the landscape
02	HC	HwCw - Cladonia	xeric - subxeric	ACIDIC, Shallow Crests, Thin, Dry Soils
03	RS	CwSxw - Soopolallie	xeric - subxeric	BASIC, Shallow Crests, Thin, Dry Soils
04	RV	CwSxw - Velvet-leaved blueberry	submesic - subxeric	COARSE - Medium Benches, Dry
05	HM	HwCw - Step moss	submesic	Steep SW , Steep NE & COARSE- Dry High Kame Terrace
06	ST	Sxw - Twinberry - Oak fern	subhygric	Cold, Moist, Frosty Toe Slopes, WT > 50 cm
07	RD	CwHw - Devil's club - Lady fern	subhygric	Non-frosty, Slightly Moist Seepage Slopes, WT > 50 cm
08	SD	Sxw - Devil's club - Lady fern	hygric - subhydric	Flat, Wet, Frosty Valleys & Depressions WT < 50 cm
00	TS	Labrador tea - Sedge - Sphagnum	hygric - subhydric	Cold, Wet, Level Organic areas (PG entity)
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock		
00	AV	Non-forested Avalanche Tracks		
00	GB	Gravel Bar		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: ICH wk4**



**Example Attribute Class Rule File for ICH wk4 (arule6330)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	20.00	20.00	20.00	8.00	32.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	7.00	7.00	7.00	1.00	13.00	6
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	6.80	6.80	6.80	0.00	7.30	0.5
11	formfile	QWETI	Sl_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.50	10.50	10.50	9.00	12.00	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
18	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
19	formfile	SLOPE	SlopeGT10	4	8.00	8.00	8.00	6.00	99.00	2
20	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	99.00	2
21	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
22	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
23	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
24	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
25	formfile	SLOPE	SlopeLT30	5	25.00	42.50	42.50	0.00	30.00	5
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
32	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5
37	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
38	relzfile	Z2St	Low_Knoll	5	20.00	20.00	20.00	0.00	25.00	5
39	geofile	TEXTURE	Acidic	4	50.00	50.00	50.00	45.00	100.00	5
40	geofile	TEXTURE	Basic	5	45.00	40.00	40.00	0.00	50.00	5

### Example Fuzzy Ecological Class Rule File for ICH wk4 (crule6330)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6302r	Crest	30	1	6302	02 Acid Shallow Crest	MH6381u	Up2Mid	35	11	6381	08 Up Wet Level Swale
MH6302r	Dry_WI	20	1	6302		MH6381u	Wet2V_Wet	25	11	6381	
MH6302r	Hi_Ridge	20	1	6302		MH6381u	SlopeLT20	15	11	6381	
MH6302r	Shallow	40	1	6302		MH6381u	SlopeLT05	5	11	6381	
MH6302r	Med2CrS	10	1	6302		MH6381u	Medium	10	11	6381	
MH6302r	Acidic	10	1	6302		MH6381u	Deep	10	11	6381	
MH6322r	Crest	30	2	6322	05 Acid Deep Ridge	MH6301L	Mid2Toe	35	12	6301	01 Lower Shedding
MH6322r	Dry_WI	20	2	6322		MH6301L	Med2Sl_Wet	25	12	6301	
MH6322r	Hi_Ridge	20	2	6322		MH6301L	SlopeLT30	20	12	6301	
MH6322r	Deep	10	2	6322		MH6301L	Med2CrS	10	12	6301	
MH6322r	Med2CrS	10	2	6322		MH6301L	Deep	10	12	6301	
MH6322r	Acidic	10	2	6322		MH6307s	Toe	35	13	6307	07 Moist Sloping Toe
MH6303r	Crest	30	3	6303	03 Basic Shallow Crest	MH6307s	Sl_Wet2Wet	25	13	6307	
MH6303r	Dry_WI	20	3	6303		MH6307s	SlopeLT30	10	13	6307	
MH6303r	Hi_Ridge	20	3	6303		MH6307s	SlopeGT10	10	13	6307	
MH6303r	Shallow	40	3	6303		MH6307s	Med2CrS	10	13	6307	
MH6303r	Med2CrS	10	3	6303		MH6307s	Deep	10	13	6307	
MH6303r	Basic	10	3	6303		MH6367f	Toe	35	14	6367	06 Moist, Frosty Toe
MH6333r	Crest	30	4	6333	05 Basic Deep Ridge	MH6367f	Sl_Wet2Wet	25	14	6367	
MH6333r	Dry_WI	20	4	6333		MH6367f	SlopeLT20	10	14	6367	
MH6333r	Hi_Ridge	20	4	6333		MH6367f	SlopeLT10	10	14	6367	
MH6333r	Deep	10	4	6333		MH6367f	Med2CrS	10	14	6367	
MH6333r	Med2CrS	10	4	6333		MH6367f	Deep	10	14	6367	
MH6333r	Basic	10	4	6333		MH6306t	Toe2Valley	35	15	6306	
MH6352k	Crest	35	5	6352	01 Deep Low Knoll	MH6306t	Wet	25	15	6306	06 Moist, Frosty Toe
MH6352k	Dry_WI	25	5	6352		MH6306t	SlopeLT10	15	15	6306	
MH6352k	Low_Knoll	20	5	6352		MH6306t	SlopeLT05	5	15	6306	
MH6352k	Deep	10	5	6352		MH6306t	Med2Fine	10	15	6306	
MH6352k	Med2CrS	10	5	6352		MH6306t	Deep	10	15	6306	
MH6305s	Up2Mid	35	6	6305	05 Steep SW warm dry	MH6376t	Toe2Valley	35	16	6376	06 Moist, Frosty Toe
MH6305s	Sl_Dry_WI	25	6	6305		MH6376t	Wet	25	16	6376	
MH6305s	Steep_SW	30	6	6305		MH6376t	SlopeLT10	15	16	6376	
MH6305s	Med2CrS	5	6	6305		MH6376t	SlopeGT05	5	16	6376	
MH6305s	Deep	5	6	6305		MH6376t	Med2Fine	10	16	6376	
MH6355n	Crest2Mid	35	7	6355	05 Steep NE cool dry	MH6376t	Deep	10	16	6376	
MH6355n	Dry2Med_WI	25	7	6355		MH6387v	Valley	35	17	6387	07 Moist Sloping Valley
MH6355n	Steep_NE	30	7	6355		MH6387v	Wet2V_Wet	25	17	6387	
MH6355n	Med2CrS	5	7	6355		MH6387v	SlopeGT05	20	17	6387	
MH6355n	Deep	5	7	6355		MH6387v	Med2Fine	10	17	6387	
MH6351u	Crest2Mid	35	8	6351	01 Drier Upper Crowns	MH6387v	Deep	10	17	6387	
MH6351u	Dry2Med_WI	25	8	6351		MH6308v	Valley	35	18	6308	08 V. Wet, Flat Valley
MH6351u	SlopeLT30	20	8	6351		MH6308v	Wet2V_Wet	25	18	6308	
MH6351u	Medium	10	8	6351		MH6308v	SlopeLT05	20	18	6308	
MH6351u	Deep	10	8	6351		MH6308v	Med2Fine	10	18	6308	
MH6301m	Up2Mid	35	9	6301	01 Up - Low Shedding	MH6308v	Deep	10	18	6308	
MH6301m	Sl_Dry2Med	25	9	6301		MH6388m	WetL_LT200	50	19	6388	08 V. Wet, Margins
MH6301m	SlopeLT30	20	9	6301		MH6388m	WetZ_LT05	50	19	6388	
MH6301m	Med2CrS	10	9	6301		MH6309o	Organic	99	20	6309	TS V. Wet, Organics
MH6301m	Deep	10	9	6301		MH6377s	Hi_Seep	80	21	6377	07 Moist Sloping Seepage
MH6371u	Up2Mid	35	10	6371	07 Up Sloping Swale	MH6377s	Med2Fine	5	21	6377	
MH6371u	Wet	25	10	6371		MH6377s	SlopeGT05	15	21	6377	
MH6371u	SlopeLT20	15	10	6371		MH6368s	Hi_Seep	80	22	6386	08 Flat Wet Seepage
MH6371u	SlopeGT05	5	10	6371		MH6368s	Med2Fine	5	22	6386	
MH6371u	Med2CrS	10	10	6371		MH6368s	SlopeLT05	15	22	6386	
MH6371u	Deep	10	10	6371							

**PEM Entity Descriptions for: ICH wk4**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6301	ICH wk4	01	HO	d	j	6301 areas were mapped on a wide range of well to moderately well drained upper to lower slope positions in areas mapped as MEDIUM TEXTURED. 6301 areas are meant to capture the concept of a typical mesic Site Series (01) on all upper, draining, divergent slopes that are not shallow, steep or affected by seepage. Gentle slope, deep, medium-textured soils.
6302	ICH wk4	02	HC	s	r	6302 areas were mapped on the dry crests of high ridges with ACIDIC parent materials that had been mapped as SHALLOW to bedrock. The regional ecologist indicated that it was possible to draw a simple boundary that would separate areas of ACIDIC rock from areas of BASIC rock. The rules presently contain a reference to an input payer that does not yet exist that will ultimately provide a means of separating acidic from basic rocks. 6302 is ONLY predicted for areas mapped as shallow to bedrock and where the regional ecologist had indicated the parent rocks were ACIDIC. Crest position, medium to coarse textured shallow soil
6303	ICH wk4	03	RS	s	r	6303 areas were mapped on the dry crests of high ridges with BASIC parent materials that had been mapped as SHALLOW to bedrock. The regional ecologist indicated that it was possible to draw a simple boundary that would separate areas of ACIDIC rock from areas of BASIC rock. The rules presently contain a reference to an input payer that does not yet exist that will ultimately provide a means of separating acidic from basic rocks. 6303 is ONLY predicted for areas mapped as shallow to bedrock and where the regional ecologist had indicated the parent rocks were BASIC. Crest position, medium to coarse textured shallow soil
6304	ICH wk4	04	RV	c	x	6304 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6304 areas occur ONLY on gently sloping to level low benches or terraces that occur within the valley of a main flood plain but that are not affected by seepage or high water tables. 6304 areas occur on benches or terraces that are slightly raised above the level of the active flood plain and that have not been mapped as being influenced by SEEPAGE. Level to gentle slope; deep coarse - textured glaciofluvial soil
6305	ICH wk4	05	HM	w	x	6305 areas were mapped on steep SW facing hillslopes (>35%) with warm aspects in areas mapped as MEDIUM TEXTURED. Some shallow 02 or 03 Site series may be included in 6305 areas. 6305 areas were mapped to allow for the possibility of delineating areas where the warm aspect site modifier was required and should be used. Significant slope, warm aspect, deep, medium-coarse textured soils.
6306	ICH wk4	06	ST	j	y	6306 areas were mapped in moist lower to toe slopes that accumulated both cold air and seepage in areas mapped as MEDIUM TEXTURED. These lower to toe slopes experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6306 areas generally occur topographically below 6307 areas and above channels, hollows and draws occupied by wetter Site Series such as 08. Lower slope, receiving site; deep, medium - textured soils
6307	ICH wk4	07	RD	j	y	6307 areas were mapped on gentle to moderate slopes in lower to toe slope landform positions in areas mapped as MEDIUM TEXTURED that were moistened by seepage from upslope but that had sufficient slope in the down-slope direction that they did not accumulate moisture or cold air and develop permanently high water tables or frequent frosts. 6307 areas are predicted to be occupied by slightly moist, NON-FROSTY seepage conditions consistent with the concepts of the non-frosty 07 Site Series. Lower to toe slope, non-frosty, moisture receiving site; deep, medium - textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6308	ICH wk4	08	SD	j	y	6308 areas were mapped in areas of MEDIUM TEXTURED materials. 6308 areas occur in the lowest, wettest and flattest portions of draws, hollows and depressions with slopes less than 5%. 6308 areas mostly occur in level to very gently sloping valley bottoms. These level valley bottoms tend to have persistent seepage within 50 cm of the surface and are also usually very frosty. 6308 areas are predicted to contain mainly very wet, very frosty 08 Site Series along with some moist frosty 06 Site Series. (Flat Valleys). Toe slope or depression; deep, medium to coarse - textured soil
6309	ICH wk4	09	TS			Organic wetland. 09 was only defined for use in the Prince George Forest Region.
6322	ICH wk4	05	HM	d	r	6322 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock and had been identified as being underlain by ACIDIC bedrock by the Regional Ecologist. 6322 areas are the deep equivalent of 6302 shallow crests. 6322 areas are predicted to be occupied dominantly by the drier submesic 05 Site Series with a component of shallow, dry acidic 02 Site Series. Crest position, deep medium textured acidic soil
6333	ICH wk4	05	HM	d	r	6333 areas were mapped on the dry crests of high ridges that had been mapped as DEEP to bedrock and had been identified as being under-laid by BASIC bedrock by the Regional Ecologist. 6333 areas are the deep equivalent of 6303 shallow crests. 6333 areas are predicted to be occupied dominantly by the drier submesic 05 Site Series with a component of shallow, dry basic 03 Site Series. Crest position, deep medium textured acidic soil
6347	ICH wk4	08	SD	c	y	6347 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6347 areas occupy the lowest, wettest and coldest locations within valley bottoms and active flood plains in areas mapped as COARSE TEXTURED. These low, wet, valley locations experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the cold, wet frosty 08 Site Series along with a component of cold moist, frosty 06 Site Series and perhaps some moist, not-frosty 07 Site Series. 6347 areas generally occupy channels, hollows and draws in areas mapped as COARSE TEXTURED. Lower slope, receiving site; deep, coarse - textured soils
6350	ICH wk4	05	HM	c	x	6350 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6350 areas occur on gently to moderately sloping coarse textured benches or kame terraces that occur above and outside of the valley floor of the main flood plain. A vertical distance of 20 m above the active flood plain was arbitrarily selected to separate high benches outside the flood plain (6350) from lower benches within the area of influence of the flood plain (6304). Gentle slope; deep coarse - textured soils.
6351	ICH wk4	01	HO	d	x	6351 areas were mapped on slightly drier upper slopes, just below the crests or crowns or moderate to high ridges and ONLY in areas mapped as MEDIUM TEXTURED. 6351 areas were defined and mapped to allow for the possibility of recognizing a more extensive area of drier than mesic Site Series in upper slope positions just below the crowns of ridges and knolls. 6351 areas are predicted to contain a mixture of mesic 01 Site Series along with a significant component of slightly drier than mesic 05 Site Series. Upper slope position, deep, medium textured soil.
6352	ICH wk4	01	HO	d	x	6352 areas were mapped on the slightly drier tops of low knolls and ridges in areas of low to moderate relief and MEDIUM TEXTURED materials. These areas may be entirely mesic 01 or they may contain a significant component of drier than mesic 05 site series. Gentle slope; deep, medium - textured soils



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6353	ICH wk4	05	HM	c	x	6353 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6353 areas occur on moderately to steeply sloping valley sides that occur outside of the valley floor of the main flood plain. 6353 areas were mapped in order to differentiate gently to moderately sloping upper kame terraces (6305) from sloping valley sides (6353). Moderate to steep slope; deep coarse - textured soils.
6355	ICH wk4	05	HM	k	x	6355 areas were mapped on steep NE facing hillslopes (>35%) with cool aspects in areas mapped as MEDIUM TEXTURED. Some shallow 02 or 03 Site series may be included in 6355 areas. 6355 areas were mapped to allow for the possibility of delineating areas where the cool aspect site modifier was required and should be used. Significant slope, cool aspect, deep, medium-coarse textured soils.
6357	ICH wk4	07	RD	c	y	6357 areas were mapped ONLY in areas mapped as COARSE TEXTURED that also exhibited high levels of moisture according to the LMES moisture model. 6357 areas occur on gently to moderately sloping coarse textured benches or kame terraces that occur above and outside of the valley floor of the main flood plain. A vertical distance of 20 m above the active flood plain was arbitrarily selected to separate high benches outside the flood plain (6357) from lower benches within the area of influence of the flood plain (6374). The defining characteristic of 6357 areas is the presence of high levels of simulated moisture which alters the predicted Site Series from drier 05 to moister 07 Site Series. Gentle slope; deep coarse - textured soils.
6366	ICH wk4	06	ST	j	y	6366 areas were mapped ONLY in areas mapped as COARSE TEXTURED with SEEPAGE that also exhibited high levels of moisture according to the LMES moisture model. 6366 areas occur on gently to moderately sloping coarse textured benches that occur above and on the valley floor of the main flood plain. A vertical distance of 20 m above the active flood plain was arbitrarily selected to separate high benches outside the flood plain (6375) from lower benches within the area of influence of the flood plain (6366). The defining characteristic of 6366 areas is the presence of high levels of simulated moisture in frosty flat flood plains which alters the predicted Site Series from drier 05 to moist frosty 06 Site Series. Gentle slope; deep coarse - textured soils.
6367	ICH wk4	06	ST	j	y	6367 areas were mapped in moist lower to toe slopes that accumulated both cold air and seepage in areas mapped as MEDIUM TEXTURED. These lower to toe slopes experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6367 areas generally occur on very gentle slopes in about the same topographic position as the non-frosty seepage entity labeled as 6307. 6367 areas are predicted to contain a mixture of frosty, moist 06 Site Series and non-frosty, moist 07 Site Series. Lower slope, receiving site; deep, medium - textured soils
6368	ICH wk4	06	ST	j	y	6368 areas were mapped on level to very gentle slopes (<5%) ONLY in areas mapped as MEDIUM TEXTURED with SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. 6368 SEEPAGE areas were mapped separately from 6377 SEEPAGE areas in order to differentiate flat frosty 6368 areas from more sloping, not frosty 6377 areas.
6371	ICH wk4	07	RD	d	y	6371 areas were mapped in gently to moderately sloping draws, hollows and swales in mid to upper landform positions in areas mapped as MEDIUM TEXTURED. 6371 areas were meant to allow for recognition of moister seepage areas in draws and hollows in upper slope positions in medium textured areas. 6371 areas are predicted to be occupied by slightly moist, non-frosty seepage conditions consistent with the concepts of the non-frosty 07 Site Series. 6371 areas may also contain a significant component of mesic 01 Site Series. Mid to upper slope, receiving site; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6374	ICH wk4	07	RD	c	y	6374 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 6374 areas occur ONLY on gently sloping to level low benches or terraces that occur within the valley of a main flood plain and are affected by high levels of SEEPAGE. 6374 areas occur on benches or terraces that are just slightly raised above the level of the active flood plain and that have been mapped as being influenced by SEEPAGE. Level to gentle slope; deep coarse - textured glaciofluvial soil
6375	ICH wk4	07	RD	c	y	6375 areas were mapped ONLY in areas mapped as COARSE TEXTURED and that were also recognized as affected by. 6375 areas occur on gently to moderately sloping coarse textured benches or kame terraces that occur above and outside of the valley floor of the main flood plain. A vertical distance of 20 m above the active flood plain was arbitrarily selected to separate high benches outside the flood plain (6375) from lower benches within the area of influence of the flood plain (6374). The defining characteristic of 6375 areas is the presence of SEEPAGE which alters the predicted Site Series from drier 05 to moister 07 Site Series. Gentle slope; deep coarse - textured soils.
6376	ICH wk4	06	ST	j	y	6376 areas were mapped in moist lower to toe slopes with slopes greater than 5% that may accumulate both cold air and seepage in MEDIUM TEXTURED areas. These lower to toe slopes may experience cold, frosty and moist conditions and are predicted to be occupied dominantly by the moist, frosty 06 Site Series. 6367 areas generally occur on gentle to moderate slopes (>5%) in about the same topographic position as the frosty seepage entity labeled as 6306, the only difference is that the slope gradient is > 5%. 6376 areas are predicted to contain a mixture of frosty, moist 06 Site Series and non-frosty, moist 07 Site Series. Lower slope, receiving site; deep, medium - textured soils
6377	ICH wk4	07	RD	d	y	6377 areas were mapped ONLY in areas with slopes > 5% that were mapped as MEDIUM TEXTURED with SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. 6377 areas were mapped separately from 6368 areas in order to be able to infer non-frosty conditions for the more sloping 6377 areas and COLD FROSTY conditions for the flat 6368 areas..
6381	ICH wk4	08	SD	d	y	6381 areas were mapped in the lowest, flattest (< 5% slope) and wettest portions of gently to moderately sloping draws, hollows and swales in mid to upper landform positions in MEDIUM TEXTURED areas. 6381 areas were meant to allow for recognition of wet, flat conditions in draws and hollows in upper slope positions. 6381 areas are predicted to be occupied by wet, possibly frosty seepage conditions consistent with the concepts of the wet frosty 08 Site Series. Mid to upper slope, flat receiving site; deep, medium - textured soils
6387	ICH wk4	07	RD	d	y	6387 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 6387 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. 6387 areas mostly occur above and outside of main valley bottoms. These sloping draws tend to have persistent seepage within 50 cm of the surface and may be slightly frosty, but some of the cold air drains away. 6387 areas are predicted to contain mainly moist, non-frosty 07 Site Series along with moist frosty 06 Site Series and very wet and frosty 08 Site Series. (Sloping Valleys). Lower slope, receiving site; deep, medium - textured soils
6388	ICH wk4	08	SD	j	y	6388 areas were mapped on ALL TEXTURES of materials. 6388 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of both moisture and frost. Water tables are frequently within 50 cm of the surface. 6388 areas are predicted to be occupied by a mixture of wet frosty 08 site Series, moist, frosty 06 Site Series and moist, non-frosty 07 Site Series. Gentle slope or depression areas with deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6389	ICH wk4	08	SD	p	y	6389 areas were mapped in ALL locations where JMJ had recognized forested ORGANIC materials. Areas characterized by ORGANIC materials are predicted to be occupied principally by the cold, frosty, wet 08 Site Series or perhaps by an organic wetland similar to the organic 09 Site Series as defined in the Prince George Field Guide. Gentle slope or depressional areas with deep, organic soils
6390	ICH wk4	00	GB			Gravel Bar
6391	ICH wk4	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6392	ICH wk4	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6393	ICH wk4	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
6394	ICH wk4	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6395	ICH wk4	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
6396	ICH wk4	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
6397	ICH wk4	00	RO			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations. (Often Talus Slopes)
6398	ICH wk4	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process..
6399	ICH wk4	00	GL			Undefined. No rules defined to predict 6399 so this must arise from a 99 value in the exceptions class.

**PEM Entity Extended Legend with Proportions of Site Series for: ICH wk4**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6301	6301	01	ICH wk4	9	01	HO	d	j	1	07	RD			
6302	6302	02	ICH wk4	9	02	HC	s	r	1	01	HO			
6303	6303	03	ICH wk4	9	03	RS	s	r	1	01	HO			
6304	6304	04	ICH wk4	10	04	RV	c	x						
6305	6305	05	ICH wk4	8	05	HM	w	x	1	02	HC	1	03	RS
6306	6306	06	ICH wk4	9	06	ST	j	y	1	08	SD			
6307	6307	07	ICH wk4	8	07	RD	j	y	2	01	HO			
6308	6308	08	ICH wk4	9	08	SD	j	y	1	06	ST			
6309	6309	09	ICH wk4	10	09	TS								
6322	6322	05	ICH wk4	8	05	HM	d	r	2	02	HC			
6333	6333	05	ICH wk4	8	05	HM	d	r	2	03	RS			
6347	6347	08	ICH wk4	6	08	SD	c	y	3	06	ST	1	07	RD
6350	6350	05	ICH wk4	8	05	HM	c	x	2	04	RV			
6351	6301	01	ICH wk4	7	01	HO	d	x	3	05	HM			
6352	6301	01	ICH wk4	9	01	HO	d	x	1	05	HM			
6353	6353	05	ICH wk4	10	05	HM	c	x						
6355	6355	05	ICH wk4	7	05	HM	k	x	2	01	HO	1	02	HC
6357	6357	07	ICH wk4	6	07	RD	c	y	3	05	HM	1	01	HO
6366	6366	06	ICH wk4	7	06	ST	j	y	2	08	SD	1	05	HM
6367	6306	06	ICH wk4	7	06	ST	j	y	3	07	RD	0		
6368	6368	06	ICH wk4	6	06	ST	j	y	2	08	SD	2	07	RD
6371	6307	07	ICH wk4	7	07	RD	d	y	3	01	HO			
6374	6374	07	ICH wk4	10	07	RD	c	y						
6375	6375	07	ICH wk4	8	07	RD	c	y	2	05	HM			
6376	6306	06	ICH wk4	8	06	ST	j	y	2	07	RD			
6377	6377	07	ICH wk4	7	07	RD	d	y	3	06	ST			
6381	6308	08	ICH wk4	9	08	SD	d	y	1	06	ST			
6387	6307	07	ICH wk4	6	07	RD	d	y	3	06	ST	1	08	SD
6388	6388	08	ICH wk4	6	08	SD	j	y	3	06	ST	1	07	RD
6389	6389	08	ICH wk4	10	08	SD	p	y						
6390	6390	GB	ICH wk4	10	00	GB								
6391	6391	OW	ICH wk4	10	00	OW								
6392	6392	WE	ICH wk4	10	00	WE	d	y						
6393	6393	ME	ICH wk4	10	00	ME								
6394	6394	PA	ICH wk4	10	00	PA								
6395	6395	BR	ICH wk4	10	00	BR								
6396	6396	DL	ICH wk4	10	00	DL								
6397	6397	RO	ICH wk4	10	00	RO								
6398	6398	AV	ICH wk4	10	00	AV								
6399	6399	GL	ICH wk4	10	00	GL								



**BGC Unit: IDF xw****LMES Zone ID: 64****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	31,695.6	2.57%
Cariboo Region	31,695.6	0.38%

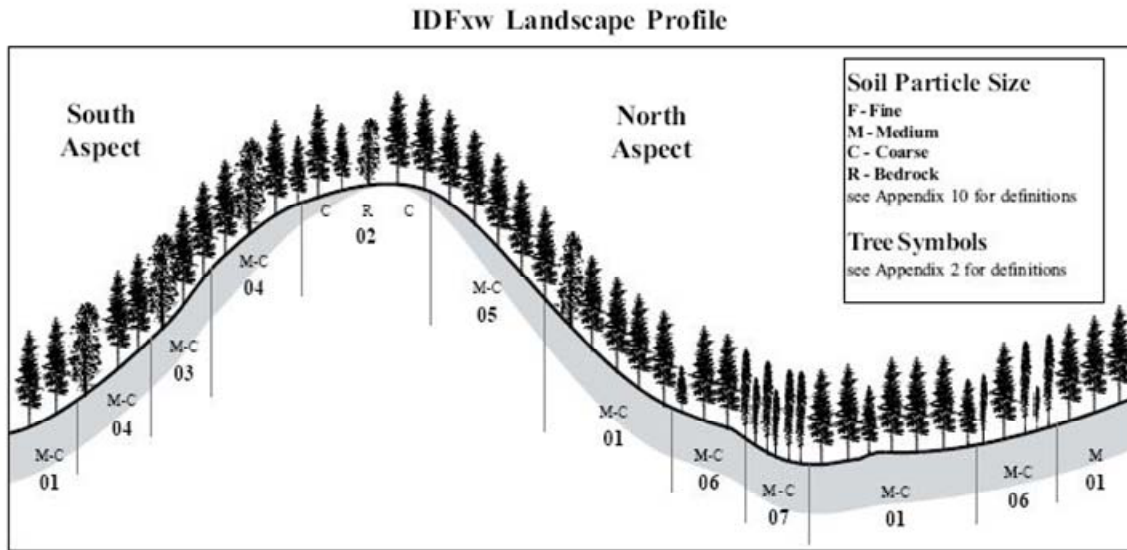
**List of Site Series Codes Defined for use in IDF xw**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	DJ	Fd - Juniper - Bluebunch wheatgrass	mesic	All upper water shedding parts of the landscape
02	PW	FdPy - Bluebunch wheatgrass - Pinegrass	xeric	Shallow Crests, Thin, Dry Soils
03	DS	FdPy - Western snowberry - Bluebunch wheatgrass	subxeric	Steep SW - Dry Warm Upper slopes
04	DW	FdPy - Bluebunch wheatgrass - Balsamroot	subxeric - submesic	Moderate SW - Slightly drier and warmer slopes
05	DF	Fd - Feathermoss	submesic	Steep NE - Cool Dry slopes
06	SB	Sxw - Water birch	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
07	SR	Sxw - Prickly rose - Coltsfoot	hygric	Flat, Wet, and Organic Depressions WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: IDF xw**



**Example Attribute Class Rule File for IDF xw (arule6430)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	20.00	20.00	20.00	8.00	32.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	7.00	7.00	7.00	1.00	13.00	6
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	6.80	6.80	6.80	0.00	7.30	0.5
11	formfile	QWETI	Sl_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.50	10.50	10.50	9.00	12.00	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
18	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
19	formfile	SLOPE	SlopeGT10	4	8.00	8.00	8.00	6.00	99.00	2
20	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	99.00	2
21	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
22	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
23	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
24	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
25	formfile	SLOPE	SlopeLT30	5	25.00	42.50	42.50	0.00	30.00	5
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
32	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
33	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
34	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5
37	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
38	relzfile	Z2St	Low_Knoll	5	20.00	20.00	20.00	0.00	25.00	5
39	geofile	TEXTURE	Acidic	4	50.00	50.00	50.00	45.00	100.00	5
40	geofile	TEXTURE	Basic	5	45.00	40.00	40.00	0.00	50.00	5

### Example Fuzzy Ecological Class Rule File for IDF xw (crule6430)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6402r	Crest	30	1	6402	02 Shallow Crest	MH6461s	Low2Toe	30	12	6406	06 Moist Level Toe
MH6402r	VDry	30	1	6402		MH6461s	SLWet2Wet	30	12	6406	
MH6402r	SlopeLT20	10	1	6402		MH6461s	SlopeLT15	10	12	6406	
MH6402r	Med2Crs	10	1	6402		MH6461s	SW_Aspect	10	12	6406	
MH6402r	Shallow	80	1	6402		MH6461s	Med2Crs	5	12	6406	
MH6402r	Hi_Ridge	10	1	6402		MH6461s	Deep	5	12	6406	
MH6424r	Crest	30	2	6424	01 Deep Dry Ridge	MH6411t	Low2Toe	30	13	6401	01 Drier Sloping Toe
MH6424r	VDry	30	2	6424		MH6411t	SL_Wet	30	13	6401	
MH6424r	SlopeLT20	10	2	6424		MH6411t	SlopeGT15	20	13	6401	
MH6424r	Med2Crs	10	2	6424		MH6411t	Med2Crs	10	13	6401	
MH6424r	Deep	20	2	6424		MH6411t	Deep	10	13	6401	
MH6424r	Hi_Ridge	10	2	6424		MH6416t	Low2Toe	30	14	6416	06 Moist Sloping Toe
MH6421k	Crest	30	3	6421	01 Deep Low Knoll	MH6416t	Wet	30	14	6416	
MH6421k	VDry	30	3	6421		MH6416t	SlopeGT15	20	14	6416	
MH6421k	SlopeLT20	10	3	6421		MH6416t	Med2Crs	10	14	6416	
MH6421k	Med2Crs	10	3	6421		MH6416t	Deep	10	14	6416	
MH6421k	Deep	20	3	6421		MH6460t	Toe	30	15	6460	06 Moist Sloping Toe
MH6421k	Low_Knoll	10	3	6421		MH6460t	Wet	30	15	6460	
MH6403s	Crest2Low	30	4	6403	03 Steep SW warm dry	MH6460t	SlopeLT15	10	15	6460	
MH6403s	Dry2SIWet	30	4	6403		MH6460t	SlopeGT05	10	15	6460	
MH6403s	Steep_SW	20	4	6403		MH6460t	Med2Crs	5	15	6460	
MH6403s	Med2Crs	10	4	6403		MH6460t	Deep	5	15	6460	
MH6403s	Deep	10	4	6403		MH6407t	Toe	30	16	6406	06 Moist Level Toe
MH6404s	Crest2Low	30	5	6404	04 20-50% SW Dry	MH6407t	Wet	30	16	6406	
MH6404s	Dry2SIWet	30	5	6404		MH6407t	SlopeLT15	10	16	6406	
MH6404s	SW_Aspect	10	5	6404		MH6407t	SlopeLT05	10	16	6406	
MH6404s	SlopeLT50	10	5	6404		MH6407t	Med2Crs	5	16	6406	
MH6404s	SlopeGT20	10	5	6404		MH6407t	Deep	5	16	6406	
MH6404s	Med2Crs	5	5	6404		MH6466v	Valley	30	17	6466	06 Moist Sloping Valley
MH6404s	Deep	5	5	6404		MH6466v	Wet2V_Wet	30	17	6466	
MH6414s	Crest2Low	30	6	6401	01 < 20% SW Shedding	MH6466v	SlopeGT05	20	17	6466	
MH6414s	Dry2SIWet	30	6	6401		MH6466v	Med2Crs	10	17	6466	
MH6414s	SW_Aspect	10	6	6401		MH6466v	Deep	10	17	6466	
MH6414s	SlopeLT20	20	6	6401		MH6477v	Valley	30	18	6477	07 Wet Flat Valley
MH6414s	Med2Crs	5	6	6401		MH6477v	Wet2V_Wet	30	18	6477	
MH6414s	Deep	5	6	6401		MH6477v	SlopeLT05	20	18	6477	
MH6405n	Crest2Low	30	7	6405	05 Steep NE cool dry	MH6477v	Medium	10	18	6477	
MH6405n	Dry2SIWet	30	7	6405		MH6477v	Deep	10	18	6477	
MH6405n	Steep_NE	20	7	6405		MH6486m	WetZ_LT05	45	19	6486	06 Moist Margin
MH6405n	Med2Crs	10	7	6405		MH6486m	WetL_LT200	45	19	6486	
MH6405n	Deep	10	7	6405		MH6486m	SlopeGT05	10	19	6486	
MH6451n	Crest2Low	30	8	6451	01 20-50% NE Dry	MH6487m	WetZ_LT05	45	20	6487	06 Wet Level Margin
MH6451n	Dry2SIWet	30	8	6451		MH6487m	WetL_LT200	45	20	6487	
MH6451n	NE_Aspect	10	8	6451		MH6487m	SlopeGT05	10	20	6487	
MH6451n	SlopeLT50	10	8	6451		MH6467ds	Hi_Seep	80	21	6467	06 Moist Seepage
MH6451n	SlopeGT20	10	8	6451		MH6467ds	Dry2SIWet	20	21	6467	
MH6451n	Med2Crs	5	8	6451		MH6476ws	Hi_Seep	80	22	6476	07 Wet Seepage
MH6451n	Deep	5	8	6451		MH6476ws	Wet	20	22	6476	
MH6415n	Crest2Low	30	9	6415	01 < 20% NE Shedding	MH6409o	Organic	99	23	6409	07 Wet. Level Organic
MH6415n	Dry2SIWet	30	9	6401		MH6461s	Crest2Low	30	24	6460	06 Moist Seepage Slope
MH6415n	NE_Aspect	10	9	6401		MH6461s	Wet	30	24	6460	
MH6415n	SlopeLT20	20	9	6401		MH6461s	SW_Aspect	10	24	6460	
MH6415n	Med2Crs	5	9	6401		MH6461s	SlopeLT15	20	24	6460	
MH6415n	Deep	5	9	6401		MH6461s	Med2Crs	5	24	6460	
MH6401m	Up2Low	35	10	6401	01 < 20% Shedding	MH6461s	Deep	5	24	6460	
MH6401m	Dry2Med	25	10	6401		MH6461n	Crest2Low	30	25	6460	06 Moist Seepage Slope
MH6401m	SlopeLT20	20	10	6401		MH6461n	Wet	30	25	6460	
MH6401m	Med2Crs	10	10	6401		MH6461n	NE_Aspect	10	25	6460	
MH6401m	Deep	10	10	6401		MH6461n	SlopeLT15	20	25	6460	
MH6461n	Low2Toe	30	11	6406	06 Moist Sloping Toe	MH6461n	Med2Crs	5	25	6460	
MH6461n	SLWet2Wet	30	11	6406		MH6461n	Deep	5	25	6460	
MH6461n	SlopeLT15	10	11	6406							
MH6461n	NE_Aspect	10	11	6406							
MH6461n	Med2Crs	5	11	6406							
MH6461n	Deep	5	11	6406							



**PEM Entity Descriptions for: IDF xw**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6401	IDF xw	01	DJ	d	j	6401 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 6401 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 20%) and on ALL ASPECTS. 6401 excludes most steeper (20-50%) upper slopes which were mapped separately as 6404 (SW) and 6451 (NE).
6402	IDF xw	02	PW	s	r	6402 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 6402 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 6402 can occur in areas of MEDIUM texture as mapped by TFIC as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
6403	IDF xw	03	DS	w	x	6403 was mapped ONLY in areas of MEDIUM TEXTURED materials. 6403 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
6404	IDF xw	04	DW	w	d	6404 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6404 occurs on moderately steep (20-50%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderately steep SW slopes be classified as the 04 Site Series (with some 03).
6405	IDF xw	05	DF	k	d	6405 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6405 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 6405 areas are dominated by the cool, slightly dry 05 Site Series.
6406	IDF xw	06	SB	d	j	6406 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6406 occupies very gently sloping lower to toe slopes (< 15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6406 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6409	IDF xw	07	SR	p	j	6409 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
6416	IDF xw	06	SB	d	j	6416 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6416 occupies moderately sloping (15-30%) LOWER to TOE slopes that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6416 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6421	IDF xw	01	DJ	d	x	6421 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 6421 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
6423	IDF xw	02	PW	s	r	6423 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 6423 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 6423 can occur in areas of COARSE texture as mapped by TFIC as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6424	IDF xw	01	DJ	d	r	6424 was mapped on deep ridges and crests on MEDIUM TEXTURED MATERIALS. 6424 occupies upper shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly normal mesic 01 site series along with some potential inclusions of 02 and 03 site series.
6432	IDF xw	02	PW	c	r	6432 was mapped on deep dry ridges and crests on COARSE TEXTURED MATERIALS. 6432 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly coarse, dry 02 site series along with some potential inclusions of 04 and 03 site series.
6436	IDF xw	06	SB	c	j	6436 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6436 occupies moderately sloping (15-30%) LOWER TO TOE slopes that are quite wet and that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6436 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, COARSE textured soils.
6437	IDF xw	01	DJ	d	j	6437 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6437 occupies moderately sloping lower to toe slopes (5-15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. In COARSE areas these slightly moist upper swales are predicted to be occupied mainly by normal mesic 01 Site Series. Lower to toe slope, receiving, deep, medium textured soils.
6441	IDF xw	04	DW	c	j	6441 was mapped ONLY on COARSE TEXTURED MATERIALS. 6441 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 20%) and on ALL ASPECTS. 6441 excludes most steeper (20-50%) upper slopes which were mapped separately as 6444 (SW) and 6454 (NE).
6462	IDF xw	06	DW	c	d	6462 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 06 and 07 Site Series.
6442	IDF xw	04	DS	c	x	6442 was mapped on the slightly drier tops of low knolls or ridges in areas of COARSE TEXTURED MATERIALS. 6442 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 04 Site Series.
6443	IDF xw	03	DS	c	w	6443 was mapped ONLY in areas of COARSE TEXTURED materials. 6443 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
6444	IDF xw	03	SB	c	w	6444 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6444 occurs on moderately steep (20-50%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderately steep SW slopes be classified as the 03 Site Series (with some 04).
6446	IDF xw	06	SB	c	j	6446 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6446 occupies very gently sloping lower to toe slopes (< 15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6446 is a slightly moist seepage unit in COARSE areas. Lower to toe slope, receiving, deep, COARSE textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6447	IDF xw	06	DJ	c	j	6477 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6477 occupies nearly level to very gently sloping (<5%) lower to toe slopes and flat valley bottoms in minor drainages or hollows. 6477 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, and sometimes within, valleys of narrow stream channels.
6451	IDF xw	01	DW	k	d	6451 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6451 occurs on moderately steep (20-50%) NE facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderately steep NE slopes be classified as the normal mesic 01 Site Series along with some slightly drier 05 Site Series.
6454	IDF xw	04	DF	c	k	6454 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6454 occurs on moderately steep (20-50%) NE facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderately steep NE slopes be classified as the somewhat dry 04 Site Series along with some cool dry 05 Site Series. There is no separate entity described in the present classification for moderately steep (20-50%) NE slopes in coarse areas.
6455	IDF xw	05	SB	c	k	6455 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6455 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 6455 areas are dominated by the cool, slightly dry 05 Site Series.
6460	IDF xw	06	SB	d	j	6460 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6460 occupies moderately sloping lower to toe slopes (5-15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6460 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6463	IDF xw	06	SB	c	j	6463 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6463 occupies moderately sloping lower to toe slopes (5-15%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6463 is a slightly moist seepage unit in COARSE areas. Lower to toe slope, receiving, deep, COARSE textured soils.
6464	IDF xw	06	SB	c	y	6464 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6464 areas occur in sloping valleys and draws and along the margins of active stream channels (> 5%). 6464 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
6466	IDF xw	06	SB	d	y	6466 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6466 areas occur in sloping valleys and draws and along the margins of active stream channels (> 5%). 6466 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
6467	IDF xw	06	SB	d	j	6467 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 06 and 07 Site Series.
6472	IDF xw	07	SR	c	j	6472 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the wet 07 and 06 site series.
6474	IDF xw	06	SB	c	j	6474 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 6474 occupies nearly level to very gently sloping (<5%) portions of flat valley bottoms in minor drainages or hollows. 6474 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes within, stream channels.

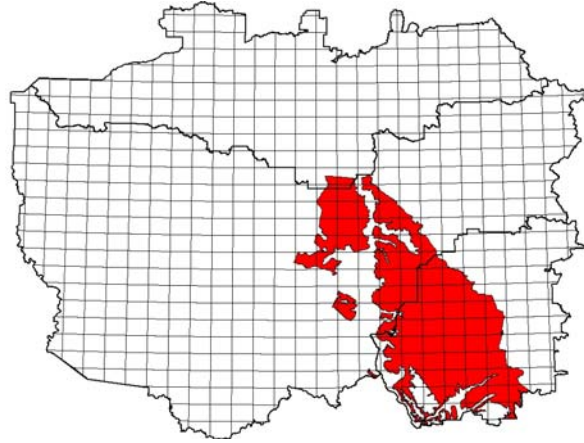
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6476	IDF xw	07	SR	d	j	6476 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the wet 07 and 06 site series.
6477	IDF xw	07	SR	d	j	6477 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6477 occupies nearly level to very gently sloping (<5%) lower to toe slopes and flat valley bottoms in minor drainages or hollows. 6477 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, and sometimes within, the valleys of narrow streams and draws.
6483	IDF xw	06	SB	c	j	6483 areas were mapped only in areas mapped as COARSE TEXTURED. 6483 areas occupy the more level (< 5%) and wetter portions of low-lying margins surrounding wetlands and open water bodies. 6483 areas are predicted to consist of a mixture of the wettest Site Series including 06 and 07.
6484	IDF xw	06	SB	c	d	6484 areas were mapped only in areas mapped as COARSE TEXTURED. 6484 areas occupy the more strongly sloping (> 5%) and drier portions of low-lying margins surrounding wetlands and open water bodies. 6484 areas are predicted to consist of a mixture of the wettest Site Series including 06 and 07.
6486	IDF xw	06	SB	d	j	6486 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6486 areas occupy the more strongly sloping (> 5%) and drier portions of low-lying margins surrounding wetlands and open water bodies. 6486 areas are predicted to consist of a mixture of the wettest Site Series including 06 and 07.
6487	IDF xw	06	SB	d	j	6487 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6487 areas occupy the more level (< 5%) and wetter portions of low-lying margins surrounding wetlands and open water bodies. 6487 areas are predicted to consist of a mixture of the wettest Site Series including 06 and 07.
6491	IDF xw	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6492	IDF xw	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6493	IDF xw	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
6494	IDF xw	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6495	IDF xw	00	BR			These areas were mapped visually by as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
6496	IDF xw	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
6497	IDF xw	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6498	IDF xw	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6499	IDF xw	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: IDF xw**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6401	6401	01	IDF xw	10	01	DJ	d	j						
6402	6402	02	IDF xw	8	02	PW	s	r	1	03	DS	1	01	DJ
6403	6403	03	IDF xw	10	03	DS	w	x		04	DW			
6404	6404	04	IDF xw	8	04	DW	w	d	2	03	DS			
6405	6405	05	IDF xw	7	05	DF	k	d	3	01	DJ			
6406	6406	06	IDF xw	8	06	SB	d	j	2	01	DJ			
6409	6409	07	IDF xw	9	07	SR	p	j	1	06	SB			
6416	6406	06	IDF xw	8	06	SB	d	j	2	01	DJ			
6421	6401	01	IDF xw	7	01	DJ	d	x	3	04	DW			
6423	6423	02	IDF xw	8	02	PW	s	r	1	03	DS	1	01	DJ
6424	6424	01	IDF xw	7	01	DJ	d	r	2	02	PW	1	03	DS
6432	6432	02	IDF xw	7	02	PW	c	r	2	04	DW	1	03	DS
6436	6436	06	IDF xw	6	06	SB	c	j	4	01	DJ			
6437	6437	01	IDF xw	6	01	DJ	d	j	4	06	SB			
6441	6441	04	IDF xw	9	04	DW	c	j	1	01	DJ			
6442	6442	04	IDF xw	10	04	DW	c	x						
6443	6443	03	IDF xw	10	03	DS	c	w						
6444	6444	03	IDF xw	8	03	DS	c	w	2	04	DW			
6446	6436	06	IDF xw	6	06	SB	c	j	4	01	DJ			
6447	6447	06	IDF xw	8	06	SB	c	j	2	01	DJ			
6451	6451	01	IDF xw	8	01	DJ	k	d	2	05	DF			
6454	6454	04	IDF xw	8	04	DW	c	k	2	05	DF			
6455	6455	05	IDF xw	8	05	DF	c	k	2	01	DJ			
6460	6406	06	IDF xw	8	06	SB	d	j	2	01	DJ			
6462	6462	06	IDF xw	8	06	SB	c	d	2	07	SR			
6463	6436	06	IDF xw	6	06	SB	c	j	4	01	DJ			
6464	6464	06	IDF xw	8	06	SB	c	y	2	07	SR			
6466	6406	06	IDF xw	8	06	SB	d	y	2	07	SR			
6467	6467	06	IDF xw	8	06	SB	d	j	2	07	SR			
6472	6472	07	IDF xw	8	07	SR	c	j	2	06	SB			
6474	6447	06	IDF xw	8	06	SB	c	j	2	01	DJ			
6476	6476	07	IDF xw	8	07	SR	d	j	2	06	SB			
6477	6477	07	IDF xw	8	07	SR	d	j	2	06	SB			
6483	6483	06	IDF xw	7	06	SB	c	j	3	07	SR			
6484	6484	06	IDF xw	7	06	SB	c	d	3	07	SR			
6486	6486	06	IDF xw	7	06	SB	d	j	3	07	SR			
6487	6486	06	IDF xw	7	06	SB	d	j	3	07	SR			
6491	6491	OW	IDF xw	10	00	OW								
6492	6492	WE	IDF xw	10	00	WE	d	y						
6493	6493	ME	IDF xw	10	00	ME								
6494	6494	PA	IDF xw	10	00	PA								
6495	6495	BR	IDF xw	10	00	BR								
6496	6496	DL	IDF xw	10	00	DL								
6497	6497	TA	IDF xw	10	00	TA								
6498	6498	AV	IDF xw	10	00	AV								
6499	6499	GL	IDF xw	10	00	GL								

**BGC Unit: IDF dk3****LMES Zone ID: 65****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	13,347.4	0.64%
Williams Lake TSA	364,755.8	7.40%
100 Mile House TSA	578,556.2	46.89%
Cariboo Region	956,659.4	11.61%

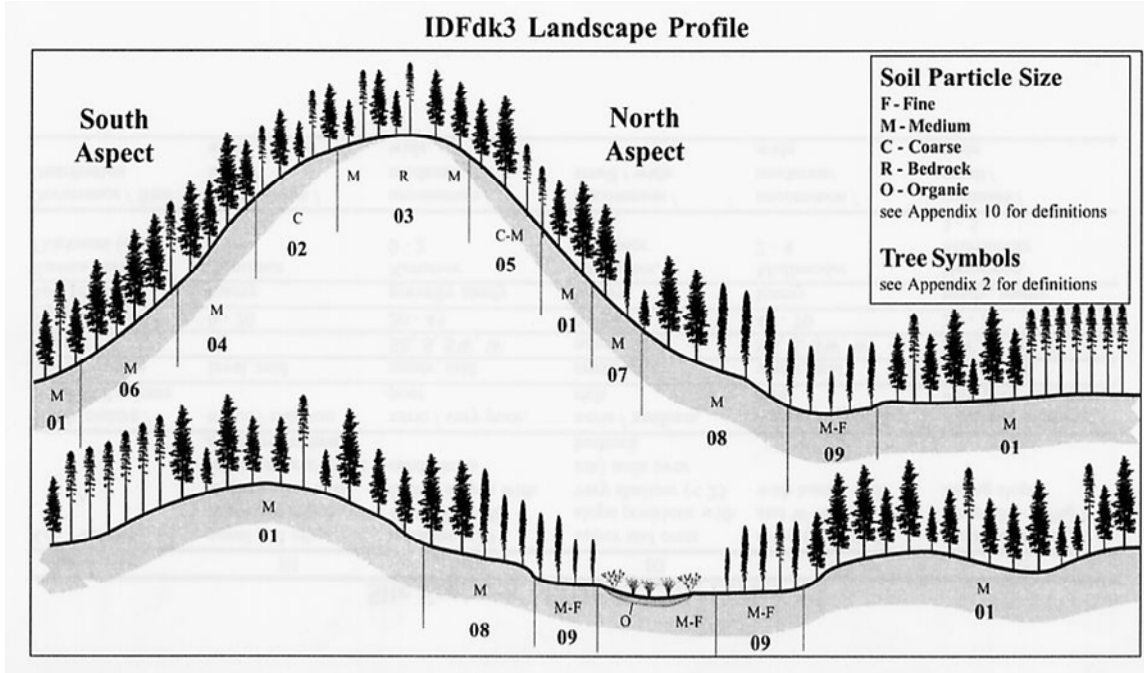
**List of Site Series Codes Defined for use in IDF dk3**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	LP	FdPl - Pinegrass - Feathermoss	mesic	All upper water shedding parts of the landscape
02	DK	Fd - Juniper - Kinnikinnick	xeric	COARSE MATERIALS - Moderate to Steep SW Slopes
03	DJ	Fd - Juniper - Peltigera	xeric	Shallow Crests, Thin, Dry Soils
04	DW	Fd - Bluebunch wheatgrass - Needlegrass	subxeric - submesic	Steep SW - Dry Warm Upper slopes
05	DM	Fd - Feathermoss - Step moss	subxeric - submesic	Steep NE - Cool Dry slopes
06	DP	Fd - Pinegrass - Aster	submesic	Moderate SW - Slightly drier and warmer slopes
07	SR	SxwFd - Prickly rose - Sedge	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
08	SS	SxwFd - Prickly rose - Sarsaparilla	subhygric	Moist to Wet, Level Toe Slopes WT > 50 cm
09	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Flat, Wet, and Organic Depressions WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: IDF dk3**



**Example Attribute Class Rule File for IDF dk3 (arule6530)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SIdry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.50	7.50	1
12	formfile	QWETI	Dry2SIWet	1	7.50	5.50	9.50	5.50	9.50	2
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
15	formfile	QWETI	SL_Wet	1	9.90	9.00	10.80	9.00	10.80	0.9
16	formfile	QWETI	SLWet2Wet	1	11.25	112.50	11.25	10.25	12.25	1
17	formfile	QWETI	Wet	1	11.50	11.50	11.50	10.50	12.50	1
18	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
19	formfile	SLOPE	Steep	4	45.00	45.00	45.00	40.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	4.00	0.00	5.00	0.00	5.00	1
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	10.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	30.00	1
24	formfile	SLOPE	SlopeLT45	5	40.00	0.00	40.00	0.00	45.00	5
25	formfile	SLOPE	SlopeGT05	4	6.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT15	4	15.00	10.00	10.00	15.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	25.00	25.00	25.00	20.00	100.00	5
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF dk3 (crule6530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6503r	Crest	30	1	6503	03 Shallow Crest	MH6571n	Low2Toe	30	10	6507	07 Moist NE Toe Slope
MH6503r	VDry	30	1	6503		MH6571n	SL_Wet	30	10	6507	
MH6503r	SlopeLT30	10	1	6503		MH6571n	SlopeLT15	10	10	6507	
MH6503r	Med2Crs	10	1	6503		MH6571n	NE_Aspect	10	10	6507	
MH6503r	Shallow	40	1	6503		MH6571n	Med2Crs	5	10	6507	
MH6503r	Hi_Ridge	10	1	6503		MH6571n	Deep	5	10	6507	
MH6563r	Crest	30	2	6563	06 Deep Dry Ridge	MH6517s	Low2Toe	30	11	6517	07 Moist SW Toe Slope
MH6563r	VDry	30	2	6563		MH6517s	SL_Wet	30	11	6517	
MH6563r	SlopeLT30	10	2	6563		MH6517s	SlopeLT15	10	11	6517	
MH6563r	Med2Crs	10	2	6563		MH6517s	SW_Aspect	10	11	6517	
MH6563r	Deep	20	2	6563		MH6517s	Med2Crs	5	11	6517	
MH6563r	Hi_Ridge	10	2	6563		MH6517s	Deep	5	11	6517	
MH6536k	Crest	30	3	6536	01 Deep Low Knoll	MH6501t	Low2Toe	30	12	6501	01 > 15% Low-Toe Slope
MH6536k	VDry	30	3	6536		MH6501t	SL_Wet	30	12	6501	
MH6536k	SlopeLT30	10	3	6536		MH6501t	SlopeGT15	20	12	6501	
MH6536k	Med2Crs	10	3	6536		MH6501t	Med2Crs	10	12	6501	
MH6536k	Deep	20	3	6536		MH6501t	Deep	10	12	6501	
MH6536k	Low_Knoll	10	3	6536		MH6508n	Toe	30	13	6508	08 Wet < 15% NE Toe
MH6504s	Crest2Low	30	4	6504	04 Steep SW warm dry	MH6508n	SLWet2Wet	30	13	6508	
MH6504s	Dry2SIWet	30	4	6504		MH6508n	SlopeLT15	10	13	6508	
MH6504s	Steep_SW	20	4	6504		MH6508n	NE_Aspect	10	13	6508	
MH6504s	Med2Crs	10	4	6504		MH6508n	Med2Crs	5	13	6508	
MH6504s	Deep	10	4	6504		MH6508n	Deep	5	13	6508	
MH6506s	Crest2Low	30	5	6506	06 20-45% SW Dry	MH6578s	Toe	30	14	6578	08 Wet < 15% SW Toe
MH6506s	Dry2Med	30	5	6506		MH6578s	SLWet2Wet	30	14	6578	
MH6506s	SW_Aspect	10	5	6506		MH6578s	SlopeLT15	10	14	6578	
MH6506s	SlopeLT45	10	5	6506		MH6578s	SW_Aspect	10	14	6578	
MH6506s	SlopeGT20	10	5	6506		MH6578s	Med2Crs	5	14	6578	
MH6506s	Med2Crs	5	5	6506		MH6578s	Deep	5	14	6578	
MH6506s	Deep	5	5	6506		MH6508v	Valley	30	15	6580	08 Wet Sloping Valley
MH6516s	Crest2Low	30	6	6516	01 < 20% SW Shedding	MH6508v	Wet2V_Wet	30	15	6580	
MH6516s	Dry2SIWet	30	6	6516		MH6508v	SlopeGT05	20	15	6580	
MH6516s	SW_Aspect	10	6	6516		MH6508v	Med2Crs	10	15	6580	
MH6516s	SlopeLT20	20	6	6516		MH6508v	Deep	10	15	6580	
MH6516s	Med2Crs	5	6	6516		MH6509f	Valley	30	16	6509	09 Wet Flat Valley
MH6516s	Deep	5	6	6516		MH6509f	Wet2V_Wet	30	16	6509	
MH6505n	Crest2Low	30	7	6505	05 Steep NE cool dry	MH6509f	SlopeLT05	20	16	6509	
MH6505n	Dry2SIWet	30	7	6505		MH6509f	Medium	10	16	6509	
MH6505n	Steep_NE	20	7	6505		MH6509f	Deep	10	16	6509	
MH6505n	Med2Crs	10	7	6505		MH6589m	WetZ_LT05	50	17	6589	09 Wet Margins
MH6505n	Deep	10	7	6505		MH6589m	WetL_LT200	50	17	6589	
MH6551n	Crest2Low	30	8	6551	01 20-45% NE Dry	MH6577s	Hi_Seep	80	18	6577	07 Moist Seepage
MH6551n	Dry2SIWet	30	8	6551		MH6577s	Med2Crs	20	18	6577	
MH6551n	NE_Aspect	10	8	6551		MH6509o	Organic	99	19	6509	09 Wet Organics
MH6551n	SlopeLT45	10	8	6551		MH6575s	Crest2Low	30	20	6575	07 Moist SW Swale
MH6551n	SlopeGT20	10	8	6551		MH6575s	SLWet2Wet	30	20	6575	
MH6551n	Med2Crs	5	8	6551		MH6575s	SW_Aspect	10	20	6575	
MH6551n	Deep	5	8	6551		MH6575s	SlopeLT15	20	20	6575	
MH6515n	Crest2Low	30	9	6515	01 < 20% NE Shedding	MH6575s	Med2Crs	5	20	6575	
MH6515n	Dry2SIWet	30	9	6515		MH6575s	Deep	5	20	6575	
MH6515n	NE_Aspect	10	9	6515		MH6575n	Crest2Low	30	21	6575	07 Moist NE Swale
MH6515n	SlopeLT20	20	9	6515		MH6575n	SLWet2Wet	30	21	6575	
MH6515n	Med2Crs	5	9	6515		MH6575n	NE_Aspect	10	21	6575	
MH6515n	Deep	5	9	6515		MH6575n	SlopeLT15	20	21	6575	
						MH6575n	Med2Crs	5	21	6575	
						MH6575n	Deep	5	21	6575	



**PEM Entity Descriptions for: IDF dk3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6501	IDF dk3	01	LP	j	d	6501 areas were mapped in all gently to moderately sloping upper to lower slope positions in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils
6502	IDF dk3	02	DK	w	x	6502 areas were mapped ONLY in areas mapped as COARSE TEXTURED and only on moderately steep warm aspects of SW facing hillslopes. Significant slope, warm aspect, deep, coarse-textured soil
6503	IDF dk3	03	DJ	r	s	6503 areas were mapped ONLY on the dry crests of high ridges that had been mapped as MEDIUM TEXTURED and SHALLOW to bedrock. Crest slope position with medium-textured shallow soil over bedrock
6504	IDF dk3	04	DW	w	x	6504 areas were mapped in steep SW facing hill slopes (>45%) with warm aspects in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils
6505	IDF dk3	05	DM	k		6505 areas were mapped on steep (>45%) NE facing slopes with cool aspects and deep MEDIUM TEXTURED soils. Significant slope, cool aspect with deep, medium-textured soils.
6506	IDF dk3	06	DP	w	x	6506 areas were mapped on moderately steep slopes (15-45%) with warm SW facing aspects and only in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils.
6507	IDF dk3	07	SR	j	k	6507 areas were mapped on gentle (slope < 15%) lower to toe slope positions with NE aspects that were moistened by seepage from upslope but that had sufficient slope that moisture did not accumulate to form permanently high water tables. 6507 areas were mapped only in areas mapped as MEDIUM TEXTURED. Gentle, lower slope, receiving positions, deep, medium-textured soils
6508	IDF dk3	08	SS	j	w	6508 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6508 were mapped on gentle (<15%) NE facing toe slopes that were moistened by seepage from upslope but that were not affected by permanently high water tables. Gentle, lower slope, receiving positions, deep, medium - textured soils
6509	IDF dk3	09	SH	d	y	6509 areas were mapped in level to depression hollows, valley bottoms or draws that accumulated and held moisture and allowed the formation of permanently high water tables. 6509 areas were only mapped in areas mapped as MEDIUM TEXTURED. Level, deep, medium - textured soils; high water table
6515	IDF dk3	01	LP	j	k	6515 areas were mapped on gently sloping upper to mid slopes (<15%) with NE aspects in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils
6516	IDF dk3	01	LP	j	w	6516 areas were mapped on gently sloping upper to mid slopes (<15%) with SW aspects in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils
6517	IDF dk3	07	SR	j	w	6517 areas were mapped on gentle (slope < 15%) lower to toe slope positions with SW aspects that were moistened by seepage from upslope but that had sufficient slope that moisture did not accumulate to form permanently high water tables. 6517 areas were mapped only in areas mapped as MEDIUM TEXTURED. Gentle, lower slope, receiving positions, deep, medium-textured soils
6518	IDF dk3	01	LP	j	d	6518 areas were mapped on gently to moderately sloping lower to toe slopes (15-35%) on all aspects in areas mapped as COARSE TEXTURED. Gentle slope deep, coarse - textured soils
6524	IDF dk3	02	DK	w	x	6524 areas were mapped in steep SW facing hill slopes (>45%) with warm aspects in areas mapped as COARSE TEXTURED. Significant slope, warm aspect, deep, coarse-textured soils
6525	IDF dk3	06	DP	c	k	6525 areas were mapped only on COARSE TEXTURED soils and only on gently sloping (< 15%) NE facing aspects.
6533	IDF dk3	03	DJ	r	s	6533 areas were mapped ONLY on the dry crests of high ridges that had been mapped as COARSE TEXTURED and SHALLOW to bedrock. Crest slope position with medium-textured shallow soil over bedrock

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6536	IDF dk3	01	LP	d	x	6536 areas were mapped on the tops of drier tops of low knolls that had DEEP MEDIUM TEXTURED SOILS. These low knoll crest positions are predicted to be occupied by the normal mesic 01 Site Series.
6551	IDF dk3	01	LP	k	x	6551 areas were mapped on moderately to steeply sloping (15-45%) slopes with NE aspects and only in areas mapped as MEDIUM TEXTURED. 6551 areas were judged by the Regional Ecologist to not be steep enough to be classified as the 05 Site Series and were predicted to be occupied mainly by normal 01 Site Series. Moderate slope; deep, medium - textured soils
6552	IDF dk3	06	DP	c	w	6552 areas were mapped only on COARSE TEXTURED soils and only on gently sloping (< 15%) SW facing aspects.
6555	IDF dk3	06	DP	c	k	6555 areas were mapped only on COARSE TEXTURED soils and only on moderately to steeply sloping (15-45%) NE facing hillslopes.
6556	IDF dk3	05	DM	c	k	6556 areas were mapped in steep NE facing hill slopes (>45%) with cool aspects in areas mapped as COARSE TEXTURED. Significant slope, cool aspect, deep, coarse-textured soils
6562	IDF dk3	06	DP	c	w	6562 areas were mapped on gently sloping (< 15%) lower to toe slopes, draws and hollows with SW aspects in areas mapped as COARSE TEXTURED. 6562 areas are predicted to consist of a mixture of slightly drier 06 and mesic 01 Site Series.
6563	IDF dk3	06	DP	d	x	6563 areas were mapped on the tops of drier crests of high ridges that had DEEP MEDIUM TEXTURED SOILS. These drier crest positions are predicted to be occupied by the slightly drier 06 Site Series in preference to the normal mesic 01 Site Series.
6566	IDF dk3	06	DP	c	x	6566 areas were mapped on dry crests in areas of DEEP COARSE TEXTURED soils.
6567	IDF dk3	07	SR	y	d	6567 areas occur in areas of noticeable seepage and COARSE TEXTURES. Such areas of slightly moister than normal conditions are predicted to be occupied by the slightly moister than mesic 07 Site Series.
6571	IDF dk3	01	LP	c	y	6571 areas were mapped on gently sloping (< 15%) lower to toe slopes, draws and hollows with NE aspects in areas mapped as COARSE TEXTURED. 6571 areas are predicted to consist of a mixture of 01 Site Series along with some 07 Site Series.
6574	IDF dk3	07	SR	c	y	6574 areas were mapped in gently sloping (< 15%) hollows and draws and lower to toe slope positions with all aspects and only in areas mapped as COARSE TEXTURED. 6574 areas were predicted to be occupied mainly by the moist 07 Site Series along with some slightly wetter 08 Site Series.
6575	IDF dk3	07	SR	j	d	6575 areas were mapped in gently sloping (< 15%) hollows and draws and lower to toe slope positions with all aspects and only in areas mapped as MEDIUM TEXTURED. 6575 areas were predicted to be occupied mainly by slightly moist 07 Site Series along with some wetter 08 Site Series.
6576	IDF dk3	07	SR	c	j	6576 areas were mapped only in COARSE TEXTURED areas. 5076 areas occupy slightly wetter toe slopes with gentle gradients (< 15%).
6577	IDF dk3	07	SR	y	d	6577 areas occur in areas of noticeable seepage and MEDIUM TEXTURES. Such areas of slightly moister than normal conditions are predicted to be occupied by the slightly moister than mesic 07 Site Series.
6578	IDF dk3	08	SS	w	j	6578 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6578 areas occur on gentle (<15%) SW facing toe slopes that were moistened by seepage from upslope but that were not affected by permanently high water tables. Gentle, lower slope, receiving positions, deep, medium - textured soils
6579	IDF dk3	09	SH	c	y	6579 areas were mapped only in areas mapped as COARSE TEXTURED. 6579 areas occur in the low-lying margins surrounding wetlands and open water bodies. 6579 areas are predicted to consist of a mixture of wetter Site Series including 09 and 08.
6580	IDF dk3	08	SS	j	w	6580 areas were mapped only in MEDIUM TEXTURED areas. 6580 areas occupy sloping valleys, hollows and swales with slopes > 5%.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6583	IDF dk3	07	SR	c	j	6583 areas were mapped only in COARSE TEXTURED areas. 6587 areas occupy sloping valleys, hollows and swales with slopes > 5%.
6587	IDF dk3	07	SR	c	j	6587 areas were mapped only in COARSE TEXTURED areas. 6587 areas occupy slightly wetter toe slopes with gentle gradients (< 15%) and a NE aspect.
6589	IDF dk3	09	SH	j	y	6589 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6589 areas occur in the low-lying margins surrounding wetlands and open water bodies. 6589 areas are predicted to consist of a mixture of wetter Site Series including 09 and 08.
6590	IDF dk3	09	SH	c	y	6590 areas were mapped in level to depression hollows, valley bottoms or draws that accumulated and held moisture and allowed the formation of permanently high water tables. 6590 areas were only mapped in areas mapped as COARSE TEXTURED. Level, deep, coarse - textured soils; high water table
6591	IDF dk3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6592	IDF dk3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. non-forested bog
6593	IDF dk3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Herb-rich meadow (cow parsnip - large leaved avens).
6594	IDF dk3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6595	IDF dk3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
6596	IDF dk3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
6597	IDF dk3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6598	IDF dk3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6599	IDF dk3	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

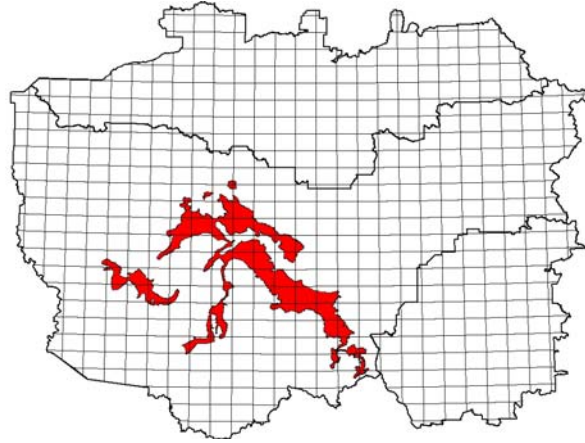
**PEM Entity Extended Legend with Proportions of Site Series for: IDF dk3**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6501	6501	01	IDF dk3	9	01	LP	j	d	1	08	SS			
6502	6502	02	IDF dk3	7	02	DK	w	x	2	06	DP	1	01	LP
6503	6503	03	IDF dk3	7	03	DJ	r	s	2	06	DP	1	01	LP
6504	6504	04	IDF dk3	7	04	DW	w	x	3	06	DP			
6505	6505	05	IDF dk3	8	05	DM	k		2	01	LP			
6506	6506	06	IDF dk3	6	06	DP	w	x	3	01	LP	1	04	DW
6507	6575	07	IDF dk3	3	07	SR	j	k	6	01	LP	1	08	SS
6508	6580	08	IDF dk3	7	08	SS	j	w	2	01	LP	1	07	SR
6509	6509	09	IDF dk3	8	09	SH	d	y	1	08	SS	1	07	SR
6515	6501	01	IDF dk3	9	01	LP	j	k	1	06	DP			
6516	6501	01	IDF dk3	8	01	LP	j	w	2	06	DP			
6517	6575	07	IDF dk3	6	07	SR	j	w	4	01	LP			
6518	6518	01	IDF dk3	6	01	LP	j	d	4	07	SR			
6524	6524	02	IDF dk3	7	02	DK	w	x	3	04	DW			
6525	6525	06	IDF dk3	8	06	DP	c	k	2	01	LP			
6533	6533	03	IDF dk3	7	03	DJ	r	s	2	06	DP	1	01	LP
6536	6501	01	IDF dk3	8	01	LP	d	x	2	06	DP			
6551	6551	01	IDF dk3	8	01	LP	k	x	2	05	DM			
6552	6562	06	IDF dk3	8	06	DP	c	w	2	01	LP			
6555	6555	06	IDF dk3	6	06	DP	c	k	4	01	LP			
6556	6556	05	IDF dk3	8	05	DM	c	k	2	06	DP			
6562	6562	06	IDF dk3	7	06	DP	c	w	2	01	LP	1	07	SR
6563	6563	06	IDF dk3	8	06	DP	d	x	2	01	LP			
6566	6566	06	IDF dk3	8	06	DP	c	x	2	03	DJ			
6567	6567	07	IDF dk3	6	07	SR	y	d	3	08	SS	1	09	SH
6571	6518	01	IDF dk3	7	01	LP	c	y	2	07	SR	1	08	SS
6574	6574	07	IDF dk3	7	07	SR	c	y	2	01	LP	1	08	SS
6575	6575	07	IDF dk3	7	07	SR	j	d	2	08	SS	1	01	LP
6576	6574	07	IDF dk3	7	07	SR	c	j	2	08	SS	1	01	LP
6577	6577	07	IDF dk3	8	07	SR	y	d	2	08	SS			
6578	6580	08	IDF dk3	6	08	SS	w	j	3	07	SR	1	01	LP
6579	6579	09	IDF dk3	6	09	SH	c	y	3	08	SS	1	01	LP
6580	6580	08	IDF dk3	7	08	SS	j	w	2	01	LP	1	07	SR
6583	6575	07	IDF dk3	6	07	SR	c	j	3	08	SS	1	01	LP
6587	6575	07	IDF dk3	6	07	SR	c	j	3	08	SS	1	01	LP
6589	6589	09	IDF dk3	6	09	SH	j	y	3	08	SS	1	01	LP
6590	6590	09	IDF dk3	8	09	SH	c	y	1	08	SS	1	07	SR
6591	6591	OW	IDF dk3	10	00	OW								
6592	6592	WE	IDF dk3	10	00	WE	d	y						
6593	6593	ME	IDF dk3	10	00	ME								
6594	6594	PA	IDF dk3	10	00	PA								
6595	6595	BR	IDF dk3	10	00	BR								
6596	6596	DL	IDF dk3	10	00	DL								
6597	6597	TA	IDF dk3	10	00	TA								
6598	6598	AV	IDF dk3	10	00	AV								
6599	6599	GL	IDF dk3	10	00	GL								



**BGC Unit: IDF dk4****LMES Zone ID: 66****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	372,646.3	7.56%
100 Mile House TSA	0.0	0.00%
Cariboo Region	372,646.3	4.52%

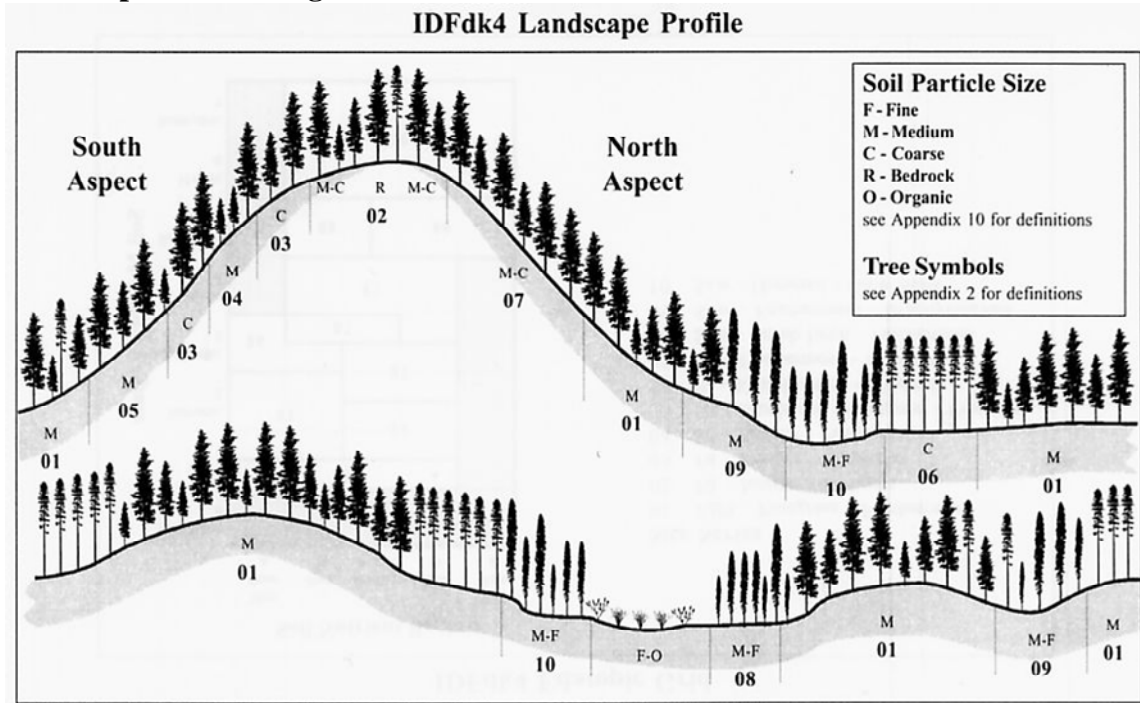
**List of Site Series Codes Defined for use in IDF dk4**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	LP	FdPl - Pinegrass - Feathermoss	mesic	All up to lower water shedding parts of the landscape
02	JP	Fd - Juniper - Peltigera	xeric	Shallow Crests, Thin, Dry Soils
03	DJ	Fd - Juniper - Saskatoon	xeric	COARSE MATERIALS - Steep SW Slopes
04	DS	Fd - Juniper - Pasture sage	subxeric	Steep SW - Dry Warm Upper slopes
05	DW	Fd - Bluebunch wheatgrass - Pinegrass	submesic - subxeric	Moderate SW - Slightly drier and warmer slopes
06	LC	Pl - Kinnikinnick - Cladonia	submesic	COARSE MATERIALS - All upper shedding not Steep SW
07	DM	Fd - Feathermoss - Step moss	submesic	Steep NE - Cool Dry slopes
08	SS	Sxw - Scrub birch - Feathermoss	subhygric	Wet, Frosty Lower to Toe Slopes, WT > 50 cm
09	SF	Sxw - Feathermoss - Brachythecium	subhygric	Non-frosty, Slightly Moist Toe Slopes, WT > 50 cm
10	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric - subhydric	Flat, Wet, Frosty and Organic Depressions WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: IDF dk4**



**Example Attribute Class Rule File for IDF dk4 (arule6630)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.50	7.50	1
12	formfile	QWETI	Dry2SIWet	1	7.50	5.50	9.50	5.50	9.50	2
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
15	formfile	QWETI	SL_Wet	1	9.70	8.80	10.60	8.80	10.60	0.9
16	formfile	QWETI	SLWet2Wet	1	11.25	112.50	11.25	10.25	12.25	1
17	formfile	QWETI	Wet	1	11.50	11.50	11.50	10.50	12.50	1
18	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	30.00	100.00	2
20	formfile	SLOPE	SlopeLT05	5	2.00	0.00	2.00	0.00	5.00	3
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	10.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	30.00	1
24	formfile	SLOPE	SlopeLT45	5	40.00	0.00	40.00	0.00	45.00	5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	2.00	100.00	3
26	formfile	SLOPE	SlopeGT15	4	15.00	10.00	10.00	15.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	25.00	25.00	25.00	20.00	100.00	5
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF dk4 (crule6630)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6602r	Crest	30	1	6602	02 Shallow Crest	MH6609n	Low2Toe	30	10	6609	09 Moist NE Toe Slope
MH6602r	VDry	30	1	6602		MH6609n	SLWet2Wet	30	10	6609	
MH6602r	SlopeLT30	10	1	6602		MH6609n	SlopeLT15	10	10	6609	
MH6602r	Med2Crs	10	1	6602		MH6609n	NE_Aspect	10	10	6609	
MH6602r	Shallow	40	1	6602		MH6609n	Med2Crs	5	10	6609	
MH6602r	Hi_Ridge	10	1	6602		MH6609n	Deep	5	10	6609	
MH6625r	Crest	30	2	6625	01 Deep Dry Ridge	MH6619s	Low2Toe	30	11	6609	09 Moist SW Toe Slope
MH6625r	VDry	30	2	6625		MH6619s	SLWet2Wet	30	11	6609	
MH6625r	SlopeLT30	10	2	6625		MH6619s	SlopeLT15	10	11	6609	
MH6625r	Med2Crs	10	2	6625		MH6619s	SW_Aspect	10	11	6609	
MH6625r	Deep	20	2	6625		MH6619s	Med2Crs	5	11	6609	
MH6625r	Hi_Ridge	10	2	6625		MH6619s	Deep	5	11	6609	
MH6604s	Crest2Low	30	3	6604	04 Steep SW warm dry	MH6601t	Low2Toe	30	12	6601	01 > 15% Low-Toe Slope
MH6604s	Dry2SIWet	30	3	6604		MH6601t	SI_Wet	30	12	6601	
MH6604s	Steep_SW	20	3	6604		MH6601t	SlopeGT15	20	12	6601	
MH6604s	Med2Crs	10	3	6604		MH6601t	Med2Crs	10	12	6601	
MH6604s	Deep	10	3	6604		MH6601t	Deep	10	12	6601	
MH6605s	Crest2Low	30	4	6605	05 15-30% SW Dry	MH6608n	Toe	30	13	6609	09 Moist < 15% NE Toe
MH6605s	Dry2SIWet	30	4	6605		MH6608n	Wet	30	13	6609	
MH6605s	SW_Aspect	10	4	6605		MH6608n	SlopeLT15	10	13	6609	
MH6605s	SlopeLT30	10	4	6605		MH6608n	NE_Aspect	10	13	6609	
MH6605s	SlopeGT15	10	4	6605		MH6608n	Med2Crs	5	13	6609	
MH6605s	Med2Crs	5	4	6605		MH6608n	Deep	5	13	6609	
MH6605s	Deep	5	4	6605		MH6689s	Toe	30	14	6609	09 Moist < 15% SW Toe
MH6615s	Crest2Low	30	5	6601	01 <15% SW Shedding	MH6689s	Wet	30	14	6609	
MH6615s	Dry2SIWet	30	5	6601		MH6689s	SlopeLT15	10	14	6609	
MH6615s	SW_Aspect	10	5	6601		MH6689s	SW_Aspect	10	14	6609	
MH6615s	SlopeLT15	20	5	6601		MH6689s	Med2Crs	5	14	6609	
MH6615s	Med2Crs	5	5	6601		MH6689s	Deep	5	14	6609	
MH6615s	Deep	5	5	6601		MH6629v	Valley	30	15	6629	09 Moist Sloping Valley
MH6607n	Crest2Low	30	6	6607	07 Steep NE cool dry	MH6629v	Wet2V_Wet	30	15	6629	
MH6607n	Dry2SIWet	30	6	6607		MH6629v	SlopeGT05	20	15	6629	
MH6607n	Steep_NE	20	6	6607		MH6629v	Med2Crs	10	15	6629	
MH6607n	Med2Crs	10	6	6607		MH6629v	Deep	10	15	6629	
MH6607n	Deep	10	6	6607		MH6610f	Valley	30	16	6610	10 Wet Flat Valley
MH6671n	Crest2Low	30	7	6601	01 15-30% NE Shedding	MH6610f	Wet2V_Wet	30	16	6610	
MH6671n	Dry2SIWet	30	7	6601		MH6610f	SlopeLT05	20	16	6610	
MH6671n	NE_Aspect	10	7	6601		MH6610f	Medium	10	16	6610	
MH6671n	SlopeLT30	10	7	6601		MH6610f	Deep	10	16	6610	
MH6671n	SlopeGT15	10	7	6601		MH6688m	WetZ_LT05	50	17	6688	10 Wet Margins
MH6671n	Med2Crs	5	7	6601		MH6688m	WetL_LT200	50	17	6688	
MH6671n	Deep	5	7	6601		MH6681s	Hi_Seep	80	18	6681	09 Moist Seepage
MH6617n	Crest2Low	30	8	6601	01 < 15% NE Shedding	MH6681s	Med2Crs	20	18	6681	
MH6617n	Dry2SIWet	30	8	6601		MH6610o	Organic	99	19	6610	10 Wet Organics
MH6617n	NE_Aspect	10	8	6601		MH6649s	Crest2Low	30	20	6609	09 Moist SW Swale
MH6617n	SlopeLT15	20	8	6601		MH6649s	Wet	30	20	6609	
MH6617n	Med2Crs	5	8	6601		MH6649s	SW_Aspect	10	20	6609	
MH6617n	Deep	5	8	6601		MH6649s	SlopeLT15	20	20	6609	
MH6601m	Up2Low	35	9	6601	01 < 15% Up-Low	MH6649s	Med2Crs	5	20	6609	
MH6601m	Dry2Med	25	9	6601		MH6649s	Deep	5	20	6609	
MH6601m	SlopeLT15	20	9	6601		MH6659n	Crest2Low	30	21	6609	09 Moist SW Swale
MH6601m	Med2Crs	10	9	6601		MH6659n	Wet	30	21	6609	
MH6601m	Deep	10	9	6601		MH6659n	NE_Aspect	10	21	6609	
						MH6659n	SlopeLT15	20	21	6609	
						MH6659n	Med2Crs	5	21	6609	
						MH6659n	Deep	5	21	6609	



**PEM Entity Descriptions for: IDF dk4**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6601	IDF dk4	01	LP	d	j	6601 areas were mapped on moderate (slope > 15%) lower to toe slope positions with ALL aspects that had sufficient slope that moisture did not accumulate to produce seepage in these lower landform positions. 6601 areas were mapped only in areas mapped as MEDIUM TEXTURED. Gentle to moderate, lower slope, positions, deep, medium-textured soils. 6601 areas extend into portions of the landscape (lower toe slopes) that would normally be expected to exhibit moister conditions but under the drier climate in this subzone, there is insufficient moisture to generate seepage in these toe slope positions.
6602	IDF dk4	02	JP	r	s	6602 areas were mapped ONLY on the dry crests of high ridges that had been mapped as SHALLOW to bedrock. Crest slope position with medium-textured shallow soil over bedrock
6603	IDF dk4	04	DS	w	x	6603 areas were mapped in steep SW facing hill slopes (>30%) with warm aspects in areas mapped as COARSE TEXTURED. Significant slope, warm aspect, deep, coarse-textured soils
6604	IDF dk4	04	DS	w	x	6604 areas were mapped in steep SW facing hill slopes (>30%) with warm aspects in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils
6605	IDF dk4	05	DW	w	x	6605 areas were mapped on moderately steep slopes (15-30%) with warm SW facing aspects and only in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils.
6607	IDF dk4	07	DM	k		6607 areas were mapped on steep (>30%) NE facing slopes with cool aspects and deep MEDIUM TEXTURED soils. Significant slope, cool aspect with deep, medium-textured soils.
6609	IDF dk4	09	SF	j	k	6609 areas were mapped in gently sloping (< 15%) hollows and draws and in lower to toe slope positions with ALL aspects and only in areas mapped as MEDIUM TEXTURED. 6609 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6609 areas were expected to be occupied by the moist frosty 08 site series but the regional ecologist indicated that these areas would likely contain more moist, non-frosty 09 than frosty 08 site series.
6610	IDF dk4	10	SH	d	j	6610 areas were mapped ONLY in areas of MEDIUM TEXTURE. 6610 areas occupy flat, wet, low lying valley bottoms with slope gradients less than 5%. It is assumed that these flat valley bottoms accumulate both moisture and cold air and develop permanently high water tables. These wet frosty areas are predicted to be occupied mainly by the very wet and frosty 10 Site Series along with the wet, frosty 08 Site Series. Toe slope to depression; poor drainage; deep, medium-textured soils.
6622	IDF dk4	02	JP	r	s	6622 areas were mapped ONLY on the dry crests of high ridges that had been mapped as SHALLOW to bedrock and COARSE. Crest slope position with coarse-textured shallow soil over bedrock
6625	IDF dk4	01	LP	d	x	6625 areas were mapped on the tops of drier crests of high ridges that had DEEP MEDIUM TEXTURED SOILS and were NOT mapped as SHALLOW. These drier crest positions are predicted to contain some slightly drier 05 Site Series in addition to the dominant normal mesic 01 Site Series.
6628	IDF dk4	10	SH	d	j	6628 areas were mapped ONLY in areas of COARSE. 6628 areas occupy flat, wet, low lying valley bottoms with slope gradients less than 5%. It is assumed that these flat valley bottoms accumulate both moisture and cold air and develop permanently high water tables. These wet frosty areas are predicted to be occupied mainly by the very wet and frosty 10 Site Series along with the wet, frosty 08 Site Series. Toe slope to depression; poor drainage; deep, coarse-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6629	IDF dk4	09	SF	d	j	6629 areas were mapped ONLY in areas of MEDIUM TEXTURE. 6629 areas occupy gently to moderately sloping, moist valley bottoms with slope gradients greater than 5%. It is assumed that these sloping valley bottoms accumulate considerable moisture but that they do not develop permanently high water tables. These moist, sloping areas are predicted to be occupied mainly by the slightly moist 09 Site Series along with some wet, frosty 08 Site Series. Toe slope to depression; poor drainage; deep, medium-textured soils.
6632	IDF dk4	06	LC	d	x	6632 areas were mapped on the tops of drier crests of high ridges that had DEEP COARSE TEXTURED SOILS and were NOT mapped as SHALLOW. These drier crest positions in coarse areas are predicted to contain the sandy 06 Site Series.
6635	IDF dk4	05	DW	w	x	6635 areas were mapped on moderately steep slopes (15-30%) with warm SW facing aspects and only in areas mapped as COARSE TEXTURED. Significant slope, warm aspect, deep, coarse-textured soils. The regional ecologist recommended assigning the slightly dry 05 site series to all moderate SW-facing slopes, including those in coarse textured areas.
6639	IDF dk4	09	SF	d	j	6639 areas were mapped ONLY in areas of COARSE TEXTURE. 6639 areas occupy gently to moderately sloping, moist valley bottoms with slope gradients greater than 5%. It is assumed that these sloping valley bottoms accumulate considerable moisture but that they do not develop permanently high water tables. These moist, sloping areas are predicted to be occupied mainly by the slightly moist 09 Site Series along with some wet, frosty 08 Site Series. Toe slope to depression; poor drainage; deep, coarse-textured soils.
6648	IDF dk4	01	LP	c	y	6648 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with SW aspects in areas mapped as COARSE TEXTURED. 6649 areas are predicted to consist of a mixture of normal, mesic 01 Site Series along with some moist, not frosty 09 Site Series.
6650	IDF dk4	05	DW	c	j	6650 areas were mapped on moderate (slope > 15%) lower to toe slope positions with SW aspects that had sufficient slope that moisture did not accumulate to produce seepage in these lower landform positions. 6650 areas were mapped only in areas mapped as COARSE TEXTURED. Gentle to moderate, lower slope, positions, deep, coarse-textured soils. 6650 areas occupy portions of the landscape (lower toe slopes) with SW aspects that would normally be expected to exhibit moister conditions but under the drier climate in this subzone, there is insufficient moisture to generate seepage in these toe slope positions.
6658	IDF dk4	01	LP	c	y	6658 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with NE aspects in areas mapped as COARSE TEXTURED. 6658 areas are predicted to consist of a mixture of normal, mesic 01 Site Series along with some moist, not frosty 09 Site Series.
6660	IDF dk4	06	LC	c	j	6660 areas were mapped on moderate (slope > 15%) lower to toe slope positions with NE aspects that had sufficient slope that moisture did not accumulate to produce seepage in these lower landform positions. 6660 areas were mapped only in areas mapped as COARSE TEXTURED. Gentle to moderate, lower slope, positions, deep, coarse-textured soils. 6660 areas occupy portions of the landscape (lower toe slopes) with NE aspects that would normally be expected to exhibit moister conditions but under the drier climate in this subzone, there is insufficient moisture to generate seepage in these toe slope positions.
6666	IDF dk4	06	LC	c	d	6666 areas were mapped in all gently to moderately sloping upper to lower slope positions in areas mapped as COARSE TEXTURED. Gentle slope; deep, coarse - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6669	IDF dk4	09	SF	j	k	6669 areas were mapped in gently sloping (< 15%) hollows and draws and in lower to toe slope positions with ALL aspects and only in areas mapped as COARSE TEXTURED. 6669 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6669 areas were expected to be occupied by the moist frosty 08 site series but the regional ecologist indicated that these areas would likely contain more moist, non-frosty 09 than frosty 08 site series.
6677	IDF dk4	07	DM	k		6677 areas were mapped on steep (>30%) NE facing slopes with cool aspects and deep COARSE TEXTURED soils. Significant slope, cool aspect with deep, coarse-textured soils.
6681	IDF dk4	09	SF	y	d	6681 areas occur in areas of noticeable seepage and MEDIUM TEXTURES. Such areas of slightly moister than normal conditions are predicted to be occupied by the slightly moister than mesic 09 Site Series along with possibly some moist, frosty 08 site series.
6683	IDF dk4	09	SF	y	d	6683 areas occur in areas of noticeable seepage and COARSE TEXTURES. Such areas of slightly moister than normal conditions are predicted to be occupied by the slightly moister than mesic 09 Site Series along with possibly some moist, frosty 08 site series.
6687	IDF dk4	09	SF	j	y	6687 areas were mapped only in areas mapped as COARSE TEXTURED. 6687 areas occur in the low-lying margins surrounding wetlands and open water bodies. 6687 areas are predicted to consist of a mixture of wetter Site Series including 09 and 10.
6688	IDF dk4	10	SH	j	y	6688 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6689 areas occur in the low-lying margins surrounding wetlands and open water bodies. 6688 areas are predicted to consist of a mixture of wetter Site Series including 10 and 09.
6691	IDF dk4	00	OE			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6692	IDF dk4	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. non-forested bog
6693	IDF dk4	00	WM			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
6694	IDF dk4	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6695	IDF dk4	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
6696	IDF dk4	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
6697	IDF dk4	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6698	IDF dk4	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6699	IDF dk4	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

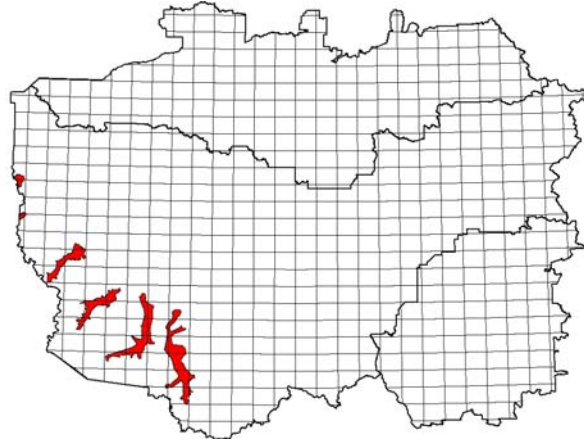
**PEM Entity Extended Legend with Proportions of Site Series for: IDF dk4**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6601	6601	01	IDF dk4	7	01	LP	d	j	2	09	SF	1	08	SS
6602	6602	02	IDF dk4	7	02	JP	r	s	3	01	LP			
6603	6603	04	IDF dk4	7	04	DS	w	x	3	05	DW			
6604	6604	04	IDF dk4	7	04	DS	w	x	3	05	DW			
6605	6605	05	IDF dk4	6	05	DW	w	x	4	01	LP			
6607	6607	07	IDF dk4	8	07	DM	k		2	01	LP			
6609	6629	09	IDF dk4	7	09	SF	j	k	3	08	SS			
6610	6610	10	IDF dk4	7	10	SH	d	j	3	09	SF			
6622	6622	02	IDF dk4	7	02	JP	r	s	3	01	LP			
6625	6625	01	IDF dk4	6	01	LP	d	x	4	02	JP			
6628	6628	10	IDF dk4	7	10	SH	d	j	3	09	SF			
6629	6629	09	IDF dk4	8	09	SF	d	j	2	08	SS			
6632	6632	06	IDF dk4	10	06	LC	d	x						
6635	6635	05	IDF dk4	6	05	DW	w	x	4	01	LP			
6639	6639	09	IDF dk4	8	09	SF	d	j	2	08	SS			
6648	6648	01	IDF dk4	6	01	LP	c	y	4	09	SF			
6650	6635	05	IDF dk4	7	05	DW	c	j	2	01	LP	1	09	SF
6658	6658	01	IDF dk4	6	01	LP	c	y	4	09	SF	0		
6660	6666	06	IDF dk4	7	06	LC	c	j	2	01	LP	1	09	SF
6666	6666	06	IDF dk4	8	06	LC	c	d	2	05	DW			
6669	6639	09	IDF dk4	7	09	SF	j	k	3	08	SS			
6677	6677	07	IDF dk4	8	07	DM	k		2	06	LC			
6681	6681	09	IDF dk4	8	09	SF	y	d	2	08	SS			
6683	6683	09	IDF dk4	8	09	SF	y	d	2	08	SS			
6687	6687	09	IDF dk4	6	09	SF	j	y	3	10	SH	1	01	LP
6688	6688	10	IDF dk4	6	10	SH	j	y	3	09	SF	1	01	LP
6691	6691	OW	IDF dk4	10	00	OW								
6692	6692	WE	IDF dk4	10	00	WE	d	y						
6693	6693	ME	IDF dk4	10	00	ME								
6694	6694	PA	IDF dk4	10	00	PA								
6695	6695	BR	IDF dk4	10	00	BR								
6696	6696	DL	IDF dk4	10	00	DL								
6697	6697	TA	IDF dk4	10	00	TA								
6698	6698	AV	IDF dk4	10	00	AV								
6699	6699	GL	IDF dk4	10	00	GL								



**BGC Unit: IDF dw****LMES Zone ID: 67****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	107,834.0	2.19%
100 Mile House TSA	0.0	0.00%
Cariboo Region	107,834.0	1.31%

**List of Site Series Codes Defined for use in IDF dw**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	DP	Fd - Prickly rose - Pinegrass	submesic - mesic	All up to lower water shedding parts of the landscape
02	DS	Fd - Saskatoon - Snowberry	very xeric - subxeric	Shallow Crests, Thin, Dry Soils
03	LK	Pl - Kinikinnick - Cladonia	subxeric	COARSE MATERIALS - All upper shedding not Steep SW
04	DB	Fd - Prickly rose - Bluegrass wheatgrass	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
05	DK	Fd - Soopolallie - Kinnikinnick	submesic	Moderate SW- Slightly drier and warmer slopes
06	BP	FdBl - Prickly rose - Pinegrass	submesic - mesic	Steep NE - Cool Dry slopes
07	ST	Sxw - Soopolallie - Twinberry	subhygric	Slightly Moist Toe Slopes, WT > 50 cm (Quite rare)
08	SG	Sxw - Twinberry - Gooseberry	subhygric - hygric	Level, Moist to Wet Low - Toe Slopes, WT > 50 cm
09	CwHw	Devil's club - Lady fern	hygric - subhydric	Rich, Moist Devil's Club (Very Rare - Not Predicted)
10	SH	Sxw - Horsetail	hygric - subhydric	Very Wet, Flat Valleys, Depressions and Organics
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Ray Coupé, 2007, personal communication. And Mapcode\_Mar18\_06.mdb. Preliminary classification.

**NOTE:** Acting on the recommendation of the Regional Ecologist, the typical moisture classes associated with 04 (DB) and 05 (DK) were exchanged relative to information in the Mapcode\_Mar18\_06.mdb file.

## Landscape Profile Diagram: IDF dw

No Landscape Profile Diagram available.

### Example Attribute Class Rule File for IDF dw (arule6730)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.50	7.50	1
12	formfile	QWETI	Dry2SIWet	1	7.50	5.50	9.50	5.50	9.50	2
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
15	formfile	QWETI	SI_Wet	1	9.70	8.80	10.60	8.80	10.60	0.9
16	formfile	QWETI	SLWet2Wet	1	11.25	112.50	11.25	10.25	12.25	1
17	formfile	QWETI	Wet	1	11.50	11.50	11.50	10.50	12.50	1
18	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	30.00	100.00	2
20	formfile	SLOPE	SlopeLT05	5	2.00	0.00	2.00	0.00	5.00	3
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	10.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	30.00	1
24	formfile	SLOPE	SlopeLT45	5	40.00	0.00	40.00	0.00	45.00	5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	2.00	100.00	3
26	formfile	SLOPE	SlopeGT15	4	15.00	10.00	10.00	15.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	25.00	25.00	25.00	20.00	100.00	5
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetLT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF dw (crule6730)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6702r	Crest	30	1	6702	02 Shallow Crest	MH6769n	Low2Toe	30	11	6769	08 Moist NE Toe Slope
MH6702r	VDry	30	1	6702		MH6769n	SLWet2Wet	30	11	6769	
MH6702r	SlopeLT30	10	1	6702		MH6769n	SlopeLT15	10	11	6769	
MH6702r	Med2Crs	10	1	6702		MH6769n	NE_Aspect	10	11	6769	
MH6702r	Shallow	40	1	6702		MH6769n	Med2Crs	5	11	6769	
MH6702r	Hi_Ridge	10	1	6702		MH6769n	Deep	5	11	6769	
MH6724r	Crest	30	2	6724	05 Deep Dry Ridge	MH6759s	Low2Toe	30	12	6759	08 Moist SW Toe Slope
MH6724r	VDry	30	2	6724		MH6759s	SLWet2Wet	30	12	6759	
MH6724r	SlopeLT30	10	2	6724		MH6759s	SlopeLT15	10	12	6759	
MH6724r	Med2Crs	10	2	6724		MH6759s	SW_Aspect	10	12	6759	
MH6724r	Deep	20	2	6724		MH6759s	Med2Crs	5	12	6759	
MH6724r	Hi_Ridge	10	2	6724		MH6759s	Deep	5	12	6759	
MH6721k	Crest	30	3	6721	05 Deep Low Knoll	MH6701t	Low2Toe	30	13	6701	01 > 15% Low-Toe Slope
MH6721k	VDry	30	3	6721		MH6701t	SJ_Wet	30	13	6701	
MH6721k	SlopeLT30	10	3	6721		MH6701t	SlopeGT15	20	13	6701	
MH6721k	Med2Crs	10	3	6721		MH6701t	Med2Crs	10	13	6701	
MH6721k	Deep	20	3	6721		MH6701t	Deep	10	13	6701	
MH6721k	Low_Knoll	10	3	6721		MH6708n	Toe	30	14	6718	08 Moist < 15% NE Toe
MH6704s	Crest2Low	30	4	6704	04 Steep SW warm dry	MH6708n	Wet	30	14	6718	
MH6704s	Dry2SIWet	30	4	6704		MH6708n	SlopeLT15	10	14	6718	
MH6704s	Steep_SW	20	4	6704		MH6708n	NE_Aspect	10	14	6718	
MH6704s	Med2Crs	10	4	6704		MH6708n	Med2Crs	5	14	6718	
MH6704s	Deep	10	4	6704		MH6708n	Deep	5	14	6718	
MH6705s	Crest2Low	30	5	6705	05 15-30% SW Dry	MH6780s	Toe	30	15	6781	08 Moist < 15% SW Toe
MH6705s	Dry2SIWet	30	5	6705		MH6780s	Wet	30	15	6781	
MH6705s	SW_Aspect	10	5	6705		MH6780s	SlopeLT15	10	15	6781	
MH6705s	SlopeLT30	10	5	6705		MH6780s	SW_Aspect	10	15	6781	
MH6705s	SlopeGT15	10	5	6705		MH6780s	Med2Crs	5	15	6781	
MH6705s	Med2Crs	5	5	6705		MH6780s	Deep	5	15	6781	
MH6705s	Deep	5	5	6705		MH6709v	Valley	30	16	6709	08 Moist Sloping Valley
MH6715s	Crest2Low	30	6	6751	01 <15% SW Shedding	MH6709v	Wet2V_Wet	30	16	6709	
MH6715s	Dry2SIWet	30	6	6751		MH6709v	SlopeGT05	20	16	6709	
MH6715s	SW_Aspect	10	6	6751		MH6709v	Med2Crs	10	16	6709	
MH6715s	SlopeLT15	20	6	6751		MH6709v	Deep	10	16	6709	
MH6715s	Med2Crs	5	6	6751		MH6710f	Valley	30	17	6710	10 Wet Flat Valley
MH6715s	Deep	5	6	6751		MH6710f	Wet2V_Wet	30	17	6710	
MH6706n	Crest2Low	30	7	6706	06 Steep NE cool dry	MH6710f	SlopeLT05	20	17	6710	
MH6706n	Dry2SIWet	30	7	6706		MH6710f	Medium	10	17	6710	
MH6706n	Steep_NE	20	7	6706		MH6710f	Deep	10	17	6710	
MH6706n	Med2Crs	10	7	6706		MH6788m	WetZ_LT05	45	18	6788	08 Moist Margins (>5%)
MH6706n	Deep	10	7	6706		MH6788m	WetL_LT200	45	18	6788	
MH6761n	Crest2Low	30	8	6761	01 15-30% NE Shedding	MH6788m	SlopeGT05	10	18	6788	
MH6761n	Dry2SIWet	30	8	6761		MH6789m	WetZ_LT05	45	19	6789	10 Wet Margins (<5%)
MH6761n	NE_Aspect	10	8	6761		MH6789m	WetL_LT200	45	19	6789	
MH6761n	SlopeLT30	10	8	6761		MH6789m	SlopeGT05	10	19	6789	
MH6761n	SlopeGT15	10	8	6761		MH6782ds	Hi_Seep	80	20	6782	07 Moist Seepage
MH6761n	Med2Crs	5	8	6761		MH6782ds	Dry2SIWet	20	20	6782	
MH6761n	Deep	5	8	6761		MH6783ws	Hi_Seep	80	21	6783	08 Wetter Seepage
MH6716n	Crest2Low	30	9	6716	01 < 15% NE Shedding	MH6783ws	Wet	20	21	6783	
MH6716n	Dry2SIWet	30	9	6716		MH6710o	Organic	99	22	6700	10 Wet Organics
MH6716n	NE_Aspect	10	9	6716		MH6758s	Crest2Low	30	23	6758	08 Moist SW Swale
MH6716n	SlopeLT15	20	9	6716		MH6758s	Wet	30	23	6758	
MH6716n	Med2Crs	5	9	6716		MH6758s	SW_Aspect	10	23	6758	
MH6716n	Deep	5	9	6716		MH6758s	SlopeLT15	20	23	6758	
MH6701m	Up2Low	35	10	6711	01 < 15% Up-Low	MH6758s	Med2Crs	5	23	6758	
MH6701m	Dry2Med	25	10	6711		MH6758s	Deep	5	23	6758	
MH6701m	SlopeLT15	20	10	6711		MH6768n	Crest2Low	30	24	6768	08 Moist NE Swale
MH6701m	Med2Crs	10	10	6711		MH6768n	Wet	30	24	6768	
MH6701m	Deep	10	10	6711		MH6768n	NE_Aspect	10	24	6768	
						MH6768n	SlopeLT15	20	24	6768	
						MH6768n	Med2Crs	5	24	6768	
						MH6768n	Deep	5	24	6768	



**PEM Entity Descriptions for: IDF dw**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6700	IDF dw	10	SH			6700 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 10 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
6701	IDF dw	01	DP	d	j	6701 areas were mapped on moderate (slope > 15%) lower to toe slope positions with ALL aspects that had sufficient slope that moisture did not accumulate to produce seepage in these lower landform positions. 6701 areas were mapped only in areas mapped as MEDIUM TEXTURED by TFIC. Gentle to moderate, lower slope, positions, deep, medium-textured soils. 6701 areas occupy portions of the landscape (lower toe slopes) that would normally be expected to exhibit moister conditions but under the drier climate in this subzone, there is insufficient moisture to generate seepage in these toe slope positions.
6702	IDF dw	02	DS	r	s	6702 areas were mapped ONLY on the dry crests of high ridges that had been mapped as MEDIUM TEXTURED and SHALLOW to bedrock. Crest slope position with medium-textured shallow soil over bedrock
6704	IDF dw	04	DB	w	d	6704 areas were mapped in steep SW facing hill slopes (>30%) with warm aspects in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils
6705	IDF dw	05	DK	d	x	6705 areas were mapped on moderately steep slopes (15-30%) with warm SW facing aspects and only in areas mapped as MEDIUM TEXTURED. Significant slope, warm aspect, deep, medium-textured soils.
6706	IDF dw	06	BP	k	d	6706 areas were mapped on steep (>30%) NE facing slopes with cool aspects and deep MEDIUM TEXTURED soils. Significant slope, cool aspect with deep, medium-textured soils.
6709	IDF dw	08	SG	d	j	6709 areas were mapped ONLY in areas of MEDIUM TEXTURE. 6709 areas occupy gently to moderately sloping, moist valley bottoms with slope gradients greater than 5%. It is assumed that these sloping valley bottoms accumulate considerable moisture but that they do not develop permanently high water tables. These moist, sloping areas were expected to be occupied by a rich, moist Site Series seepage entity. However, the regional ecologist indicated that the devil's club seepage entity was very rare in this subzone and recommended describing this area as dominated by the more common 08 moist site series. Toe slope to depression; poor drainage; deep, medium-textured soils.
6710	IDF dw	10	SH	d	j	6710 areas were mapped ONLY in areas of MEDIUM. 6710 areas occupy flat, wet, low lying valley bottoms with slope gradients less than 5%. It is assumed that these flat valley bottoms accumulate both moisture and cold air and develop permanently high water tables. These wet frosty areas are predicted to be occupied mainly by the very wet 10 Site Series along with the wet 07 Site Series. Toe slope to depression; poor drainage; deep, medium-textured soils.
6711	IDF dw	01	DP	j	d	6711 areas were mapped in all level to gently sloping (0-15%) upper to lower slope positions in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils
6715	IDF dw	01	DP	j	w	6715 areas were mapped on gently sloping upper to mid slopes (<15%) with SW aspects in HIGH RELIEF landscapes in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils
6716	IDF dw	01	DP	k	j	6716 areas were mapped on gently sloping upper to mid slopes (<15%) with NE aspects in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6718	IDF dw	08	SG	j	k	6718 areas were mapped in gently sloping (< 15%) lower to toe slope positions with NE aspects and only in areas mapped as MEDIUM TEXTURED. 6718 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6718 areas were expected to be occupied by the moist 08 site series but may end up being described as dominated by the normal mesic 01 site series.
6721	IDF dw	05	DK	d	x	6721 areas were mapped on the tops of drier crests of low knolls that had DEEP MEDIUM TEXTURED SOILS and were NOT mapped as SHALLOW. These low knoll positions are predicted to contain some slightly drier 04 and 05 Site Series in addition to the normal mesic 01 Site Series.
6724	IDF dw	05	DK	d	x	6724 areas were mapped on the tops of drier crests of high ridges that had DEEP MEDIUM TEXTURED SOILS and were NOT mapped as SHALLOW. These drier crest positions are predicted to contain some slightly drier 04 and 05 Site Series in addition to the normal mesic 01 Site Series.
6730	IDF dw	03	LK	c	d	6730 areas were mapped in all level to gently sloping (0-15%) MID to LOWER slope positions in areas mapped as COARSE TEXTURED. Gentle slope; deep, COARSE - textured soils 6730 areas are probably dominated by the dry, coarse 03 site series but may contain increasing amounts of 01 site series in finer textured slope wash materials. These are the lower half of the upper, divergent landscape positions.
6731	IDF dw	01	DP	d	j	6731 areas were mapped on moderate (slope > 15%) lower to toe slope positions with ALL aspects that had sufficient slope that moisture did not accumulate to produce seepage in these lower landform positions. 6731 areas were mapped only in areas mapped as COARSE TEXTURED. Gentle to moderate, lower slope, positions, deep, COARSE-textured soils. 6731 areas occupy portions of the landscape (lower toe slopes) that would normally be expected to exhibit moister conditions but under the drier climate in this subzone, there is insufficient moisture to generate seepage in these toe slope positions.
6732	IDF dw	02	DS	r	s	6732 areas were mapped ONLY on the dry crests of high ridges that had been mapped as SHALLOW to bedrock. Crest slope position with COARSE-textured shallow soil over bedrock
6737	IDF dw	07	ST	d	j	6737 areas were mapped ONLY in areas of COARSE. 6737 areas occupy gently to moderately sloping, moist valley bottoms with slope gradients greater than 5%. It is assumed that these sloping valley bottoms accumulate considerable moisture but that they do not develop permanently high water tables. These moist, sloping areas were expected to be occupied by the rich, moist Site Series seepage entity. However, the regional ecologist indicated that the devil's club seepage entity was very rare in this subzone and recommended describing this area as dominated by the more common 07 moist site series. Toe slope to depression; poor drainage; deep, COARSE-textured soils.
6738	IDF dw	01	DP	j	k	6738 areas were mapped in gently sloping (< 15%) lower to toe slope positions with SW aspects and only in areas mapped as COARSE TEXTURED. 6738 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6738 areas were expected to be occupied by the moist 08 site series but ended up being described by the Regional Ecologist as dominated by the normal mesic 01 site series.
6739	IDF dw	01	DP	c	j	6739 areas were mapped only in areas mapped as COARSE TEXTURED. 6739 areas occur on gentle (< 15%) lower slopes and in upper draws and hollows with a NE aspect where there is an expectation of increased amounts of moisture from seepage in most landscapes. The regional ecologist indicated that the devil's club seepage entity that normally occurs in such settings was extremely rare in this drier subzone. 6739 areas are therefore predicted to contain a mixture of the normal mesic 01 and the most common wetter site series (08). Gentle, lower slope, receiving positions, deep, COARSE-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6741	IDF dw	03	LK	d	x	6741 areas were mapped on the tops of drier crests of low knolls that had DEEP COARSE TEXTURED SOILS and were NOT mapped as SHALLOW. These low knoll positions in coarse areas are predicted to be dominated by the coarse, dry 03 Site Series.
6742	IDF dw	03	LK	d	x	6742 areas were mapped on the tops of drier crests of high ridges that had DEEP COARSE TEXTURED SOILS and were NOT mapped as SHALLOW. These drier crest positions in coarse areas are predicted to be dominated by the coarse, dry 03 Site Series.
6744	IDF dw	04	DB	w	c	6744 areas were mapped in steep SW facing hill slopes (>30%) with warm aspects in areas mapped as COARSE TEXTURED. Significant slope, warm aspect, deep, COARSE-textured soils
6745	IDF dw	03	LK	w	c	6745 areas were mapped on gently sloping upper to mid slopes (<15%) with SW aspects in areas mapped as COARSE TEXTURED. Gentle slope; deep, COARSE - textured soils
6748	IDF dw	01	DP	j	k	6748 areas were mapped in gently sloping (< 15%) lower to toe slope positions with NE aspects and only in areas mapped as COARSE TEXTURED. 6748 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6748 areas were expected to be occupied by the moist 08 site series but ended up being described by the Regional Ecologist as dominated by the normal mesic 01 site series.
6749	IDF dw	01	DP	c	j	6749 areas were mapped only in areas mapped as COARSE TEXTURED. 6749 areas occur on gentle (< 15%) lower slopes and in upper draws and hollows with a SW aspect where there is an expectation of increased amounts of moisture from seepage in most landscapes. The regional ecologist indicated that the devil's club seepage entity that normally occurs in such settings was extremely rare in this drier subzone. 6749 areas are therefore predicted to contain a mixture of the normal mesic 01 and the most common wetter site series (08). Gentle, lower slope, receiving positions, deep, COARSE-textured soils.
6751	IDF dw	01	DP	j	w	6751 areas were mapped on gently sloping upper to mid slopes (<15%) with SW aspects in LOW RELIEF landscapes in areas mapped as MEDIUM TEXTURED. Gentle slope; deep, medium - textured soils.
6755	IDF dw	03	LK	w	c	6755 areas were mapped on moderately steep slopes (15-30%) with warm SW facing aspects and only in areas mapped as COARSE TEXTURED. Significant slope, warm aspect, deep, COARSE-textured soils.
6757	IDF dw	08	SG	c	y	6757 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with SW aspects in areas mapped as COARSE TEXTURED. 6757 areas are predicted to consist of a mixture of the common moist 08 Site Series along with the less common moist 07 Site Series.
6758	IDF dw	08	SG	c	y	6758 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with SW aspects in areas mapped as MEDIUM TEXTURED. 6758 areas are predicted to consist of a mixture of the common moist 08 Site Series along with the less common, moist 07 Site Series.
6759	IDF dw	08	SG	j	k	6759 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6759 areas occur on gentle (< 15%) lower slopes and in upper draws and hollows with a SW aspect where there is an expectation of increased amounts of moisture from seepage in most landscapes. The regional ecologist indicated that the devil's club seepage entity that normally occurs in such settings was extremely rare in this drier subzone. 6759 areas are therefore predicted to contain a mixture of the normal mesic 01 and the most common wetter site series (08). Gentle, lower slope, receiving positions, deep, medium-textured soils.
6761	IDF dw	01	DP	k	d	6761 areas were mapped on moderately steep slopes (15-30%) with cool NE facing aspects and only in areas mapped as MEDIUM TEXTURED. Significant slope, cool aspect, deep, medium-textured soils. 6761 areas were mapped as an opposite to 6705 areas. 6761 areas are expected to contain mainly the dominant 01 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6764	IDF dw	03	LK	k	c	6764 areas were mapped on moderately steep slopes (15-30%) with cool NE facing aspects and only in areas mapped as COARSE TEXTURED. Significant slope, cool aspect, deep, COARSE-textured soils. 6764 areas were mapped as an opposite to 6755 areas. 6764 areas are expected to contain mainly the coarse, dry 03 site series.
6765	IDF dw	03	LK	c	d	6765 areas were mapped on gently sloping upper to mid slopes (<15%) with NE aspects in areas mapped as COARSE TEXTURED. Gentle slope; deep, COARSE - textured soils
6766	IDF dw	03	LK	k	d	6766 areas were mapped on steep slopes (> 30%) with cool NE-facing aspects and only in areas mapped as COARSE TEXTURED. Significant slope, cool aspect, deep, coarse-textured soils.
6767	IDF dw	08	SG	c	y	6767 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with NE aspects in areas mapped as COARSE TEXTURED. 6767 areas are predicted to consist of a mixture of the common, moist 08 Site Series along with some normal mesic 01 Site Series.
6768	IDF dw	08	SG	c	y	6768 areas were mapped on gently sloping (< 15%) draws and hollows in upper portions of the landscape with NE aspects in areas mapped as MEDIUM TEXTURED. 6768 areas are predicted to consist of a mixture of the common, moist 08 Site Series along with some moist 07 Site Series.
6769	IDF dw	08	SG	j	k	6769 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6769 areas occur on gentle (< 15%) lower slopes and in upper draws and hollows with a NE aspect where there is an expectation of increased amounts of moisture from seepage in most landscapes. The regional ecologist indicated that the devil's club seepage entity that normally occurs in such settings was extremely rare in this drier subzone. 6769 areas are therefore predicted to contain a mixture of the most common wetter site series (08) and normal mesic 01. Gentle, lower slope, receiving positions, deep, medium-textured soils.
6773	IDF dw	10	SH	d	j	6773 areas were mapped ONLY in areas of COARSE TEXTURE. 6773 areas occupy flat, wet, low lying valley bottoms with slope gradients less than 5%. It is assumed that these flat valley bottoms accumulate both moisture and cold air and develop permanently high water tables. These wet frosty areas are predicted to be occupied mainly by the very wet 10 Site Series along with the wet 07 Site Series. Toe slope to depression; poor drainage; deep, COARSE-textured soils.
6776	IDF dw	07	ST	y	d	6776 areas occur on the drier portions of areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these somewhat drier, sloping manually mapped seepage areas be described as being occupied by the relatively rare 07 seepage entity.
6777	IDF dw	08	SG	y	d	6777 areas occur on the wetter portions of areas of noticeable SEEPAGE and COARSE TEXTURES as mapped by TFIC. The regional ecologist recommended predicting that these relatively moist, level seepage areas be described as being occupied by the relatively common 08 site series.
6778	IDF dw	08	SG	j	y	6778 areas were mapped only in areas mapped by TFIC as COARSE TEXTURED. 6778 areas occur on slopes GREATER THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 6778 areas are predicted to consist of a mixture of wetter Site Series including 08 and 10.
6779	IDF dw	10	SH	j	y	6779 areas were mapped only in areas mapped as COARSE TEXTURED. 6779 areas occur on slopes LESS THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 6779 areas are predicted to be dominated by the very wet 10 site series.
6781	IDF dw	08	SG	j	k	6781 areas were mapped in gently sloping (< 15%) lower to toe slope positions with SW aspects and only in areas mapped as MEDIUM TEXTURED. 6781 areas represent the lowest, flattest and wettest locations that are not actually located within stream channels or depressions. 6781 areas were expected to be occupied by the moist 08 site series but may end up being described as dominated by the normal mesic 01 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6782	IDF dw	07	ST	y	d	6782 areas occur on slopes GREATER THAN 5% in areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the relatively rare 07 seepage entity.
6783	IDF dw	08	SG	y	d	6783 areas occur on slopes LESS THAN 5% in areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level seepage areas be described as being occupied by the relatively common 08 site series.
6788	IDF dw	08	SG	j	y	6788 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6788 areas occur on slopes GREATER THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 6788 areas are predicted to consist of a mixture of wetter Site Series including 08 and 10.
6789	IDF dw	10	SH	j	y	6789 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6789 areas occur on slopes LESS THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 6789 areas are predicted to be dominated by the very wet 10 site series.
6791	IDF dw	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6792	IDF dw	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6793	IDF dw	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
6794	IDF dw	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6795	IDF dw	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
6796	IDF dw	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
6797	IDF dw	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6798	IDF dw	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6799	IDF dw	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

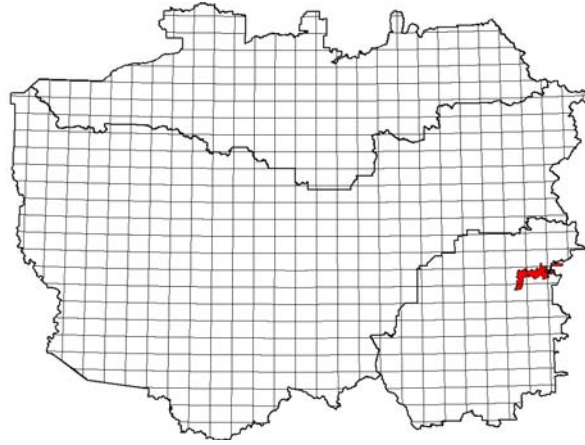
**PEM Entity Extended Legend with Proportions of Site Series for: IDF dw**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6700	6700	10	IDF dw	10	10	SH								
6701	6701	01	IDF dw	7	01	DP	d	j	3	08	SG			
6702	6702	02	IDF dw	7	02	DS	r	s	3	05	DK			
6704	6704	04	IDF dw	7	04	DB	w	d	3	05	DK			
6705	6705	05	IDF dw	6	05	DK	d	x	3	01	DP	1	04	DB
6706	6706	06	IDF dw	7	06	BP	k	d	3	01	DP			
6709	6709	08	IDF dw	6	08	SG	d	j	4	10	SH			
6710	6710	10	IDF dw	7	10	SH	d	j	3	07	ST			
6711	6711	01	IDF dw	9	01	DP	j	d	1	SH	SS			
6715	6711	01	IDF dw	8	01	DP	j	w	2	05	DK			
6716	6711	01	IDF dw	9	01	DP	k	j	1	06	BP			
6718	6769	08	IDF dw	6	08	SG	j	k	4	01	DP			
6721	6724	05	IDF dw	5	05	DK	d	x	4	01	DP	1	04	DB
6724	6724	05	IDF dw	6	05	DK	d	x	3	04	DB	1	02	DS
6730	6730	03	IDF dw	5	03	LK	c	d	5	01	DP			
6731	6731	01	IDF dw	6	01	DP	d	j	4	08	SG			
6732	6732	02	IDF dw	7	02	DS	r	s	3	01	DP			
6737	6737	07	IDF dw	6	07	ST	d	j	4	10	SH			
6738	6749	01	IDF dw	6	01	DP	j	k	4	07	ST			
6739	6739	01	IDF dw	6	01	DP	c	j	4	08	SG			
6741	6742	03	IDF dw	8	03	LK	d	x	1	04	DB	1	05	DK
6742	6742	03	IDF dw	8	03	LK	d	x	1	04	DB	1	05	DK
6744	6744	04	IDF dw	7	04	DB	w	c	3	03	LK			
6745	6730	03	IDF dw	8	03	LK	w	c	2	04	DB			
6748	6739	01	IDF dw	6	01	DP	j	k	4	08	SG			
6749	6749	01	IDF dw	5	01	DP	c	j	4	08	SG	1	07	ST
6751	6711	01	IDF dw	5	01	DP	j	w	5	05	DK			
6755	6755	03	IDF dw	6	03	LK	w	c	3	05	DK	1	04	DB
6757	6757	08	IDF dw	6	08	SG	c	y	4	01	DP			
6758	6759	08	IDF dw	7	08	SG	c	y	2	07	ST	1	01	DP
6759	6759	08	IDF dw	5	08	SG	j	k	4	01	DP	1	07	ST
6761	6701	01	IDF dw	7	01	DP	k	d	3	06	BP			
6764	6764	03	IDF dw	7	03	LK	k	c	3	01	DP			
6765	6730	03	IDF dw	7	03	LK	c	d	3	01	DP			
6766	6766	03	IDF dw	6	03	LK	k	d	4	06	BP			
6767	6767	08	IDF dw	6	08	SG	c	y	4	01	DP			
6768	6769	08	IDF dw	7	08	SG	c	y	2	07	ST	1	01	LP
6769	6769	08	IDF dw	5	08	SG	j	k	4	01	DP	1	07	ST
6773	6773	10	IDF dw	7	10	SH	d	j	3	07	ST			
6776	6776	07	IDF dw	6	07	ST	y	d	4	08	SG			
6777	6777	08	IDF dw	7	08	SG	y	d	3	01	DP			
6778	6778	08	IDF dw	7	08	SG	j	y	3	10	SH			
6779	6779	10	IDF dw	8	10	SH	j	y	2	08	SG			
6781	6759	08	IDF dw	6	08	SG	j	k	4	01	DP			
6782	6782	07	IDF dw	6	07	ST	y	d	4	08	SG			
6783	6783	08	IDF dw	7	08	SG	y	d	3	01	DP			
6788	6788	08	IDF dw	7	08	SG	j	y	3	10	SH			
6789	6789	10	IDF dw	8	10	SH	j	y	2	08	SG			
6791	6791	OW	IDF dw	10	00	OW								
6792	6792	WE	IDF dw	10	00	WE	d	y						
6793	6793	ME	IDF dw	10	00	ME								
6794	6794	PA	IDF dw	10	00	PA								
6795	6795	BR	IDF dw	10	00	BR								
6796	6796	DL	IDF dw	10	00	DL								
6797	6797	TA	IDF dw	10	00	TA								
6798	6798	AV	IDF dw	10	00	AV								
6799	6799	GL	IDF dw	10	00	GL								



**BGC Unit: IDF mw2****LMES Zone ID: 68****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	14,890.4	1.21%
Cariboo Region	14,890.4	0.18%

**List of Site Series Codes Defined for use in IDF mw2**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	DF		submesic - mesic	All up to lower water shedding parts of the landscape
02	DS		very xeric - subxeric	Shallow Crests, Thin, Dry Soils
03	DP		subxeric	Steep SW - Dry Warm Upper Slopes (includes Shallow)
04			submesic - mesic	Steep NE - Cool Dry slopes
05			subhygric	Very Slightly Moist Lower Slopes, WT > 50 cm
06			subhygric - hygric	Sloping Valleys and Toes - Rich, Moist Devil's Club
07			hygric - subhydric	Flat, Wet, Frosty Low - Toe Slopes, WT < 50 cm
08			hygric - subhydric	Never mapped as dominant class
09			hygric - subhydric	Very Wet, Poor Organics
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

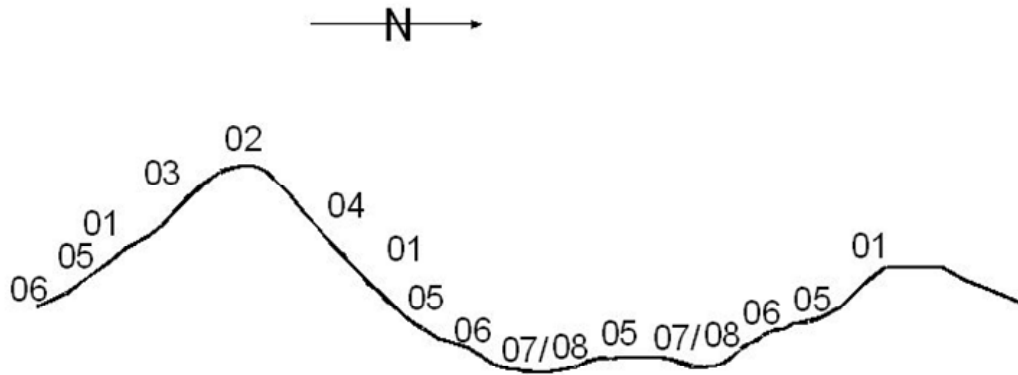
Ray Coupé, 2007, personal communication.

Concepts and alpha codes for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist.



**Landscape Profile Diagram: IDF mw2**

Subzone: **IDFmw2 (68)**



**Example Attribute Class Rule File for IDF mw2 (arule6830)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	1	80.00	80.00	80.00	70.00	90.00	10
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	50.00	70.00	10
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
7	relzfile	PCTZ2ST	Toe	1	15.00	15.00	15.00	7.00	23.00	8
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Drier	1	7.50	6.50	8.50	6.50	8.50	1
13	formfile	LNQAREA	Less_dry	1	9.00	8.50	8.50	8.50	9.50	0.5
14	formfile	QWETI	SI_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
15	formfile	QWETI	Med2SI_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
16	formfile	QWETI	SI_Wet2Wet	1	10.00	10.00	10.00	8.20	11.80	1.8
17	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
18	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
21	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
22	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
23	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
24	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
31	geofile	TEXTURE	Med2CrS	4	45.00	40.00	40.00	40.00	100.00	10
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	L2Wet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
39	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF mw2 (crule6830)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6802r	Crest	35	1	6802	02 Shallow Crest	MH6861u	Up2Mid	35	12	6805	05 5-20% Wet Swale
MH6802r	Dry_WI	25	1	6802		MH6861u	Wet2V_Wet	25	12	6805	
MH6802r	Hi_Ridge	20	1	6802		MH6861u	SlopeLT20	15	12	6805	
MH6802r	Shallow	40	1	6802		MH6861u	SlopeGT05	5	12	6805	
MH6802r	Med2Crs	10	1	6802		MH6861u	Med2Crs	10	12	6805	
MH6822r	Crest	35	2	6822	04 Deep Dry Ridge	MH6861u	Deep	10	12	6805	
MH6822r	Dry_WI	25	2	6822		MH6815L	Mid2Toe	35	13	6815	05 < 30% Moist Lower
MH6822r	Hi_Ridge	20	2	6822		MH6815L	Med2Sl_Wet	25	13	6815	
MH6822r	Deep	10	2	6822		MH6815L	SlopeLT30	20	13	6815	
MH6822r	Med2Crs	10	2	6822		MH6815L	Med2Crs	10	13	6815	
MH6821k	Crest	35	3	6821	01 Deep Low Knoll	MH6815L	Deep	10	13	6815	
MH6821k	Dry_WI	25	3	6821		MH6806s	Toe	35	14	6806	06 5-25% Sl. Moist Toe
MH6821k	Low_Knoll	20	3	6821		MH6806s	Sl_Wet2Wet	25	14	6806	
MH6821k	Deep	10	3	6821		MH6806s	SlopeLT20	15	14	6806	
MH6821k	Med2Crs	10	3	6821		MH6806s	SlopeGT05	5	14	6806	
MH6804n	Crest2Mid	35	4	6804	04 Steep NE cool dry	MH6806s	Med2Crs	10	14	6806	
MH6804n	Dry2Med_WI	25	4	6804		MH6806s	Deep	10	14	6806	
MH6804n	Steep_NE	20	4	6804		MH6807s	Toe	35	15	6807	07 < 10% Wet, Level Toe
MH6804n	Med2Crs	10	4	6804		MH6807s	Sl_Wet2Wet	25	15	6807	
MH6804n	Deep	10	4	6804		MH6807s	SlopeLT10	15	15	6807	
MH6803s	Crest2Mid	35	5	6803	03 Steep SW warm dry	MH6807s	SlopeLT05	5	15	6807	
MH6803s	Dry2Med_WI	25	5	6803		MH6807s	Med2Crs	10	15	6807	
MH6803s	Steep_SW	20	5	6803		MH6807s	Deep	10	15	6807	
MH6803s	Med2Crs	10	5	6803		MH6887t	Toe2Valley	35	16	6807	07 < 5% Wet, Level Toe
MH6803s	Deep	10	5	6803		MH6887t	Wet	25	16	6807	
MH6834n	Crest2Mid	35	6	6834	02 Shallow Gentle NE	MH6887t	SlopeLT10	15	16	6807	
MH6834n	Dry2Med_WI	25	6	6834		MH6887t	SlopeLT05	5	16	6807	
MH6834n	Gentle_NE	20	6	6834		MH6887t	Med2Crs	10	16	6807	
MH6834n	Med2Crs	10	6	6834		MH6887t	Deep	10	16	6807	
MH6834n	Shallow	10	6	6834		MH6878t	Toe2Valley	35	17	6806	06 > 5% Moist, Sloping Toe
MH6833s	Crest2Mid	35	7	6833	02 Shallow Gentle SW	MH6878t	Wet	25	17	6806	
MH6833s	Dry2Med_WI	25	7	6833		MH6878t	SlopeLT10	15	17	6806	
MH6833s	Gentle_SW	20	7	6833		MH6878t	SlopeGT05	5	17	6806	
MH6833s	Med2Crs	10	7	6833		MH6878t	Med2Crs	10	17	6806	
MH6833s	Shallow	10	7	6833		MH6878t	Deep	10	17	6806	
MH6831u	Crest2Mid	30	8	6831	01 < 30% Drier Upper	MH6866v	Valley	35	18	6866	06 Moist Sloping Valley
MH6831u	Dry2Med_WI	20	8	6831		MH6866v	Wet2V_Wet	25	18	6866	
MH6831u	Drier	5	8	6831		MH6866v	SlopeGT05	20	18	6866	
MH6831u	SlopeLT30	20	8	6831		MH6866v	Med2Crs	10	18	6866	
MH6831u	Med2Crs	10	8	6831		MH6866v	Deep	10	18	6866	
MH6831u	Deep	40	8	6831		MH6808v	Valley	35	19	6878	07 Wet Flat Valley
MH6813u	Crest2Mid	30	9	6801	01 < 30% Upper Mesic	MH6808v	Wet2V_Wet	25	19	6878	
MH6813u	Dry2Med_WI	20	9	6801		MH6808v	SlopeLT05	20	19	6878	
MH6813u	Less_dry	5	9	6801		MH6808v	Med2Crs	10	19	6878	
MH6813u	SlopeLT30	20	9	6801		MH6808v	Deep	10	19	6878	
MH6813u	Med2Crs	10	9	6801		MH6889m	WetL_LT200	50	20	6889	07 Wet Margins
MH6813u	Deep	40	9	6801		MH9599m	WetZ_LT05	50	20	6889	
MH6801m	Up2Mid	35	10	6801	01 < 30% Mesic Mid	MH6809o	Organic	99	21	6809	09 Wet Organics
MH6801m	Sl_Dry2Med	25	10	6801		MH6855s	Hi_Seep	90	22	6855	05 Sl. Moist Seepage
MH6801m	SlopeLT30	20	10	6801		MH6855s	Sl_Wet2Wet	10	22	6855	
MH6801m	Med2Crs	10	10	6801		MH6856s	Hi_Seep	90	23	6856	07 Wetter Seepage
MH6801m	Deep	10	10	6801		MH6856s	Wet2V_Wet	10	23	6856	
MH6801m	Hi_Ridge	10	10	6801		MH6850t	Mid2Toe	35	24	6850	06 Moist Lower Swale
MH6851u	Up2Mid	35	11	6805	05 5-20% Moist Swale	MH6850t	Wet	25	24	6850	
MH6851u	Wet	25	11	6805		MH6850t	SlopeLT20	20	24	6850	
MH6851u	SlopeLT20	15	11	6805		MH6850t	Med2Crs	10	24	6850	
MH6851u	SlopeGT05	5	11	6805		MH6850t	Deep	10	24	6850	
MH6851u	Med2Crs	10	11	6805							
MH6851u	Deep	10	11	6805							

**PEM Entity Descriptions for: IDF mw2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6801	IDF mw2	01		d	j	6801 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 6801 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 20%) and on ALL ASPECTS. This is the predominant site series in the BEC variant.
6802	IDF mw2	02		s	r	6802 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 6802 occurs on the driest crest positions of high ridges that are shallow to bedrock. 6802 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
6803	IDF mw2	03		w	x	6803 was mapped ONLY in areas of MEDIUM TEXTURED materials. 6803 occupies STEEP UPPER to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 20% and the aspect must be from 135 to 315. STEEP SW slopes are dominated by the drier 03 Site Series.
6804	IDF mw2	04		k	d	6804 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6804 occurs on steep, cool NE facing slopes in UPPER to LOWER landform positions. Slope gradient is greater than 20% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to LOWER landform positions. 6804 areas are dominated by the cool dry 04 Site Series.
6805	IDF mw2	05		d	j	6805 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6805 areas occur in level to sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these level to gently sloping upper draws would most likely be dominated by the slightly moist 05 Site Series.
6806	IDF mw2	06		d	j	6806 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6806 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6806 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
6807	IDF mw2	07		d	j	6807 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6807 occupies nearly level to very gently sloping (<5%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 6807 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
6809	IDF mw2	09		p	j	6809 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 09 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
6815	IDF mw2	05		d	j	6815 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 6815 occurs on mid to lower landform positions with slopes less than 20% and on ALL ASPECTS. 6815 areas are often slightly concave and tend to receive and accumulate some moisture from above. 6815 areas were mapped as a transition zone in the lower extent of the normal mesic 01 range. Upon review the regional ecologist indicated that 6815 areas would likely be dominated by the slightly moist 05 Site Series along with some normal mesic 01 Site Series.
6821	IDF mw2	01		d	x	6821 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 6821 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 03 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6822	IDF mw2	04		d	x	6822 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 6822 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 04 site series along with some potential inclusions of 01 and 02 site series.
6831	IDF mw2	01		d	j	6831 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 6831 occupies the upper parts of broad crests or crowns in shedding landform positions and on ALL ASPECTS. 6831 represented an attempt to map drier portions of upper crowns. Upon review, the Regional Ecologist recommended that 6831 areas be described as being dominated by the normal mesic 01 Site Series.
6833	IDF mw2	02				6833 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6833 occurs on Gentle (<20%) SW facing slopes that were also mapped as SHALLOW. The Regional Ecologist suggested that forested areas with SHALLOW soils be classified as the 03 Site Series.
6834	IDF mw2	02				6833 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS as mapped by TFIC. 6833 occurs on Gentle (<20%) NE facing slopes that were also mapped as SHALLOW by TFIC. The Regional Ecologist suggested that forested areas with SHALLOW soils be classified as the 03 Site Series.
6850	IDF mw2	06		d	j	6850 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6850 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 6850 is a slightly moist seepage unit that was defined to "cut through" draws in the lower portions of 01 areas. Lower to toe slope, receiving, deep, medium textured soils.
6855	IDF mw2	05		d	j	6855 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 05 and 06 Site Series.
6856	IDF mw2	07		d	j	6856 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the relatively moist 06 and 05 site series.
6866	IDF mw2	06		d	y	6866 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 6866 areas occur in sloping valleys and draws and along the margins of active stream channels. 6866 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. Rich, moist devil's club unit in sloping valleys.
6878	IDF mw2	07		d	y	6878 was mapped ONLY in areas of MEDIUM TEXTURED materials. 6878 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 6878 areas are predicted to have permanently high water tables and very wet cool conditions (water table < 30 cm).
6889	IDF mw2	07		d	j	6889 areas were mapped only in areas mapped as MEDIUM TEXTURED. 6889 areas occupy the low-lying margins surrounding wetlands and open water bodies. 6889 areas are predicted to consist of a mixture of wetter Site Series including 07 and 08.
6891	IDF mw2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6892	IDF mw2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6893	IDF mw2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
6894	IDF mw2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6895	IDF mw2	00	BR			These areas were mapped visually by as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
6896	IDF mw2	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
6897	IDF mw2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6898	IDF mw2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6899	IDF mw2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

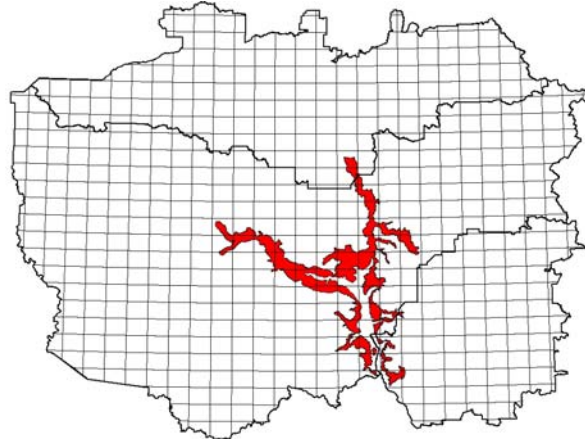
**PEM Entity Extended Legend with Proportions of Site Series for: IDF mw2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6801	6801	01	IDF mw2	9	01		d	j	1	05				
6802	6802	02	IDF mw2	8	02		s	r	1	03		1	01	
6803	6803	03	IDF mw2	10	03		w	x						
6804	6804	04	IDF mw2	7	04		k	d	3	01				
6805	6851	05	IDF mw2	10	05		d	j						
6806	6806	06	IDF mw2	7	06		d	j	3	05				
6807	6807	07	IDF mw2	7	07		d	j	3	05				
6809	6809	09	IDF mw2	9	09		p	j	1	07				
6815	6815	05	IDF mw2	9	05		d	j	1	01				
6821	6801	01	IDF mw2	7	01		d	x	3	03				
6822	6822	04	IDF mw2	8	04		d	x	2	01				
6831	6801	01	IDF mw2	9	01		d	j	1	05				
6833	6833	02	IDF mw2	10	02									
6834	6833	02	IDF mw2	10	02									
6850	6806	06	IDF mw2	7	06		d	j	3	05				
6855	6855	05	IDF mw2	9	05		d	j	1	06				
6856	6856	07	IDF mw2	7	07		d	j	3	08				
6866	6806	06	IDF mw2	7	06		d	y	3	05				
6878	6878	07	IDF mw2	8	07		d	y	2	08				
6889	6889	07	IDF mw2	7	07		d	j	3	08				
6891	6891	OW	IDF mw2	10	00	OW								
6892	6892	WE	IDF mw2	10	00	WE	d	y						
6893	6893	ME	IDF mw2	10	00	ME								
6894	6894	PA	IDF mw2	10	00	PA								
6895	6895	BR	IDF mw2	10	00	BR								
6896	6896	DL	IDF mw2	10	00	DL								
6897	6897	TA	IDF mw2	10	00	TA								
6898	6898	AV	IDF mw2	10	00	AV								
6899	6899	GL	IDF mw2	10	00	GL								



**BGC Unit: IDF xm****LMES Zone ID: 69****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	8,339.2	0.40%
Williams Lake TSA	236,818.6	4.80%
100 Mile House TSA	13,555.3	1.10%
Cariboo Region	258,713.1	3.14%

**List of Site Series Codes Defined for use in IDF xm**

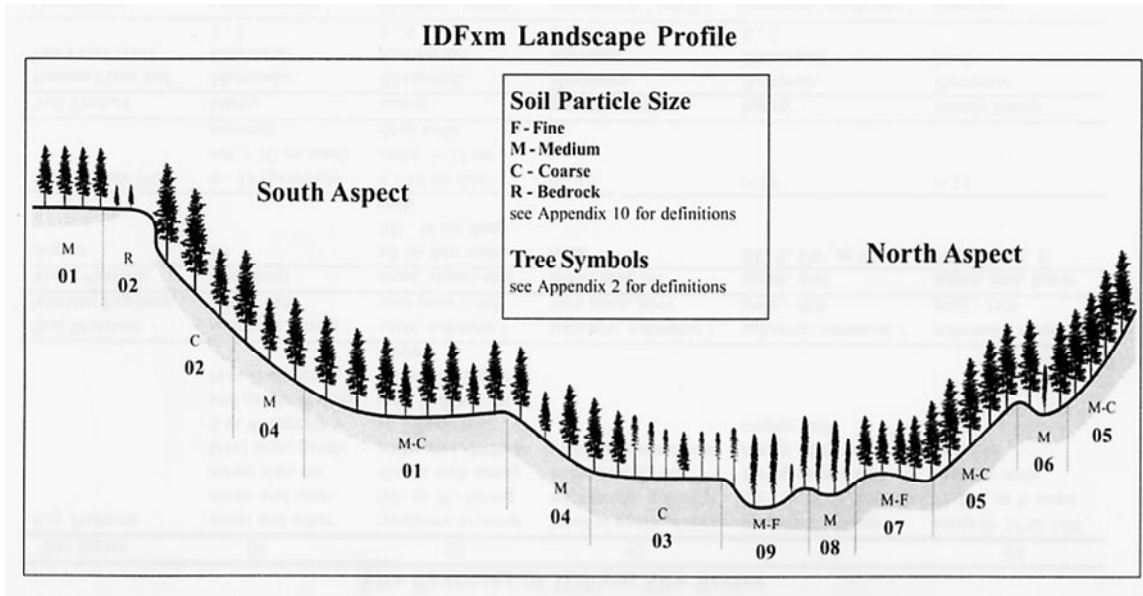
<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	DP	Fd - Pinegrass - Feathermoss	mesic	All up to lower water shedding parts of the landscape
02	DW	Fd - Bluebunch wheatgrass, Penstemon, Typic	xeric - subxeric	
02	DW	Fd - Bluebunch wheatgrass - Penstemon, Shallow	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03	DJ	Fd - Juniper - Cladonia	subxeric - submesic	COARSE MATERIALS - Restricted to Frosty Level Terraces
04	DS	Fd - Bluebunch wheatgrass - Pasture sage	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
05	DM	Fd - Feathermoss - Step moss	submesic - mesic	Steep NE - Cool Dry slopes, Also COARSE, non-frosty
06	DR	Fd - Ricegrass - Feathermoss	subhygric	Very Slightly Moist Lower Slopes in low relief areas
07	RS	Fd - Prickly rose - Sarsaparilla	subhygric	Non-frosty, moist seepage, Toe slopes in higher relief
08	SS	Sxw - Snowberry - Prickly rose	subhygric - hygric	Sloping Valleys and Toes - Rich, Moist Seepage
09	SH	Sxw - Horsetail (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Flat, Wet, Frosty Toe slopes and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.



**Landscape Profile Diagram: IDF xm**



**Example Attribute Class Rule File for IDF xm (arule6930)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	50.00	50.00	50.00	25.00	75.00	25
5	relzfile	PCTZ2ST	Mid2Low	1	40.00	40.00	40.00	20.00	60.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	20.00	20.00	20.00	10.00	30.00	10
7	relzfile	PCTZ2ST	Toe	1	10.00	10.00	10.00	2.00	18.00	8
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SlDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.70	7.30	0.8
12	formfile	QWETI	Dry2SlDry	1	7.50	7.50	7.50	6.50	8.50	1
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med2SlWet	1	9.40	9.40	9.40	8.40	10.40	1
16	formfile	QWETI	Sl_Wet	1	10.60	10.60	10.60	9.80	11.40	0.8
17	formfile	QWETI	SLWet2Wet	1	11.40	11.40	11.40	10.60	12.20	0.8
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	27.00	27.00	27.00	25.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	2.00	2.00	2.00	0.00	3.00	1
22	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	5
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	25.00	5
24	formfile	SLOPE	SlopeLT35	5	30.00	30.00	30.00	0.00	35.00	5
25	formfile	SLOPE	SlopeGT05	4	3.00	3.00	3.00	2.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	SLOPE	SlopeGT35	4	35.00	35.00	35.00	34.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Not_sandy	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF xm (crule6930)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH6902b	Crest	20	1	6902	02 Shallow Crest	MH6951n	Mid2Low	30	9	6915	05 Steep NE Mid-Low
MH6902b	VDry	30	1	6902		MH6951n	Dry2SIDry	30	9	6915	
MH6902b	SlopeLT20	20	1	6902		MH6951n	Steep_NE	30	9	6915	
MH6902b	Med2Crs	10	1	6902		MH6951n	Not_sandy	10	9	6915	
MH6902b	Shallow	80	1	6902		MH6951n	Deep	10	9	6915	
MH6902b	Hi_Ridge	10	1	6902		MH6911n	Low2Toe	30	10	6911	01 Gentle Low-Toe NE
MH6921c	Crest	20	2	6921	01 Deep Dry Ridge	MH6911n	Med2SIWet	30	10	6911	
MH6921c	VDry	30	2	6921		MH6911n	SlopeLT20	10	10	6911	
MH6921c	SlopeLT20	20	2	6921		MH6911n	Gentle_NE	30	10	6911	
MH6921c	Med2Crs	10	2	6921		MH6911n	Deep	10	10	6911	
MH6921c	Deep	10	2	6921		MH6911s	Low2Toe	30	11	6911	01 Gentle Low-Toe SW
MH6921c	Hi_Ridge	10	2	6921		MH6911s	Med2SIWet	30	11	6911	
MH6904s	Crest2Mid	30	3	6904	04 Steep SW warm dry	MH6911s	SlopeLT20	20	11	6911	
MH6904s	VDry2SIDry	30	3	6904		MH6911s	Gentle_SW	20	11	6911	
MH6904s	Steep_SW	30	3	6904		MH6911s	Deep	10	11	6911	
MH6904s	Not_sandy	10	3	6904		MH6907L	Low2Toe	30	12	6917	07 <15% Wet Low-Toe
MH6904s	Deep	10	3	6904		MH6907L	SL_Wet	30	12	6917	
MH6905n	Crest2Mid	30	4	6905	05 Steep NE cool dry	MH6907L	SlopeLT15	20	12	6917	
MH6905n	VDry2SIDry	30	4	6905		MH6907L	Not_sandy	10	12	6917	
MH6905n	Steep_NE	30	4	6905		MH6907L	Deep	10	12	6917	
MH6905n	Med2Crs	10	4	6905		MH6907t	Toe	30	13	6907	07 <20% Wet Toe
MH6905n	Deep	10	4	6905		MH6907t	SLWet2Wet	30	13	6907	
MH6914s	Crest2Mid	30	5	6901	01 Gentle Up-Mid SW	MH6907t	SlopeLT20	20	13	6907	
MH6914s	VDry2SIDry	30	5	6901		MH6907t	Not_sandy	10	13	6907	
MH6914s	Gentle_SW	30	5	6901		MH6907t	Deep	10	13	6907	
MH6914s	Not_sandy	10	5	6901		MH6917s	Toe	30	14	6910	01 >10% Drier Toe
MH6914s	Deep	10	5	6901		MH6917s	SLWet2Wet	30	14	6910	
MH6915n	Crest2Mid	30	6	6901	01 Gentle Up-Mid NE	MH6917s	SlopeGT10	20	14	6910	
MH6915n	VDry2SIDry	30	6	6901		MH6917s	Not_sandy	10	14	6910	
MH6915n	Gentle_NE	30	6	6901		MH6917s	Deep	10	14	6910	
MH6915n	Not_sandy	10	6	6901		MH6908v	Valley	30	15	6908	08 Moist Sloping Valley
MH6915n	Deep	10	6	6901		MH6908v	Wet2V_Wet	30	15	6908	
MH6001u	Mid2Low	30	7	6901	01 < 35% Mid-Low	MH6908v	SlopeGT05	20	15	6908	
MH6001u	Dry2SIDry	30	7	6901		MH6908v	Not_sandy	10	15	6908	
MH6001u	SlopeLT35	30	7	6901		MH6908v	Deep	10	15	6908	
MH6001u	Not_sandy	10	7	6901		MH6909v	Valley	30	16	6909	09 Wet Flat Valley
MH6001u	Deep	10	7	6901		MH6909v	Wet2V_Wet	30	16	6909	
MH6941s	Mid2Low	30	8	6914	04 Steep SW Mid-Low	MH6909v	SlopeLT05	20	16	6909	
MH6941s	Dry2SIDry	30	8	6914		MH6909v	Not_sandy	10	16	6909	
MH6941s	Steep_SW	30	8	6914		MH6909v	Deep	10	16	6909	
MH6941s	Not_sandy	10	8	6914		MH6989m	WetZ_LT05	50	17	6989	08 Wet Margins
MH6941s	Deep	10	8	6914		MH6989m	WetL_LT200	50	17	6989	
						MH6976s	Hi_Seep	80	18	6976	07 Moist Seepage
						MH6976s	Med2Crs	20	18	6976	
						MH6909o	Organic	99	19	6990	09 Wet Flat Organics

**PEM Entity Descriptions for: IDF xm**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6900	IDF xm	00	GB			These areas consist of all sites that were recognized as GRAVEL BARS by the manual interpretation process.
6901	IDF xm	01	DP	j	d	6901 areas were mapped on gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
6902	IDF xm	02	DW	s	r	6902 areas were defined to occur only on dry crests with SHALLOW soils and MEDIUM TEXTURES. Significant slopes of warm aspects, medium textured shallow soils over bedrock.
6903	IDF xm	03	DJ	c	j	According to the Regional Ecologist, the 03 Site Series is restricted to occurring in locations affected by cold air drainage and frost. Such areas are typically associated with pine dominated forest cover. 6903 areas occur only in western parts of the Williams Lake TSA. Gentle slope of deep, coarse-textured soils.
6904	IDF xm	04	DS	w	x	6904 areas were defined to occur on steep SW facing warm aspects and on deep, medium textured materials. Significant slope, warm aspect, deep, medium-textured soils.
6905	IDF xm	05	DM	k	x	6905 areas were defined to occur on steep NE facing hill slopes with cool aspects and deep, medium textured soils. Such steep NE facing hill slopes were quite common within the extent of IDF xm so a fair amount of 05 Site Series was predicted. Significant slope, cool aspect with deep, medium-textured soils.
6906	IDF xm	06	DR	j	y	6906 areas were mapped ONLY in areas of LOW RELIEF and short slopes on deep, medium textured soils. Slopes are shorter and less seepage occurs than in areas of higher relief and longer slopes. Moist sites of lower slope receiving position, deep medium-textured soils.
6907	IDF xm	07	RS	j	y	6907 areas were mapped on gentle lower to toe slopes (< 15%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. These same landform positions are mapped as 6906 in areas of low relief and short slopes with less seepage. Moist sites of lower slope receiving position, deep medium-textured soil.
6908	IDF xm	08	SS	j	y	6908 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 6908 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep medium-textured soils.
6909	IDF xm	09	SH	j	y	6909 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 6909 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils.
6910	IDF xm	01	DP	j	y	6910 areas were mapped on moderately sloping lower to slopes (< 20%) in areas of DEEP MEDIUM TEXTURED soils. 6910 areas were created to reduce the extent of areas predicted to be affected by seepage in lower to toe slope positions. Steeper slopes in lower to toe landform positions were assumed to be occupied by normal mesic 01 site series and not affected by seepage (unless the site is very steep cool aspect =05 or steep warm aspect =04). Drier sites of lower slope receiving position, deep medium-textured soil.
6911	IDF xm	01	DP	j	y	6911 areas were mapped on gentle (< 15%) lower to toe slope positions in areas mapped as MEDIUM TEXTURED. 6911 areas occupy the lower portions of convex shedding slopes in locations that may be slightly moistened by seepage from upslope but that have sufficient slope that moisture does not accumulate sufficiently to create conditions moister than mesic. 6911 areas were mapped in order to permit the possibility of recognizing these areas as slightly moister occurrences than typical for normal mesic 01 Site Series. After some deliberation 6911 areas were predicted to be dominated by mesic 01 Site Series rather than by moister 07 (or 06) Site Series. Gentle, lower slope, deep, medium-textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6913	IDF xm	03	DJ	c	y	6913 areas were mapped only in areas of COARSE TEXTURED materials. They occupy gentle lower to toe slope positions with slopes less than 20% in areas of coarse textured materials. These lower landscape positions are usually expected to be moister but the relatively steep slopes militate against this and drier than expected Site Series are predicted. Drier sites of lower slope receiving position, deep coarse-textured soil.
6914	IDF xm	04	DS	w	x	6914 is a temporary unit that attempts to recognize and separate the lower portions of steep SW slopes as defined for 6904
6915	IDF xm	05	DM	k	x	6915 is a temporary unit that attempts to recognize and separate the lower portions of steep NE slopes as defined for 6905
6916	IDF xm	06	DR	j	y	6916 areas were mapped ONLY in areas of LOW RELIEF and short slopes on deep, medium textured soils. Slopes are shorter and less seepage occurs than in areas of higher relief and longer slopes. Moist sites of lower slope receiving position, deep medium-textured soils. 6916 areas occupied the lower portions of the landscape just below 6906 areas.
6917	IDF xm	07	RS	c	d	6917 areas were mapped only in areas of MEDIUM TEXTURED materials. They occupy gentle lower to toe slope positions in areas of medium textured materials. These areas may accumulate moisture from seepage. The Regional Ecologist indicated that these draws and hollows in areas of medium textured materials would likely be occupied by a slightly drier end of the 07 Site Series. Moist sites of lower slope receiving position, deep medium-textured soil.
6921	IDF xm	01	DP	d	x	6921 areas were mapped on the slightly drier crests of high ridges with deep soils. 6921 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the 01 Site Series. Gentle slope, deep, medium-textured soils.
6924	IDF xm	02	DW	c	w	6924 areas were defined to occur on relatively steep (> 30%) SW facing warm aspects and on deep, COARSE textured materials. 6924 is the COARSE TEXTURED equivalent to 6904 defined for STEEP SW slopes in MEDIUM TEXTURED areas. Significant slope, warm aspect, deep, coarse-textured soils.
6925	IDF xm	05	DM	c	k	6925 areas were defined to occur on the lower portions of relatively steep (> 30%) NE facing hillslopes with cool aspects and deep, COARSE textured soils. The Regional Ecologist indicated that the 03 Site Series was associated with Frosty conditions and Coarse soils. Relatively steep NE facing areas of COARSE materials are therefore retained as 05 Site Series. Significant slope, cool aspect with deep, medium-textured soils.
6930	IDF xm	03	DJ	d	x	6930 areas were mapped on the slightly drier crests of high ridges with deep soils. 6930 areas permit recognition of a drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the coarse, dry 03 Site Series. Gentle slope, deep, coarse-textured soils.
6932	IDF xm	02	DW	s	r	6932 areas were defined to occur only on dry crests with SHALLOW soils and COARSE TEXTURES. Significant slopes of warm aspects, coarse textured shallow soils over bedrock.
6933	IDF xm	01	DP	c	d	6933 areas were mapped only in areas of COARSE TEXTURED materials. They occupy gentle lower to toe slope positions with slopes greater than 20% in areas of coarse textured materials. These lower landscape positions are usually associated with inter-terrace faces and are expected to be associated with the coarse, frosty 03. There is no defined site series for coarse, not frosty and not steep so we could only call these areas normal 01 but recognize that they are drier and coarser than normal 01. Drier sites of lower slope shedding position, deep coarse-textured soil.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6937	IDF xm	07	RS	c	d	6937 areas were mapped only in areas of COARSE TEXTURED materials. They occupy gentle lower to toe slope positions in areas of coarse textured materials. These areas may accumulate slope wash that is somewhat less coarse textured than the original parent material. The Regional Ecologist indicated that these draws and hollows in areas of coarse textured materials would likely be occupied by a slightly drier end of the 07 Site Series. Moist sites of lower slope receiving position, deep medium-textured soil.
6938	IDF xm	08	SS	c	y	6938 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of COARSE TEXTURED soils. 6938 areas are characterized by moving, aerated groundwater and rich, moist soils. Lower slope to depression, deep medium-textured soils.
6939	IDF xm	08	SS	c	y	6939 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 6939 areas occur in flat ephemeral stream channels and depressions that are likely only periodically saturated. Gentle slope or depression areas with deep, coarse-textured soils.
6942	IDF xm	02	DW	c	w	6942 areas were defined to occur on the lower portions of relatively steep (> 30%) SW facing warm aspects and on deep, COARSE textured materials. 6942 was defined in order to try to separate the lower portions of steep SW hillslopes. It is functionally equivalent to 6924. Significant slope, warm aspect, deep, coarse-textured soils.
6952	IDF xm	05	DM	c	k	6952 areas were defined to occur on relatively steep (> 30%) NE facing hillslopes with cool aspects and deep, COARSE textured soils. The Regional Ecologist indicated that the 03 Site Series was associated with Frosty conditions and Coarse soils. Relatively steep NE facing areas of COARSE materials are therefore described as 05 Site Series. Significant slope, cool aspect with deep, medium-textured soils.
6967	IDF xm	07	RS	d	y	6976 areas were mapped in all locations of manually recognized SEEPAGE and COARSE TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 08. Moist sites of lower slope receiving position, deep medium-textured soil.
6973	IDF xm	08	SS	d	y	6973 areas were mapped only in areas of COARSE TEXTURED materials. They occupy the lower portions of gentle lower to toe slope positions in areas of coarse textured materials. These areas may accumulate slope wash that is somewhat less coarse textured than the original parent material. The Regional Ecologist indicated that these draws and hollows in areas of coarse textured materials would likely be occupied by a slightly drier end of the 07 Site Series. Moist sites of lower slope receiving position, deep medium-textured soil.
6976	IDF xm	07	RS	d	y	6976 areas were mapped in all locations of manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 08. Moist sites of lower slope receiving position, deep medium-textured soil.
6979	IDF xm	08	SS	d	y	6979 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes on COARSE TEXTURED materials. These low-lying margins may contain a mixture of both 08 and wetter 09 Site Series. Lower slope to depression, deep medium-textured soils.
6989	IDF xm	08	SS	d	y	6989 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes on MEDIUM TEXTURED materials. These low-lying margins may contain a mixture of both 08 and wetter 09 Site Series. Lower slope to depression, deep medium-textured soils.
6990	IDF xm	09	SH			6990 areas were mapped in all locations where interpreters had mapped ORGANIC materials. 6990 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depression areas with deep, fine-textured soils.

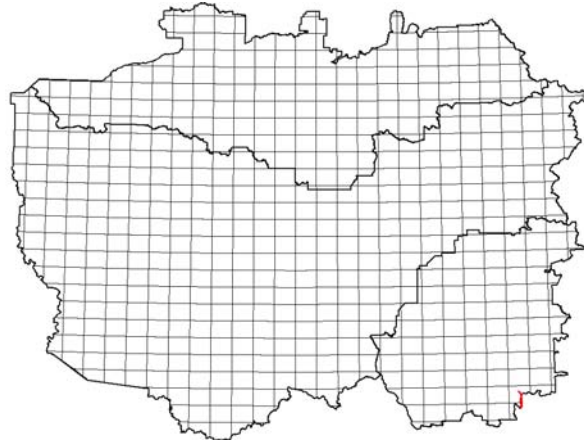
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
6991	IDF xm	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
6992	IDF xm	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
6993	IDF xm	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
6994	IDF xm	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
6995	IDF xm	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
6996	IDF xm	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
6997	IDF xm	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
6998	IDF xm	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
6999	IDF xm	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: IDF xm**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
6901	6901	01	IDF xm	9	01	DP	j	d	1	06	DR			
6902	6902	02	IDF xm	9	02	DW	s	r	1	04	DS			
6903	6913	03	IDF xm	10	03	DJ	c	j						
6904	6904	04	IDF xm	7	04	DS	w	x	2	01	DP	1	02	DW
6905	6905	05	IDF xm	8	05	DM	k	x	2	01	DP			
6906	6906	06	IDF xm	7	06	DR	j	y	2	07	RS	1	01	DP
6907	6907	07	IDF xm	7	07	RS	j	y	2	06	DR	1	01	DP
6908	6908	08	IDF xm	7	08	SS	j	y	2	07	RS	1	01	DP
6909	6909	09	IDF xm	8	09	SH	j	y	1	06	DR	1	01	DP
6910	6901	01	IDF xm	7	01	DP	j	y	2	07	RS	1	06	DR
6911	6911	01	IDF xm	7	01	DP	j	y	3	07	RS			
6913	6913	03	IDF xm	6	03	DJ	c	y	3	01	DP	1	06	DR
6914	6904	04	IDF xm	7	04	DS	w	x	2	01	DP	1	02	DW
6915	6905	05	IDF xm	8	05	DM	k	x	2	01	DP			
6916	6906	06	IDF xm	7	06	DR	j	y	2	07	RS	1	01	DP
6917	6907	07	IDF xm	7	07	RS	c	d	3	01	DP			
6921	6921	01	IDF xm	9	01	DP	d	x	1	02	DW			
6924	6924	02	IDF xm	7	02	DW	c	w	3	04	DS			
6925	6952	05	IDF xm	9	05	DM	c	k	1	01	DP			
6930	6930	03	IDF xm	10	03	DJ	d	x						
6932	6932	02	IDF xm	9	02	DW	s	r	1	04	DS			
6933	6933	01	IDF xm	8	01	DP	c	d	2	05	DM			
6937	6937	07	IDF xm	7	07	RS	c	d	3	01	DP			
6938	6973	08	IDF xm	7	08	SS	c	y	2	07	RS	1	01	DP
6939	6973	08	IDF xm	7	08	SS	c	y	2	09	SH	1	01	DP
6942	6924	02	IDF xm	7	02	DW	c	w	3	04	DS			
6952	6952	05	IDF xm	9	05	DM	c	k	1	01	DP			
6967	6967	07	IDF xm	6	07	RS	d	y	2	08	SS	2	01	DP
6973	6973	08	IDF xm	6	08	SS	d	y	2	07	RS	2	01	DP
6976	6976	07	IDF xm	6	07	RS	d	y	4	08	SS			
6979	6979	08	IDF xm	6	08	SS	d	y	4	09	SH			
6989	6989	08	IDF xm	5	08	SS	d	y	3	09	SH	2	01	DP
6990	6990	09	IDF xm	10	09	SH								
6991	6991	OW	IDF xm	10	00	OW								
6992	6992	WE	IDF xm	10	00	WE	d	y						
6993	6993	ME	IDF xm	10	00	ME								
6994	6994	PA	IDF xm	10	00	PA								
6995	6995	BR	IDF xm	10	00	BR								
6996	6996	DL	IDF xm	10	00	DL								
6997	6997	TA	IDF xm	10	00	TA								
6998	6998	AV	IDF xm	10	00	AV								
6999	6999	GL	IDF xm	10	00	GL								

**BGC Unit: IDF xh2****LMES Zone ID: 70****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	1,107.4	0.09%
Cariboo Region	1,107.4	0.01%

**List of Site Series Codes Defined for use in IDF xh2**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01		Interim classification - no letter codes assigned	mesic	All up to lower water shedding parts of the landscape
02		Interim classification - no letter codes assigned	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03		Interim classification - no letter codes assigned	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04		Interim classification - no letter codes assigned	submesic - mesic	Steep NE - Cool Dry slopes, Next to grasslands
05		Interim classification - no letter codes assigned	submesic - mesic	Steep NE - Cool Dry slopes, Upper-Mid Slopes
06		Interim classification - no letter codes assigned	submesic - mesic	Steep NE - Cool Mesic slopes, Mid-Lower Slopes
07		Interim classification - no letter codes assigned	subhygric	Slightly Moist Lower to Toe Slopes, WT > 50 cm
09		Interim classification - no letter codes assigned	subhygric - hygric	Level to gentle, Moist to Wet Lower to Toe seepage slopes
11		Interim classification - no letter codes assigned	subhygric - hygric	Wet, Fluvial toe slopes and depressions
12		Interim classification - no letter codes assigned	hygric - subhydric	Flat, Wet, Frosty Toe slopes and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

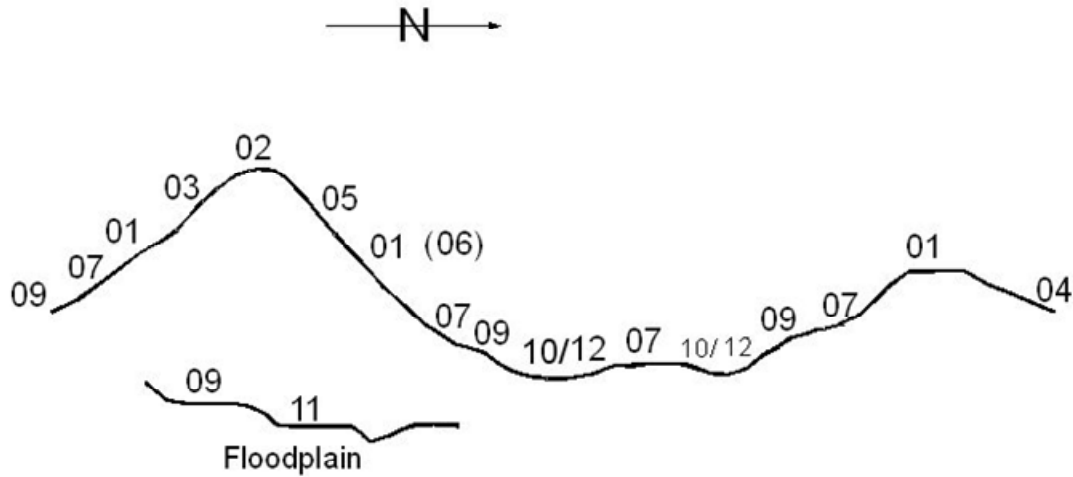
Ray Coupé, 2007, personal communication.

Concepts for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist. No alpha codes have yet been assigned for this provisional classification.



**Landscape Profile Diagram: IDF xh2**

Subzone: IDF xh2 (70)



**Example Attribute Class Rule File for IDF xh2 (arule7030)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	SL_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	LNQAREA	Drier	1	9.50	9.50	9.50	8.50	10.50	1
15	formfile	LNQAREA	Wetter	1	11.50	11.50	11.50	10.50	12.50	1
16	formfile	QWETI	SL_Wet	1	9.50	9.50	9.50	8.50	10.50	1
17	formfile	QWETI	SLWet2Wet	1	10.50	10.50	10.50	9.50	11.50	1
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for IDF xh2 (crule7030)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH7002r	Crest	30	1	7002	02 Shallow Crest	MH7061n	Mid2Low	30	15	7011	01 10-30% Mid-Low NE
MH7002r	VDry	30	1	7002		MH7061n	Dry2SIDry	30	15	7011	
MH7002r	SlopeLT30	10	1	7002		MH7061n	SlopeLT30	20	15	7011	
MH7002r	Med2CrS	10	1	7002		MH7061n	SlopeGT10	10	15	7011	
MH7002s	Shallow	40	1	7002		MH7061n	NE_Aspect	10	15	7011	
MH7002r	Hi_Ridge	10	1	7002		MH7013L	Mid2Low	30	16	7001	01 < 10% Mid-Low SW
MH7021c	Crest	30	2	7021	02 Deep Dry Ridge	MH7013L	Dry2SIDry	30	16	7001	
MH7021c	VDry	30	2	7021		MH7013L	SlopeLT10	30	16	7001	
MH7021c	SlopeLT30	10	2	7021		MH7013L	SW_Aspect	10	16	7001	
MH7021c	Med2CrS	10	2	7021		MH7016L	Mid2Low	30	17	7001	01 < 10% Mid-Low NE
MH7021c	Deep	10	2	7021		MH7016L	Dry2SIDry	30	17	7001	
MH7021c	Hi_Ridge	10	2	7021		MH7016L	SlopeLT10	30	17	7001	
MH7012k	Crest	30	3	7010	01 Deep Low Knoll	MH7016L	NE_Aspect	10	17	7001	
MH7012k	VDry	30	3	7010		MH7017L	Mid2Low	30	18	7017	07 10-30% Moist Mid-Low
MH7012k	SlopeLT30	10	3	7010		MH7017L	Wet	30	18	7017	
MH7012k	Med2CrS	10	3	7010		MH7017L	SlopeLT30	20	18	7017	
MH7012k	Deep	10	3	7010		MH7017L	SlopeGT10	10	18	7017	
MH7012k	Low_Knoll	10	3	7010		MH7017L	Deep	10	18	7017	
MH7003s	Crest2Mid	30	4	7003	03 Steep SW warm dry	MH7071L	Mid2Low	30	19	7071	07 <10% Wet Mid-Low
MH7003s	VDry2SIDry	30	4	7003		MH7071L	Wet	30	19	7071	
MH7003s	Steep_SW	20	4	7003		MH7071L	SlopeLT10	30	19	7071	
MH7003s	Med2CrS	10	4	7003		MH7071L	Deep	10	19	7071	
MH7003s	Deep	10	4	7003		MH7030t	Low2Toe	30	20	7030	07 Steep Moist Toe SW
MH7005n	Crest2Mid	30	5	7005	05 Steep NE cool dry	MH7030t	SI_Wet	30	20	7030	
MH7005n	VDry2SIDry	30	5	7005		MH7030t	Steep	20	20	7030	
MH7005n	Steep_NE	20	5	7005		MH7030t	SW_Aspect	10	20	7030	
MH7005n	Med2CrS	10	5	7005		MH7060t	Low2Toe	30	21	7060	07 Steep Moist Toe NE
MH7005n	Deep	10	5	7005		MH7060t	SI_Wet	30	21	7060	
MH7031s	Crest2Mid	30	6	7011	01 10-30% SW UP	MH7060t	Steep	20	21	7060	
MH7031s	Dry	30	6	7011		MH7060t	NE_Aspect	10	21	7060	
MH7031s	SlopeLT30	20	6	7011		MH7011t	Low2Toe	30	22	7000	01 10-30% Drier Toe
MH7031s	SlopeGT10	10	6	7011		MH7011t	SI_Wet	30	22	7000	
MH7031s	SW_Aspect	10	6	7011		MH7011t	SlopeLT30	20	22	7000	
MH7051n	Crest2Mid	30	7	7051	05 10-30% NE UP	MH7011t	SlopeGT10	10	22	7000	
MH7051n	Dry	30	7	7051		MH7011t	Drier	10	22	7000	
MH7051n	SlopeLT30	20	7	7051		MH7018t	Low2Toe	30	23	7017	07 10-30% Wetter Toe
MH7051n	SlopeGT10	10	7	7051		MH7018t	SI_Wet	30	23	7017	
MH7051n	NE_Aspect	10	7	7051		MH7018t	SlopeLT30	20	23	7017	
MH7013s	Crest2Mid	30	8	7001	01 < 10% SW UP	MH7018t	SlopeGT10	10	23	7017	
MH7013s	Dry	30	8	7001		MH7018t	Wetter	10	23	7017	
MH7013s	SlopeLT10	30	8	7001		MH7019t	Low2Toe	30	24	7071	07 <10% Wet Low-Toe
MH7013s	SW_Aspect	10	8	7001		MH7019t	Wet	30	24	7071	
MH7015n	Crest2Mid	30	9	7001	01 < 10% NE UP	MH7019t	SlopeLT10	30	24	7071	
MH7015n	Dry	30	9	7001		MH7019t	Deep	10	24	7071	
MH7015n	SlopeLT10	30	9	7001		MH7007t	Toe	30	25	7017	07 10=30% Wet Low-Toe
MH7015n	NE_Aspect	10	9	7001		MH7007t	SI_Wet	30	25	7017	
MH7037u	Crest2Mid	30	10	7015	01 5-30% Upper Swale	MH7007t	SlopeLT30	20	25	7017	
MH7037u	Wet	30	10	7015		MH7007t	SlopeGT10	10	25	7017	
MH7037u	SlopeLT30	20	10	7015		MH7007t	Deep	10	25	7017	
MH7037u	SlopeGT05	10	10	7015		MH7009t	Toe	30	26	7009	09 < 10% Flat, Wet Toe
MH7037u	Deep	10	10	7015		MH7009t	Wet	30	26	7009	
MH7039u	Crest2Mid	30	11	7071	07 < 5% Moist UP Swale	MH7009t	SlopeLT10	30	26	7009	
MH7039u	Wet	30	11	7071		MH7009t	Deep	10	26	7009	
MH7039u	SlopeLT05	30	11	7071		MH7079v	Valley	30	27	7079	07 Sloping Valley
MH7039u	Deep	10	11	7071		MH7079v	Wet2V_Wet	30	27	7079	
MH7033s	Mid2Low	30	12	7033	03 Steep Mid-Low SW	MH7079v	SlopeGT05	20	27	7079	
MH7033s	VDry2SIDry	30	12	7033		MH7079v	Medium	10	27	7079	
MH7033s	Steep_SW	20	12	7033		MH7079v	Deep	10	27	7079	
MH7033s	Med2CrS	10	12	7033		MH7089v	Valley	30	28	7089	12 Flat, Wet Valley
MH7033s	Deep	10	12	7033		MH7089v	Wet2V_Wet	30	28	7089	
MH7065n	Mid2Low	30	13	7065	06 Steep Mid-Low NE	MH7089v	SlopeLT05	20	28	7089	
MH7065n	VDry2SIDry	30	13	7065		MH7089v	Medium	10	28	7089	
MH7065n	Steep_NE	20	13	7065		MH7089v	Deep	10	28	7089	
MH7065n	Med2CrS	10	13	7065		MH7088m	WetZ_LT05	50	29	7088	09 Wet Margins
MH7065n	Deep	10	13	7065		MH7088m	WetZ_LT200	50	29	7088	
MH7031m	Mid2Low	30	14	7011	01 10-30% Mid-Low SW	MH7012o	Organic	99	30	7012	12 Forested Organics
MH7031m	Dry2SIDry	30	14	7011							
MH7031m	SlopeLT30	20	14	7011							
MH7031m	SlopeGT10	10	14	7011							
MH7031m	SW_Aspect	10	14	7011							

**PEM Entity Descriptions for: IDF xh2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7000	IDF xh2	01		d	j	7011 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7011 occupies moderately sloping (10-30%) LOWER to TOE slopes that were initially considered as transition areas from normal mesic 01 to slightly moist 07 Site Series. Upon review, the regional ecologist indicated that these moderately sloping lower to toe slopes would likely be dominated by the normal mesic 01 Site Series along with a small amount of slightly moister 07. Deep, medium textured soils on moderate lower to toe slopes.
7001	IDF xh2	01		d	j	7001 was mapped ONLY on MEDIUM TEXTURED. 7001 occurs on LEVEL to GENTLE slopes (< 10%) across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes and on ALL ASPECTS. 7001 excludes moderately steep (10-30%) upper to lower slopes. These steeper slopes are mapped as 7011 and 7000.
7002	IDF xh2	02		s	r	7002 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 7002 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 7002 can occur in all areas of MEDIUM texture as mapped by TFIC as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
7003	IDF xh2	03		w	x	7003 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7003 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
7005	IDF xh2	05		k	d	7005 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7005 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 7005 areas are dominated by the cool, slightly dry 05 Site Series.
7007	IDF xh2	07		d	j	7007 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7007 areas occur in the most level (< 10%) and wettest portions of toe slopes and in nearly level valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level toe slopes and draws would most likely still be dominated by the slightly moist 07 Site Series along with a minor component of wetter 08 Site Series.
7009	IDF xh2	09		d	j	7009 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7009 areas occur in the wettest and flattest (< 10%) portions of wet toe slopes and hollows. The regional ecologist indicated that these wet, level toe slopes and hollows would most likely be dominated by the very moist 09 Site Series along with a minor component of very moist 12 Site Series.
7010	IDF xh2	01		d	x	7010 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 7010 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of low to moderate relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 03 Site Series.
7011	IDF xh2	01		d	j	7011 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7011 occupies moderately sloping (10-30%) UPPER to LOWER slopes that are predominantly convex and water-shedding. These convex, upper to lower slopes are dominated by the normal mesic 01 Site Series along with a small amount of slightly moister 07. 7011 areas are similar to 7001 areas except that slopes are a bit steeper (10-30%). Deep, medium textured soils on moderate upper to lower slopes.
7012	IDF xh2	12		p	j	7012 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 12 site series. Hygric toe, level or depressions. Deep, organic-textured soil.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7015	IDF xh2	01		d	j	7015 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7015 areas occur in moderately sloping (5-30%) valleys and draws in upper to mid landform positions. The regional ecologist indicated that these moderately sloping upper draws would not normally accumulate enough moisture to be occupied by the slightly moist 07 Site Series and would be more likely to be dominated by the normal mesic 01 Site Series.
7017	IDF xh2	07		d	j	7017 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7017 areas occur across a wide range of gently to moderately sloping (10-30%) valleys, draws, hollows, lower slopes and toe slopes in upper to lower landform positions. The regional ecologist indicated that these gently to moderately sloping toe slopes, draws and hollows would most likely be dominated by slightly moist 07 Site Series along with a smaller component of the normal, mesic 01 Site Series.
7021	IDF xh2	02		r	d	7021 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 7021 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain mainly shallow 02 Site Series along with some potential inclusions of normal mesic 01 and drier 03 Site Series.
7030	IDF xh2	07		w	y	7030 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7030 occupies STEEP LOWER to TOE SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. These LOWER portions of STEEP SW slopes often occur in the upper portions of draws and hollows and tend to be dominated by the slightly moist 07 Site Series along with a component of normal mesic 01 Site Series.
7033	IDF xh2	03		w	x	7033 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7033 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. LOWER portions of STEEP SW slopes remain dominated by the warm, dry 03 Site Series.
7051	IDF xh2	05		d	k	7051 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7051 occurs on moderate (10-30%) NE-facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderate upper NE slopes be classified as the 05 Site Series (with some 06 and 01).
7060	IDF xh2	07		k	y	7060 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7060 occurs on steep, cool NE facing slopes in LOWER to TOE landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. These LOWER portions of STEEP NE slopes often occur in the upper portions of draws and hollows and tend to be dominated by the slightly moist 07 Site Series along with a component of normal mesic 01 Site Series.
7065	IDF xh2	06		k	d	7065 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7065 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is a slightly different variant of a steep NE slope unit in MID to LOWER landform positions. These steep, lower slope 7065 areas are predicted to be dominated by cool, moist 06 Site Series along with a component of cool, slightly dry 05 Site Series.
7071	IDF xh2	07		d	j	7071 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7071 areas occur in the wettest and flattest portions of valleys and draws in upper to lower landform positions (< 5%). The regional ecologist indicated that these wet, level draws would most likely be dominated by the moist 07 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7079	IDF xh2	07		d	y	7079 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7079 areas occur in sloping (> 5%) valleys and draws and along the margins of active stream channels. 7079 occurs in relatively strongly sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. 7079 is essentially the same as 7017 but is kept separate mainly to maintain a distinction between sloping valleys (7079) and sloping toe slopes (7017).
7080	IDF xh2	09		d	j	7080 areas occur in all areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these manually mapped seepage areas be described as being occupied by the wetter 09 Site Series along with a smaller amount of slightly moist 07.
7088	IDF xh2	09		d	j	7088 areas were mapped only in areas mapped as MEDIUM TEXTURED. 7088 areas occupy the low-lying margins surrounding wetlands and open water bodies. 7088 areas are predicted to consist of a mixture of the wettest Site Series including 09, 12 and 07.
7089	IDF xh2	12		p	j	7089 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7089 areas occur in the wettest and flattest (< 5%) portions of valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level draws would most likely be dominated by the very moist 12 and 09 Site Series along with a minor component of slightly moist 07 Site Series.
7091	IDF xh2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7092	IDF xh2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
7093	IDF xh2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
7094	IDF xh2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7095	IDF xh2	00	BR			These areas were mapped visually as areas of scrub brush.
7096	IDF xh2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
7097	IDF xh2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7098	IDF xh2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7099	IDF xh2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: IDF xh2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7000	7011	01	IDF xh2	8	01		d	j	2	07				
7001	7001	01	IDF xh2	9	01		d	j	1	04				
7002	7002	02	IDF xh2	8	02		s	r	1	03		1	05	
7003	7003	03	IDF xh2	8	03		w	x	2	02				
7005	7005	05	IDF xh2	8	05		k	d	2	06				
7007	7007	07	IDF xh2	7	07		d	j	3	09				
7009	7009	09	IDF xh2	8	09		d	j	2	12				
7010	7001	01	IDF xh2	9	01		d	x	1	03				
7011	7011	01	IDF xh2	9	01		d	j	1	07				
7012	7012	12	IDF xh2	9	12		p	j	1	09				
7015	7015	01	IDF xh2	7	01		d	j	3	07				
7017	7017	07	IDF xh2	7	07		d	j	3	01				
7021	7021	02	IDF xh2	8	02		r	d	1	01		1	03	
7030	7030	07	IDF xh2	7	07		w	y	3	01				
7033	7003	03	IDF xh2	8	03		w	x	2	01				
7051	7051	05	IDF xh2	7	05		d	k	2	06		1	01	
7060	7060	07	IDF xh2	7	07		k	y	3	01				
7065	7065	06	IDF xh2	6	06		k	d	4	05				
7071	7017	07	IDF xh2	8	07		d	j	2	01				
7079	7017	07	IDF xh2	8	07		d	y	2	01				
7080	7080	09	IDF xh2	8	09		d	j	2	07				
7088	7088	09	IDF xh2	6	09		d	j	2	12		2	07	
7089	7089	12	IDF xh2	8	12		p	j	2	09				
7091	7091	OW	IDF xh2	10	00	OW								
7092	7092	WE	IDF xh2	10	00	WE	d	y						
7093	7093	ME	IDF xh2	10	00	ME								
7094	7094	PA	IDF xh2	10	00	PA								
7095	7095	BR	IDF xh2	10	00	BR								
7096	7096	DL	IDF xh2	10	00	DL								
7097	7097	TA	IDF xh2	10	00	TA								
7098	7098	AV	IDF xh2	10	00	AV								
7099	7099	GL	IDF xh2	10	00	GL								



**BGC Unit: MS xk2****LMES Zone ID: 72****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	31,958.3	2.59%
Cariboo Region	31,958.3	0.39%

**List of Site Series Codes Defined for use in MS xk2**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01		Interim classification - no letter codes assigned	mesic	All up to lower water shedding parts of the landscape
02		Interim classification - no letter codes assigned	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03		Interim classification - no letter codes assigned	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04		Interim classification - no letter codes assigned	submesic - mesic	Steep NE - Cool Dry slopes, Upper-Mid Slopes
05		Interim classification - no letter codes assigned	submesic - mesic	Not known to occur in Cariboo Region
06		Interim classification - no letter codes assigned	submesic - mesic	Not known to occur in Cariboo Region
07		Interim classification - no letter codes assigned	subhygric	Slightly Moist Lower to Toe Slopes, WT > 50 cm
08		Interim classification - no letter codes assigned	subhygric - hygric	Flat, Wet, Toe slopes and depressions, WT < 50 cm
09		Interim classification - no letter codes assigned	subhygric - hygric	Similar to 08 but wetter and very uncommon
10		Interim classification - no letter codes assigned	hygric - subhydric	Very Wet, Poor Organics
00		Interim classification - no letter codes assigned		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

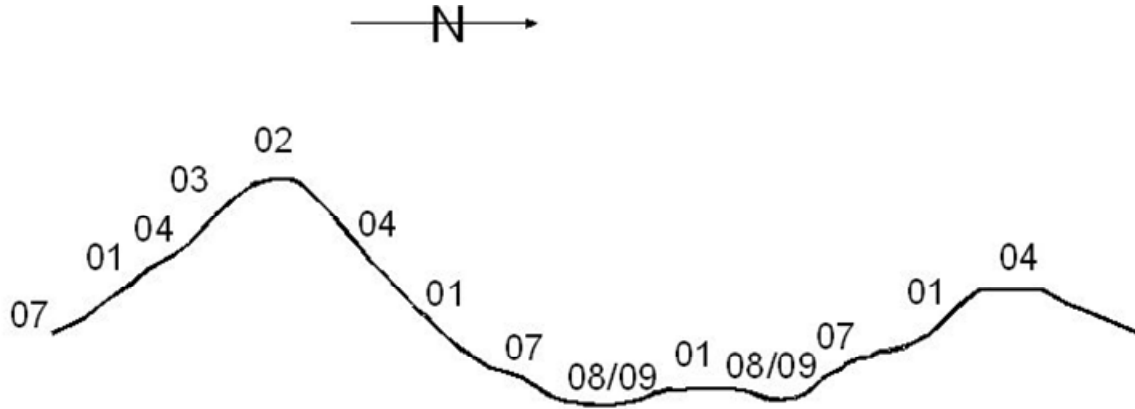
Ray Coupé, 2007, personal communication.

Concepts for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist. No alpha codes have yet been assigned for this provisional classification.



**Landscape Profile Diagram: MS xk2**

Subzone: MSxk2 (72)



**Example Attribute Class Rule File for MS xk2 (arule7230)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	Sl_Wet	1	9.50	9.50	9.50	8.50	10.50	1
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.5
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for MS xk2 (crule7230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH7202r	Crest	30	1	7202	02 Shallow Crest	MH7243s	Mid2Low	30	15	7201	01 10-30% Mid-Low SW
MH7202r	VDry	30	1	7202		MH7243s	Dry2SIDry	30	15	7201	
MH7202r	SlopeLT30	10	1	7202		MH7243s	SlopeLT30	20	15	7201	
MH7202r	Med2Crs	10	1	7202		MH7243s	SlopeGT10	10	15	7201	
MH7202r	Shallow	40	1	7202		MH7243s	SW_Aspect	10	15	7201	
MH7202r	Hi_Ridge	10	1	7202		MH7215n	Mid2Low	30	16	7201	01 10-30% Mid-Low NE
MH7224c	Crest	30	2	7224	04 Deep Dry Ridge	MH7215n	Dry2SIDry	30	16	7201	
MH7224c	VDry	30	2	7224		MH7215n	SlopeLT30	20	16	7201	
MH7224c	SlopeLT30	10	2	7224		MH7215n	SlopeGT10	10	16	7201	
MH7224c	Med2Crs	10	2	7224		MH7215n	NE_Aspect	10	16	7201	
MH7224c	Deep	10	2	7224		MH7213l	Mid2Low	30	17	7201	01 < 10% Mid-Low SW
MH7224c	Hi_Ridge	10	2	7224		MH7213l	Dry2SIDry	30	17	7201	
MH7242k	Crest	30	3	7242	01 Deep Low Knoll	MH7213l	SlopeLT10	30	17	7201	
MH7242k	VDry	30	3	7242		MH7213l	SW_Aspect	10	17	7201	
MH7242k	SlopeLT30	10	3	7242		MH7214l	Mid2Low	30	18	7201	01 < 10% Mid-Low NE
MH7242k	Med2Crs	10	3	7242		MH7214l	Dry2SIDry	30	18	7201	
MH7242k	Deep	10	3	7242		MH7214l	SlopeLT10	30	18	7201	
MH7242k	Low_Knoll	10	3	7242		MH7214l	NE_Aspect	10	18	7201	
MH7203s	Crest2Mid	25	4	7203	03 Steep SW warm dry	MH7273l	Mid2Low	30	19	7217	07 10-30% Moist Mid-Low
MH7203s	VDry2SIDry	25	4	7203		MH7273l	Wet	30	19	7217	
MH7203s	Steep_SW	30	4	7203		MH7273l	SlopeLT30	20	19	7217	
MH7203s	Med2Crs	10	4	7203		MH7273l	SlopeGT10	10	19	7217	
MH7203s	Deep	10	4	7203		MH7273l	Deep	10	19	7217	
MH7204n	Crest2Mid	25	5	7204	04 Steep NE cool dry	MH7274l	Mid2Low	30	20	7207	07 <10% Wet Mid-Low
MH7204n	VDry2SIDry	25	5	7204		MH7274l	Wet	30	20	7207	
MH7204n	Steep_NE	30	5	7204		MH7274l	SlopeLT10	30	20	7207	
MH7204n	Med2Crs	10	5	7204		MH7274l	Deep	10	20	7207	
MH7204n	Deep	10	5	7204		MH7211t	Low2Toe	30	21	7211	01 10-30% Drier Mid-Low
MH7234s	Crest2Mid	30	6	7234	04 10-30% SW UP	MH7211t	SL_Wet	30	21	7211	
MH7234s	Dry	30	6	7234		MH7211t	SlopeLT30	20	21	7211	
MH7234s	SlopeLT30	20	6	7234		MH7211t	SlopeGT10	10	21	7211	
MH7234s	SlopeGT10	10	6	7234		MH7211t	Deep	10	21	7211	
MH7234s	SW_Aspect	10	6	7234		MH7271t	Low2Toe	30	22	7217	07 10-20% Moist Low-Toe
MH7241n	Crest2Mid	30	7	7201	01 10-30% NE UP	MH7271t	SLWet2Wet	30	22	7217	
MH7241n	Dry	30	7	7201		MH7271t	SlopeLT20	20	22	7217	
MH7241n	SlopeLT30	20	7	7201		MH7271t	SlopeGT10	10	22	7217	
MH7241n	SlopeGT10	10	7	7201		MH7271t	Deep	10	22	7217	
MH7241n	NE_Aspect	10	7	7201		MH7217t	Low2Toe	30	23	7217	07 <10% Moist Low-Toe
MH7213s	Crest2Mid	30	8	7201	01 < 10% SW UP	MH7217t	Wet	30	23	7217	
MH7213s	Dry	30	8	7201		MH7217t	SlopeLT10	30	23	7217	
MH7213s	SlopeLT10	30	8	7201		MH7217t	Deep	10	23	7217	
MH7213s	SW_Aspect	10	8	7201		MH7271t	Toe	30	24	7217	07 10-30% Sl. Wet Toe
MH7214n	Crest2Mid	30	9	7201	01 < 10% NE UP	MH7271t	SL_Wet	30	24	7217	
MH7214n	Dry	30	9	7201		MH7271t	SlopeLT30	20	24	7217	
MH7214n	SlopeLT10	30	9	7201		MH7271t	SlopeGT10	10	24	7217	
MH7214n	NE_Aspect	10	9	7201		MH7271t	Deep	10	24	7217	
MH7227u	Crest2Mid	30	10	7201	01 5-30% Drier Swale	MH7208t	Toe	30	25	7207	07 <10% Wet Toe
MH7227u	SL_Wet	30	10	7201		MH7208t	Wet	30	25	7207	
MH7227u	SlopeLT30	20	10	7201		MH7208t	SlopeLT10	30	25	7207	
MH7227u	SlopeGT05	10	10	7201		MH7208t	Deep	10	25	7207	
MH7227u	Deep	10	10	7201		MH7280v	Valley	30	26	7270	07 Sloping Valley
MH7237u	Crest2Mid	30	11	7217	07 5-30% Moist Swale	MH7280v	Wet2V_Wet	30	26	7270	
MH7237u	Wet	30	11	7217		MH7280v	SlopeGT05	20	26	7270	
MH7237u	SlopeLT20	20	11	7217		MH7280v	Medium	10	26	7270	
MH7237u	SlopeGT05	10	11	7217		MH7280v	Deep	10	26	7270	
MH7237u	Deep	10	11	7217		MH7288v	Valley	30	27	7208	08 Flat, Wet Valley
MH7238u	Crest2Mid	30	12	7208	08 < 5% Wet UP Swale	MH7288v	Wet2V_Wet	30	27	7208	
MH7238u	Wet	30	12	7208		MH7288v	SlopeLT05	20	27	7208	
MH7238u	SlopeLT05	30	12	7208		MH7288v	Medium	10	27	7208	
MH7238u	Deep	10	12	7208		MH7288v	Deep	10	27	7208	
MH7233s	Mid2Low	30	13	7233	03 Steep Mid-Low SW	MH7289m	WetZ_LT05	50	28	7289	08 Wet Margins
MH7233s	VDry2SIDry	30	13	7233		MH7289m	WetL_LT200	50	28	7289	
MH7233s	Steep_SW	20	13	7233		MH7277s	Hi_Seep	80	29	7277	07 Moist Seepage
MH7233s	Med2Crs	10	13	7233		MH7277s	Med2Crs	20	29	7277	
MH7233s	Deep	10	13	7233		MH7209o	Organic	99	30	7209	10 Flat, Wet Organics
MH7244n	Mid2Low	30	14	7244	01 Steep Mid-Low NE						
MH7244n	VDry2SIDry	30	14	7244							
MH7244n	Steep_NE	20	14	7244							
MH7244n	Med2Crs	10	14	7244							
MH7244n	Deep	10	14	7244							

**PEM Entity Descriptions for: MS xk2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7201	MS xk2	01		d	j	7201 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 7201 occurs on GENTLE to MODERATE slopes (< 30%) across a wide range of upper to lower convex or shedding landform positions from upper slopes and broad, smooth crests (not sharp crests) to lower to toe slopes and on ALL ASPECTS. 7201 excludes moderately steep (10-30%) upper slopes with a SW orientation. These steeper SW-facing upper slopes are mapped as 7234 (SW).
7202	MS xk2	02		s	r	7202 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 7202 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 7202 can occur in all areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
7203	MS xk2	03		w	x	7203 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7203 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
7204	MS xk2	04		k	d	7204 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7204 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 7204 areas are dominated by the cool, slightly dry 04 Site Series.
7207	MS xk2	07		d	j	7207 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7207 areas occur in the most level (< 10%) and wettest portions of toe slopes and in nearly level valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level toe slopes and draws would most likely still be dominated by the slightly moist 07 Site Series along with a minor component of wetter 08 Site Series.
7208	MS xk2	08		d	j	7208 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7208 areas occur in the wettest and flattest (< 5%) portions of valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level draws would most likely be dominated by the very moist 08 Site Series along with a minor component of slightly moist 07 Site Series.
7209	MS xk2	10		p	j	7209 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor organic 10 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
7211	MS xk2	01		d	j	7211 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7211 occupies moderately sloping (10-30%) LOWER to TOE slopes that were initially considered as transition areas from normal mesic 01 to slightly moist 07 Site Series. Upon review, the regional ecologist indicated that these moderately sloping lower to toe slopes would likely be dominated by the normal mesic 01 Site Series along with a small amount of slightly moister 07. Deep, medium textured soils on moderate lower to toe slopes.
7217	MS xk2	07		d	j	7217 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7217 areas occur across a wide range of gently sloping (10-30%) valleys, draws, hollows, lower slopes and toe slopes in upper to lower landform positions. The regional ecologist indicated that these gently sloping toe slopes, draws and hollows would most likely be dominated by slightly moist 07 Site Series along with a smaller component of the normal, mesic 01 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7224	MS xk2	04		r	d	7224 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 7224 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of drier 04 site series along with some potential inclusions of shallow 02 and normal mesic 01 site series.
7225	MS xk2	02		s	c	7225 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 7225 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 7225 can occur in all areas of COARSE texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
7233	MS xk2	03		w	x	7233 was mapped ONLY in areas of MEDIUM TEXTURED. 7233 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. LOWER portions of STEEP SW slopes remain dominated by the warm, dry 03 Site Series.
7234	MS xk2	04		d	x	7234 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7234 occurs on gentle to moderate (10-30%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 04 Site Series (with some 01).
7240	MS xk2	04		c	d	7240 was mapped ONLY on COARSE TEXTURED MATERIALS. 7240 occurs on GENTLE slopes (< 10%) across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes and on ALL ASPECTS. 7240 excludes moderately steep (10-30%) upper slopes with a SW or NW orientation. Moderately steep upper slopes are mapped as 7254 (SW) or 7245 (NE).
7242	MS xk2	01		d	x	7242 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 7242 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of low to moderate relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
7244	MS xk2	01		k	d	7244 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7244 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in MID to LOWER landform positions. 7244 areas remain dominated by the normal mesic 01 Site Series along with a component of cool, slightly dry 04 Site Series.
7245	MS xk2	04		c	d	7245 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7245 occurs on gentle to moderate (10-30%) NE facing upper slopes that are slightly drier and cooler than normal. The Regional Ecologist suggested that these moderate NE slopes be classified as the 04 Site Series (with some 03).
7251	MS xk2	01		c	d	7251 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7251 occupies moderately sloping (10-30%) LOWER to TOE slopes that were initially considered as transition areas from coarse dry 04 to normal mesic 01 Site Series. Upon review, the regional ecologist indicated that these moderately sloping lower to toe slopes in COARSE areas would likely be dominated by the normal mesic 01 Site Series along with a small amount of slightly moist 07 Site Series. Deep, COARSE textured soils on moderate lower to toe slopes.
7252	MS xk2	04		c	r	7252 was mapped on deep dry ridges and crests on COARSE TEXTURED MATERIALS. 7252 occupies the highest and driest shedding locations on the crests of ridges and low knolls in landscapes of low to high relief. It is predicted to contain a mixture of drier 04 site series along with some potential inclusions of shallow 02 and very dry 03 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7253	MS xk2	03		w	c	7253 was mapped ONLY in areas of COARSE TEXTURED materials. 7253 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
7254	MS xk2	04		c	d	7254 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7254 occurs on gentle to moderate (10-30%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 04 Site Series (with some 03).
7255	MS xk2	04		k	c	7255 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7255 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions in COARSE areas. 7255 areas are predicted to be dominated by the slightly drier 04 Site Series along with some normal mesic 01 Site Series. In areas further south than the Cariboo Region, steep cool NE-facing slopes are dominated by the cool, dry 05 (Trapper's Tea) Site Series but 05 has not been observed in this landform position within the present Cariboo PEM project area.
7256	MS xk2	07		d	j	7256 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7256 areas occur in gently sloping (10-30%) valleys, draws, hollows, lower slopes and toe slopes in upper landform positions. The regional ecologist indicated that these gently sloping toe slopes, draws and hollows would most likely be dominated by slightly moist 07 Site Series along with a smaller component of the coarse, dry 04 Site Series.
7257	MS xk2	07		c	d	7257 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7257 areas occur across a wide range of gently sloping (10-30%) valleys, draws, hollows, lower slopes and toe slopes in upper to lower landform positions. The regional ecologist indicated that these gently sloping toe slopes, draws and hollows would most likely be dominated by slightly moist 07 Site Series along with a smaller component of the coarse, dry 04 Site Series.
7258	MS xk2	08		c	j	7258 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7258 areas occur in the most level (< 10%) and wettest portions of toe slopes and in nearly level valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level toe slopes and draws in areas of COARSE texture would most likely still be dominated by the wetter 08 Site Series along with a minor component of slightly moist 07 Site Series.
7259	MS xk2	08		c	y	7259 areas were mapped only in areas mapped as COARSE TEXTURED. 7259 areas occupy the low-lying margins surrounding wetlands and open water bodies. 7259 areas are predicted to consist of a mixture of the wettest Site Series including 08, 09 and 10.
7266	MS xk2	07		c	y	7266 areas occur in all areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these manually mapped seepage areas be described as being occupied by the slightly moist 07 and perhaps a small amount of wetter 08 Site Series.
7270	MS xk2	07		d	y	7270 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7270 areas occur in sloping (> 5%) valleys and draws and along the margins of active stream channels. 7270 occurs in relatively strongly sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. 7270 is essentially the same as 7217 but is kept separate mainly to maintain a distinction between sloping valleys (7270) and sloping toe slopes (7217)

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7274	MS xk2	07		c	d	7274 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7274 areas occur in sloping (> 5%) valleys and draws and along the margins of active stream channels. 7274 occurs in relatively strongly sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. 7274 is essentially the same as 7257 but is kept separate mainly to maintain a distinction between sloping valleys (7274) and sloping toe slopes (7257)
7277	MS xk2	07		d	j	7277 areas occur in all areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these manually mapped seepage areas be described as being occupied by the slightly moist 07 and perhaps a small amount of wetter 08 Site Series.
7289	MS xk2	08		d	j	7289 areas were mapped only in areas mapped as MEDIUM TEXTURED. 7289 areas occupy the low-lying margins surrounding wetlands and open water bodies. 7289 areas are predicted to consist of a mixture of the wettest Site Series including 08, 09 and 10.
7291	MS xk2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7292	MS xk2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
7293	MS xk2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
7294	MS xk2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7295	MS xk2	00	BR			These areas were mapped visually by as areas of scrub brush.
7296	MS xk2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
7297	MS xk2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7298	MS xk2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7299	MS xk2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MS xk2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7201	7201	01	MS xk2	9	01		d	j	1	04				
7202	7202	02	MS xk2	8	02		s	r	1	03		1	04	
7203	7203	03	MS xk2	8	03		w	x	2	02				
7204	7204	04	MS xk2	8	04		k	d	2	01				
7207	7207	07	MS xk2	7	07		d	j	3	08				
7208	7208	08	MS xk2	7	08		d	j	3	07				
7209	7209	10	MS xk2	9	10		p	j	1	09				
7211	7211	01	MS xk2	9	01		d	j	1	07				
7217	7217	07	MS xk2	7	07		d	j	3	01				
7224	7224	04	MS xk2	8	04		r	d	1	02		1	01	
7225	7225	02	MS xk2	8	02		s	c	1	04		1	03	
7233	7203	03	MS xk2	10	03		w	x	0	01				
7234	7224	04	MS xk2	7	04		d	x	3	01				
7240	7240	04	MS xk2	9	04		c	d	1	01				
7242	7242	01	MS xk2	9	01		d	x	1	04				
7244	7244	01	MS xk2	6	01		k	d	4	04				
7245	7240	04	MS xk2	9	04		c	d	1	05				
7251	7251	01	MS xk2	7	01		c	d	3	07				
7252	7252	04	MS xk2	8	04		c	r	1	02		1	03	
7253	7253	03	MS xk2	8	03		w	c	2	02				
7254	7240	04	MS xk2	7	04		c	d	3	03				
7255	7255	04	MS xk2	8	04		k	c	2	01				
7256	7257	07	MS xk2	7	07		c	d	3	04				
7257	7257	07	MS xk2	7	07		c	d	3	04				
7258	7258	08	MS xk2	7	08		c	j	3	07				
7259	7259	08	MS xk2	6	08		c	y	2	09		2	10	
7266	7266	07	MS xk2	8	07		c	y	2	08				
7270	7217	07	MS xk2	8	07		d	y	2	01				
7274	7257	07	MS xk2	8	07		c	d	2	04				
7277	7277	07	MS xk2	8	07		d	j	2	08				
7289	7289	08	MS xk2	6	08		d	j	2	09		2	10	
7291	7291	OW	MS xk2	10	00	OW								
7292	7292	WE	MS xk2	10	00	WE	d	y						
7293	7293	ME	MS xk2	10	00	ME								
7294	7294	PA	MS xk2	10	00	PA								
7295	7295	BR	MS xk2	10	00	BR								
7296	7296	DL	MS xk2	10	00	DL								
7297	7297	TA	MS xk2	10	00	TA								
7298	7298	AV	MS xk2	10	00	AV								
7299	7299	GL	MS xk2	10	00	GL								

**BGC Unit: MS xk3****LMES Zone ID: 73****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	29,737.1	2.41%
Cariboo Region	29,737.1	0.36%

**List of Site Series Codes Defined for use in MS xk3**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01		Interim classification - no letter codes assigned	mesic	All up to lower water shedding parts of the landscape
02		Interim classification - no letter codes assigned	xeric - subxeric	Shallow Crests, Thin, Dry Soils
03		Interim classification - no letter codes assigned	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04		Interim classification - no letter codes assigned	submesic - mesic	Moderate SW- Slightly drier and warmer slopes, & COARSE
05		Interim classification - no letter codes assigned	submesic - mesic	Steep NE - Cool Dry slopes, Upper-Mid Slopes
06		Interim classification - no letter codes assigned	subhygric - hygric	Slightly Moist, Rich Lower to Toe Slopes, WT > 50 cm
07		Interim classification - no letter codes assigned	subhygric	Flat, Wet, Toe slopes and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

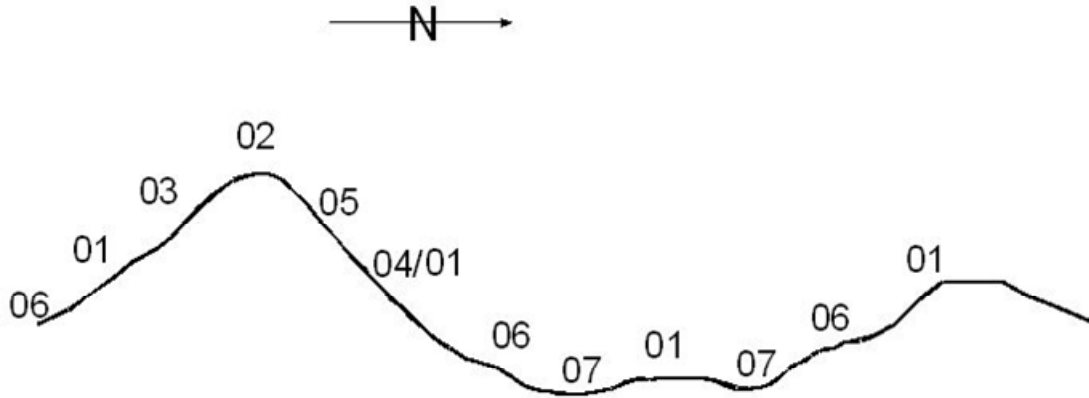
Ray Coupé, 2007, personal communication.

Concepts for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist. No alpha codes have yet been assigned for this provisional classification.



**Landscape Profile Diagram: MS xk3**

Subzone: MSxk3 (73)



**Example Attribute Class Rule File for MS xk3 (arule7330)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SlDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SlDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	Sl_Wet	1	9.50	9.50	9.50	8.50	10.50	1
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.5
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for MS xk3 (crule7330)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH7302r	Crest	30	1	7302	02 Shallow Crest	MH7343s	Mid2Low	30	14	7343	01 10-30% Mid-Low SW
MH7302r	VDry	30	1	7302		MH7343s	Dry2SIDry	30	14	7343	
MH7302r	SlopeLT30	10	1	7302		MH7343s	SlopeLT30	20	14	7343	
MH7302r	Med2Crs	10	1	7302		MH7343s	SlopeGT10	10	14	7343	
MH7302r	Shallow	40	1	7302		MH7343s	SW_Aspect	10	14	7343	
MH7302r	Hi_Ridge	10	1	7302		MH7315n	Mid2Low	30	15	7315	04 10-30% Mid-Low NE
MH7321c	Crest	30	2	7321	01 Deep Dry Ridge	MH7315n	Dry2SIDry	30	15	7315	
MH7321c	VDry	30	2	7321		MH7315n	SlopeLT30	20	15	7315	
MH7321c	SlopeLT30	10	2	7321		MH7315n	SlopeGT10	10	15	7315	
MH7321c	Med2Crs	10	2	7321		MH7315n	NE_Aspect	10	15	7315	
MH7321c	Deep	10	2	7321		MH7313l	Mid2Low	30	16	7301	01 < 10% Dry Mid-Low
MH7321c	Hi_Ridge	10	2	7321		MH7313l	Dry2SIDry	30	16	7301	
MH7312k	Crest	30	3	7312	01 Deep Low Knoll	MH7313l	SlopeLT10	30	16	7301	
MH7312k	VDry	30	3	7312		MH7313l	Med2Crs	10	16	7301	
MH7312k	SlopeLT30	10	3	7312		MH7316l	Mid2Low	30	17	7316	06 < 10% Moist Mid-Low
MH7312k	Med2Crs	10	3	7312		MH7316l	Wet	30	17	7316	
MH7312k	Deep	10	3	7312		MH7316l	SlopeLT30	20	17	7316	
MH7312k	Low_Knoll	10	3	7312		MH7316l	SlopeGT10	10	17	7316	
MH7303s	Crest2Mid	30	4	7303	03 Steep SW warm dry	MH7316l	Deep	10	17	7316	
MH7303s	VDry2SIDry	30	4	7303		MH7361l	Mid2Low	30	18	7306	06 <10% Wet Mid-Low
MH7303s	Steep_SW	20	4	7303		MH7361l	Wet	30	18	7306	
MH7303s	Med2Crs	10	4	7303		MH7361l	SlopeLT10	30	18	7306	
MH7303s	Deep	10	4	7303		MH7361l	Deep	10	18	7306	
MH7354n	Crest2Mid	30	5	7354	05 Steep NE cool dry	MH7330t	Low2Toe	30	19	7316	06 Steep SW Hollow
MH7354n	VDry2SIDry	30	5	7354		MH7330t	Sl_Wet	30	19	7316	
MH7354n	Steep_NE	20	5	7354		MH7330t	Steep	20	19	7316	
MH7354n	Med2Crs	10	5	7354		MH7330t	SW_Aspect	10	19	7316	
MH7354n	Deep	10	5	7354		MH7340t	Low2Toe	30	20	7316	06 Steep NE Hollow
MH7334s	Crest2Mid	30	6	7334	01 10-30% SW UP	MH7340t	Sl_Wet	30	20	7316	
MH7334s	Dry	30	6	7334		MH7340t	Steep	20	20	7316	
MH7334s	SlopeLT30	20	6	7334		MH7340t	NE_Aspect	10	20	7316	
MH7334s	SlopeGT10	10	6	7334		MH7311t	Low2Toe	30	21	7301	01 10-30% Drier Low-Toe
MH7334s	SW_Aspect	10	6	7334		MH7311t	Sl_Wet	30	21	7301	
MH7341n	Crest2Mid	30	7	7341	04 10-30% NE UP	MH7311t	SlopeLT30	20	21	7301	
MH7341n	Dry	30	7	7341		MH7311t	SlopeGT10	10	21	7301	
MH7341n	SlopeLT30	20	7	7341		MH7311t	Deep	10	21	7301	
MH7341n	SlopeGT10	10	7	7341		MH7317t	Low2Toe	30	22	7306	06 <10% Wet Low-Toe
MH7341n	NE_Aspect	10	7	7341		MH7317t	Wet	30	22	7306	
MH7313s	Crest2Mid	30	8	7301	01 < 10% SW UP	MH7317t	SlopeLT10	30	22	7306	
MH7313s	Dry	30	8	7301		MH7317t	Deep	10	22	7306	
MH7313s	SlopeLT10	30	8	7301		MH7318t	Toe	30	23	7301	01 10-30% Sl. Wet Toe
MH7313s	SW_Aspect	10	8	7301		MH7318t	Sl_Wet	30	23	7301	
MH7314n	Crest2Mid	30	9	7301	01 < 10% NE UP	MH7318t	SlopeLT30	20	23	7301	
MH7314n	Dry	30	9	7301		MH7318t	SlopeGT10	10	23	7301	
MH7314n	SlopeLT10	30	9	7301		MH7318t	Deep	10	23	7301	
MH7314n	NE_Aspect	10	9	7301		MH7316t	Toe	30	24	7316	06 <10% Flat Moist Toe
MH7336u	Crest2Mid	30	10	7336	06 5-30% Upper Swale	MH7316t	Sl_Wet	30	24	7316	
MH7336u	Wet	30	10	7336		MH7316t	SlopeLT30	20	24	7316	
MH7336u	SlopeLT30	20	10	7336		MH7316t	SlopeLT10	10	24	7316	
MH7336u	SlopeGT05	10	10	7336		MH7316t	Deep	10	24	7316	
MH7336u	Deep	10	10	7336		MH7308t	Toe	30	25	7307	07 <10% Flat Wet Toe
MH7346u	Crest2Mid	30	11	7346	06 <5% Upper Swale	MH7308t	Wet	30	25	7307	
MH7346u	Wet	30	11	7346		MH7308t	SlopeLT10	30	25	7307	
MH7346u	SlopeLT05	30	11	7346		MH7308t	Deep	10	25	7307	
MH7346u	Deep	10	11	7346		MH7380v	Valley	30	26	7316	06 Sloping Valley
MH7333s	Mid2Low	30	12	7333	03 Steep Mid-Low SW	MH7380v	Wet2V_Wet	30	26	7316	
MH7333s	VDry2SIDry	30	12	7333		MH7380v	SlopeGT05	20	26	7316	
MH7333s	Steep_SW	20	12	7333		MH7380v	Medium	10	26	7316	
MH7333s	Med2Crs	10	12	7333		MH7380v	Deep	10	26	7316	
MH7333s	Deep	10	12	7333		MH7388v	Valley	30	27	7307	07 Flat, Wet Valley
MH7345n	Mid2Low	30	13	7345	05 Steep Mid-Low NE	MH7388v	Wet2V_Wet	30	27	7307	
MH7345n	VDry2SIDry	30	13	7345		MH7388v	SlopeLT05	20	27	7307	
MH7345n	Steep_NE	20	13	7345		MH7388v	Medium	10	27	7307	
MH7345n	Med2Crs	10	13	7345		MH7388v	Deep	10	27	7307	
MH7345n	Deep	10	13	7345		MH7389m	WetZ_LT05	50	28	7377	07 Wet Margins
						MH7389m	WetL_LT200	50	28	7377	
						MH7377s	Hi_Seep	80	29	7366	06 Moist Seepage
						MH7377s	Med2Crs	20	29	7366	
						MH7309o	Organic	99	30	7309	07 Flat, Wet Organics

**PEM Entity Descriptions for: MS xk3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7301	MS xk3	01		d	j	7301 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 7301 occurs on GENTLE slopes (< 10%) across a wide range of upper to lower convex or shedding landform positions from upper slopes and broad, smooth crests(not sharp crests) to lower to toe slopes and on ALL ASPECTS. 7301 excludes most steeper (>10%) upper slopes. These steeper upper slopes are mapped as 7334 (SW) or 7341 (NE).
7302	MS xk3	02		s	r	7302 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 7302 occurs on the driest crest positions of high ridges that are SHALLOW to bedrock. 7302 can occur in all areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
7303	MS xk3	03		w	x	7303 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7303 occupies STEEP UPPER to MID SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
7306	MS xk3	06		d	j	7306 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7306 occupies level to very gently sloping lower to toe slopes (< 10%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 7306 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
7307	MS xk3	07		d	j	7307 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7307 occupies nearly level to very gently sloping (<10%) lower to toe slopes and flat valley bottoms in minor drainages or hollows. 7307 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, and sometimes within, stream channels.
7309	MS xk3	07		p	j	7309 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
7312	MS xk3	01		d	x	7312 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 7312 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
7315	MS xk3	04		d	j	7351 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7351 occupies moderately to gently sloping (10-30%) NE-facing MID to LOWER slopes that were initially considered as transition areas from slightly drier 04 to normal mesic 01. Upon review, the regional ecologist indicated that these NE-facing mid to lower slopes would likely be dominated by the slightly drier 04 Site Series along with considerable amounts of normal mesic 01 Site Series. Deep, medium textured soils on moderate mid to lower slopes.
7316	MS xk3	06		d	y	7316 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7316 areas occur in toe slopes, sloping valleys and draws and along the margins of active stream channels (> 5%). 7316 occurs in relatively strongly sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
7321	MS xk3	01		d	r	7321 was mapped on deep high ridges and crests on MEDIUM TEXTURED MATERIALS. 7321 occupies upper shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 01 site series along with some potential inclusions of 03 and 05 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7322	MS xk3	02		c	s	7322 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 7322 occurs on the driest crest positions of high ridges to low knolls that are SHALLOW to bedrock. 7322 can occur in all areas of COARSE texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
7324	MS xk3	04		c	r	7324 was mapped on the drier tops of high ridges to low knolls in areas of COARSE TEXTURED MATERIALS. 7324 occupies the drier shedding locations on the tops of low knolls and high ridges in landscapes of low to high relief. It is predicted to be dominated by the 04 Site Series along with perhaps a minor component of shallow 02 Site Series.
7330	MS xk3	03		w	c	7330 was mapped ONLY in areas of COARSE TEXTURED materials. 7330 occupies STEEP UPPER to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP UPPER SW slopes are dominated by the drier 03 Site Series.
7333	MS xk3	03		w	x	7333 was mapped ONLY in areas of MEDIUM TEXTURED materials. 7333 occupies STEEP MID to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. LOWER portions of STEEP SW slopes remain dominated by the warm, dry 03 Site Series.
7334	MS xk3	01		d	j	7334 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7334 occurs on gentle to moderate (10-30%) SW facing upper slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 01 Site Series (with some 03).
7336	MS xk3	06		d	j	7336 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7336 areas occur in gently sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these gently sloping upper draws would most likely be dominated by slightly moist 06 Site Series along with a smaller component of the normal, mesic 01 Site Series.
7340	MS xk3	04		c	d	7340 was mapped ONLY on COARSE TEXTURED MATERIALS. 7340 occurs on MODERATE to GENTLE slopes (< 30%) across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes and on ALL ASPECTS. Virtually all upper shedding slopes in COARSE areas are mapped as 7340.
7341	MS xk3	04		d	j	7341 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7341 occurs on gentle to moderate (10-30%) NE facing upper slopes that are slightly cooler and drier than normal. The Regional Ecologist suggested that these moderate NE slopes be classified as the slightly drier 04 Site Series along with some normal mesic 01 Site Series.
7343	MS xk3	01		d	j	7343 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7343 occupies moderately to gently sloping (10-30%) SW-facing MID to LOWER slopes that were initially considered as transition areas from slightly drier 04 to normal mesic 01. Upon review, the regional ecologist indicated that these SW-facing mid to lower slopes would likely be dominated by the normal mesic 01 Site Series along with a small amount of slightly drier 03. Deep, medium textured soils on moderate mid to lower slopes.
7345	MS xk3	05		k	d	7345 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7345 occurs on steep, cool NE facing slopes in MID to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in MID to LOWER landform positions. 7345 areas remain dominated by the cool, slightly dry 05 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7346	MS xk3	06		d	j	7346 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7346 areas occur in the wettest and flattest portions of valleys and draws in upper to lower landform positions (< 5%). The regional ecologist indicated that these wet, level draws would most likely be dominated by the slightly moist 06 Site Series along with a minor component of wetter 07 Site Series.
7350	MS xk3	05		k	c	7350 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7350 occurs on steep, cool NE facing slopes in UPPER to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to LOWER landform positions. 7350 areas are dominated by the cool, slightly dry 05 Site Series.
7351	MS xk3	01		c	d	7351 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7351 occurs on gentle to moderate (10-30%) LOWER to TOE slopes that are slightly moister than similar UPPER slopes in COARSE areas. The Regional Ecologist suggested that these MODERATE LOWER slopes be classified as the 01 Site Series (with some 04).
7354	MS xk3	05		k	d	7354 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 7354 occurs on steep, cool NE facing slopes in UPPER to MID landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to MID landform positions. 7354 areas are dominated by the cool, slightly dry 05 Site Series.
7356	MS xk3	06		c	y	7356 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7356 areas occur in toe slopes, sloping valleys and draws and along the margins of active stream channels (> 5%). 7356 occurs in relatively strongly sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes.
7357	MS xk3	06		c	j	7357 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7357 occupies level to very gently sloping lower to toe slopes (< 10%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 7357 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, COARSE textured soils.
7358	MS xk3	07		c	j	7358 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7358 occupies nearly level to very gently sloping (<10%) lower to toe slopes and flat valley bottoms in minor drainages or hollows. 7358 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, and sometimes within, stream channels.
7364	MS xk3	01		c	d	7364 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7364 areas occur in gently sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these gently sloping upper draws in COARSE areas would most likely be dominated by normal mesic 01 Site Series along with a smaller component of the slightly moist 06 Site Series.
7365	MS xk3	06		c	j	7365 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 7365 areas occur in the wettest and flattest portions of valleys and draws in upper to lower landform positions (< 5%). The regional ecologist indicated that these wet, level draws would most likely be dominated by the slightly moist 06 Site Series along with a minor component of wetter 07 Site Series.
7366	MS xk3	06		d	j	7366 areas occur in all areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these manually mapped seepage areas be described as being occupied by the slightly moist 06 and 07 Site Series.
7367	MS xk3	06		c	d	7367 areas occur in all areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these manually mapped seepage areas on COARSE textures be described as being occupied by the slightly moist 06 and 07 Site Series .

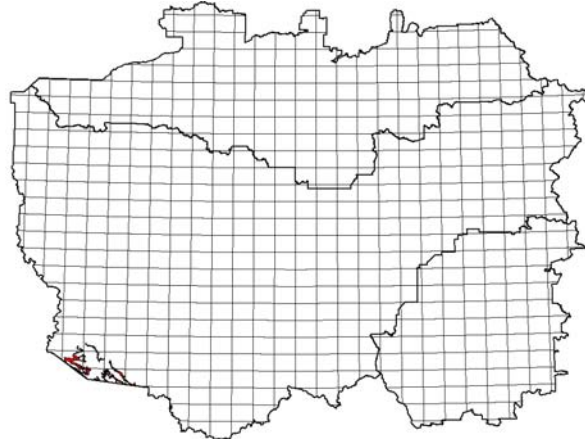
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7376	MS xk3	07		c	j	7376 areas were mapped only in areas mapped as COARSE TEXTURED. 7376 areas occupy the low-lying margins surrounding wetlands and open water bodies in COARSE areas. 7376 areas are predicted to consist of a mixture of the wettest Site Series including 07 and 06.
7377	MS xk3	07		d	j	7377 areas were mapped only in areas mapped as MEDIUM TEXTURED. 7377 areas occupy the low-lying margins surrounding wetlands and open water bodies. 7377 areas are predicted to consist of a mixture of the wettest Site Series including 07 and 06.
7391	MS xk3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7392	MS xk3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
7393	MS xk3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
7394	MS xk3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7395	MS xk3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
7396	MS xk3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
7397	MS xk3	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7398	MS xk3	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7399	MS xk3	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MS xk3**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7301	7301	01	MS xk3	9	01		d	j	1	04				
7302	7302	02	MS xk3	8	02		s	r	1	03		1	05	
7303	7303	03	MS xk3	10	03		w	x						
7306	7306	06	MS xk3	6	06		d	j	4	07				
7307	7307	07	MS xk3	8	07		d	j	2	06				
7309	7309	07	MS xk3	9	07		p	j	1	06				
7312	7301	01	MS xk3	9	01		d	x	1	04				
7315	7341	04	MS xk3	6	04		d	j	4	01				
7316	7316	06	MS xk3	8	06		d	y	2	01				
7321	7321	01	MS xk3	8	01		d	r	1	03		1	05	
7322	7322	02	MS xk3	8	02		c	s	1	03		1	05	
7324	7324	04	MS xk3	9	04		c	r	1	02				
7330	7330	03	MS xk3	10	03		w	c						
7333	7303	03	MS xk3	10	03		w	x						
7334	7301	01	MS xk3	8	01		d	j	2	03				
7336	7316	06	MS xk3	6	06		d	j	4	01				
7340	7340	04	MS xk3	9	04		c	d	1	01				
7341	7341	04	MS xk3	6	04		d	j	4	01				
7343	7334	01	MS xk3	9	01		d	j	1	03				
7345	7354	05	MS xk3	8	05		k	d	2	01				
7346	7306	06	MS xk3	7	06		d	j	3	07				
7350	7350	05	MS xk3	8	05		k	c	2	04				
7351	7351	01	MS xk3	6	01		c	d	4	04				
7354	7354	05	MS xk3	8	05		k	d	2	04				
7356	7356	06	MS xk3	8	06		c	y	2	01				
7357	7357	06	MS xk3	6	06		c	j	4	07				
7358	7358	07	MS xk3	8	07		c	j	2	06				
7364	7364	01	MS xk3	6	01		c	d	4	06				
7365	7356	06	MS xk3	7	06		c	j	3	07				
7366	7366	06	MS xk3	8	06		d	j	2	07				
7367	7367	06	MS xk3	8	06		c	d	2	07				
7376	7376	07	MS xk3	7	07		c	j	3	06				
7377	7377	07	MS xk3	7	07		d	j	3	06				
7391	7391	OW	MS xk3	10	00	OW								
7392	7392	WE	MS xk3	10	00	WE	d	y						
7393	7393	ME	MS xk3	10	00	ME								
7394	7394	PA	MS xk3	10	00	PA								
7395	7395	BR	MS xk3	10	00	BR								
7396	7396	DL	MS xk3	10	00	DL								
7397	7397	TA	MS xk3	10	00	TA								
7398	7398	AV	MS xk3	10	00	AV								
7399	7399	GL	MS xk3	10	00	GL								

**BGC Unit: MH mmp****LMES Zone ID: 75****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	11,390.8	0.23%
100 Mile House TSA	0.0	0.00%
Cariboo Region	11,390.8	0.14%

**List of Site Series Codes Defined for use in MH mmp**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	MB	HmBa Blueberry	subxeric - mesic	Steep Slopes - Sparse Parkland, mesic
02	MM	Mountain Heather	very xeric	Shallow Crests - Sparse Parkland to mountain heather
03	MO	Oak Fern	subxeric - mesic	Steep Dry Slopes - Richer vegetation
04	AB	Bramble	subhygric	Steep Slopes - Medium textured, deep, some seepage
05	MT	Twistedstalk	subhygric	Steep Slopes - Deep, medium textured - mid-low seepage
06	MD	Deer Cabbage	hygric	Gentle Slopes - moisture receiving, forested gullies
07	YH	Hellebore	hygric	Gentle Slopes - Low-Toe, rich wet seepage
08	YS	Sphagnum	subhydric	Treed bog - organic
09	YC	Skunk Cabbage	subhydric	Gentle Slopes - Low-Toe, rich wet seepage
00	MH	Hm - Mountain heather parkland	subxeric - mesic	Parkland heath - very thin cover, rocky ridges
00	SW	Sedge Laurel bog		
00	YM	Yellow Cedar krummholz		
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Ray Coupé, 2007, personal communication, and Mapcode\_Mar18\_06.mdb, Provisional, not correlated.

**NOTE:** The Regional Ecologist has indicated concern that the concepts and alpha codes used in this BGC Unit are suboptimal and need to be revised to better match with concepts and codes used in the CMA. It is expected that the legend or look-up table for MH mmp will be revised in the near future to address these concerns. Users should be aware that the codes assigned to PEM entities in MH mmp are likely to change.



**Landscape Profile Diagram: MH mmp**

No Landscape Profile Diagram available

**Example Attribute Class Rule File for MH mmp (arule7531)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	formfile	LNQAREA	Up2Low	1	9.00	7.50	10.50	7.50	10.50	1.5
3	formfile	LNQAREA	Hollow	4	11.00	10.50	99.00	10.50	99.00	0.5
4	formfile	LNQAREA	Sure_Bet	4	0.00	0.00	99.00	0.00	99.00	0.5
5	formfile	QWETI	Dry_WI	5	5.00	0.00	6.00	0.00	6.00	0.5
6	formfile	QWETI	Dry2Med_WI	1	7.00	5.00	9.00	5.00	9.00	2
7	formfile	QWETI	Wet2V_Wet	4	9.50	9.00	99.00	9.00	99.00	0.5
8	formfile	SLOPE	Steep	4	50.00	50.00	50.00	45.00	100.00	5
9	formfile	SLOPE	SlopeGT30	4	30.00	30.00	30.00	30.00	99.00	2
10	formfile	SLOPE	SlopeLT45	5	45.00	45.00	45.00	0.00	47.00	2
11	formfile	SLOPE	SlopeLT20	5	15.00	22.50	22.50	0.00	20.00	5
12	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	32.00	2
13	formfile	SLOPE	SlopeGT05	4	5.50	5.00	99.00	5.00	99.00	0.5
14	formfile	SLOPE	SlopeLT05	5	4.50	0.00	5.00	0.00	5.00	0.5
15	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
16	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
17	relzfile	Z2St	Hi_Ridge	4	30.00	30.00	30.00	25.00	999.00	5
18	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
19	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
20	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
21	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
22	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
23	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	3.00	1.5

**Example Fuzzy Ecological Class Rule File for MH mmp (crule7531)**

<u>f_name</u>	<u>fuzattr</u>	<u>attrwt</u>	<u>facet_no</u>	<u>f_code</u>	<u>Predicts</u>	<u>f_name</u>	<u>fuzattr</u>	<u>attrwt</u>	<u>facet_no</u>	<u>f_code</u>	<u>Predicts</u>
SH7530r	Crest	35	1	7540	02 MM Sparse Parkland	SH7534ne	Up2Low	35	5	7544	01 MB Sparse Parkland
SH7530r	Dry_WI	35	1	7540	Ridge Crest	SH7534ne	Dry2Med_WI	35	5	7544	< 30% NE Slope
SH7530r	SlopeLT20	20	1	7540		SH7534ne	SlopeLT30	20	5	7544	
SH7530r	Hi_Ridge	10	1	7540		SH7534ne	NE_Aspect	10	5	7544	
SH7531sw	Up2Low	35	2	7541	01 MB Sparse Parkland	SH7535ne	Up2Low	35	6	7545	01 MB Sparse Parkland
SH7531sw	Dry2Med_WI	35	2	7541	< 30% SW Slope	SH7535ne	Dry2Med_WI	35	6	7545	30-45% NE Slope
SH7531sw	SlopeLT30	20	2	7541		SH7535ne	SlopeLT45	10	6	7545	
SH7531sw	SW_Aspect	10	2	7541		SH7535ne	SlopeGT30	10	6	7545	
SH7532sw	Up2Low	35	3	7542	01 MB Sparse Parkland	SH7535ne	NE_Aspect	10	6	7545	
SH7532sw	Dry2Med_WI	35	3	7542	30-45% SW Slope	SH7536ne	Up2Low	35	7	7546	RO Rock in Parkland
SH7532sw	SlopeLT45	10	3	7542		SH7536ne	Dry2Med_WI	35	7	7546	> 45% NE Slope
SH7532sw	SlopeGT30	10	3	7542		SH7536ne	Steep	20	7	7546	
SH7532sw	SW_Aspect	10	3	7542		SH7536ne	NE_Aspect	10	7	7546	
SH7533sw	Up2Low	35	4	7543	RU Rubble and Rock	SH7537st	Hollow	35	8	7547	04 AB Forested Hollow
SH7533sw	Dry2Med_WI	35	4	7543	> 45% SW Slope	SH7537st	Wet2V_Wet	35	8	7547	Sloping > 5%
SH7533sw	Steep	20	4	7543		SH7537st	SlopeGT05	30	8	7547	
SH7533sw	SW_Aspect	10	4	7543		SH7538lv	Hollow	35	9	7548	06 MD Forested Hollow
						SH7538lv	Wet2V_Wet	35	9	7548	Level < 5%
						SH7538lv	SlopeLT05	30	9	7548	

**PEM Entity Descriptions for: MH mmp**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7510	MH mmp	00	MH	r	s	7510 areas were mapped along the tops of sharp, narrow ridges or crests that had little or no observable vegetation and were interpreted as bare rock and forbs (e.g. very thin cover of heathers and sedges). Gentle slopes, medium textured shallow soils, bare rock and heathers, little observable vegetation. Shallow crests.
7511	MH mmp	00	MH	s	j	7511 areas were mapped on moderate to gentle slopes (<30%) with S and W aspects in upper landform positions that had a thin vegetation cover of sparse vegetation (Parkland Heath). Gentle slopes, warm aspects, medium textured shallow soils, thin parkland heath.
7512	MH mmp	00	RU	w	s	7512 areas were mapped on moderately steep to steep slopes (30-45%) with S and SW (windswept) aspects in upper landform positions. 7512 areas had a sparse vegetation cover of parkland heath. Moderate to steep slopes, warm aspect, medium textured shallow soils, thin parkland heath.
7513	MH mmp	00	RO	w	v	7513 areas were mapped on very steep (>45%) SW facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Warm aspect.
7514	MH mmp	00	MH	s	j	7514 areas were mapped on moderate to gentle slopes (<30%) with N and E aspects in upper landform positions that had a sparse vegetation cover of heathers and sedges. Gentle slopes, Cool aspects, medium textured shallow soils, thin parkland heath.
7515	MH mmp	00	RU	k	s	7515 areas were mapped on moderately steep to steep slopes (30-45%) with N and E (shadowed) aspects in upper landform positions. 7515 areas had a sparse vegetation cover of heathers and sedges. Moderate to steep slopes, cool aspect, medium textured shallow soils; thin parkland heath.
7516	MH mmp	00	RO	k	v	7516 areas were mapped on very steep (>45%) N and E facing cliffs and hillsides that had little or no observable vegetation (e.g. bare soils). A very steep, bedrock escarpment or outcropping, with little soil development and sparse vegetative cover. Rubble and scree. Cool aspect
7517	MH mmp	00	RU	s	y	7517 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as no observable vegetation that were interpreted as bare rock with heathers and sedges (e.g. very thin cover). Slope gradients are greater than 15% and wetness index is greater than 9. These are rocky chutes in areas with very thin ground cover.
7518	MH mmp	00	SW	s	y	7518 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as no observable vegetation that were interpreted as bare rock a with heathers and sedges (e.g. very thin cover). Slope gradients are less than 15% and wetness index is greater than 9. These are level to gently sloping rocky seepage creeks with a thin cover of forbs and willows.
7530	MH mmp	02	MM	r	s	7530 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by sparse parkland. 7530 areas are transition areas from mountain heathers to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, mountain heather to sparse parkland transition vegetation. Shallow crests.
7531	MH mmp	01	MB	d	j	7531 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by sparse parkland. 7531 areas are transition areas from mountain heathers to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7532	MH mmp	01	MB	w	s	7532 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by sparse parkland vegetation. 7532 areas are transition areas from heather meadows to sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
7533	MH mmp	00	RU	w	v	7533 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some sparse parkland. Very steep slopes, shallow, rocky, medium textured soils.
7534	MH mmp	01	MB	s	j	7534 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by sparse parkland vegetation. 7534 areas are transition areas from sparse parkland to rock. Gentle slopes, deep, medium textured soils.
7535	MH mmp	01	MB	k	s	7535 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by sparse parkland vegetation. 7535 areas are transition areas from sparse parkland to rock. Moderate to steep slopes, shallow, medium textured soils.
7536	MH mmp	00	RO	k	v	3636 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3636 areas appear to be covered by a mixture bare rock and some sparse parkland. Very steep slopes, shallow, rocky, medium textured soils.
7537	MH mmp	04	AB	s	y	7537 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
7538	MH mmp	06	MD	s	y	7538 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
7540	MH mmp	02	MM	r	s	7540 areas were mapped along the tops of sharp, narrow ridges or crests that appeared to be covered by sparse parkland. 7540 areas are transition areas from mountain heathers to a combination of brush, stunted trees and rock. Crest positions, gentle slopes, medium textured shallow soils, mountain heather to sparse parkland transition vegetation. Shallow crests.
7541	MH mmp	01	MB	d	j	7541 areas were mapped on gentle to moderate (< 30%) S and W facing (windward) slopes that appeared to be covered by sparse parkland. 7541 areas are transition areas from mountain heathers to a combination of sparse parkland and rock. Gentle slopes, deep, medium textured soils.
7542	MH mmp	01	MB	w	s	7542 areas were mapped on moderate to steep (30-45%) S and W facing (windward) slopes that appeared to be covered by sparse parkland vegetation. 7542 areas are transition areas from heather meadows to sparse parkland and rock. Moderate to steep slopes, shallow, medium textured soils.
7543	MH mmp	00	RU	w	v	7543 areas were mapped on very steep (> 45%) S and W facing (windward) slopes that appeared to be covered by a mixture of bare rock and some sparse parkland. Very steep slopes, shallow, rocky, medium textured soils.
7544	MH mmp	01	MB	s	j	7544 areas were mapped on gentle to moderate (< 30%) N and E facing (leeward) slopes that appeared to be covered by sparse parkland vegetation. 7544 areas are transition areas from sparse parkland to rock. Gentle slopes, deep, medium textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7545	MH mmp	01	MB	k	s	7545 areas were mapped on moderate to steep (30-45%) N and E facing (leeward) slopes that appeared to be covered by covered by sparse parkland vegetation. 7545 areas are transition areas from sparse parkland to rock. Moderate to steep slopes, shallow, medium textured soils.
7546	MH mmp	00	RO	k	v	3646 areas were mapped on very steep (> 45%) N and E facing (leeward) slopes that appeared to be covered by a mixture of bare rock and some dry tundra. 3646 areas appear to be covered by a mixture bare rock and some sparse parkland. Very steep slopes, shallow, rocky, medium textured soils.
7547	MH mmp	04	AB	s	y	7547 areas were mapped in wetter draws and hollows located on moderate to very steep slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 31). Slope gradients are greater than 15% and wetness index is greater than 9. These are sloping rocky chutes and hollows in areas with transitional forb to brush ground cover.
7548	MH mmp	06	MD	s	y	7548 areas were mapped in wetter draws and hollows located on gentle to level slopes in areas classified as having an increasingly thick ground cover of forbs, shrubs, willow and stunted trees (class 40). Slope gradients are less than 15% and wetness index is greater than 9. These are wet vegetated gullies.
7551	MH mmp	00	MH	k	s	7551 areas were mapped in areas characterized by dark purple colors on the false color satellite image. In parkland environments, this dark purple color is interpreted to infer the presence of a sparse parkland forest cover. This color is associated with areas that were in shadow and not directly illuminated by sunlight from the SE. So most 5851 areas are expected to occur on N, NW or NE facing slopes with a sparse parkland forest cover.
7552	MH mmp	00	RT	k	s	7552 areas were mapped in areas near and around the edges of glaciers that appeared to trap and retain persistent accumulations of snow and ice but did not appear to be glacier ice or permanent snow. Some 7552 areas may include talus or rock glaciers. Others may be rubble or rock with persistent late snow. 7552 areas are mostly snow and ice and do not appear to have any significant vegetative ground cover.
7553	MH mmp	00	GL	k		7553 areas were mapped to enclose what appear to be patches of bright ice and snow located in shadows in the satellite imagery. These bright dark blue areas appear to be glaciers or permanent snow and they generally occur down slope of the lee or shadowed portions of steep N, NW or NE facing slopes. 7553 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied Landsat false color imagery.
7554	MH mmp	00	GL			7554 areas were mapped to enclose the cores of what appear to be permanent glaciers. 7554 areas were predicted solely on the basis of the reflectance values in bands 1, 2 and 3 of the supplied Landsat false color imagery. Most 7554 areas of glacier ice are open to sunlight illumination from the SE and have a bright cyan color on the false color satellite image.
7591	MH mmp	00	OW			These areas represent open water as extracted from the TRIM II digital data and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7592	MH mmp	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
7593	MH mmp	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.

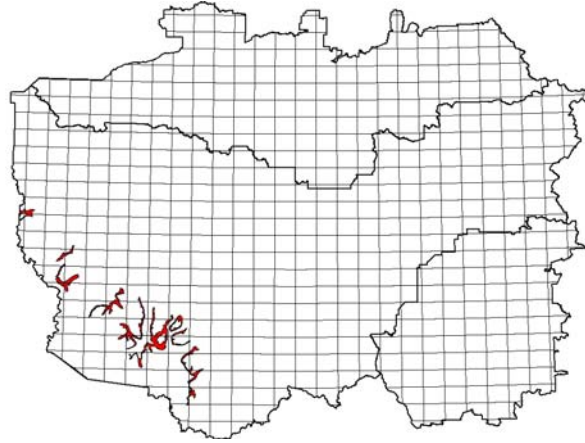
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7594	MH mmp	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7595	MH mmp	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
7596	MH mmp	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
7598	MH mmp	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MH mmp**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7510	7510	MH	MH mmp	6	00	MH	r	s	4	00	RO			
7511	7511	MH	MH mmp	7	00	MH	s	j	3	00	RU			
7512	7512	RU	MH mmp	6	00	RU	w	s	4	00	MH			
7513	7513	RO	MH mmp	8	00	RO	w	v	2	00	MH			
7514	7514	MH	MH mmp	7	00	MH	s	j	3	00	RO			
7515	7515	RU	MH mmp	6	00	RU	k	s	4	00	MH			
7516	7516	RO	MH mmp	8	00	RO	k	v	2	00	MH			
7517	7517	RU	MH mmp	6	00	RU	s	y	4	00	SB			
7518	7518	SW	MH mmp	6	00	SW	s	y	4	00	SB			
7530	7540	02	MH mmp	8	02	MM	r	s	2	00	MH			
7531	7541	01	MH mmp	6	01	MB	d	j	4	00	MH			
7532	7542	01	MH mmp	6	01	MB	w	s	4	00	MH			
7533	7543	RU	MH mmp	8	00	RU	w	v	2	01	MB			
7534	7544	01	MH mmp	6	01	MB	s	j	4	03	MO			
7535	7545	01	MH mmp	6	01	MB	k	s	4	03	MO			
7536	7546	RO	MH mmp	7	00	RO	k	v	3	01	MB			
7537	7547	04	MH mmp	6	04	AB	s	y	4	05	MT			
7538	7548	06	MH mmp	6	06	MD	s	y	4	09	YC			
7540	7540	02	MH mmp	8	02	MM	r	s	2	00	MH			
7541	7541	01	MH mmp	6	01	MB	d	j	4	00	MH			
7542	7542	01	MH mmp	6	01	MB	w	s	4	00	MH			
7543	7543	RU	MH mmp	8	00	RU	w	v	2	01	MB			
7544	7544	01	MH mmp	6	01	MB	s	j	4	03	MO			
7545	7545	01	MH mmp	6	01	MB	k	s	4	03	MO			
7546	7546	RO	MH mmp	7	00	RO	k	v	3	01	MB			
7547	7547	04	MH mmp	6	04	AB	s	y	4	05	MT			
7548	7548	06	MH mmp	6	06	MD	s	y	4	09	YC			
7551	7551	MH	MH mmp	6	00	MH	k	s	4	01	MB			
7552	7552	RT	MH mmp	6	00	RT	k	s	4	00	GL			
7553	7553	GL	MH mmp	8	00	GL	k		2	00	RT			
7554	7554	GL	MH mmp	10	00	GL								
7591	7591	OW	MH mmp	10	00	OW								
7592	7592	WE	MH mmp	10	00	WE	d	y						
7593	7593	ME	MH mmp	10	00	ME								
7594	7594	PA	MH mmp	10	00	PA								
7595	7595	BR	MH mmp	10	00	BR								
7596	7596	DL	MH mmp	10	00	DL								
7598	7598	AV	MH mmp	10	00	AV								

**BGC Unit: MS dc2****LMES Zone ID: 76****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	47,595.0	0.97%
100 Mile House TSA	0.0	0.00%
Cariboo Region	47,595.0	0.58%

**List of Site Series Codes Defined for use in MS dc2**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SF	Sxw - Wintergreen - Feathermoss	submesic - mesic	All up to lower water shedding parts of the landscape
02	DS	FdBl - Spirea - Stonecrop	xeric	Shallow Crests, Thin, Dry Soils - Also Deep Crests
03	DK	FdBl - Soopolallie - Kinnikinnick	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04	PK	PIBl - Soopolallie - Kinnikinnick		COARSE upper, Also Moderate SW & Shallow SW- Slightly Drier, warmer or shallow slopes
05	SR	Sxw - Rhododendron - Crowberry		Wet, Flat, Frosty Toe, < 10%
06	ST	Sxw - Twinberry - Reedgrass	subhygic - hygic	Slightly Moist, Alluvial channels and hollows, WT > 50 cm
07	SG	Sxw - Gooseberry	subhygic - hygic	Slightly Moist, Sloping Lower to Toe Slopes, WT > 50 cm
08	SH	Sxw - Horsetail - Leafy moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygic	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		
00	GB	Gravel Bar		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.



## Landscape Profile Diagram: MS dc2

No Landscape Profile diagram available

### Example Attribute Class Rule File for MS dc2 (arule7630)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	1	80.00	80.00	80.00	70.00	90.00	10
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	50.00	70.00	10
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	30.00	30.00	30.00	15.00	15.00	15
7	relzfile	PCTZ2ST	Toe	1	15.00	15.00	15.00	5.00	25.00	10
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Drier	1	7.50	6.50	8.50	6.50	8.50	1
13	formfile	LNQAREA	Less_dry	1	9.00	8.50	8.50	8.50	9.50	0.5
14	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
15	formfile	QWETI	Med2Sl_Wet	1	9.30	9.30	9.30	7.90	10.70	1.4
16	formfile	QWETI	Sl_Wet2Wet	1	9.90	9.90	9.90	8.10	11.70	1.8
17	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
18	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
21	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
22	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
23	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
24	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
31	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
39	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for MS dc2 (crule7630)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH7602r	Crest	10	1	7602	02a Shallow Crest	MH7617u	Up2Mid	35	15	7617	07 Moist Upper Swale
MH7602r	Dry_WI	10	1	7602		MH7617u	Wet	25	15	7617	
MH7602r	Hi_Ridge	20	1	7602		MH7617u	SlopeLT20	15	15	7617	
MH7602r	Shallow	60	1	7602		MH7617u	SlopeGT05	5	15	7617	
MH7602r	Med2CrS	10	1	7602		MH7617u	Medium	10	15	7617	
MH7622r	Crest	35	2	7622	02 Deep High Ridge	MH7617u	Deep	10	15	7617	
MH7622r	Dry_WI	25	2	7622		MH7618u	Up2Mid	35	16	7618	06 Upper Swale bottom
MH7622r	Hi_Ridge	20	2	7622		MH7618u	Wet2V_Wet	25	16	7618	
MH7622r	Deep	10	2	7622		MH7618u	SlopeLT20	15	16	7618	
MH7622r	Med2CrS	10	2	7622		MH7618u	SlopeGT05	5	16	7618	
MH7621k	Crest	35	3	7621	01 Deep Low Knoll	MH7618u	Medium	10	16	7618	
MH7621k	Dry_WI	25	3	7621		MH7618u	Deep	10	16	7618	
MH7621k	Low_Knoll	20	3	7621		MH7671L	Mid2Toe	35	17	7671	01 SW Mid2Toe transition
MH7621k	Deep	10	3	7621		MH7671L	Med2SJ_Wet	25	17	7671	
MH7621k	Med2CrS	10	3	7621		MH7671L	SlopeLT30	10	17	7671	
MH7613n	Crest2Mid	35	4	7613	01 Steep NE upper	MH7671L	SlopeGT10	10	17	7671	
MH7613n	Dry2Med_WI	25	4	7613		MH7671L	SW_Aspect	10	17	7671	
MH7613n	Steep_NE	20	4	7613		MH7671L	Deep	5	17	7671	
MH7613n	Med2CrS	10	4	7613		MH7670L	Mid2Toe	35	18	7670	01 NE Mid2Toe transition
MH7613n	Deep	10	4	7613		MH7670L	Med2SJ_Wet	25	18	7670	
MH7603s	Crest2Mid	35	5	7603	03 Steep SW upper	MH7670L	SlopeLT30	10	18	7670	
MH7603s	Dry2Med_WI	25	5	7603		MH7670L	SlopeGT10	10	18	7670	
MH7603s	Steep_SW	20	5	7603		MH7670L	NE_Aspect	10	18	7670	
MH7603s	Med2CrS	10	5	7603		MH7670L	Deep	10	18	7670	
MH7603s	Deep	10	5	7603		MH7677s	Toe	35	19	7677	07 5-10% Moist Toe SW
MH7613L	Up2Mid	40	6	7638	01 Steep NE lower	MH7677s	SI_Wet2Wet	25	19	7677	
MH7613L	SI_Dry2Med	20	6	7638		MH7677s	SlopeLT10	15	19	7677	
MH7613L	Steep_NE	20	6	7638		MH7677s	SlopeGT05	5	19	7677	
MH7613L	Med2CrS	10	6	7638		MH7677s	Med2CrS	10	19	7677	
MH7613L	Deep	10	6	7638		MH7677s	SW_Aspect	10	19	7677	
MH7603L	Up2Mid	40	7	7639	03 Steep SW lower	MH7607n	Toe	35	20	7607	07 5-10% Moist Toe NE
MH7603L	SI_Dry2Med	20	7	7639		MH7607n	SI_Wet2Wet	25	20	7607	
MH7603L	Steep_SW	20	7	7639		MH7607n	SlopeLT10	15	20	7607	
MH7603L	Med2CrS	10	7	7639		MH7607n	SlopeGT05	5	20	7607	
MH7603L	Deep	10	7	7639		MH7607n	Med2CrS	10	20	7607	
MH7623n	Crest2Mid	10	8	7623	01 Gentle Shallow NE	MH7607n	NE_Aspect	10	20	7607	
MH7623n	Dry2Med_WI	10	8	7623		MH7657t	Toe	35	21	7657	07 Moist Toe Transition
MH7623n	Gentle_NE	10	8	7623		MH7657t	SI_Wet2Wet	25	21	7657	
MH7623n	Med2CrS	10	8	7623		MH7657t	SlopeLT10	5	21	7657	
MH7623n	Shallow	60	8	7623		MH7657t	SlopeLT05	15	21	7657	
MH7632s	Crest2Mid	10	9	7632	03 Gentle Shallow SW	MH7657t	Med2CrS	10	21	7657	
MH7632s	Dry2Med_WI	10	9	7632		MH7657t	Deep	10	21	7657	
MH7632s	Gentle_SW	10	9	7632		MH7605t	Toe2Valley	35	22	7605	05 Flat Wet Frosty Toe
MH7632s	Med2CrS	10	9	7632		MH7605t	Wet	25	22	7605	
MH7632s	Shallow	60	9	7632		MH7605t	SlopeLT10	5	22	7605	
MH7631n	Crest2Mid	30	10	7631	01 Gentle NE Deep	MH7605t	SlopeLT05	15	22	7605	
MH7631n	Dry2Med_WI	20	10	7631		MH7605t	Med2Fine	10	22	7605	
MH7631n	Drier	5	10	7631		MH7605t	Deep	10	22	7605	
MH7631n	SlopeLT30	20	10	7631		MH7675t	Toe2Valley	35	23	7675	05 5-10% Wet Gentle Toe
MH7631n	NE_Aspect	10	10	7631		MH7675t	Wet	25	23	7675	
MH7631n	Deep	40	10	7631		MH7675t	SlopeLT10	15	23	7675	
MH7634s	Crest2Mid	30	11	7634	01 Gentle SW Deep	MH7675t	SlopeGT05	5	23	7675	
MH7634s	Dry2Med_WI	20	11	7634		MH7675t	Med2Fine	10	23	7675	
MH7634s	Drier	5	11	7634		MH7675t	Deep	10	23	7675	
MH7634s	SlopeLT30	20	11	7634		MH7668v	Valley	35	24	7668	07 Sloping Valley, Rich Wet
MH7634s	SW_Aspect	10	11	7634		MH7668v	Wet2V_Wet	25	24	7668	
MH7634s	Deep	40	11	7634		MH7668v	SlopeGT05	20	24	7668	
MH7614n	Crest2Mid	30	12	7614	01 Gentle NE upper less dry	MH7668v	Med2Fine	10	24	7668	
MH7614n	Dry2Med_WI	20	12	7614		MH7668v	Deep	10	24	7668	
MH7614n	Less_dry	5	12	7614		MH7608v	Valley	35	25	7608	08 Flat Valley, Wet Poor
MH7614n	SlopeLT30	20	12	7614		MH7608v	Wet2V_Wet	25	25	7608	
MH7614n	NE_Aspect	10	12	7614		MH7608v	SlopeLT05	20	25	7608	
MH7614n	Deep	40	12	7614		MH7608v	Med2Fine	10	25	7608	
MH7641s	Crest2Mid	30	13	7641	01 Gentle SW upper less dry	MH7608v	Deep	10	25	7608	
MH7641s	Dry2Med_WI	20	13	7641		MH7688m	Wet_LT200	50	26	7688	05 Wet Cold Margins
MH7641s	Less_dry	5	13	7641		MH7688m	WetZ_LT05	50	26	7688	
MH7641s	SlopeLT30	20	13	7641		MH7685o	Organic	99	27	7685	08 Organic Wetlands
MH7641s	SW_Aspect	10	13	7641		MH7678s	Hi_Seep	90	28	7678	07 Moist Seepage areas
MH7641s	Deep	40	13	7641		MH7678s	Med2Fine	10	28	7678	
MH7601m	Up2Mid	35	14	7601	01 Upper 01 < 30%	MH7686t	Mid2Toe	35	29	7686	06 Moist Hollow in Toe
MH7601m	SI_Dry2Med	25	14	7601		MH7686t	Wet	25	29	7686	
MH7601m	SlopeLT30	20	14	7601		MH7686t	SlopeLT20	20	29	7686	
MH7601m	Medium	10	14	7601		MH7686t	Medium	10	29	7686	
MH7601m	Deep	10	14	7601		MH7686t	Deep	10	29	7686	
MH7601m	Hi_Ridge	10	14	7601							

**PEM Entity Descriptions for: MS dc2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7600	MS dc2	00	GB			These areas consist of all sites that were recognized as GRAVEL BARS by the manual interpretation process.
7601	MS dc2	01	SF	d	j	7601 areas were mapped in areas of MEDIUM TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
7602	MS dc2	02 a	DS	s	r	7702 areas mapped ONLY on dry crests with SHALLOW soils and MEDIUM or COARSE TEXTURES. Moderate slopes on crests, medium to coarse textured shallow soils over bedrock.
7603	MS dc2	03	DK	w	x	7603 areas were defined to occur on steep (>25%) upper SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. Significant slope, warm aspect, deep, medium-textured soils.
7605	MS dc2	05	SR	j	y	7605 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP MEDIUM TEXTURED soils. 7605 areas were defined to try to model the wet, flat, frosty 05 site series. 7605 areas do appear likely to be dominated by the wet, flat, frosty 05 site series along with some 07 and 08.
7607	MS dc2	07	SG	j	y	7607 areas were mapped on gentle NE-facing lower to toe slopes (< 15%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity for this area. Moist sites of lower slope receiving position, deep medium-textured soil.
7608	MS dc2	08	SH	j	y	7608 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 7608 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depression areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet 08 site series.
7611	MS dc2	04	PK	c	d	7611 areas were mapped in areas of COARSE TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, COARSE-textured soils. The only drier than mesic site series is 04 so 04 is assigned to all parts of this entity. (Upper portion of 04)
7613	MS dc2	01	SF	k	s	7613 areas were defined to occur on steep (>25%) upper NE-facing cool aspects on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 7613 areas are predicted to be dominated by the normal mesic 01 site series, cool phase (01k). Significant slope, cool aspect with deep, medium-textured soils
7614	MS dc2	01	SF	k	d	7614 areas were defined to occur on gentle to moderate (<25%) NE-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7614 areas were created to permit recognition of slightly moister portions of moderate NE slopes. 7614 areas ended up being lumped in with normal mesic 01 areas. Moderate slope, cool aspect, deep, medium-textured soils.
7617	MS dc2	07	SG	d	j	7617 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials. 7617 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 7617 areas are predicted to be occupied by the slightly moist 07 site series. Gentle slope, deep, medium-textured soils.
7618	MS dc2	06	ST	d	j	7618 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials. 7618 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 7618 areas are predicted to be occupied by the moist alluvial 06 site series along with the normal, moist seepage 07 site series. Gentle slope, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7620	MS dc2	04	PK	c	d	7620 areas were mapped on the slightly drier crests of high ridges with deep COARSE TEXTURED soils. 7620 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic 04 Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 04 Site Series along with some normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils.
7621	MS dc2	01	SF	d	x	7621 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 7621 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 site series along with some drier 04 Site Series. Gentle slope, deep, medium-textured soils.
7622	MS dc2	02	DS	d	x	7622 areas were mapped on the slightly drier crests of high ridges with deep MEDIUM TEXTURED soils. 7622 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 02 Site Series along with some normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
7623	MS dc2	01	SF	s	k	7623 areas were defined to occur on gentle to moderate (<25%) NE-facing slopes and on SHALLOW, MEDIUM TEXTURED materials in UPPER landform positions. 7623 areas were created to balance a shallow SW entity defined to recognize drier 04 site series in shallow SW slopes. Moderate slope, cool aspect, shallow, medium-textured soils.
7630	MS dc2	04	PK	c	d	7630 areas were mapped in areas of COARSE TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, COARSE-textured soils. The only drier than mesic site series is 04 so 04 is assigned to all parts of this entity.
7631	MS dc2	01	SF	d	k	7631 areas were defined to occur on gentle to moderate (<25%) NE-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7631 areas were created to act as a counterpoint to possible recognition of the slightly drier 04 site series that occurs on moderate SW slopes in specific geographic localities. . Moderate slope, cool aspect, deep, medium-textured soils.
7632	MS dc2	03	DK	w	x	7632 areas were defined to occur on gentle to moderate (<25%) SW-facing slopes and on SHALLOW, MEDIUM TEXTURED materials in UPPER landform positions. 7632 areas were created to permit recognition of a shallow SW entity defined to recognize drier 03 site series on shallow SW slopes. Moderate slope, warm aspect, shallow, medium-textured soils.
7633	MS dc2	03	DK	w	c	7633 areas were defined to occur on steep (>25%) upper SW-facing warm aspects and on deep, COARSE TEXTURED materials. Significant slope, warm aspect, deep, COARSE-textured soils.
7634	MS dc2	01	SF	d	w	7634 areas were defined to occur on gentle to moderate (<25%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7634 areas were created to permit possible recognition of the slightly drier 04 site series that occurs on moderate SW-facing upper slopes in specific geographic localities. Moderate slope, warm aspect, deep, medium-textured soils.
7635	MS dc2	07	SG	c	d	7635 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP COARSE TEXTURED soils. 7635 areas were defined to try to model the wet, flat, frosty 05 site series. 7635 areas however appear likely to be dominated by the wet, 07 site series along with some 05 and 08.
7636	MS dc2	04	PK	c	j	7636 areas were mapped on gentle SW-facing slopes in lower to toe landform positions in areas of COARSE TEXTURED soils. 7636 areas were initially thought to be transition areas that exhibited some seepage 07 and 06 site series. The regional ecologist indicated that all 7636 areas could be expected to be dominated by the dry 04 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7637	MS dc2	07	SG	c	d	7637 areas were mapped in slightly moist upper swales, hollows and concavities in areas of COARSE TEXTURED materials. 7637 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 7637 areas are predicted to be occupied by the slightly moist 07 site series. Gentle slope, deep, COARSE-textured soils.
7638	MS dc2	01	SF	k	s	7638 areas were defined to occur on steep (>25%) mid to lower NE-facing cool aspects on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 7638 areas are predicted to be dominated by the normal mesic 01 site series, cool phase (01k). Significant slope, cool aspect with deep, medium-textured soils. The 7638 entity was added to ensure that steep NE-facing slopes lower in the landscape remained recognized as steep.
7639	MS dc2	03	DK	w	x	7639 areas were defined to occur on steep (>25%) mid to lower SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. Significant slope, warm aspect, deep, medium-textured soils. The 7639 entity was added to ensure that steep SW-facing slopes lower in the landscape remained recognized as 03 site series.
7641	MS dc2	01	SF	d	w	7641 areas were defined to occur on gentle to moderate (<25%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7641 areas were created to permit recognition of slightly moister portions of moderate SW slopes. 7641 areas ended up being lumped in with normal mesic 01 areas. Moderate slope, warm aspect, deep, medium-textured soils.
7644	MS dc2	04	PK	k	c	7644 areas were defined to occur on steep (>25%) upper NE-facing cool aspects on deep, COARSE TEXTURED materials in UPPER to MID landform positions. 7644 areas are predicted to be dominated by the slightly dry 04 site series, cool phase. Significant slope, cool aspect with deep, COARSE-textured soils
7645	MS dc2	07	SG	c	d	7645 areas were mapped in slightly moist lower to toe slope swales, hollows and concavities in areas of COARSE TEXTURED materials. 7645 areas were mapped to permit recognition of slightly moister conditions in swales in lower landform positions. 7645 areas are predicted to be occupied by the slightly moist 07 site series along with considerable amounts of normal mesic 01 site series. Gentle slope, deep, COARSE-textured soils.
7646	MS dc2	07	SG	c	d	7646 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of COARSE TEXTURED soils. 7646 areas are characterized by moving, aerated groundwater and rich, moist soils. 7646 areas are not as moist as 7648 areas due to the steeper slopes. Lower slope to depression, deep COARSE-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 07 along with some 06 seepage entity on alluvial soils along stream channels.
7647	MS dc2	07	SG	c	y	7647 areas were mapped in all locations of manually recognized SEEPAGE and COARSE TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 05. Moist sites of lower slope receiving position, deep COARSE-textured soil.
7648	MS dc2	08	ST	c	j	7648 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 7648 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depression areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet 08 site series.
7653	MS dc2	05	SR	c	d	7653 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP COARSE TEXTURED soils. 7653 areas were defined to try to model the wet, flat, frosty 05 site series. 7653 areas do appear likely to be dominated by the wet, flat, frosty 05 site series along with some 07 and 08.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7657	MS dc2	07	SG	j	y	7657 areas were mapped on gentle (< 10%) lower to toe slopes moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. 7657 areas were meant to define a transition zone between moist seepage 07 and flat frosty 05 site series. In the end, most 7657 areas appeared to be best described as a transition between normal mesic 01 and moist seepage 07, with 07 perhaps dominating. Moist sites of lower slope receiving position, deep medium-textured soil.
7658	MS dc2	04	PK	k	c	7658 areas were defined to occur on steep (>25%) mid to lower NE-facing cool aspects on deep, COARSE TEXTURED materials in UPPER to MID landform positions. 7658 areas are predicted to be dominated by the slightly dry 04 site series, cool phase. Significant slope, cool aspect with deep, COARSE-textured soils. The 7658 entity was added to ensure that steep NE-facing slopes lower in the landscape remained recognized as steep.
7659	MS dc2	03	DK	w	c	7659 areas were defined to occur on steep (>25%) mid to lower SW-facing warm aspects and on deep, COARSE TEXTURED materials. Significant slope, warm aspect, deep, COARSE-textured soils. The 7659 entity was added to ensure that steep SW-facing slopes lower in the landscape remained recognized as 03 site series.
7663	MS dc2	04	PK	c	j	7663 areas were mapped on gentle NE-facing slopes in lower to toe landform positions in areas of COARSE TEXTURED soils. 7663 areas were initially thought to be transition areas that exhibited some seepage 07 and 06 site series. The regional ecologist indicated that all 7663 areas could be expected to be dominated by the dry 04 site series.
7668	MS dc2	07	SG	j	y	7668 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 7668 areas are characterized by moving, aerated groundwater and rich, moist soils. 7668 areas are not as moist as 7608 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 07 along with some 06 seepage entity on alluvial soils along stream channels.
7670	MS dc2	01	SF	d	k	7670 areas were mapped on gentle NE-facing slopes in lower to toe landform positions in areas of MEDIUM TEXTURED soils. 7670 areas were initially thought to be transition areas that exhibited some seepage 07 and 01 site series. The regional ecologist indicated that all 7670 areas could be expected to be dominated by the normal 01 site series.
7671	MS dc2	01	SF	d	j	7671 areas were mapped on gentle SW-facing slopes in lower to toe landform positions in areas of MEDIUM TEXTURED soils. 7671 areas were initially thought to be transition areas that exhibited some seepage 07 and 01 site series. The regional ecologist indicated that all 7671 areas could be expected to be dominated by the normal 01 site series.
7673	MS dc2	01	SF	c	y	7673 areas were mapped on gentle SW-facing lower to toe slopes (< 15%) moistened by seepage in areas of DEEP COARSE TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity for this area. Moist sites of lower slope receiving position, deep COARSE-textured soil.
7674	MS dc2	01	SF	c	y	7674 areas were mapped on gentle NE-facing lower to toe slopes (< 15%) moistened by seepage in areas of DEEP COARSE TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity for this area. Moist sites of lower slope receiving position, deep COARSE-textured soil.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7675	MS dc2	05	SR	d	y	7675 areas were mapped on very gentle toe slopes (< 10%) in areas of permanently high water tables and DEEP MEDIUM TEXTURED soils. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. 7675 areas are wetter and flatter than all of the other seepage type map entities. 7675 areas typically occupy the bottoms of gentle hollows or draws and do not occur within major basins or depressions. Deep, fine-textured soil.
7677	MS dc2	07	SG	j	y	7677 areas were mapped on gentle SW-facing lower to toe slopes (< 15%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity for this area. Moist sites of lower slope receiving position, deep medium-textured soil.
7678	MS dc2	07	SG	d	y	7678 areas were mapped in all locations of manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 07 and 05. Moist sites of lower slope receiving position, deep medium-textured soil.
7681	MS dc2	00	RO	v	x	7681 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
7682	MS dc2	00	RO	v	x	7682 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
7683	MS dc2	00	GL			7683 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with remnants of glaciers.
7685	MS dc2	08	ST	d	y	7685 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 08 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
7686	MS dc2	07	SG	d	j	7686 areas were mapped in slightly moist lower to toe slope swales, hollows and concavities in areas of MEDIUM TEXTURED materials. 7686 areas were mapped to permit recognition of slightly moister conditions in swales in lower landform positions. 7686 areas are predicted to be occupied by the slightly moist 07 site series along with considerable amounts of normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
7688	MS dc2	05	SR	j	y	7688 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in MEDIUM TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the wet, frosty 05 site series along with the very wet 08 site series. Lower slope to depression, deep medium-textured soils.
7689	MS dc2	08	ST	j	y	7689 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in COARSE TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the very wet 08 site series along with the wet, frosty 05 site series. Lower slope to depression, deep COARSE-textured soils.
7691	MS dc2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7692	MS dc2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7693	MS dc2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
7694	MS dc2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7695	MS dc2	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
7696	MS dc2	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
7697	MS dc2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7698	MS dc2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7699	MS dc2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.



### PEM Entity Extended Legend with Proportions of Site Series for: MS dc2

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7600	7600	GB	MS dc2	10	00	GB								
7601	7601	01	MS dc2	9	01	SF	d	j	1	06	ST			
7602	7602	02a	MS dc2	6	02a	DS	s	r	2	03	DK	2	01	SF
7603	7603	03	MS dc2	7	03	DK	w	x	2	04	PK	1	01	SF
7605	7675	05	MS dc2	6	05	SR	j	y	3	07	SG	1	08	SH
7607	7686	07	MS dc2	7	07	SG	j	y	2	01	SF	1	05	SR
7608	7608	08	MS dc2	8	08	SH	j	y	1	06	ST	1	05	SR
7611	7630	04	MS dc2	9	04	PK	c	d	1	06	ST			
7613	7613	01	MS dc2	8	01	SF	k	s	2	02	DS			
7614	7601	01	MS dc2	6	01	SF	k	d	4	06	ST			
7617	7686	07	MS dc2	6	07	SG	d	j	4	01	SF			
7618	7618	06	MS dc2	6	06	ST	d	j	4	07	SG			
7620	7620	04	MS dc2	6	04	PK	c	d	4	01	SF			
7621	7601	01	MS dc2	6	01	SF	d	x	4	04	PK			
7622	7622	02	MS dc2	6	02	DS	d	x	4	01	SF			
7623	7623	01	MS dc2	9	01	SF	s	k	1	02	DS			
7630	7630	04	MS dc2	9	04	PK	c	d	1	06	ST			
7631	7601	01	MS dc2	10	01	SF	d	k						
7632	7632	03	MS dc2	6	03	DK	w	x	3	02	DS	1	01	SF
7633	7633	03	MS dc2	7	03	DK	w	c	2	04	PK	1	01	SF
7634	7601	01	MS dc2	6	01	SF	d	w	4	04	PK			
7635	7645	07	MS dc2	7	07	SG	c	d	2	05	SR	1	08	SH
7636	7630	04	MS dc2	9	04	PK	c	j	1	06	ST			
7637	7645	07	MS dc2	6	07	SG	c	d	4	01	SF			
7638	7613	01	MS dc2	8	01	SF	k	s	2	02	DS			
7639	7603	03	MS dc2	7	03	DK	w	x	2	04	PK	1	01	SF
7641	7601	01	MS dc2	6	01	SF	d	w	4	05	SR			
7644	7644	04	MS dc2	8	04	PK	k	c	2	01	SF			
7645	7645	07	MS dc2	6	07	SG	c	d	4	01	SF			
7646	7645	07	MS dc2	6	07	SG	c	d	3	06	ST	1	05	SR
7647	7647	07	MS dc2	7	07	SG	c	y	3	05	SR			
7648	7648	08	MS dc2	8	08	SH	c	j	1	06	ST	1	05	SR
7653	7653	05	MS dc2	6	05	SR	c	d	3	07	SG	1	08	SH
7657	7686	07	MS dc2	6	07	SG	j	y	3	01	SF	1	05	SR
7658	7644	04	MS dc2	8	04	PK	k	c	2	02	DS			
7659	7633	03	MS dc2	7	03	DK	w	c	2	04	PK	1	01	SF
7663	7630	04	MS dc2	9	04	PK	c	j	1	06	ST			
7668	7686	07	MS dc2	6	07	SG	j	y	3	06	ST	1	05	SR
7670	7601	01	MS dc2	9	01	SF	d	k	1	07	SG			
7671	7601	01	MS dc2	9	01	SF	d	j	1	07	SG			
7673	7673	01	MS dc2	7	01	SF	c	y	2	07	SG	1	05	SR
7674	7674	01	MS dc2	7	01	SF	c	y	2	07	SG	1	05	SR
7675	7675	05	MS dc2	7	05	SR	d	y	2	07	SG	1	08	SH
7677	7686	07	MS dc2	7	07	SG	j	y	2	01	SF	1	05	SR
7678	7678	07	MS dc2	7	07	SG	d	y	3	05	SR			
7681	7681	RO	MS dc2	8	00	RO	v	x	2	02	DS			
7682	7682	RO	MS dc2	6	00	RO	v	x	4	02	DS			
7683	7683	GL	MS dc2	10	00	GL								
7685	7685	08	MS dc2	9	08	SH	d	y	1	05	SR			
7686	7686	07	MS dc2	6	07	SG	d	j	4	01	SF			
7688	7688	05	MS dc2	7	05	SR	j	y	3	08	SH			
7689	7689	08	MS dc2	7	08	SH	j	y	3	05	SR			
7691	7691	OW	MS dc2	10	00	OW								
7692	7692	WE	MS dc2	10	00	WE	d	y						
7693	7693	ME	MS dc2	10	00	ME								
7694	7694	PA	MS dc2	10	00	PA								

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7695	7695	BR	MS dc2	10	00	BR								
7696	7696	DL	MS dc2	10	00	DL								
7697	7697	TA	MS dc2	10	00	TA								
7698	7698	AV	MS dc2	10	00	AV								
7699	7699	GL	MS dc2	10	00	GL								



**BGC Unit: MS dv****LMES Zone ID: 77****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	28,263.1	0.57%
100 Mile House TSA	0.0	0.00%
Cariboo Region	28,263.1	0.34%

**List of Site Series Codes Defined for use in MS dv**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	LS	Pl - Soopolallie - Twinflower	mesic	All up to lower water shedding parts of the landscape
02	PB	Pl - Penstemon - Balsamroot - South slope	xeric - subxeric	02b Steep SW - Dry Warm Upper Slopes (includes Coarse)
02	PB	Pl - Penstemon - Balsamroot, Shallow	xeric - subxeric	02a Shallow Crests, Thin, Dry Soils - Also Shallow COARSE
02	PB	Pl - Penstemon - Balsamroot	xeric - subxeric	02 Deep Dry Ridge tops
03	LR	Pl - Short-awned ricegrass - Peltigera	submesic	COARSE, Level to Gentle Frosty Glaciofluvial Flood Plains
04	LK	Pl - Saskatoon - Kinnikinnick	submesic - subxeric	Slightly Drier and Warmer, on moderate SW slopes, Also on Steep NE COARSE
05	LM	Pl - Soopolallie - Heron's bill moss	submesic - subxeric	COARSE, All Upper shedding portions, Excluding Flat, Frosty FG Flood Plains
06	ST	Sxw - Twinberry - Reedgrass	subhygric	Slightly Moist, Sloping Lower to Toe Slopes, WT > 50 cm
07	SC	Sxw - Dwarf blueberry - Crowberry	subhygric	Wet, Flat, Frosty Toe, < 10%
08	SS	Sxw - Soopolallie - Scouring-rush	hygric	Uncommon - Not Modeled as dominant in any PEM entity
09	SH	Sxw - Horsetail - Leafy moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997. And Mapcode\_Mar18\_06.mdb.

## Landscape Profile Diagram: MS dv

No Landscape Profile diagram available

## Example Attribute Class Rule File for MS dv (arule7731) (Coarse areas)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
14	formfile	QWETI	SI_Wet	1	10.00	10.00	10.00	9.20	10.80	0.8
15	formfile	QWETI	SLWet2Wet	1	11.00	11.00	11.00	10.00	11.00	1
16	formfile	QWETI	Wet	1	11.50	11.50	11.50	11.00	12.00	0.5
17	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
18	formfile	SLOPE	Steep	4	25.00	25.00	100.00	25.00	100.00	2
19	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
20	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
21	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
22	formfile	SLOPE	SlopeLT30	5	27.00	0.00	30.00	0.00	30.00	2
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
24	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
25	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
26	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
27	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
28	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
29	geofile	TEXTURE	Coarse	4	60.00	60.00	60.00	55.00	100.00	5
30	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
31	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
32	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
33	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
34	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
37	relzfile	Z2St	Hi_Ridge	4	25.00	20.00	999.00	20.00	999.00	5
38	relzfile	Z2St	Low_Knoll	5	15.00	0.00	20.00	0.00	20.00	5
39	relzfile	Z2St	Near_Base	5	15.00	0.00	20.00	0.00	20.00	5
40	relzfile	Z2ST	Above_Base	4	25.00	20.00	500.00	20.00	500.00	5

**Example Fuzzy Ecological Class Rule File for MS dv (crule7731) (Coarse areas)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
CH7702a	Crest	20	1	7725	02a COARSE Shallow	CH7716s	Low2Toe	30	11	7736	03 COARSE Level FP SW
CH7702a	VDry	30	1	7725		CH7716s	Med_WI	30	11	7736	
CH7702a	SlopeLT30	20	1	7725		CH7716s	SlopeLT30	20	11	7736	
CH7702a	Coarse	10	1	7725		CH7716s	SW_Aspect	10	11	7736	
CH7702a	Shallow	40	1	7725		CH7716s	Deep	10	11	7736	
CH7702a	Hi_Ridge	10	1	7725		CH7761n	Low2Toe	30	12	7763	03 COARSE Level FP NE
CH7721c	Crest	20	2	7752	02 COARSE Deep Crest	CH7761n	Med_WI	30	12	7763	
CH7721c	VDry	30	2	7752		CH7761n	SlopeLT30	20	12	7763	
CH7721c	SlopeLT30	20	2	7752		CH7761n	NE_Aspect	10	12	7763	
CH7721c	Coarse	10	2	7752		CH7761n	Deep	10	12	7763	
CH7721c	Deep	10	2	7752		CH7706L	Low2Toe	30	13	7746	
CH7721c	Hi_Ridge	10	2	7752		CH7706L	Sl_Wet	30	13	7746	07 Moist, Flat, Frosty FP
CH7712k	Crest	20	3	7750	02 COARSE Deep Knoll	CH7706L	SlopeLT20	20	13	7746	
CH7712k	VDry	30	3	7750		CH7706L	Med2Crs	10	13	7746	
CH7712k	SlopeLT30	20	3	7750		CH7706L	Near_Base	10	13	7746	
CH7712k	Coarse	10	3	7750		CH7764L	Low2Toe	30	14	7764	05 COARSE, Above FP
CH7712k	Deep	10	3	7750		CH7764L	Sl_Wet	30	14	7764	
CH7712k	Low_Knoll	10	3	7750		CH7764L	SlopeLT20	20	14	7764	
CH7722s	Crest2Mid	30	4	7720	02b COARSE Steep SW	CH7764L	Med2Crs	10	14	7764	
CH7722s	VDry2SDry	30	4	7720		CH7764L	Above_Base	10	14	7764	
CH7722s	Steep_SW	20	4	7720		CH7767t	Toe	30	15	7747	07 Moist, Flat, Frosty FP
CH7722s	Coarse	10	4	7720		CH7767t	SLWet2Wet	30	15	7747	
CH7722s	Deep	10	4	7720		CH7767t	SlopeLT20	20	15	7747	
CH7723n	Crest2Mid	30	5	7755	04 COARSE Steep NE	CH7767t	Med2Crs	10	15	7747	
CH7723n	VDry2SDry	30	5	7755		CH7767t	Near_Base	10	15	7747	
CH7723n	Steep_NE	20	5	7755		CH7774t	Toe	30	16	7774	07 COARSE, Wet Toes
CH7723n	Coarse	10	5	7755		CH7774t	SLWet2Wet	30	16	7774	
CH7723n	Deep	10	5	7755		CH7774t	SlopeLT20	20	16	7774	
CH7741s	Crest2Mid	20	6	7705	05 COARSE 10-30% SW	CH7774t	Med2Crs	10	16	7774	
CH7741s	Dry	20	6	7705		CH7774t	Above_Base	10	16	7774	
CH7741s	SlopeLT30	20	6	7705		CH7778t	Toe	30	17	7738	07 COARSE - Flat, Frosty FP
CH7741s	SlopeGT10	20	6	7705		CH7778t	Wet	30	17	7738	
CH7741s	SW_Aspect	20	6	7705		CH7778t	SlopeLT10	20	17	7738	
CH7714n	Crest2Mid	20	7	7705	05 COARSE 10-30% NE	CH7778t	Med2Crs	10	17	7738	
CH7714n	Dry	20	7	7705		CH7778t	Deep	10	17	7738	
CH7714n	SlopeLT30	20	7	7705		CH7708v	Valley	30	18	7783	06 COARSE - Sloping Valley
CH7714n	SlopeGT10	20	7	7705		CH7708v	Wet2V_Wet	30	18	7783	
CH7714n	NE_Aspect	20	7	7705		CH7708v	SlopeGT05	20	18	7783	
CH7701u	Up2Mid	30	8	7733	05 COARSE < 30% Up-Mid	CH7708v	Med2Crs	10	18	7783	
CH7701u	Dry2SDry	30	8	7733		CH7708v	Deep	10	18	7783	
CH7701u	SlopeLT30	20	8	7733		CH7709v	Valley	30	19	7739	07 COARSE - Wet Flat Valley
CH7701u	Coarse	10	8	7733		CH7709v	Wet2V_Wet	30	19	7739	
CH7701u	Deep	10	8	7733		CH7709v	SlopeLT05	20	19	7739	
CH7701s	Mid2Low	30	9	7735	05 COARSE < 30% LOW SW	CH7709v	Med2Crs	10	19	7739	
CH7701s	Med_WI	30	9	7735		CH7709v	Deep	10	19	7739	
CH7701s	SlopeLT30	10	9	7735		CH7789m	WetZ_LT05	50	20	7779	07 Wet, Flat, Frosty
CH7701s	Gentle_SW	20	9	7735		CH7789m	WetL_LT200	50	20	7779	
CH7701s	Deep	10	9	7735		CH7766s	Hi_Seep	80	21	7760	06 COARSE - Seepage
CH7701n	Mid2Low	30	10	7753	05 COARSE < 30% LOW NE	CH7766s	Med2Crs	20	21	7760	
CH7701n	Med_WI	30	10	7753		CH7703fp	Near_Base	50	22	7703	07 COARSE - Level FP
CH7701n	SlopeLT30	10	10	7753		CH7703fp	SlopeLT10	30	22	7703	
CH7701n	Gentle_NE	20	10	7753		CH7703fp	Med_WI	20	22	7703	
CH7701n	Deep	10	10	7753							

**PEM Entity Descriptions for: MS dv**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7701	MS dv	01	LS	d	j	7701 areas were defined as being the drier portions of mid to lower slopes in areas with MEDIUM TEXTURED materials. 7701 areas were created to restrict the extent of the wetter site series within mid to lower parts of the landscape. 7701 areas are predicted to be occupied mainly by normal mesic 01 site series.
7702	MS dv	02	PB	s	r	7702 areas mapped ONLY on dry crests with SHALLOW soils and MEDIUM TEXTURES. Moderate slopes on crests, medium textured shallow soils over bedrock.
7703	MS dv	07	SC	d	j	7703 areas were mapped in all gently sloping (<10%) areas that occurred within less than 25 m of the base level of a major stream channel or river flood plain and that were not modeled as having a high wetness index. 7703 areas represent an attempt to predict the occurrence of the 03 site series that occurs in relatively flat glaciofluvial flood plains. In the end, these level areas in valleys were interpreted as being mostly wet and frosty and were associated with the wet, frosty 07 site series.
7705	MS dv	05	LM	c	d	7705 areas were defined to occur on gentle to moderate (<25%) slopes of ALL ASPECTS and on deep, COARSE TEXTURED materials in UPPER landform positions. 7705 areas were created to recognize dry 05 site series. Moderate slope, deep, COARSE-textured soils.
7706	MS dv	06	ST	j	y	7706 areas were mapped on gentle lower to toe slopes (< 15%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. The modeled extent of 7706 areas was restricted by defining a competing 7710 entity that occurred in a similar landform position but at a higher elevation above the local stream channel level (> 25 m). Moist sites of lower slope receiving position, deep medium-textured soil.
7708	MS dv	06	ST	j	y	7708 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 7708 areas are characterized by moving, aerated groundwater and rich, moist soils. 7708 areas are not as moist as 7709 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 06 seepage entity.
7709	MS dv	09	SH	j	y	7709 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 7709 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depression areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet 09 site series.
7710	MS dv	01	LS	d	j	7710 areas were mapped on gentle lower to toe slopes (< 15%) that would normally be expected to be moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. The 7710 entity was created to restrict the modeled extent of the 7706 entity that occurred in a similar landform position. 7710 areas occur at least 25 m above the local stream channel level (> 25 m) and are not expected to accumulate significant seepage moisture. Slightly moist sites of lower slope receiving position, deep medium-textured soil.
7711	MS dv	01	LS	d	j	7711 areas were mapped in areas of MEDIUM TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
7712	MS dv	01	LS	d	x	7712 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 7712 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 site series along with some drier 04 Site Series. Gentle slope, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7714	MS dv	01	LS	d	j	7714 areas were defined to occur on gentle to moderate (<25%) NE-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7714 areas were created to counter-balance the 7741 entity that occurs on moderate SW-facing upper slopes. Moderate slope, cool aspect, deep, medium-textured soils.
7716	MS dv	01	LS	d	j	7716 areas were mapped on gentle SW-facing slopes in lower to toe landform positions in areas of MEDIUM TEXTURED soils. 7716 areas were initially thought to be transition areas that exhibited some seepage and 06 site series. The regional ecologist indicated that all 7716 areas could be expected to be dominated by the normal 01 site series.
7720	MS dv	02 b	PB	w	c	7720 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, COARSE TEXTURED materials. Significant slope, warm aspect, deep, COARSE-textured soils.
7721	MS dv	02	PB	d	x	7721 areas were mapped on the slightly drier crests of high ridges with deep MEDIUM TEXTURED soils. 7721 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 02 Site Series along with some slightly dry 04 and some normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
7722	MS dv	02 b	PB	w	x	7722 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. Significant slope, warm aspect, deep, medium-textured soils.
7723	MS dv	01	LS	k	d	7723 areas were defined to occur on steep (>25%) NE-facing cool aspects on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 7723 areas are predicted to be dominated by the normal mesic 01 site series. Significant slope, cool aspect with deep, medium-textured soils.
7725	MS dv	02 a	PB	s	c	7725 areas mapped ONLY on dry crests with SHALLOW soils and COARSE TEXTURES as mapped by TFIC. Moderate slopes on crests, COARSE textured shallow soils over bedrock.
7733	MS dv	05	LM	c	d	7733 areas were mapped in areas of COARSE TEXTURED materials on ALL ASPECTS of gentle to moderate slopes in all convex or water shedding upper to lower landform positions. Gentle slope, deep, COARSE-textured soils.
7735	MS dv	05	LM	c	d	7735 areas were defined as being the drier portions of moderate mid to lower SW-facing slopes in areas with COARSE TEXTURED materials. 7735 areas are predicted to be occupied mainly by normal dry 05 site series.
7736	MS dv	03	LR	c	j	7736 areas were mapped on gentle SW-facing slopes in lower to toe landform positions in areas of COARSE TEXTURED soils. 7736 areas may be transitional from 03 to 05 as these areas tend to occur lower into major valley bottoms.
7738	MS dv	07	SC	c	d	7738 areas were mapped on very gentle toe slopes (< 10%) in areas of permanently high water tables and DEEP COARSE TEXTURED soils. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. 7738 areas are wetter and flatter than all of the other seepage type map entities in coarse areas. 7738 areas typically occupy the bottoms of gentle hollows or draws and do not occur within major basins or depressions. Deep, fine-textured soil. 7738 areas also ended up being associated with moist and frosty site series, such as 07 and 03 and with some moist, not-frosty 06 site series.
7739	MS dv	07	SC	c	j	7739 areas were mapped in level to flat wet valleys with slopes < 5% in areas of COARSE TEXTURED materials. 7739 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the moist, frosty 07 site series.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7741	MS dv	04	LK	d	w	7741 areas were defined to occur on gentle to moderate (<25%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER landform positions. 7741 areas were created to recognize the slightly drier 04 site series that occurs on moderate SW-facing upper slopes. Moderate slope, warm aspect, deep, medium-textured soils.
7746	MS dv	07	SC	c	d	7746 areas were mapped ONLY on COARSE TEXTURED materials. 7746 areas occur on gentle lower to toe slopes (<20%) that are no more than 25 m above the base level of a major stream channel. Most 7746 areas occur on level terrain in major flood plains and so are predicted to be occupied by the flat, frosty, coarse moist 07 and 03 site series and some moist, not-frosty 06.
7747	MS dv	07	SC	c	d	7747 areas were mapped ONLY on COARSE TEXTURED materials. 7747 areas occur on gentle toe slopes (<20%) that are no more than 25 m above the base level of a major stream channel. Most 7747 areas occur on level terrain in major flood plains and so are predicted to be occupied by the flat, frosty, coarse moist 07 and 03 site series.
7750	MS dv	03	LR	c	x	7750 areas were mapped on the slightly drier crests of low knolls with deep COARSE TEXTURED soils. 7750 areas were mapped to differentiate low knolls near base level in major river flood plains from deep crests on high ridges that are not in flood plains. The Regional Ecologist indicated that these low knoll positions would be occupied by coarse, frosty 03 site series along with some dry 05 Site Series. Gentle slope, deep, COARSE-textured soils.
7752	MS dv	05	LM	c	x	7752 areas were mapped on the slightly drier crests of high ridges with deep COARSE TEXTURED soils. 7752 areas identify coarse crest positions that are not in a flat valley. The Regional Ecologist indicated that these crest positions would be occupied by the dry 05 Site Series except for level areas in major valley floors where the 03 site series can occur. Gentle slope, deep, COARSE-textured soils.
7753	MS dv	05	LM	c	d	7753 areas were defined as being the drier portions of moderate mid to lower NE-facing slopes in areas with COARSE TEXTURED materials. 7753 areas are predicted to be occupied mainly by normal dry 05 site series.
7755	MS dv	04	LK	k	c	7755 areas were defined to occur on steep (>25%) NE-facing cool aspects on deep, COARSE TEXTURED materials in UPPER to MID landform positions. 7755 areas are predicted to be dominated by the coarse, dry 04 site series that developed on skeletal colluvial materials. Significant slope, cool aspect with deep, COARSE-textured soils
7760	MS dv	06	ST	d	y	7760 areas were mapped in all locations of manually recognized SEEPAGE and COARSE TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 06 and 08. Moist sites of lower slope receiving position, deep COARSE-textured soil.
7761	MS dv	01	LS	d	j	7761 areas were mapped on gentle NE-facing slopes in lower to toe landform positions in areas of MEDIUM TEXTURED soils. 7761 areas were initially thought to be transition areas that exhibited some seepage and 06 site series. The regional ecologist indicated that all 7761 areas could be expected to be dominated by the normal 01 site series.
7763	MS dv	03	LR	c	j	7763 areas were mapped on gentle NE-facing slopes in lower to toe landform positions in areas of COARSE TEXTURED soils. 7763 areas may be transitional from 03 to 05 as these areas tend to occur lower into major valley bottoms.
7764	MS dv	05	LM	c	d	7764 areas were mapped ONLY on COARSE TEXTURED materials. 7764 areas occur on gentle slopes (<20%) that are at least 25 m above the base level of a major stream channel. Most 7764 areas occur on gently sloping terrain that occurs outside of, and above, a major flood plain. 7764 areas are predicted to be occupied by the normal, dry, coarse 05 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7766	MS dv	06	ST	d	y	7766 areas were mapped in all locations of manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moister Site Series 06 and 08. Moist sites of lower slope receiving position, deep medium-textured soil.
7767	MS dv	06	ST	d	y	7767 areas were mapped on gentle toe slopes (< 15%) in areas of seasonally elevated moisture and DEEP MEDIUM TEXTURED soils. 7767 areas were originally defined to try to model the wet, frosty 07 site series. The regional ecologist indicated that 7767 areas were more likely to be dominated by the more common 06 seepage site series.
7774	MS dv	07	SC	c	d	7774 areas were mapped ONLY on COARSE TEXTURED materials. 7774 areas occur on gentle toe slopes (<20%) that are at least 25 m above the base level of a major stream channel. Most 7774 areas occur on level to gently sloping terrain above and outside of major flood plains. Upon review, 7774 areas were observed to occur mainly in the lowest and wettest parts of fans and aprons and adjacent to stream channels leading into major river valleys. 7774 areas were therefore predicted to be occupied mainly by moister site series such as the moist, frosty 07, the moist not-frosty 06 and the cool, frosty, not so moist 03.
7776	MS dv	06	ST	d	y	7776 areas were mapped on gentle lower to toe slopes (< 15%) that would normally be expected to be moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. The 7776 entity was created to restrict the modeled extent of the 7767 entity that occurred in a similar landform position. 7776 areas occur at least 25 m above the local stream channel level and were expected to be somewhat less moist than 7767 areas. 7776 areas appear to be equally likely to contain normal mesic 01 or slightly moist 06 site series. Slightly moist sites of lower slope receiving position, deep medium-textured soil.
7778	MS dv	09	SH	d	y	7778 areas were mapped on very gentle toe slopes (< 10%) in areas of permanently high water tables and DEEP MEDIUM TEXTURED soils. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. 7778 areas are wetter and flatter than all of the other seepage type map entities. 7778 areas typically occupy the bottoms of gentle hollows or draws and do not occur within major basins or depressions. Deep, fine-textured soil.
7779	MS dv	07	SC	j	y	7779 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in MEDIUM TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the wet, frosty 07 site series along with the very wet 09 site series. Lower slope to depression, deep medium-textured soils.
7783	MS dv	06	ST	j	y	7783 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of COARSE TEXTURED soils. 7783 areas are not as moist as 7739 areas due to the steeper slopes. Lower slope to depression, deep COARSE-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the moister, frosty 07 seepage entity in coarse areas.
7789	MS dv	09	SH	d	y	7789 areas were mapped in all locations where interpreters had manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 09 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
7791	MS dv	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7792	MS dv	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7793	MS dv	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
7794	MS dv	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7795	MS dv	00	BR			These areas were mapped visually as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
7796	MS dv	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
7797	MS dv	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7798	MS dv	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7799	MS dv	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MS dv**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7701	7711	01	MS dv	9	01	LS	d	j	1	06	ST			
7702	7702	02	MS dv	6	02	PB	s	r	2	03	LR	2	01	
7703	7738	07	MS dv	6	07	SC	d	j	4	03	LR			
7705	7705	05	MS dv	8	05	LM	c	d	2	04	LK			
7706	7708	06	MS dv	7	06	ST	j	y	2	07	SC	1	01	LS
7708	7708	06	MS dv	6	06	ST	j	y	3	09	SH	1	07	SC
7709	7778	09	MS dv	7	09	SH	j	y	2	08	SS	1	07	SC
7710	7711	01	MS dv	7	01	LS	d	j	3	06	ST			
7711	7711	01	MS dv	9	01	LS	d	j	1	06	ST			
7712	7711	01	MS dv	6	01	LS	d	x	4	04	LK			
7714	7711	01	MS dv	9	01	LS	d	j	1	06	ST			
7716	7711	01	MS dv	9	01	LS	d	j	1	06	ST			
7720	7720	02b	MS dv	7	02b	PB	w	c	3	04	LK			
7721	7721	02	MS dv	6	02	PB	d	x	2	04	LK	2	01	
7722	7722	02b	MS dv	7	02b	PB	w	x	2	04	LK	1	01	
7723	7723	01k	MS dv	8	01	LS	k	d	2	02	PB			
7725	7725	02a	MS dv	7	02a	PB	s	c	3	03	LR			
7733	7705	05	MS dv	8	05	LM	c	d	2	04	LK			
7735	7705	05	MS dv	8	05	LM	c	d	2	04	LK			
7736	7736	03	MS dv	6	03	LR	c	j	4	05	LM			
7738	7738	07	MS dv	5	07	SC	c	d	3	06	ST	2	03	LR
7739	7738	07	MS dv	7	07	SC	c	j	2	09	SH	1	08	SS
7741	7741	04	MS dv	6	04	LK	d	w	4	01	LS			
7746	7746	07	MS dv	5	07	SC	c	d	3	06	ST	2	03	LR
7747	7746	07	MS dv	6	07	SC	c	d	4	03	LR			
7750	7750	03	MS dv	7	03	LR	c	x	3	05	LM			
7752	7752	05	MS dv	7	05	LM	c	x	3	03	LR			
7753	7705	05	MS dv	8	05	LM	c	d	2	04	LK			
7755	7755	04	MS dv	8	04	LK	k	c	2	02	PB			
7760	7760	06	MS dv	6	06	ST	d	y	2	08	SS	2	07	SC
7761	7711	01	MS dv	9	01	LS	d	j	1	06	ST			
7763	7763	03	MS dv	6	03	LR	c	j	4	05	LM			
7764	7705	05	MS dv	8	05	LM	c	d	2	03	LR			
7766	7766	06	MS dv	6	06	ST	d	y	2	08	SS	2	07	SC
7767	7708	06	MS dv	7	06	ST	d	y	3	01	LS			
7774	7746	07	MS dv	5	07	SC	c	d	3	06	ST	2	03	
7776	7708	06	MS dv	5	06	ST	d	y	5	01	LS			
7778	7778	09	MS dv	6	09	SH	d	y	3	07	SC	1	08	SS
7779	7779	07	MS dv	6	07	SC	j	y	3	09	SH	1	08	SS
7783	7783	06	MS dv	6	06	ST	j	y	3	07	SC	1	08	SS
7789	7789	09	MS dv	6	09	SH	d	y	2	08	SS	2	07	SC
7791	7791	OW	MS dv	10	00	OW								
7792	7792	WE	MS dv	10	00	WE	d	y						
7793	7793	ME	MS dv	10	00	ME								
7794	7794	PA	MS dv	10	00	PA								
7795	7795	BR	MS dv	10	00	BR								
7796	7796	DL	MS dv	10	00	DL								
7797	7797	TA	MS dv	10	00	TA								
7798	7798	AV	MS dv	10	00	AV								
7799	7799	GL	MS dv	10	00	GL								



**BGC Unit: MS xk****LMES Zone ID: 78****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	4,734.1	0.10%
100 Mile House TSA	0.0	0.00%
Cariboo Region	4,734.1	0.06%

**List of Site Series Codes Defined for use in MS xk**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	LG	Uncorrelated entity from interim classification	mesic	All up to lower water shedding parts of the landscape
02	DJ	Uncorrelated entity from interim classification	very xeric - subxeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	DP	Uncorrelated entity from interim classification	xeric - subxeric	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04	SW	Uncorrelated entity from interim classification	subxeric - submesic	Slightly Drier and Warmer, on moderate SW slopes
05	SR	Uncorrelated entity from interim classification	submesic - mesic	Steep NE - Cool Dry slopes, Upper-Mid Slopes
06	SG	Uncorrelated entity from interim classification	submesic - mesic	Slightly Moist, Sloping Lower to Toe Slopes, WT > 50 cm
07	SH	Uncorrelated entity from interim classification	subhygric	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007. Uncorrelated entities.

**NOTE:** The Regional Ecologist has indicated concern that the concepts and alpha codes used in this BGC Unit are incorrect and need to be revised to better match with concepts and codes used in the new classification being prepared for the MS xk3. It is expected that the legend or look-up table for MS xk3 will need to be revised in the near future to address these concerns. Users should be aware that the codes assigned to PEM entities in MS xk3 are likely to change.

## Landscape Profile Diagram: MS xk

No Landscape Profile diagram available

## Example Attribute Class Rule File for MS xk (arule7830)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	SL_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	SL_Wet	1	9.50	9.50	9.50	8.50	10.50	1
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.5
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2st	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2st	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for MS xk (crule7830)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH7802r	Crest	30	1	7802	02 Shallow Crest	MH7843s	Mid2Low	30	14	7843	01 10-30% Mid-Low SW
MH7802r	VDry	30	1	7802		MH7843s	Dry2SIDry	30	14	7843	
MH7802r	SlopeLT30	10	1	7802		MH7843s	SlopeLT30	20	14	7843	
MH7802r	Med2Crs	10	1	7802		MH7843s	SlopeGT10	10	14	7843	
MH7802r	Shallow	40	1	7802		MH7843s	SW_Aspect	10	14	7843	
MH7802r	Hi_Ridge	10	1	7802		MH78315n	Mid2Low	30	15	7815	01 10-30% Mid-Low SW
MH7821c	Crest	30	2	7821	01 Deep High Ridge	MH78315n	Dry2SIDry	30	15	7815	
MH7821c	VDry	30	2	7821		MH78315n	SlopeLT30	20	15	7815	
MH7821c	SlopeLT30	10	2	7821		MH78315n	SlopeGT10	10	15	7815	
MH7821c	Med2Crs	10	2	7821		MH78315n	NE_Aspect	10	15	7815	
MH7821c	Deep	10	2	7821		MH7813L	Mid2Low	30	16	7813	01 < 10% Mid-Low SW
MH7821c	Hi_Ridge	10	2	7821		MH7813L	Dry2SIDry	30	16	7813	
MH7812k	Crest	30	3	7812	01 Deep Low Knoll	MH7813L	SlopeLT10	30	16	7813	
MH7812k	VDry	30	3	7812		MH7813L	SW_Aspect	10	16	7813	
MH7812k	SlopeLT30	10	3	7812		MH78314L	Mid2Low	30	17	7814	01 < 10% Mid-Low NE
MH7812k	Med2Crs	10	3	7812		MH78314L	Dry2SIDry	30	17	7814	
MH7812k	Deep	10	3	7812		MH78314L	SlopeLT10	30	17	7814	
MH7812k	Low_Knoll	10	3	7812		MH78314L	NE_Aspect	10	17	7814	
MH7803s	Crest2Mid	30	4	7803	03 Steep SW upper	MH78363L	Mid2Low	30	18	7863	06 10-30% Moist Mid-Low
MH7803s	VDry2SIDry	30	4	7803		MH78363L	Wet	30	18	7863	
MH7803s	Steep_SW	20	4	7803		MH78363L	SlopeLT30	20	18	7863	
MH7803s	Med2Crs	10	4	7803		MH78363L	SlopeGT10	10	18	7863	
MH7803s	Deep	10	4	7803		MH78363L	Deep	10	18	7863	
MH7854n	Crest2Mid	30	5	7854	05 Steep NE upper	MH78464L	Mid2Low	30	19	7864	07 < 10% Wet Mid-Low
MH7854n	VDry2SIDry	30	5	7854		MH78464L	Wet	30	19	7864	
MH7854n	Steep_NE	20	5	7854		MH78464L	SlopeLT10	30	19	7864	
MH7854n	Med2Crs	10	5	7854		MH78464L	Deep	10	19	7864	
MH7854n	Deep	10	5	7854		MH7830t	Low2Toe	30	20	7830	03 Steep Low-Toe SW
MH7834s	Crest2Mid	30	6	7834	03 10-30% SW UP	MH7830t	SL_Wet	30	20	7830	
MH7834s	Dry	30	6	7834		MH7830t	Steep	20	20	7830	
MH7834s	SlopeLT30	20	6	7834		MH7830t	SW_Aspect	10	20	7830	
MH7834s	SlopeGT10	10	6	7834		MH7840t	Low2Toe	30	21	7840	05 Steep Low-Toe NE
MH7834s	SW_Aspect	10	6	7834		MH7840t	SL_Wet	30	21	7840	
MH78341n	Crest2Mid	30	7	7841	01 10-30% NE UP	MH7840t	Steep	20	21	7840	
MH78341n	Dry	30	7	7841		MH7840t	NE_Aspect	10	21	7840	
MH78341n	SlopeLT30	20	7	7841		MH7811t	Low2Toe	30	22	7811	06 10-30% Moist Low-Toe
MH78341n	SlopeGT10	10	7	7841		MH7811t	SL_Wet	30	22	7811	
MH78341n	NE_Aspect	10	7	7841		MH7811t	SlopeLT30	20	22	7811	
MH7813s	Crest2Mid	30	8	7813	01 < 10% SW UP	MH7811t	SlopeGT10	10	22	7811	
MH7813s	Dry	30	8	7813		MH7811t	Deep	10	22	7811	
MH7813s	SlopeLT10	30	8	7813		MH7817t	Low2Toe	30	23	7817	06 < 10% Wet Low-Toe
MH7813s	SW_Aspect	10	8	7813		MH7817t	Wet	30	23	7817	
MH78314n	Crest2Mid	30	9	7814	01 < 10% NE UP	MH7817t	SlopeLT10	30	23	7817	
MH78314n	Dry	30	9	7814		MH7817t	Deep	10	23	7817	
MH78314n	SlopeLT10	30	9	7814		MH7818t	Toe	30	24	7818	06 10-30% Moist Toe
MH78314n	NE_Aspect	10	9	7814		MH7818t	SL_Wet	30	24	7818	
MH7836u	Crest2Mid	30	10	7836	06 5-30% Upper Swale	MH7818t	SlopeLT30	20	24	7818	
MH7836u	Wet	30	10	7836		MH7818t	SlopeGT10	10	24	7818	
MH7836u	SlopeLT30	20	10	7836		MH7818t	Deep	10	24	7818	
MH7836u	SlopeGT10	10	10	7836		MH7808t	Toe	30	25	7808	06 < 10% Flat, Wet Toe
MH7836u	Deep	10	10	7836		MH7808t	Wet	30	25	7808	
MH7846u	Crest2Mid	30	11	7846	07 < 10% Flat, Wet Swale	MH7808t	SlopeLT10	30	25	7808	
MH7846u	Wet	30	11	7846		MH7808t	Deep	10	25	7808	
MH7846u	SlopeLT10	30	11	7846		MH7880v	Valley	30	26	7880	06 > 5% Sloping Valley
MH7846u	Deep	10	11	7846		MH7880v	Wet2V_Wet	30	26	7880	
MH7833s	Mid2Low	30	12	7833	03 Steep Mid-Low SW	MH7880v	SlopeGT05	20	26	7880	
MH7833s	VDry2SIDry	30	12	7833		MH7880v	Medium	10	26	7880	
MH7833s	Steep_SW	20	12	7833		MH7880v	Deep	10	26	7880	
MH7833s	Med2Crs	10	12	7833		MH7888v	Valley	30	27	7888	07 < 5% Flat, Wet Valley
MH7833s	Deep	10	12	7833		MH7888v	Wet2V_Wet	30	27	7888	
MH7845n	Mid2Low	30	13	7845	05 Steep Mid-Low NE	MH7888v	SlopeLT05	20	27	7888	
MH7845n	VDry2SIDry	30	13	7845		MH7888v	Medium	10	27	7888	
MH7845n	Steep_NE	20	13	7845		MH7888v	Deep	10	27	7888	
MH7845n	Med2Crs	10	13	7845		MH7889m	WetZ_LT05	50	28	7889	07 Flat, Wet Margins
MH7845n	Deep	10	13	7845		MH7889m	WetZ_LT200	50	28	7889	
						MH7877s	Hi_Seep	80	29	7877	06 Moist Seepage Areas
						MH7877s	Med2Crs	20	29	7877	
						MH7809o	Organic	99	30	7809	07 Wet Organics



**PEM Entity Descriptions for: MS xk**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7800	MS xk	00	RO	v	r	7800 areas mapped in ALL areas that had no forest cover and were BARE ROCK. Moderate slopes on crests, medium to coarse textured very shallow soils over bedrock.
7802	MS xk	02	DJ	s	r	7802 areas mapped ONLY on dry crests with SHALLOW soils and MEDIUM or COARSE TEXTURES. Moderate slopes on crests, medium to coarse textured shallow soils over bedrock.
7803	MS xk	03	DP	w	x	7803 areas were defined to occur on steep (>25%) UPPER SW-facing warm aspects and on deep, MEDIUM TEXTURED materials. Significant slope, warm aspect, deep, medium-textured soils.
7808	MS xk	06	SG	j	y	7808 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP MEDIUM TEXTURED soils. 7605 areas were defined to try to model the wet, flat, frosty 08 site series. The Regional Ecologist recommended assigning site series 06 to this entity.
7809	MS xk	07	SH	d	y	7809 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
7811	MS xk	06	SG	j	y	7811 areas were mapped on moderate (10-30%) lower to toe slopes moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity for this area. Moist sites of lower slope receiving position, deep medium-textured soil.
7812	MS xk	01	LG	d	x	7812 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 7812 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 Site Series along with some slightly drier 04 site series. Gentle slope, deep, medium-textured soils.
7813	MS xk	01	LG	d	j	7813 areas were defined to occur on gentle (<10%) SW-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 7813 areas were created to restrict the extent of the slightly drier 04 site series that occurs on moderate SW-facing upper slopes to only slopes > 10%. Gentle slope, warm aspect, deep, medium-textured soils.
7814	MS xk	01	LG	d	j	7814 areas were defined to occur on gentle (<10%) NE-facing slopes and on deep, MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 7814 areas were created to restrict the extent of the slightly drier 04 site series that occurs on moderate SW-facing upper slopes to only slopes > 10%. Gentle slope, cool aspect, deep, medium-textured soils.
7815	MS xk	01	LG	d	k	7815 areas were defined to occur on moderate (10-25%) NE-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 7815 areas were created to balance a moderate SW entity defined to limit the extent of the slightly drier 04 site series to the upper portions of moderate SW slopes. Moderate slope, cool aspect, deep, medium-textured soils.
7817	MS xk	06	SG	j	y	7817 areas were mapped on gentle toe slopes (< 10%) in areas of seasonally elevated moisture and DEEP MEDIUM TEXTURED soils. 7817 areas were defined to try to model the wet, flat, frosty 08 site series. The Regional Ecologist recommended assigning site series 06 to this entity.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7818	MS xk	06	SG	j	y	7818 areas were mapped on moderate toe slopes (10-25%) moistened by seepage in areas of DEEP MEDIUM TEXTURED soils. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant seepage entity (06) for this area. Moist sites of lower slope receiving position, deep medium-textured soil.
7821	MS xk	01	LG	d	x	7821 areas were mapped on the slightly drier crests of high ridges with deep MEDIUM TEXTURED soils. 7821 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the slightly drier 04 Site Series along with some normal mesic 01 site series. Gentle slope, deep, medium-textured soils.
7830	MS xk	03	DP	w	x	7830 areas were defined to occur on steep (>25%) SW-facing warm aspects and on deep, MEDIUM TEXTURED materials in LOWER to TOE landform positions. Significant slope, warm aspect, deep, medium-textured soils. The 7830 entity was added to separate steep SW-facing slopes very low in the landscape from other steep SW slopes.
7833	MS xk	03	DP	w	x	7833 areas were defined to occur on steep (>25%) mid to lower SW-facing warm aspects and on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. Significant slope, warm aspect, deep, medium-textured soils. The 7833 entity was added to ensure that steep SW-facing slopes lower in the landscape remained recognized as 03 site series.
7834	MS xk	03	DP	w	x	7834 areas were defined to occur on moderate (10-25%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 7834 areas were created to define a moderate SW entity intended to recognize the slightly drier 04 site series on moderate SW slopes. Moderate slope, warm aspect, deep, medium-textured soils. Upon review, the regional ecologist recommended labeling these areas as the dry, warm 03 Site Series instead of the less dry 04 Site Series.
7836	MS xk	06	SG	d	j	7836 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER LANDFORM positions. 7836 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. The Regional Ecologist recommended assigning site series 06 to this entity. Gentle slope, deep, medium-textured soils.
7840	MS xk	05	SR	k	s	7840 areas were defined to occur on steep (>25%) NE-facing cool aspects and on deep, MEDIUM TEXTURED materials in LOWER to TOE landform positions. Significant slope, cool aspect, deep, medium-textured soils. The 7840 entity was added to separate steep NE-facing slopes very low in the landscape from other steep NE slopes
7841	MS xk	01	LG	d	k	7841 areas were defined to occur on moderate (10-25%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 7841 areas were created to balance a moderate SW entity defined to recognize the slightly drier 04 site series on moderate SW slopes. Moderate slope, cool aspect, deep, medium-textured soils.
7843	MS xk	01	LG	w	x	7843 areas were defined to occur on moderate (10-25%) SW-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 7843 areas were created to define a moderate SW entity intended to restrict the extent of the slightly drier 04 site series to the upper portions of moderate SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
7845	MS xk	05	SR	k	s	7845 areas were defined to occur on steep (>25%) mid to lower NE-facing cool aspects on deep, MEDIUM TEXTURED materials in MID to LOWER landform positions. 7845 areas are predicted to be dominated by the cool, dry 05 Site Series along with considerable amounts of normal 01 Site Series. Significant slope, cool aspect with deep, medium-textured soils. The 7845 entity was added to ensure that steep NE-facing slopes lower in the landscape remained recognized as steep.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7846	MS xk	07	SH	d	j	7846 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER LANDFORM positions. 7846 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 7846 areas are predicted to be occupied by the moist seepage 07 site series. Gentle slope, deep, medium-textured soils.
7854	MS xk	05	SR	k	s	7854 areas were defined to occur on steep (>25%) upper NE-facing cool aspects on deep, MEDIUM TEXTURED materials in UPPER to MID landform positions. 7854 areas are predicted to be dominated by the cool, dry 05 site series. Significant slope, cool aspect with deep, medium-textured soils
7863	MS xk	06	SG	d	j	7863 areas were mapped in slightly moist swales, hollows and concavities in areas of MEDIUM TEXTURED materials in MID to LOWER LANDFORM positions. 7863 areas were mapped to permit recognition of slightly moister conditions in swales in mid to lower landform positions. The Regional Ecologist recommended assigning site series 06 to this entity. Gentle slope, deep, medium-textured soils.
7864	MS xk	07	SH	d	j	7864 areas were mapped in lowest, flattest and wettest portions of swales, hollows and concavities in areas of MEDIUM TEXTURED materials in MID to LOWER LANDFORM positions. 7864 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in mid to lower landform positions. 7864 areas are predicted to be occupied by the very wet 07 site series. Gentle slope, deep, medium-textured soils.
7877	MS xk	06	SG	d	y	7877 areas were defined for all locations of manually recognized SEEPAGE and MEDIUM TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the moist 06 Site Series. Moist sites of lower slope receiving position, deep medium-textured soil. The Regional Ecologist recommended assigning site series 06 to this entity.
7880	MS xk	06	SG	j	y	7880 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 7880 areas are characterized by moving, aerated groundwater and rich, moist soils. 7880 areas are not as moist as 7888 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the more common 06 along with some 07 site series.
7888	MS xk	07	SH	j	y	7888 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 7888 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depression areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the wet 07 site series.
7889	MS xk	07	SH	j	y	7889 areas were mapped in low-lying areas marginal to non-forested wetlands and lakes in MEDIUM TEXTURED areas. These low-lying marginal areas were interpreted to be occupied mainly by the wet, 07 site series along with the moist 06 site series. Lower slope to depression, deep medium-textured soils.
7891	MS xk	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
7892	MS xk	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

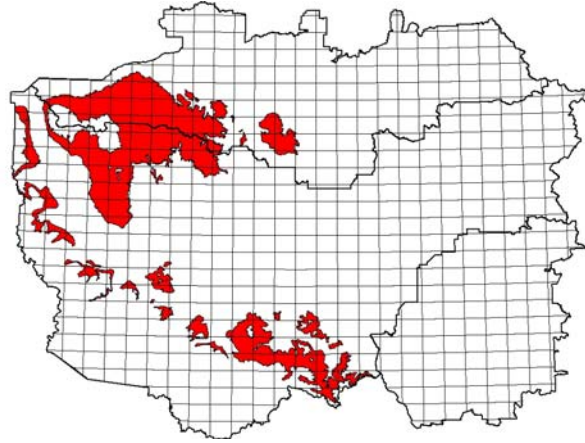
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
7893	MS xk	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer. No 4793 areas were permitted to occur in this PEM area.
7894	MS xk	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
7895	MS xk	00	BR			These areas were mapped visually as areas of scrub brush. . Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
7896	MS xk	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
7897	MS xk	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
7898	MS xk	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
7899	MS xk	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MS xk**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
7800	7800	RO	MS xk	6	00	RO	v	r	4	02	DJ			
7802	7802	02	MS xk	6	02	DJ	s	r	2	03	DP	2	01	LG
7803	7803	03	MS xk	7	03	DP	w	x	2	04	SW	1	01	LG
7808	7808	06	MS xk	7	06	SG	j	y	3	07	SH			
7809	7809	07	MS xk	9	07	SH	d	y	1	06	SG			
7811	7880	06	MS xk	7	06	SG	j	y	2	01	LG	1	07	SH
7812	7812	01	MS xk	6	01	LG	d	x	4	04	SW			
7813	7813	01	MS xk	9	01	LG	d	j	1	04	SW			
7814	7841	01	MS xk	9	01	LG	d	j	1	04	SW			
7815	7841	01	MS xk	9	01	LG	d	k	1	04	SW			
7817	7808	06	MS xk	7	06	SG	j	y	3	07	SH			
7818	7880	06	MS xk	7	06	SG	j	y	2	01	LG	1	07	SH
7821	7821	01	MS xk	6	01	LG	d	x	3	04	SW	1	02	DJ
7830	7803	03	MS xk	7	03	DP	w	x	2	01	LG	1	04	SW
7833	7803	03	MS xk	7	03	DP	w	x	2	01	LG	1	04	SW
7834	7834	03	MS xk	6	03	DP	w	x	4	01	LG			
7836	7880	06	MS xk	6	06	SG	d	j	4	01	LG			
7840	7854	05	MS xk	6	05	SR	k	s	4	01	LG			
7841	7841	01	MS xk	9	01	LG	d	k	1	04	SW			
7843	7843	01	MS xk	6	01	LG	w	x	4	03	DP			
7845	7854	05	MS xk	6	05	SR	k	s	4	04	SW			
7846	7864	07	MS xk	6	07	SH	d	j	4	08				
7854	7854	05	MS xk	8	05	SR	k	s	2	04	SW			
7863	7880	06	MS xk	6	06	SG	d	j	4	01	LG			
7864	7864	07	MS xk	6	07	SH	d	j	4	06	SG			
7877	7877	06	MS xk	7	06	SG	d	y	3	07	SH			
7880	7880	06	MS xk	8	06	SG	j	y	2	07	SH			
7888	7864	07	MS xk	8	07	SH	j	y	2	06	SG			
7889	7889	07	MS xk	7	07	SH	j	y	3	06	SG			
7891	7891	OW	MS xk	10	00	OW								
7892	7892	WE	MS xk	10	00	WE	d	y						
7893	7893	ME	MS xk	10	00	ME								
7894	7894	PA	MS xk	10	00	PA								
7895	7895	BR	MS xk	10	00	BR								
7896	7896	DL	MS xk	10	00	DL								
7897	7897	TA	MS xk	10	00	TA								
7898	7898	AV	MS xk	10	00	AV								
7899	7899	GL	MS xk	10	00	GL								

**BGC Unit: MS xv****LMES Zone ID: 80****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	287,158.3	13.83%
Williams Lake TSA	570,320.6	11.57%
100 Mile House TSA	0.0	0.00%
Cariboo Region	857,478.9	10.41%

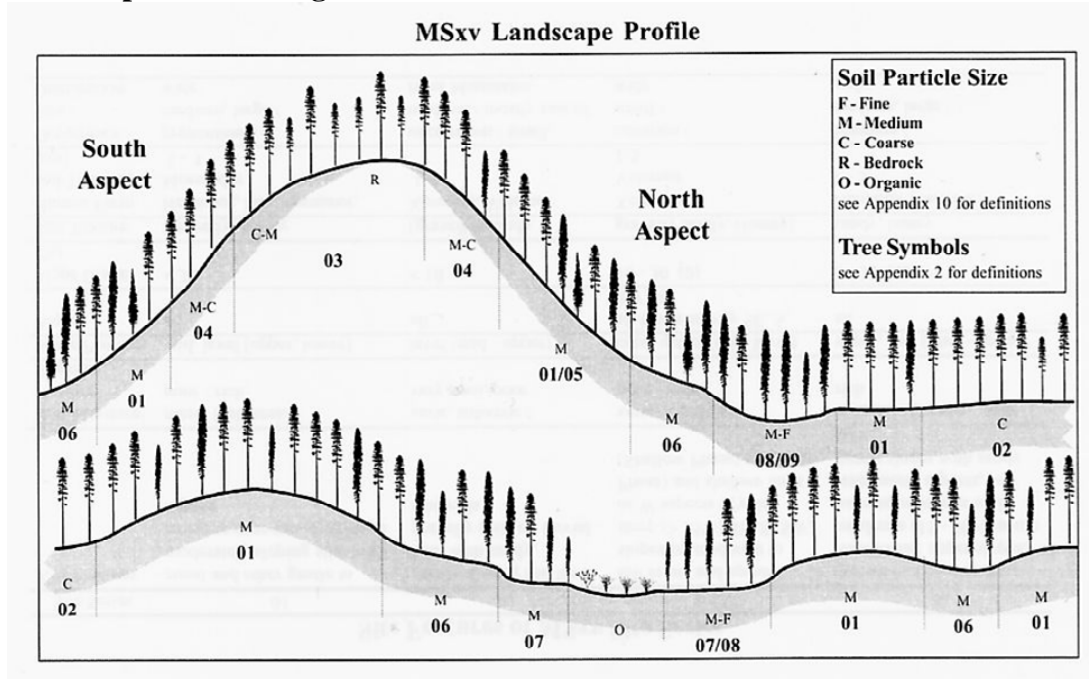
**List of Site Series Codes Defined for use in MS xv**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	LG	PI - Grouseberry - Feathermoss	mesic	All up to lower water shedding parts of the landscape
02	LF	PI - Fescue - Stereocaulon	xeric - subxeric	Dry Frosty Fringe in Sandy Areas Surrounding Meadows
03	LK	PI - Kinnikinnick - Cladonia, Typic	xeric - subxeric	03a Steep SW - Dry Warm Upper Slopes (includes Coarse)
03	LK	PI - Kinnikinnick - Cladonia, Shallow	xeric - subxeric	03b Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
04	GK	PI - Grouseberry - Kinnikinnick	submesic	All COARSE upper, Also Drier Moderate SW and Steep NE
05	LT	PI - Trapper's tea - Crowberry	mesic	Moderate NE - Slightly Cool Dry slopes, Restricted area
06	SC	Sxw - Crowberry - Knight's plume	subhygic	Moist, Not-Frosty, Low-Toe Seepage areas, WT > 50 cm
07	SG	Sxw - Crowberry - Glow moss	subhygic	Moist to wet, Not-Frosty, Low-Toe Seepage areas, WT < 50 cm
08	SH	Sxw - Horsetail - Crowberry (Ws07 - Sxw - Common horsetail - Leafy moss)	hygic - subhygic	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm ORGANICS in original Quesnel PEM area
09	ST	Sxw - Labrador tea - Willow	hygic - subhygic	Very Wet, Poor Organics
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: MS xv**



**Example Attribute Class Rule File for MS xv (arule8030)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	Sl_Wet	1	10.00	10.00	10.00	9.20	10.80	0.8
17	formfile	QWETI	SlWet2Wet	1	11.00	11.00	11.00	10.00	12.00	1
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for MS xv (crule8030)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH8003c	Crest	20	1	8003	03 Shallow Crest	MH8001n	Mid2Low	30	10	8001	01 < 30% MID-LOW NE
MH8003c	VDry	30	1	8003		MH8001n	Med_WI	30	10	8001	
MH8003c	SlopeLT30	20	1	8003		MH8001n	SlopeLT30	10	10	8001	
MH8003c	Med2Crs	10	1	8003		MH8001n	Gentle_NE	20	10	8001	
MH8003c	Shallow	80	1	8003		MH8001n	Deep	10	10	8001	
MH8003c	Hi_Ridge	10	1	8003		MH8016l	Low2Toe	30	11	8016	01 < 30% Drier Low-Toe
MH8043c	Crest	20	2	8043	04 Deep High Ridge	MH8016l	Med_WI	30	11	8016	
MH8043c	VDry	30	2	8043		MH8016l	SlopeLT30	20	11	8016	
MH8043c	SlopeLT30	20	2	8043		MH8016l	Medium	10	11	8016	
MH8043c	Med2Crs	10	2	8043		MH8016l	Deep	10	11	8016	
MH8043c	Deep	10	2	8043		MH8006L	Low2Toe	30	12	8006	06 < 10% Moist Low-Toe
MH8043c	Hi_Ridge	10	2	8043		MH8006L	SL_Wet	30	12	8006	
MH8014c	Crest	20	3	8014	01 Deep Low Knoll	MH8006L	SlopeLT10	20	12	8006	
MH8014c	VDry	30	3	8014		MH8006L	Medium	10	12	8006	
MH8014c	SlopeLT30	20	3	8014		MH8006L	Deep	10	12	8006	
MH8014c	Med2Crs	10	3	8014		MH8067t	Toe	30	13	8067	06 < 10% Sl. Wet Toe
MH8014c	Deep	10	3	8014		MH8067t	SLWet2Wet	30	13	8067	
MH8014c	Low_knoll	10	3	8014		MH8067t	SlopeLT10	20	13	8067	
MH8003a	Crest2Mid	30	4	8033	03a Steep SW upper	MH8067t	Medium	10	13	8067	
MH8003a	VDry2SDry	30	4	8033		MH8067t	Deep	10	13	8067	
MH8003a	Steep_SW	20	4	8033		MH8007t	Toe	30	14	8067	06 < 5% Wet Toe
MH8003a	Med2Crs	10	4	8033		MH8007t	Wet	30	14	8067	
MH8003a	Deep	10	4	8033		MH8007t	SlopeLT05	20	14	8067	
MH8004n	Crest2Mid	30	5	8044	04 Steep NE upper	MH8007t	Medium	10	14	8067	
MH8004n	VDry2SDry	30	5	8044		MH8007t	Deep	10	14	8067	
MH8004n	Steep_NE	20	5	8044		MH8068s	Valley	30	15	8068	06 > 5% Sloping Valley
MH8004n	Med2Crs	10	5	8044		MH8068s	Wet2V_Wet	30	15	8068	
MH8004n	Deep	10	5	8044		MH8068s	SlopeGT05	20	15	8068	
MH8004s	Crest2Mid	20	6	8041	04 10-30% SW Upper	MH8068s	Medium	10	15	8068	
MH8004s	Dry	20	6	8041		MH8068s	Deep	10	15	8068	
MH8004s	SlopeLT30	20	6	8041		MH8008f	Valley	30	16	8008	08 < 5% Flat, Wet Valley
MH8004s	SlopeGT10	20	6	8041		MH8008f	Wet2V_Wet	30	16	8008	
MH8004s	SW_Aspect	20	6	8041		MH8008f	SlopeLT05	20	16	8008	
MH8005n	Crest2Mid	20	7	8001	01 10-30% NE Upper	MH8008f	Medium	10	16	8008	
MH8005n	Dry	20	7	8001		MH8008f	Deep	10	16	8008	
MH8005n	SlopeLT30	20	7	8001		MH8008m	Wet_LT05	50	17	8078	07 Wet Margins in WWL
MH8005n	SlopeGT10	20	7	8001		MH8008m	Wet_LT200	50	17	8078	
MH8005n	NE_Aspect	20	7	8001		MH8066s	Hi_Seep	80	18	8076	07 Seepage in WWL
MH8001u	Up2Mid	30	8	8001	01 < 30% Upper Shedding	MH8066s	Med2Crs	20	18	8076	
MH8001u	Dry2SDry	30	8	8001		MH8089o	Organic	99	19	8088	09 Organics in WWL
MH8001u	SlopeLT30	20	8	8001							
MH8001u	Med2Crs	10	8	8001							
MH8001u	Deep	10	8	8001							
MH8001s	Mid2Low	30	9	8001	01 < 30% MID-LOW SW						
MH8001s	Med_WI	30	9	8001							
MH8001s	SlopeLT30	10	9	8001							
MH8001s	Gentle_SW	20	9	8001							
MH8001s	Deep	10	9	8001							
						NOTE	DIFFERENT	RULES			QUESNEL PEM AREA ONLY
						MH8008m	Wet_LT05	50	17	8028	07 Quesnel Wet Margins
						MH8008m	Wet_LT200	50	17	8028	
						MH8066s	Hi_Seep	80	18	8066	07 Quesnel Seepage
						MH8066s	Med2Crs	20	18	8066	
						MH8089o	Organic	99	19	8089	08 Organics in WWL
						MH8002m	Sand_Fringe	99	20	8002	02 Quesnel Sand Fringe



**PEM Entity Descriptions for: MS xv**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8001	MS xv	01	LG	j	d	In areas of HIGH RELIEF AND MEDIUM TEXTURED materials 8001 was mapped on all upper to mid slopes with moderate gradients (< 30%). This setting dominates the upper portion of the landscape in high relief areas. It is expected to consist mainly of mesic 01 site series with perhaps a component of somewhat drier 04 site series.
8002	MS xv	02	LF	c	j	8002 was mapped mainly as a narrow fringe or margin surrounding slightly wet areas of non-forested brush. 8002 was described by the regional ecologist as being a frost prone unit that developed on coarse sandy to gravelly soils. The regional ecologist indicated that the most common location for this site series was in cold, frost prone areas that occurred around the margins of areas of non productive brush or grassland. He indicated that many of these brush areas developed in depressions on sandy materials that would normally be wetlands but were not full wetlands because of the coarse textured substrate. Unfortunately, interpreters did not map hardly any coarse textured sands in the vicinity of these brush areas. In order to force 02 to occur in the margins of most areas of non productive brush, these areas of brush were buffered and 8002 was defined as occurring in all areas identified as being marginal to areas mapped as non-productive brush. In many cases these occur in areas mapped as OR (open range) on forest cover maps. This unit is not predicted south of the original QUESNEL PEM map area.
8003	MS xv	03	LK	v	r	8003 is equivalent to 03b as defined in the field guide. It is restricted to only those dry crest areas that were mapped as MEDIUM TEXTURED and SHALLOW to bedrock. If interpreters mapped it as shallow to bedrock it is 8003
8004	MS xv	04	GK	c	j	In areas of COARSE TEXTURED materials, 8004 was mapped in all upper crest to mid slope positions. These are the highest locations on coarse dry materials and will be almost exclusively 04.
8005	MS xv	05	LT			8005 areas were mapped on moderately sloping (10-30%) UPPER TO MID slopes with a predominant NE aspect on MEDIUM TEXTURED materials in a specific area in the southern portion of the West Williams Lake PEM map area. 8005 areas were defined to permit recognition of the 05 site series on NE-facing upper slopes in this one locality.
8006	MS xv	06	SC	j	d	8006 was mapped on lower to toe slopes in areas of MEDIUM TEXTURE and LOW TO HIGH RELIEF. 8006 occurs in slightly wetter landform positions that experience some seepage but that usually have sufficient slope to permit ongoing drainage of both water and cold air. These slopes are usually not frosty and are usually not located in drainage channels or depressions.
8008	MS xv	08	SH	j	d	8008 was mapped in the wettest and flattest (< 5%) parts of toe slopes, depressions and draws in areas of MEDIUM TEXTURE where the water table was expected to be within 50 cm of the surface. It is the main wet unit and occupies most level to gently sloping depressions and draws.
8014	MS xv	01	LG	d	x	8014 is mapped on slightly drier crest positions on low knolls that are not mapped as shallow. These low knolls may contain a small percentage of slightly drier 04 along with dominant mesic 01
8016	MS xv	01	LG	j	d	In areas of HIGH RELIEF AND MEDIUM TEXTURED materials 8016 was mapped on all lower to toe slopes with moderate gradients (< 30%). This setting was initially thought likely to contain a mixture of mesic 01 and slightly wetter 06 site series. Review of the concept by the regional ecologist suggested that these areas would consist mostly of mesic 01 site series.
8026	MS xv	01	LG	c	j	8026 was mapped in areas of COARSE TEXTURED materials. 8026 occurs in lower to toe slope landform positions that may accumulate small amounts of moisture from seepage or from high water tables. However, 8026 areas are predicted to consist mainly of mesic 01 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8028	MS xv	08	SH	j	d	8028 was mapped in the low-lying margins that surround non-forested wetlands and open water in areas of MEDIUM TEXTURED materials in the original QUESNEL PEM. The water table is expected to be within 50 cm of the surface. This margin wet unit is used in most subzone variants to assign areas in the margins of wetlands to the appropriate wet site series. In this northern portion of the subzone margin areas are predicted to be occupied by the very moist 08 site series and may also contain some frosty 02.
8030	MS xv	03	LK	v	r	8030 is equivalent to 03b as defined in the field guide. It is restricted to only those dry crest areas that were mapped as COARSE TEXTURED and SHALLOW to bedrock. If interpreters mapped it as coarse and shallow to bedrock it is 8030
8033	MS xv	03	LK	w	x	8033 is mapped as a classic steep SW dry slope. Slope > 30% and slope position is from crest to mid slope. (03a Typic Phase)
8034	MS xv	04	GK	c	j	In areas of COARSE TEXTURED materials, 8034 was mapped on the tops of deep crests that had not been mapped as shallow. These are the highest locations on coarse dry materials and will be almost exclusively 04.
8040	MS xv	04	GK	w	j	8140 areas were mapped on moderately sloping (10-30%) upper slopes with a predominant SW aspect on MEDIUM TEXTURED materials in a specific area of in the southern portion of the West Williams Lake PEM map area. 8140 areas were defined as an opposite to 8150 areas with a similar position on NE-facing upper slopes.
8041	MS xv	04	GK	w	j	In areas of HIGH RELIEF and MEDIUM TEXTURED materials 8041 was mapped as occurring on somewhat sloping SW aspects in crest to mid slope positions. It was assumed that these moderate South aspect slopes would contain a mixture of drier 04 and mesic 01 site series.
8042	MS xv	04	GK	c	j	In areas of COARSE TEXTURED materials, 8042 was mapped in lower to toe slope positions below 8004 and above 8026. It is predicted to include slightly dry 04 and possibly some 02
8043	MS xv	04	GK	r	d	8043 is mapped on dry crest positions that were not mapped as shallow to bedrock by JMJ. These crest positions are assumed to be slightly drier than mesic but not to be shallow. They are therefore considered to consist of a mix of slightly drier 04 with some mesic 01 and some shallow 03.
8044	MS xv	04	GK	k	d	8044 is mapped as a classic steep somewhat drier NE slope with Slope > 30% and slope position from crest to mid slope. This is the opposite facing slope to 8033. It is considered to consist mostly of slightly drier 04 with a component of mesic 01.
8046	MS xv	06	SC	j	d	8046 was mapped on in sloping valleys and draws in areas of COARSE TEXTURE and HIGH RELIEF. 8046 occurs in wetter landform positions that experience considerable seepage but that usually have sufficient slope to permit ongoing drainage of both water and cold air. These slopes are usually not frosty but they are usually located in or adjacent to drainage channels or swales.
8048	MS xv	08	SH	c	j	8048 was mapped in the wettest and flattest (< 5%) parts of toe slopes, depressions and draws in areas of COARSE TEXTURE where the water table was expected to be within 50 cm of the surface. It is the main wet unit and occupies most level to gently sloping depressions and draws.
8050	MS xv	05	LT	d	j	8050 areas were mapped on moderately sloping (10-30%) MID to LOWER slopes with a predominant NE aspect on MEDIUM TEXTURED materials in a specific area n the southern portion of the West Williams Lake PEM map area. 8050 areas were defined to permit recognition of the 05 site series on NE-facing mid to lower slopes in this one locality.
8062	MS xv	06	SC	c	j	8062 was mapped in areas of COARSE TEXTURED materials. 8062 occurs in upper sloping draws and hollows that may accumulate finer textured alluvium and also receive moisture from seepage or from high water tables. 8062 areas are predicted to consist mainly of the non-frosty 06 seepage unit.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8064	MS xv	06	SC	c	j	8064 was mapped in all areas of COARSE TEXTURE and LOW TO HIGH RELIEF in the original QUESNEL PEM map area with manually interpreted and digitized observable seepage. 8064 occurs in all landform positions that experience readily observable seepage that makes the site wetter than mesic. These seepage areas are usually not frosty and are usually not located in drainage channels or depressions.
8066	MS xv	06	SC	y	j	8066 was mapped in all areas of MEDIUM TEXTURE and LOW TO HIGH RELIEF in the original QUESNEL PEM map area with manually interpreted and digitized observable seepage. 8066 occurs in all landform positions that experience readily observable seepage that makes the site wetter than mesic. These seepage areas are usually not frosty and are usually not located in drainage channels or depressions.
8067	MS xv	06	SC	j	d	8067 was mapped on toe slopes in areas of HIGH RELIEF and MEDIUM TEXTURE materials. It was originally thought of as a zone of transition from slightly wet 06 to wetter 07 site series. After review the regional ecologist suggested that 8067 be amalgamated with 8007 and that the combined class be treated as a mixture of 06 and 07 site series.
8068	MS xv	06	SC	j	d	8068 was mapped on in sloping valleys and draws in areas of MEDIUM TEXTURE and HIGH RELIEF. 8068 occurs in wetter landform positions that experience considerable seepage but that usually have sufficient slope to permit ongoing drainage of both water and cold air. These slopes are usually not frosty but they are usually located in or adjacent to drainage channels or swales.
8074	MS xv	07	SG	c	j	8074 was mapped in the low-lying margins that surround non-forested wetlands and open water in areas of COARSE TEXTURED materials in the more southerly West Williams Lake PEM map area. The water table is expected to be within 50 cm of the surface. This wet margin unit is used in most subzone variants to assign areas in the margins of wetlands to the appropriate wet site series. In the southern West Williams Lake portion of this subzone margin areas are predicted to be the 07 site series and not the wetter 08 or frosty 02 site series.
8076	MS xv	07	SG	y	j	8076 was mapped in all areas of MEDIUM TEXTURE and LOW TO HIGH RELIEF in the southern West Williams Lake PEM map area with manually interpreted and digitized observable seepage. 8076 occurs in all landform positions that experience readily observable seepage that makes the site wetter than mesic. These seepage areas are usually not frosty and are usually not located in drainage channels or depressions.
8077	MS xv	07	SG	y	j	8077 was mapped in all areas of COARSE TEXTURE and LOW TO HIGH RELIEF in the southern West Williams Lake PEM map area with manually interpreted and digitized observable seepage. 8077 occurs in all landform positions that experience readily observable seepage that makes the site wetter than mesic. These seepage areas are usually not frosty and are usually not located in drainage channels or depressions.
8078	MS xv	07	SG	j	d	8078 was mapped in the low-lying margins that surround non-forested wetlands and open water in areas of MEDIUM TEXTURED materials in the more southerly West Williams Lake PEM map area. The water table is expected to be within 50 cm of the surface. This wet margin unit is used in most subzone variants to assign areas in the margins of wetlands to the appropriate wet site series. In the southern West Williams Lake portion of this subzone margin areas are predicted to be the 07 site series and not the wetter 08 or frosty 02 site series.
8082	MS xv	08	SH	c	j	8082 was mapped in the low-lying margins that surround non-forested wetlands and open water in areas of COARSE TEXTURED materials in the original QUESNEL PEM. The water table is expected to be within 50 cm of the surface. This wet margin unit is used in most subzone variants to assign areas in the margins of wetlands to the appropriate wet site series. In this northern portion of the subzone margin areas are predicted to be dominated by the wet 08 site series with some frosty 02 around the fringe.

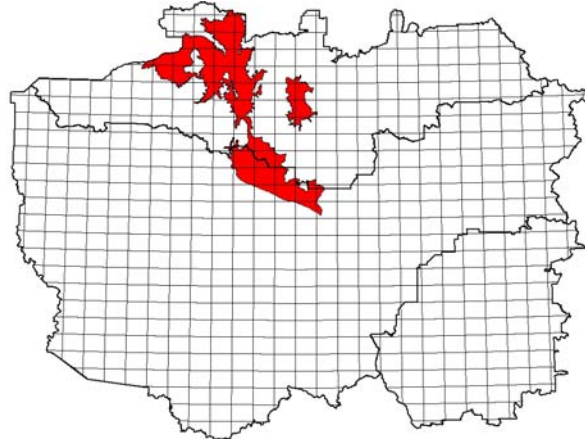
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8088	MS xv	09	ST	p	j	8088 was mapped in the more southerly West Williams Lake PEM map area in locations of manually mapped areas of forested organic soils. These occurred in the wettest and flattest (< 5%) parts of toe slopes, depressions and draws where the water table was expected to be within 50 cm of the surface. These areas would normally be classified as a nutrient poor site series (09) The 09 Site Series occurs in these areas of ORGANIC materials in the western half of the West Williams Lake PEM map area ONLY.
8089	MS xv	08	SH	p	j	8089 was mapped in the original QUESNEL PEM map area in locations of manually mapped forested organic soils. These occurred in the wettest and flattest (< 5%) parts of toe slopes, depressions and draws where the water table was expected to be within 50 cm of the surface. These areas would normally be classified as a nutrient poor site series (09) in other sub-zones but the regional ecologist stated that there was no expectation of encountering site series 09 with the boundaries of the QUESNEL PEM so organic wetlands were classified as site series 08.
8091	MS xv	00	OW			8091 areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8092	MS xv	00	WE			8092 areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8093	MS xv	00	ME			8093 areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8094	MS xv	00	PA			8094 areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8095	MS xv	00	BR			8095 areas were mapped visually by interpreters as areas of scrub brush.
8096	MS xv	00	DL			8096 areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
8097	MS xv	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
8098	MS xv	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
8099	MS xv	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MS xv**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8001	8001	01	MS xv	8	01	LG	j	d	2	04	GK			
8002	8002	02	MS xv	8	02	LF	c	j	2	04	GK			
8003	8003	03	MS xv	6	03	LK	v	r	2	01	LG	2	04	GK
8004	8004	04	MS xv	9	04	GK	c	j	1	01	LG			
8005	8005	05	MS xv	10	05	LT								
8006	8006	06	MS xv	8	06	SC	j	d	2	01	LG			
8008	8008	08	MS xv	8	08	SH	j	d	2	06	SC			
8014	8001	01	MS xv	8	01	LG	d	x	2	04	GK			
8016	8001	01	MS xv	8	01	LG	j	d	2	06	SC			
8026	8026	01	MS xv	10	01	LG	c	j						
8028	8028	08	MS xv	8	08	SH	j	d	2	02	LF			
8030	8030	03	MS xv	6	03	LK	v	r	2	01	LG	2	04	GK
8033	8033	03	MS xv	8	03	LK	w	x	2	04	GK			
8034	8004	04	MS xv	9	04	GK	c	j	1	01	LG			
8040	8041	04	MS xv	6	04	GK	w	j	4	01	LG			
8041	8041	04	MS xv	6	04	GK	w	j	4	01	LG			
8042	8042	04	MS xv	8	04	GK	c	j	2	02	LF			
8043	8043	04	MS xv	5	04	GK	r	d	3	01	LG	2	03	LK
8044	8044	04	MS xv	8	04	GK	k	d	2	01	LG			
8046	8046	06	MS xv	6	06	SC	j	d	3	08	SH	1	01	LG
8048	8048	08	MS xv	8	08	SH	c	j	2	06	SC			
8050	8005	05	MS xv	10	05	LT	d	j						
8062	8046	06	MS xv	7	06	SC	c	j	2	08	SH	1	01	LG
8064	8064	06	MS xv	8	06	SC	c	j	2	01	LG			
8066	8066	06	MS xv	8	06	SC	y	j	2	01	LG			
8067	8006	06	MS xv	5	06	SC	j	d	4	08	SH	1	01	LG
8068	8006	06	MS xv	6	06	SC	j	d	3	08	SH	1	01	LG
8074	8074	07	MS xv	8	07	SG	c	j	2	08	SH			
8076	8076	07	MS xv	8	07	SG	y	j	2	01	LG			
8077	8077	07	MS xv	8	07	SG	y	j	2	01	LG			
8078	8078	07	MS xv	8	07	SG	j	d	2	08	SH			
8082	8082	08	MS xv	8	08	SH	c	j	2	02	LF			
8088	8088	09	MS xv	8	09	ST	p	j	2	08	SH			
8089	8089	08	MS xv	8	08	SH	p	j	2	06	SC			
8091	8091	OW	MS xv	10	00	OW			0					
8092	8092	WE	MS xv	10	00	WE			0					
8093	8093	TB	MS xv	10	00	TB			0					
8094	8094	PA	MS xv	10	00	PA			0					
8095	8095	BR	MS xv	10	00	BR			0					
8096	8096	DL	MS xv	10	00	DL			0					
8097	8097	TA	MS xv	10	00	TA			0					
8098	8098	AV	MS xv	10	00	AV			0					
8099	8099	GL	MS xv	10	00	GL			0					

**BGC Unit: SBPS dc****LMES Zone ID: 81****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	297,352.7	14.32%
Williams Lake TSA	98,929.1	2.01%
100 Mile House TSA	0.0	0.00%
<b>Cariboo Region</b>	<b>396,281.8</b>	<b>4.81%</b>

**List of Site Series Codes Defined for use in SBPS dc**

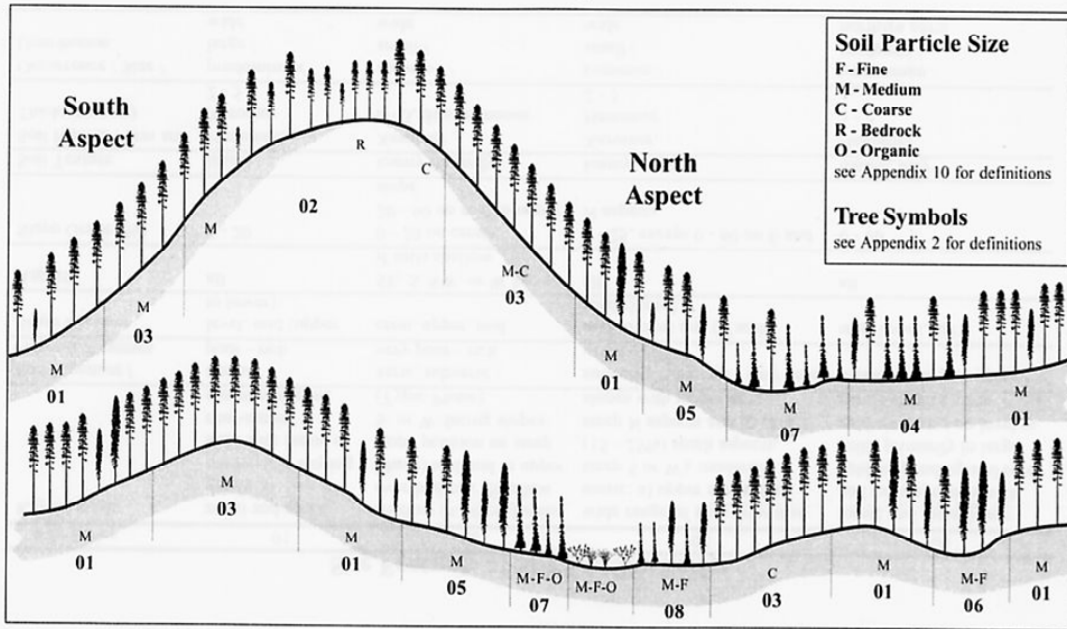
<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	LJ	PI - Juniper - Feathermoss	mesic	All up to lower water shedding medium texture < 30%
02	LC	PI - Kinnikinnick - Cladonia, Shallow	xeric	02b Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
02	LC	PI - Kinnikinnick - Cladonia, Typic	xeric	02a Steep SW - Dry Warm Upper Slopes (includes Coarse)
03	LF	PI - Kinnikinnick - Feathermoss, Typic	subxeric - submesic	Steep NE - Cool Dry slopes
03	LF	PI - Kinnikinnick - Feathermoss, Sand	subxeric - submesic	All COARSE upper shedding parts of the landscape
03	LF	PI - Kinnikinnick - Feathermoss	subxeric - submesic	Moderate (15-25%) SW slopes, Also Deep, Dry Crests
04	BF	PIsb - Feathermoss	submesic	Cool, Frosty, Mesic upper to lower slopes, Also Frosty Toe
05	SB	Sxw - Scrub birch - Feathermoss	subhygric	Cold, Wet, Frosty Toe Slopes, MEDIUM and COARSE areas
06	SM	Sxw - Horsetail - Meadowrue	subhygric - hygric	Moist, Not-Frosty, Alluvial Channels and Flood Plains
07	BB	Sb - Scrub birch - Sedge (Wb05 - Water sedge - Peat-moss)	hygric - subhygric	ORGANICS and Cold, Wet, Flat, Frosty Depressions
08	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric - subhygric	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBPS dc**

**SBPSdc Landscape Profile**



**Example Attribute Class Rule File for SBPS dc (arule8130)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10
7	relzfile	PCTZ2ST	Near_Str	1	3.00	3.00	3.00	1.00	5.00	2
8	relzfile	PCTZ2ST	Above_Str	4	1.00	1.00	1.00	0.50	1.00	0.5
9	formfile	LNQAREA	Valley	4	13.50	13.50	13.50	13.00	50.00	0.5
10	formfile	QWETI	Dry	5	6.80	6.80	6.80	0.00	7.00	0.2
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
12	formfile	QWETI	Dry2SIDry	1	8.00	8.00	8.00	6.50	9.50	1.5
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	8.90	8.90	8.90	8.00	9.80	0.9
15	formfile	QWETI	Med_WI	1	8.50	7.50	9.50	7.50	9.50	1
16	formfile	QWETI	Sl_Wet	1	9.50	9.00	10.00	9.00	10.00	0.5
17	formfile	QWETI	SLWet2Wet	1	10.50	10.00	11.00	9.75	11.25	0.75
18	formfile	QWETI	Wet	1	11.50	11.50	11.50	10.50	12.50	1
19	formfile	QWETI	Wet2V_Wet	4	13.00	13.00	13.00	12.50	50.00	0.5
20	formfile	SLOPE	Steep	4	22.00	22.00	22.00	20.00	100.00	3
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	5
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	1	50.00	50.00	50.00	10.00	90.00	40
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBPS dc (crule8130)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H2202b	Crest	20	1	8102	02 Shallow Crest	H2201s	Crest2Mid	30	8	8101	01 < 10% UP-MID SW
H2202b	Dry	30	1	8102		H2201s	Dry2SIDry	30	8	8101	
H2202b	SlopeLT20	20	1	8102		H2201s	SW_Aspect	10	8	8101	
H2202b	Med2Crs	10	1	8102		H2201s	SlopeLT10	20	8	8101	
H2202b	Shallow	40	1	8102		H2201s	Med2Crs	5	8	8101	
H2202b	Hi_Ridge	10	1	8102		H2201s	Deep	5	8	8101	
H2232r	Crest	20	2	8132	03 Deep Dry High Ridge	H2201u	Crest2Mid	30	9	8101	01 < 10% UP-MID NE
H2232r	Dry	30	2	8132		H2201u	Dry2SIDry	30	9	8101	
H2232r	SlopeLT20	20	2	8132		H2201u	NE_Aspect	10	9	8101	
H2232r	Med2Crs	10	2	8132		H2201u	SlopeLT10	20	9	8101	
H2232r	Deep	10	2	8132		H2201u	Med2Crs	5	9	8101	
H2232r	Hi_Ridge	10	2	8132		H2201u	Deep	5	9	8101	
H2231r	Crest	20	3	8131	01 Deep Low Knoll	H2201L	Mid2Low	30	10	8101	01 < 20% Drier MID-LOW
H2231r	Dry	30	3	8131		H2201L	Dry2Med	30	10	8101	
H2231r	SlopeLT20	20	3	8131		H2201L	SlopeLT20	20	10	8101	
H2231r	Med2Crs	10	3	8131		H2201L	Med2Crs	10	10	8101	
H2231r	Deep	10	3	8131		H2201L	Deep	10	10	8101	
H2231r	Low_Knoll	10	3	8131		H2205L	Low2Toe	30	11	8115	05 < 10% Moist Frosty Toe
H2202a	Crest2Mid	30	4	8123	02a Steep SW upper	H2205L	SLWet2Wet	30	11	8115	
H2202a	VDry2SIDry	30	4	8123		H2205L	SlopeLT10	20	11	8115	
H2202a	Steep_SW	20	4	8123		H2205L	Med2Crs	10	11	8115	
H2202a	Med2Crs	10	4	8123		H2205L	Deep	10	11	8115	
H2202a	Deep	10	4	8123		H2206t	Near_Str	30	12	8106	06 < 10% Moist Alluvial
H2203n	Crest2Mid	30	5	8133	03a Steep NE upper	H2206t	Wet	30	12	8106	
H2203n	VDry2SIDry	30	5	8133		H2206t	SlopeLT10	20	12	8106	
H2203n	Steep_NE	20	5	8133		H2206t	Medium	10	12	8106	
H2203n	Med2Crs	10	5	8133		H2206t	Deep	10	12	8106	
H2203n	Deep	10	5	8133		H2287v	Valley	30	13	8108	08 < 5% Flat, Wet Valley
H2203a	Crest2Mid	30	6	8103	03a 10-25% SW Upper	H2287v	Wet2V_Wet	30	13	8108	
H2203a	Dry2SIDry	30	6	8103		H2287v	SlopeLT05	20	13	8108	
H2203a	SW_Aspect	10	6	8103		H2287v	Medium	10	13	8108	
H2203a	SlopeLT20	10	6	8103		H2287v	Deep	10	13	8108	
H2203a	SlopeGT10	10	6	8103		H2208m	Valley	30	14	8108	08 5-10% Sloping Valley
H2203a	Med2Crs	5	6	8103		H2208m	Wet2V_Wet	30	14	8108	
H2203a	Deep	5	6	8103		H2208m	SlopeGT05	20	14	8108	
H2201n	Crest2Mid	30	7	8101	01 10-25% NE Upper	H2208m	SlopeLT10	10	14	8108	
H2201n	Dry2SIDry	30	7	8101		H2208m	Deep	10	14	8108	
H2201n	NE_Aspect	10	7	8101		H2208s	Valley	30	15	8168	06 > 10% Sloping Valley
H2201n	SlopeLT20	10	7	8101		H2208s	Wet2V_Wet	30	15	8168	
H2201n	SlopeGT10	10	7	8101		H2208s	SlopeGT05	20	15	8168	
H2201n	Med2Crs	5	7	8101		H2208s	SlopeGT10	10	15	8168	
H2201n	Deep	5	7	8101		H2208s	Deep	10	15	8168	
						H2278m	WetZ_LT05	50	16	8178	08 Flat, Wet Margins
						H2278m	WetL_LT200	50	16	8178	
						H2256s	Hi_Seep	80	17	8156	05 Moist Seepage Areas
						H2256s	Med2Crs	20	17	8156	
						H2207o	Organic	99	18	8107	07 Cold, Wet ORGANICS



**PEM Entity Descriptions for: SBPS dc**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8101	SBPS dc	01	LJ	j	d	8101 areas were mapped in a variety of different situations on MEDIUM textured materials in areas of both HIGH and LOW relief. 8101 is mapped in ALL upper to lower slope positions that are not shallow to bedrock, steeply sloping with NE or SW aspects or coarse textured. This is the most extensive site series in the BEC variant.
8102	SBPS dc	02	LC	v	r	8102 areas were mapped ONLY in dry crests mapped as shallow to bedrock.
8103	SBPS dc	03	LF	w		8103 areas were mapped on moderately sloping (15-25%) upper slopes with a predominant SW aspect. These areas represent another setting in which 03a site series has been described as occurring. Review of initial modeling results by the Regional Ecologist resulted in restricting this occurrence of the 03 site series to occurring ONLY on moderately sloping upper slopes with SW aspects and NOT OCCURRING on gentler slopes or non south facing aspects.
8106	SBPS dc	06	SM	a	j	8106 areas were mapped ONLY in areas of HIGH RELIEF landforms in areas of MEDIUM TEXTURED materials. The regional ecologist explained that the 06 site series was confined mainly to the flood plains of larger streams and that it did not occur on lower seepage slopes or in depressions. We were unable to model this distribution well and settled for predicting only a very limited distribution of 8106 along the margins of larger drainage ways in areas of steeper topography.
8107	SBPS dc	07	BB	p	j	8107 areas were mapped ONLY for forested sites with ORGANIC materials. These may occur under any relief class but 8107 occurs most commonly in areas of low relief and HIGH FROST. 8107 is meant to capture the concept of a cold, wet frosty depression with organic soils and poor nutrient status.
8108	SBPS dc	08	SH	j	d	8108 areas were mapped in areas of HIGH to LOW RELIEF and MEDIUM TEXTURED materials. 8108 areas occupy the lowest and wettest depressions, hollows and valley bottoms. Any valley bottoms with slope gradients greater than 10% were excluded from 8108 and were classified as 8168 to indicate the likely presence of the moist alluvial 06 site series
8111	SBPS dc	01	LJ	j	d	8111 areas were mapped ONLY in areas of LOW RELIEF and MEDIUM TEXTURED materials. 8111 are identical to 8114 areas in terms of landform position. However, 8111 areas occur south of the original Quesnel map area for which the rules for 8114 were developed. While lower portions of upland areas may exhibit some frosty conditions south of the previously mapped Quesnel area, Black Spruce tends to be absent south of the Quesnel and indicators for frostiness are not strong. 8111 areas are therefore predicted to be occupied predominantly by non-frosty 01 Site Series instead of by the frosty mesic 04 Site Series or the moist frosty 05 Site Series that occupy this landform position further north in the main Quesnel PEM map area.
8114	SBPS dc	04	BF	j	d	8114 areas were mapped ONLY in areas of LOW RELIEF and MEDIUM TEXTURED materials. 8114 areas occupy relatively level lower slope landscape positions but do not extend into the lowest and wettest draws and hollows. These landscape positions are expected to accumulate cold air drainage and to experience a relatively high incidence of frost. They may exhibit either mesic or slightly moister moisture conditions. They are expected to exhibit a mixture of frosty 04 and possibly some moister frosty 05. 8114 areas were only predicted for the original Quesnel PEM.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8115	SBPS dc	05	SB	j	d	8115 areas were mapped ONLY in areas of MEDIUM textured materials and HIGH RELIEF or LOW RELIEF AND LONG GENTLE SLOPES. 8115 areas occur on lower to toe slopes where seepage water is expected to accumulate to create moister conditions. 8115 areas DO NOT fit the description of classic 05 well as they may permit the free ongoing drainage of cold air and may not be as frosty as normal 05 site series. The 05 site series was the only subhygric site series available to describe these lower seepage slopes and so was selected to describe them.
8123	SBPS dc	02	LC	w		8123 areas were mapped on relatively STEEP SW facing slopes (>20%). These steep SW facing entities represent the typic phase of the 02 site series.
8130	SBPS dc	03	LF	c	d	8130 areas were mapped ONLY in areas of COARSE textured materials. 8130 areas occupy the upper portion of the landscape from crests and crowns to lower to toe slope positions. The lower slope portions of areas of COARSE materials were modeled separately so as to permit the possibility of recognizing inclusions of less dry and less coarse textured components.
8131	SBPS dc	01	LJ	d	x	8131 areas were mapped on the slightly drier tops of low knolls and ridges. These areas may be entirely mesic 01 or they may contain a small component of slightly drier than mesic 03 site series.
8132	SBPS dc	03	LF	r	d	8132 areas were mapped on dry crests that were NOT mapped as shallow to bedrock but that are believed to represent areas that will include a component of drier than mesic site series.
8133	SBPS dc	03	LF	k		8133 areas were mapped on STEEP NE facing upper slopes, mainly in areas of HIGH RELIEF. These areas represent one of the environments described for 03a, specifically steep N aspects.
8134	SBPS dc	03	LF	c	y	8134 areas were mapped ONLY in areas of COARSE textured materials. 8134 areas occupy slightly moist lower to toe slope positions that may be affected by cold air accumulation and frost. The coarse textured materials may be overlain by somewhat finer alluvial slope wash. These areas do not occupy depressions or hollows.
8135	SBPS dc	05	SB	c	y	8135 areas were mapped ONLY in areas of COARSE textured materials. 8135 areas occupy the lowest, wettest and flattest toe slopes but do not generally extend into depressions or hollows. These areas are expected to accumulate and hold cold air drainage and to be frosty. They are also expected to accumulate moisture and to be somewhat moisture than mesic. It is estimated that 8135 areas are likely to contain a mixture of moist frosty 05 site series and less moist but still frosty 04 site series.
8137	SBPS dc	03	LF	c	d	8137 areas were mapped ONLY in areas of COARSE textured materials. 8137 areas occupy lower to toe slope landscape positions. These lower to toe landscape positions may consist entirely of coarse dry 03 site series or they may contain components of slightly less dry mesic 01 site series or slightly frosty and slightly wetter 04 site series.
8138	SBPS dc	08	SH	c	d	8138 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8138 areas occupied the bottoms of flat valleys, hollows and depressions in these coarse areas. The regional ecologist estimated that these areas would be occupied by a mixture of moist frosty 05 site series if the materials were coarse and wet, frosty 08 site series if the materials were medium to fine or the water table was high.
8140	SBPS dc	04	BF	c	d	8140 areas were mapped ONLY in areas of elevated FROST HAZARD and COARSE textured materials. 8140 areas occupy the exact same mid to lower slope landscape position as 8137 areas. Because they occur in areas thought to have an elevated risk of frost, this same landscape position is anticipated to contain a larger proportion of frosty 04 site series along with a component of normal 01 site series and coarse 03 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8141	SBPS dc	01	LJ	j	d	8141 areas were mapped ONLY within regions of LOW RELIEF that were considered to have an elevated FROST HAZARD. 8141 areas occupy the topmost crown portions of low knolls and rises in frosty areas of low relief. The regional ecologist indicated that normal 01 site series are anticipated to occupy only the topmost crown locations in these frost prone areas. Most of the remaining upper portions of the landscape are occupied by frosty 04 site series in these frosty areas.
8142	SBPS dc	04	BF	c	y	8142 areas were mapped ONLY in areas of elevated FROST HAZARD and COARSE textured materials. 8142 areas occupy the exact same lower to toe slope landscape position as 8134 areas in non-frosty COARSE areas. Because they occur in areas thought to have an elevated risk of frost, this same landscape position is anticipated to be dominated by frosty 04 site series along with lesser components of wetter frosty 05 and perhaps some very wet frosty 07.
8143	SBPS dc	04	BF	y	j	8143 areas were mapped ONLY in areas of LOW RELIEF that were considered to have an elevated FROST HAZARD. 8143 areas occupy a transition zone between the frosty 04 above them and the wetter but still frosty 05 below them. It might be advisable to merge 8143 with 8144 above it as there is not much difference between the two. 8143 is taken to consist of a mixture of frosty mesic 04 and frosty, wetter 05 site series and to be a transition zone between 8144 above it and 8145 below it.
8144	SBPS dc	04	BF	j	d	8144 areas were mapped ONLY in areas of LOW RELIEF that were considered to have an elevated FROST HAZARD. 8144 areas occupy most upper landscape positions from below the crown down to lower to toe slopes. The regional ecologist indicated that most of the upper portions of the landscape were dominated by the 04 site series within areas of frost accumulation. The 8144 entity was intended to capture this concept.
8145	SBPS dc	05	SB	j	d	8145 areas were mapped ONLY in areas of LOW RELIEF that were considered to have an elevated FROST HAZARD. 8145 areas occupy lower to toe slopes and extend into shallow draws and hollows. 8145 occupies moist, frost prone lower to toe slope positions and is expected to consist mainly of frosty, wet 05 site series.
8147	SBPS dc	07	BB	p	j	8147 areas were mapped ONLY in areas of LOW RELIEF and HIGH FROST hazard. 8147 areas were NOT mapped as forested organic areas but are expected to be organic based on their landform position and their occurrence within areas of high frost hazard.
8148	SBPS dc	08	SH	j	d	8148 areas were mapped ONLY in areas mapped as having an elevated FROST HAZARD. 8148 areas occupy the bottoms of valleys and hollows that have slope gradients greater than 5% and less than 10%. These 8148 areas are considered to have sufficient slope that they will not develop organic soils but they will likely be both wet and frosty.
8149	SBPS dc	08	SH	j	d	8149 areas were mapped only in FROSTY AREAS of LOW RELIEF and MEDIUM TEXTURED materials. 8149 areas occupy the same lowest and wettest depressions, hollows and valley bottoms as 8108 except that they occur in FROSTY AREAS. Any valley bottoms with slope gradients greater than 10% were excluded from 8149 and were classified as 8148.
8156	SBPS dc	05	SB	y		8156 areas were mapped in ALL locations of manually mapped SEEPAGE. The concept behind recognizing SEEPAGE manually was to identify locations where the vegetation provided indications that the site conditions departed from the normal expected condition. This usually meant that a site expected to be a mesic 01 exhibited slightly wetter conditions. It was therefore decided that all areas mapped as SEEPAGE would be considered to consist of slightly wetter than mesic site series, in this case 05 with perhaps some 06.

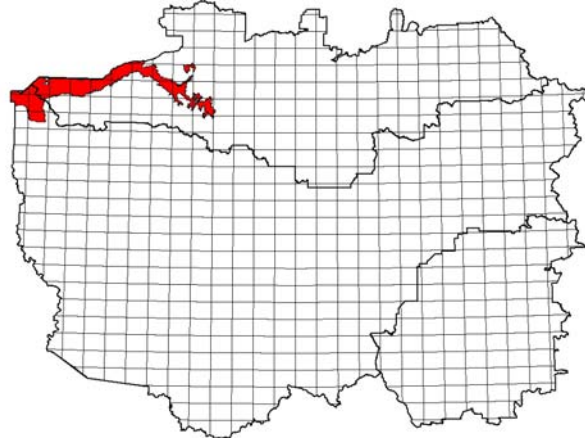
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8168	SBPS dc	06	SM	j	d	8168 areas were mapped across all ranges of relief and parent material texture. 8168 areas occupy the very lowest portions of wet valley bottoms, hollows and swales that have slope gradients greater than 10%. Due to the significant slope gradients, these areas are considered to be unlikely to be wet enough to be mapped as 08 and are not likely to accumulate frost and exhibit frosty site series such as 07, 05 or 04. 8168 areas are therefore assumed to contain a mixture of mostly moist alluvial 06 with some wetter 08 site series.
8178	SBPS dc	08	SH	j	d	8178 areas were mapped in areas of both HIGH and LOW RELIEF and on both MEDIUM and COARSE textured materials. 8178 areas occupy the margins around non-forested wetlands and open water. These wetland margins are expected to contain a mixture of wet and frosty site series. Since these areas were not mapped by interpreters as organic, the wet site series assigned to these areas is 08.
8191	SBPS dc	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8192	SBPS dc	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8193	SBPS dc	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8194	SBPS dc	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8195	SBPS dc	00	BR			These areas were mapped visually as areas of scrub brush.
8196	SBPS dc	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
8197	SBPS dc	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
8198	SBPS dc	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
8199	SBPS dc	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: SBPS dc**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8101	8101	01	SBPS dc	9	01	LJ	j	d	1	03	LF	1	05	SB
8102	8102	02	SBPS dc	7	02	LC	v	r	2	03	LF	1	01	LJ
8103	8103	03	SBPS dc	7	03	LF	w		3	01	LJ			
8106	8106	06	SBPS dc	8	06	SM	a	j	1	08	SH	1	05	SB
8107	8107	07	SBPS dc	10	07	BB	p	j						
8108	8108	08	SBPS dc	10	08	SH	j	d						
8111	8101	01	SBPS dc	8	01	LJ	j	d	2	03	LF			
8114	8144	04	SBPS dc	7	04	BF	j	d	2	05	SB	1	01	LJ
8115	8115	05	SBPS dc	7	05	SB	j	d	2	04	BF	1	06	SM
8123	8123	02	SBPS dc	8	02	LC	w		2	03	LF			
8130	8130	03	SBPS dc	10	03	LF	c	d						
8131	8101	01	SBPS dc	7	01	LJ	d	x	3	03	LF			
8132	8132	03	SBPS dc	5	03	LF	r	d	3	01	LJ	2	02	LC
8133	8133	03	SBPS dc	7	03	LF	k		2	01	LJ	1	02	LC
8134	8130	03	SBPS dc	5	03	LF	c	y	4	04	BF	1	01	LJ
8135	8135	05	SBPS dc	6	05	SB	c	y	4	04	BF			
8137	8130	03	SBPS dc	7	03	LF	c	d	2	01	LJ	1	04	BF
8138	8138	08	SBPS dc	6	08	SH	c	d	4	05	SB			
8140	8140	04	SBPS dc	6	04	BF	c	d	2	01	LJ	2	03	LF
8141	8141	01	SBPS dc	8	01	LJ	j	d	2	04	BF			
8142	8140	04	SBPS dc	8	04	BF	c	y	1	05	SB	1	07	BB
8143	8144	04	SBPS dc	6	04	BF	y	j	4	05	SB			
8144	8144	04	SBPS dc	8	04	BF	j	d	2	01	LJ			
8145	8145	05	SBPS dc	7	05	SB	j	d	3	08	SH			
8147	8147	07	SBPS dc	10	07	BB	p	j						
8148	8149	08	SBPS dc	8	08	SH	j	d	2	05	SB			
8149	8149	08	SBPS dc	8	08	SH	j	d	2	05	SB			
8156	8156	05	SBPS dc	8	05	SB	y		2	06	SM			
8168	8168	06	SBPS dc	7	06	SM	j	d	3	08	SH			
8178	8178	08	SBPS dc	8	08	SH	j	d	2	05	SB			
8191	8191	OW	SBPS dc	10	00	OW								
8192	8192	WE	SBPS dc	10	00	WE	d	y						
8193	8193	ME	SBPS dc	10	00	ME								
8194	8194	PA	SBPS dc	10	00	PA								
8195	8195	BR	SBPS dc	10	00	BR								
8196	8196	DL	SBPS dc	10	00	DL								
8197	8197	TA	SBPS dc	10	00	TA								
8198	8198	AV	SBPS dc	10	00	AV								
8199	8199	GL	SBPS dc	10	00	GL								

**BGC Unit: SBPS mc****LMES Zone ID: 82****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	104,784.1	5.05%
Williams Lake TSA	30,669.6	0.62%
100 Mile House TSA	0.0	0.00%
Cariboo Region	135,453.7	1.64%

**List of Site Series Codes Defined for use in SBPS mc**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	LF	PI - Feathermoss - Cladina, Submesic	mesic	01b, MEDIUM textures, Drier Steep NE, Steep SW, Deep Crests
01	LF	PI - Feathermoss - Cladina, Mesic	mesic	MEDIUM textures, All upper shedding parts of the landscape
01	LF	PI - Feathermoss - Cladina	mesic	
02	LC	PI - Kinnikinnick - Cladonia	subxeric - xeric	COARSE, Upper, Not Frosty; Also Shallow Crests, Med & Coarse
03	BF	SbPI - Feathermoss	submesic	COARSE, Cool, Frosty, Not Wet; ALSO Frosty Medium Moderate NE
04	SB	Sxw - Scrub birch - Feathermoss	subhygric - hygric	Flat, Frosty, Low-Toe, Not in Depression, WT < 50 cm
05	SO	Sxw - Horsetail	subhygric	Moist - Not Frosty, Sloping Seepage, WT > 50 cm
06	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric - subhydric	Flat (< 5%) Wet, Valleys, hollows and depressions, WT < 50 cm
07	BB	SbSxw - Scrub birch - Sedge (Wb05 - Sb - Water sedge - Peat-moss)	subhydric	Forested ORGANICS; Cold, Very Wet, Flat, Frosty Depressions
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Grassland		
00	GB	Gravel Bar		

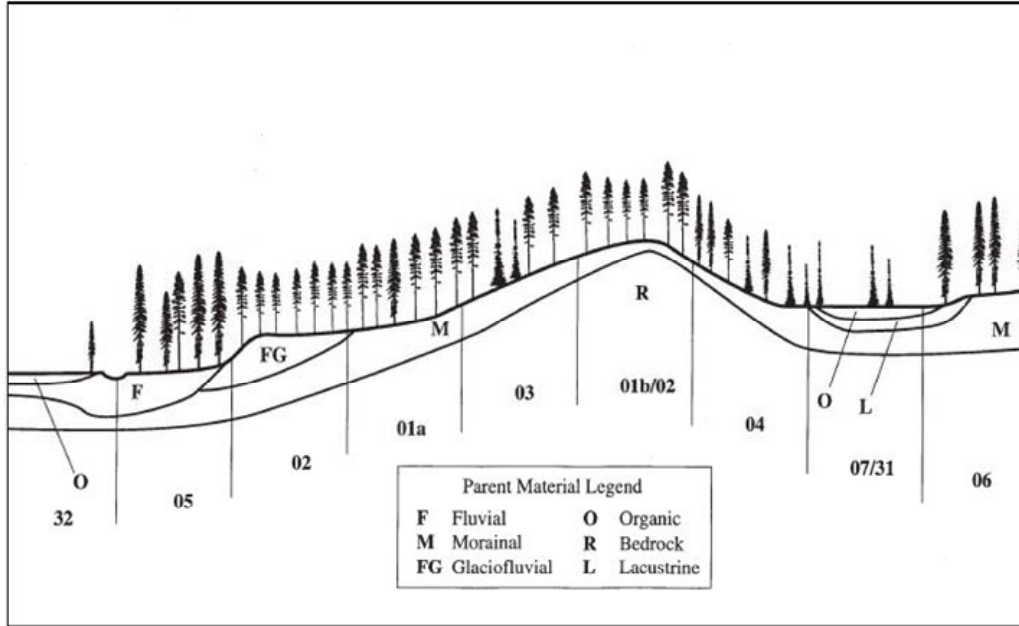
**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #26, "A Field Guide for Site Identification and Interpretation for the Prince Rupert Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

**Landscape Profile Diagram: SBPS mc**

**SBPSmc Landscape Profile<sup>a</sup>**



**Example Attribute Class Rule File for SBPS mc (arule8230)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	12.00	12.00	12.00	2.00	22.00	10
7	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
8	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
10	relzfile	PCTZ2PIT	Near_Base	1	12.00	12.00	12.00	2.00	22.00	10
11	relzfile	PCTZ2PIT	Above_Base	1	30.00	20.00	50.00	10.00	50.00	20
12	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
13	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
14	formfile	QWETI	Dry	5	6.80	6.80	6.80	0.00	7.00	0.2
15	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
16	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
17	formfile	QWETI	SL_Wet	1	9.60	9.60	9.60	9.00	10.20	0.6
18	formfile	QWETI	SLWet2Wet	1	10.80	10.80	10.80	9.80	12.80	1
19	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
20	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
21	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
22	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
23	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
24	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
25	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
26	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
27	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.50	1
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for SBPS mc (crule8230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H2302b	Crest	30	1	8221	02 Shallow Crest	H2315s	Low2Toe	30	9	8235	03 <20% Drier Frosty Toe
H2302b	VDry	30	1	8221		H2315s	SL_Wet	30	9	8235	
H2302b	SlopeLT30	10	1	8221		H2315s	SlopeLT20	20	9	8235	
H2302b	Med2Crs	10	1	8221		H2315s	Med2Crs	10	9	8235	
H2302b	Shallow	40	1	8221		H2315s	Deep	10	9	8235	
H2302b	Hi_Ridge	10	1	8221		H2305s	Toe	30	10	8205	05 5-10% Moist, Not Frosty
H2301b	Crest	30	2	8212	01b Deep Dry High Ridge	H2305s	SLWet2Wet	30	10	8205	
H2301b	VDry	30	2	8212		H2305s	SlopeLT10	20	10	8205	
H2301b	SlopeLT30	10	2	8212		H2305s	SlopeGT05	10	10	8205	
H2301b	Med2Crs	10	2	8212		H2305s	Med2Crs	10	10	8205	
H2301b	Deep	10	2	8212		H2305s	Deep	10	10	8205	
H2301b	Hi_Ridge	10	2	8212		H2304f	Toe	30	11	8204	04 < 5% Flat, Frosty Toe
H2302s	Crest2Mid	30	3	8222	01b Steep SW upper	H2304f	SLWet2Wet	30	11	8204	
H2302s	VDry2SIDry	30	3	8222		H2304f	SlopeLT10	20	11	8204	
H2302s	Steep_SW	20	3	8222		H2304f	SlopeLT05	10	11	8204	
H2302s	Med2Crs	10	3	8222		H2304f	Med2Crs	10	11	8204	
H2302s	Deep	10	3	8222		H2304f	Deep	10	11	8204	
H2303n	Crest2Mid	30	4	8203	01b Steep NE upper	H2304t	Toe	60	12	8244	04 < 5% Flat, Frosty Toe
H2303n	VDry2SIDry	30	4	8203		H2304t	Near_Base	20	12	8244	
H2303n	Steep_NE	20	4	8203		H2304t	SlopeLT05	20	12	8244	
H2303n	Med2Crs	10	4	8203		H2305u	Toe	60	13	8205	05 > 5% Moist, Not Frosty
H2303n	Deep	10	4	8203		H2305u	Above_Base	20	13	8205	
H2301m	Up2Mid	30	5	8201	01 <30% Upper Shedding	H2305u	SlopeGT05	20	13	8205	
H2301m	Dry2SIDry	30	5	8201		H2305v	Valley	30	14	8205	05 > 5% Moist, Not Frosty
H2301m	SlopeLT30	20	5	8201		H2305v	Wet2V_Wet	30	14	8205	
H2301m	Med2Crs	10	5	8201		H2305v	SlopeGT05	20	14	8205	
H2301m	Deep	10	5	8201		H2305v	Med2Crs	10	14	8205	
H2301L	Up2Low	30	6	8201	01 <20% Dry Gentle SW	H2305v	Deep	10	14	8205	
H2301L	Med_WI	30	6	8201		H2306F	Valley	30	15	8206	06 < 5% Wet, Flat, Frosty
H2301L	SlopeLT30	20	6	8201		H2306F	Wet2V_Wet	30	15	8206	
H2301L	Gentle_SW	10	6	8201		H2306F	SlopeLT05	20	15	8206	
H2301L	Deep	10	6	8201		H2306F	Medium	10	15	8206	
H2303L	Up2Low	30	7	8233	03 5-20% Cool, Dry NE	H2306F	Deep	10	15	8206	
H2303L	Med_WI	30	7	8233		H2306m	Wet_LT05	50	16	8264	06 Wet, Frosty, Margin
H2303L	SlopeLT30	10	7	8233		H2306m	Wet_LT200	50	16	8264	
H2303L	Gentle_NE	20	7	8233		H2355s	Hi_Seep	80	17	8255	05 Moist, Not Frosty Seep
H2303L	SlopeGT05	10	7	8233		H2355s	Med2Crs	20	17	8255	
H2303L	Deep	10	7	8233		H2307o	Organic	99	18	8207	07 Forested Organics
H2303f	Up2Low	30	8	8201	01 < 5% UP-LOW NE						
H2303f	Med_WI	30	8	8201							
H2303f	SlopeLT30	10	8	8201							
H2303f	Gentle_NE	20	8	8201							
H2303f	SlopeLT05	10	8	8201							
H2303f	Deep	10	8	8201							



**PEM Entity Descriptions for: SBPS mc**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8200	SBPS mc	00	GB			These areas consist of all sites that were recognized as GRAVEL BARS by the manual interpretation process.
8201	SBPS mc	01	LF	j	d	8201 areas were mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8201 areas occupy a wide range of mesic landform positions ranging from crests and upper slopes to divergent lower to toe slopes with slopes greater than 5%. 8201 is meant to capture the concept of the normal 01a site series for this zone.
8202	SBPS mc	02	LC	c	d	8202 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 8202 areas occupy all convex portions of the top 3/4 of the landscape in areas not subject to elevated risk of frost hazard and the top 1/2 of areas recognized as having an elevated FROST HAZARD. 8202 is excluded from concave draws and swales in the upper portions of the landscape. These dry swales are assumed to be occupied by the slightly cooler but still dry 02 site series.
8203	SBPS mc	01 b	LF	k	x	8203 areas were mapped in STEEP NE facing slopes in areas of MEDIUM textured materials. 8203 areas occupy steep NE facing slopes that are expected to be slightly drier than normal 01. The regional ecologist indicated that these slightly drier locations would most likely be dominated by the drier 01b phase of the 01 site series. 8203 was originally thought likely to contain the slightly cool 03 site series but the regional ecologist indicated that this 03 site series occurred on more gentle slopes lower in the landscape.
8204	SBPS mc	04	SB	j	d	8204 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8204 areas occupy flat, frosty lower slope to toe slope positions in draws, hollows and adjacent to frosty level wetlands. 8204 areas occur most frequently in areas of low relief and low gradients (< 5% slope) and in lower to toe landform positions. These areas are considered likely to accumulate and hold cold frosty air and to also accumulate seepage waters and to exhibit high water tables often within 50 cm of the surface. The regional ecologist indicated that the 8204 areas should typically be identified by the presence of Black Spruce and should only occur in the lowest and most level landform positions that were not part of actual wetland depressions.
8205	SBPS mc	05	SO	j	d	8205 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. The 8205 unit is meant to capture the concept of a not-frosty, sloping seepage area, mainly adjacent to active stream channels. The slopes are steep enough that cold air rarely accumulates and conditions are not frosty. The seepage waters produce nutrient rich conditions but the seepage rarely creates water tables above 50 cm in depth. 8205 areas are most common in areas of HIGH RELIF and LONG SLOPES where seepage and permanent stream channels can develop. 8205 areas are less common in areas of low relief and are not predicted in areas of high frost hazard.
8206	SBPS mc	06	SH	j	d	8206 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8206 areas occupy the lowest and wettest landform positions in draws, hollows and depressions with slope gradients less than 5%. These areas are expected to exhibit high water tables and cold, wet conditions. All wet, flat depression areas were predicted to be site series 06 UNLESS the parent material had been mapped as organic, in which case the 07; forested organic wetland was recognized.
8207	SBPS mc	07	BB	p	j	8207 areas were mapped ONLY in areas of forested ORGANIC materials. The regional ecologist indicated that the 07 site series was restricted to occurring in forested bogs. The manual mapping had attempted to identify and delineate all areas that were considered clearly likely to have organic materials. We therefore used the manual mapping as the key criteria for recognizing the 07 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8212	SBPS mc	01 b	LF	r	x	8212 areas were mapped ONLY in areas of MEDIUM textured materials. 8212 areas occupy the drier crest portions of relatively high ridges and knolls that were NOT mapped as shallow to bedrock. The regional ecologist indicated that there was a drier 01b phase of the 01 site series that might occupy these drier locations.
8221	SBPS mc	02	LC	v	r	8221 areas were mapped on dry crests mapped as shallow to bedrock. Most areas of 02 site series occur in areas mapped as coarse textured materials but the only drier site series available to characterize dry shallow crests was 02 so these areas have been mapped as 02.
8222	SBPS mc	01 b	LF	w	x	8222 areas were mapped on STEEP SW slopes in areas of MEDIUM textured materials. 8222 areas occupy steep dry SW slopes that are expected to be slightly drier than normal 01. The regional ecologist indicated that these slightly drier locations would most likely be dominated by the drier 01b variant of the 01 site series.
8223	SBPS mc	03	BF	c	d	8223 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8223 areas occupy a number of different landform positions that were considered to have a slightly elevated risk of frost while having a low likelihood of receiving seepage water. 8223 areas occupy cool dry hollows and draws in upper landform positions as well as convex shedding locations in lower to toe slopes with slopes less than 5%. Even on coarse textured materials these areas are anticipated to exhibit the cooler less nutrient rich conditions characteristic of the 03 site series.
8224	SBPS mc	04	SB	c	d	8224 areas were mapped ONLY in areas of elevated FROST HAZARD and on COARSE TEXTURED materials. 8224 occupies frosty level flats and level toe slopes (< 5%) in areas of coarse textured materials and elevated frost hazard. No 04 equivalent was predicted for flat toe slopes in areas of coarse textured materials that were not included in areas identified as having an elevated risk of frost hazard. We may be over-predicting 04 in areas of coarse materials in which case these areas will likely be better described as 03.
8225	SBPS mc	05	SO	c	d	8225 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8225 occurs in hollows and draws in the lower portions of the landscape where the slope gradient is greater than 5%. These sloping draws are predicted to contain finer texture alluvial materials, to accumulate some seepage moisture and NOT to accumulate frosty cold air due to the relatively high slope gradients. It is believed that these conditions are consistent with those defined for the 05 site series.
8226	SBPS mc	06	SH	c	d	8226 areas were mapped only in areas of COARSE TEXTURED materials. 8226 areas occupy the lowest, wettest and most level landform positions (< 5% slope) in hollows and depressions in BOTH frosty and not frosty areas of coarse textured materials. 8226 is the coarse textured equivalent of 8206.
8233	SBPS mc	03	BF	k	j	8233 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8233 areas occupy gentle to moderate slopes with cool NE aspects in mid to lower landform positions. The idea behind 8233 areas is that they are slightly cooler and somewhat frosty due to their NE exposure but 8233 areas are not as cool, frosty or wet as the wetter colder 04 site series. 8233 areas were restricted to NE aspects with slopes greater than 5% and less than 20%. Once slopes were less than 5% or the landform position was lower than toe, then the 04 site series was recognized.
8235	SBPS mc	03	BF	j	d	8235 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8235 areas represent a transition zone concept transitional from cooler frosty but not moist 03 to the moister seepage areas of 05. The regional ecologist indicated that the 05 site series acted as the non-frosty seepage unit for this zone but that 05 was most frequently restricted to occurring in alluvial materials adjacent to active stream channels. He preferred to see the 05 unit confined to well-defined valleys or draws that contained active stream channels. The 8235 unit was created to define a concept of a lower to toe landscape position with seepage but with no water table above 50 cm.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8241	SBPS mc	01	LF	r	x	8241 areas were mapped ONLY in areas of HIGH FROST HAZARD and MEDIUM textured materials. 8241 areas occupy the drier crest portions of relatively high ridges and knolls that were NOT mapped as shallow to bedrock. These drier crest positions would only be occupied by typical mesic 01 site series in these frosty medium textured areas.
8242	SBPS mc	04	SB	c	d	8242 areas were mapped ONLY in areas of elevated FROST HAZARD and on COARSE TEXTURED materials. 8242 areas occupy accumulation areas and sloping draws and concavities in mid to toe slopes in areas of coarse textured materials and elevated frost hazard. 8242 areas are predicted to contain a mixture of coarse, frosty 04 Site Series that occurs in slightly wetter areas affected by both seepage and frost and frosty 03 site series that is not affected by seepage.
8244	SBPS mc	04	SB	j	d	8244 areas were mapped ONLY in areas of elevated FROST HAZARD on MEDIUM TEXTURED materials. 8244 areas are permitted to occur higher upslope than in non-frosty areas and to occupy sloping draws in mid to lower slopes as well as lower to toe slopes with slope gradients less than 5%. 8244 areas are predicted to be both frosty and slightly wetter than mesic.
8246	SBPS mc	06	SH	j	d	8246 areas were mapped ONLY in areas of elevated FROST HAZARD and MEDIUM TEXTURED materials. In areas of elevated frost hazard the 06 site series was predicted to occur in sloping hollows and depressions with slope gradients greater than 5%.
8247	SBPS mc	07	BB	p	j	8247 areas were mapped ONLY in areas of ELEVATED FROST HAZARD and on MEDIUM TEXTURED materials. 8247 areas occupy the lowest and flattest hollows, draws and depressions in these frosty areas of low relief. It was reasoned that these small depressions in frosty areas would be more likely to be occupied by the organic 07 site series than by the non-organic 06 cold wetland. This assumption may prove incorrect, in which case all 8247 areas could be considered to be 06 site series.
8253	SBPS mc	03	BF	j	d	8253 areas were mapped ONLY in areas of ELEVATED FROST hazard and MEDIUM TEXTURED materials. 8253 areas are similar to 8233 areas except that they can occur over a wider range of slope positions and aspects than 8233. 8253 areas occupy upper to lower slope positions in FROSTY areas on slopes greater than 5% but less than 30%. These areas shed water but are cooler than normal due to frequent frosts.
8255	SBPS mc	05	SO	y		8255 areas were mapped in all locations of recognized SEEPAGE. The 8255 unit is meant to capture the concept of a not-frosty, sloping seepage area. It is assumed that when interpreters mapped seepage locations it was to recognize these wetter than mesic, but not too frosty entities.
8264	SBPS mc	06	SH	j	d	8264 areas were mapped around the MARGINS of lakes and non-forested wetlands. 8264 areas occupy the lowest and wettest portions of the margins to lakes and wetlands. This is a concept that is repeated for almost all BEC units. The wetland margin concept is used to permit prediction of a mixture of wetter site series around the margins of lakes and wetlands. In this variant it is predicted that these wetland margins will be occupied mainly by the cold, wet 06 site series. They may also contain other cold, wet, frosty site series including 04 and 03.
8291	SBPS mc	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8292	SBPS mc	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8293	SBPS mc	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8294	SBPS mc	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8295	SBPS mc	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8296	SBPS mc	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.

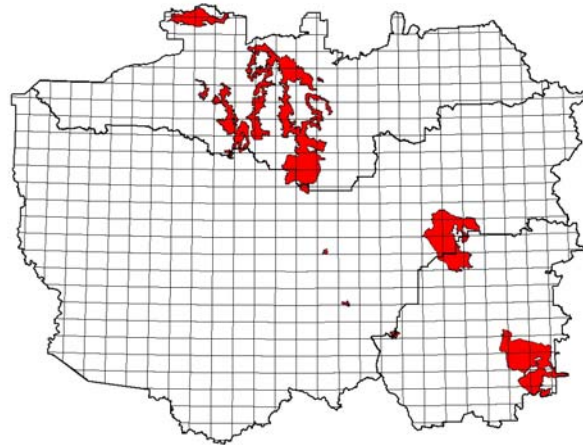
### PEM Entity Extended Legend with Proportions of Site Series for: SBPS mc

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8200	8200	GB	SBPS mc	10	00	GB								
8201	8201	01	SBPS mc	9	01	LF	j	d	1	05	SO			
8202	8202	02	SBPS mc	10	02	LC	c	d						
8203	8203	01b	SBPS mc	7	01	LF	k	x	3	02	LC	0		
8204	8204	04	SBPS mc	7	04	SB	j	d	2	06	SH	1	03	BF
8205	8205	05	SBPS mc	7	05	SO	j	d	2	03	BF	1	01	LF
8206	8206	06	SBPS mc	8	06	SH	j	d	2	04	SB			
8207	8207	07	SBPS mc	10	07	BB	p	j						
8212	8212	01b	SBPS mc	8	01	LF	r	x	2	02	LC			
8221	8221	02	SBPS mc	8	02	LC	v	r	2	01	LF			
8222	8222	01b	SBPS mc	7	01	LF	w	x	3	02	LC			
8223	8223	03	SBPS mc	6	03	BF	c	d	4	02	LC			
8224	8224	04	SBPS mc	7	04	SB	c	d	3	03	BF			
8225	8225	05	SBPS mc	6	05	SO	c	d	3	02	LC	1	01	LF
8226	8226	06	SBPS mc	7	06	SH	c	d	2	04	SB	1	03	BF
8233	8223	03	SBPS mc	8	03	BF	k	j	2	01	LF			
8235	8235	03	SBPS mc	7	03	BF	j	d	2	06	SH	1	01	LF
8241	8241	01	SBPS mc	10	01	LF	r	x						
8242	8224	04	SBPS mc	6	04	SB	c	d	4	03	BF			
8244	8244	04	SBPS mc	7	04	SB	j	d	2	03	BF	1	06	SH
8246	8246	06	SBPS mc	7	06	SH	j	d	2	04	SB	1	03	BF
8247	8247	07	SBPS mc	8	07	BB	p	j	2	06	SH			
8253	8253	03	SBPS mc	8	03	BF	j	d	2	01	LF			
8255	8255	05	SBPS mc	7	05	SO	y		3	06	SH			
8264	8264	06	SBPS mc	7	06	SH	j	d	2	04	SB	1	03	BF
8291	8291	OW	SBPS mc	10	00	OW								
8292	8292	WE	SBPS mc	10	00	WE								
8293	8293	ME	SBPS mc	10	00	ME								
8294	8294	PA	SBPS mc	10	00	PA								
8295	8295	BR	SBPS mc	10	00	BR								
8296	8296	DL	SBPS mc	10	00	DL								



**BGC Unit: SBPS mk****LMES Zone ID: 83****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	223,509.1	10.77%
Williams Lake TSA	67,591.2	1.37%
100 Mile House TSA	103,474.8	8.39%
<b>Cariboo Region</b>	<b>394,575.1</b>	<b>4.79%</b>

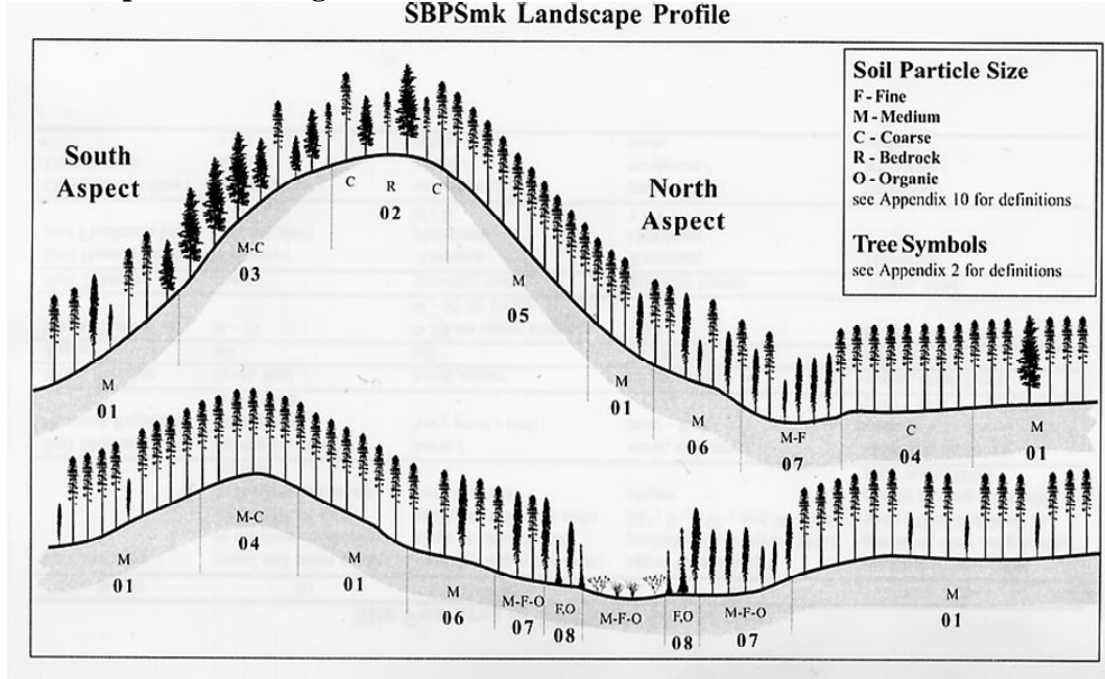
**List of Site Series Codes Defined for use in SBPS mk**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	LP	PI - Pinegrass - Arnica	mesic	MEDIUM textures, All upper shedding parts of the landscape
02	LC	PI - Cladonia - Haircap moss	very xeric - subxeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	FA	Fd - Pinegrass - Aster	xeric - subxeric	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04	LF	PI - Pinegrass - Feathermoss	submesic - mesic	MEDIUM, Deep Dry Crests
04	LF	PI - Pinegrass - Feathermoss, Typic	submesic - mesic	MEDIUM, Moderate (15-25%) Slightly Drier SW slopes
04	LF	PI - Pinegrass - Feathermoss, Sand	submesic - mesic	COARSE, All upper to lower shedding slopes, NOT Steep or Shallow
05	SM	SxwFd - Step moss	submesic	Steep NE - Cool Dry slopes
06	ST	Sxw - Twinberry	subhygric	Moist - Not Frosty, Sloping Seepage, WT > 50 cm - MEDIUM & COARSE
07	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Level to Gentle, Wet, Valleys, hollows and depressions, WT < 50 cm
08	BB	SbSxw - Scrub birch - Sedge (Wb05 - Sb - Water sedge - Peat-moss and Wb08 - Sb - Soft-leaved sedge - Peat-moss)	subhydric	Forested ORGANICS; Cold, Very Wet, Flat, Frosty Depressions
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBPS mk**  
**SBPSmk Landscape Profile**



**Example Attribute Class Rule File for SBPS mk (arule8330)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	12.00	5.00	20.00	2.00	22.00	10
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.50	7.50	1
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	SL_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
16	formfile	QWETI	SL_Wet	1	9.80	9.80	9.80	9.00	10.60	0.8
17	formfile	QWETI	SLWet2Wet	1	11.50	11.50	11.50	10.80	12.30	0.8
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.50	1
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBPS mk (crule8330)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH8302r	Crest	30	1	8302	02 Shallow Crest	MH8316L	Mid2Low	30	9	8301	01 < 20% Dry Mid-Low
MH8302r	VDry	30	1	8302		MH8316L	Dry2SIDry	30	9	8301	
MH8302r	SlopeLT30	10	1	8302		MH8316L	SlopeGT20	10	9	8301	
MH8302r	Med2Crs	10	1	8302		MH8316L	Med2Crs	20	9	8301	
MH8302r	Shallow	40	1	8302		MH8316L	Deep	10	9	8301	
MH8302r	Hi_Ridge	10	1	8302		MH8361L	Mid2Low	30	10	8361	01 < 20% Mid-Low Transition
MH8342r	Crest	30	2	8342	04 Deep Dry High Ridge	MH8361L	Med_WI	30	10	8361	
MH8342r	VDry	30	2	8342		MH8361L	SlopeLT20	20	10	8361	
MH8342r	SlopeLT30	10	2	8342		MH8361L	Med2Crs	10	10	8361	
MH8342r	Med2Crs	10	2	8342		MH8361L	Deep	10	10	8361	
MH8342r	Deep	20	2	8342		MH8306L	Low2Toe	30	11	8306	06 < 20% Moist Low-Toe
MH8342r	Hi_Ridge	10	2	8342		MH8306L	SI_Wet	30	11	8306	
MH8341r	Crest	30	3	8342	04 Deep Dry Low Knoll	MH8306L	SlopeLT20	20	11	8306	
MH8341r	VDry	30	3	8342		MH8306L	Med2Crs	10	11	8306	
MH8341r	SlopeLT30	10	3	8342		MH8306L	Deep	10	11	8306	
MH8341r	Med2Crs	10	3	8342		MH8316t	Low2Toe	30	12	8301	01 > 20% Drier Low-Toe
MH8341r	Deep	20	3	8342		MH8316t	Dry2Med	30	12	8301	
MH8341r	Low_Knoll	10	3	8342		MH8316t	SlopeGT20	20	12	8301	
MH8303s	Crest2Mid	30	4	8303	03 Steep SW upper	MH8316t	Med2Crs	10	12	8301	
MH8303s	VDry2SIDry	30	4	8303		MH8316t	Deep	10	12	8301	
MH8303s	Steep_SW	20	4	8303		MH8306t	Toe	30	13	8306	06 < 10% SI. Wet Toe
MH8303s	Med2Crs	10	4	8303		MH8306t	SLWet2Wet	30	13	8306	
MH8303s	Deep	10	4	8303		MH8306t	SlopeLT10	20	13	8306	
MH8343s	Crest2Mid	30	5	8343	04 <20% Dry Gentle SW	MH8306t	Med2Crs	10	13	8306	
MH8343s	VDry2SIDry	30	5	8343		MH8306t	Deep	10	13	8306	
MH8343s	Gentle_SW	20	5	8343		MH8307s	Valley	30	14	8307	07 > 5% Wet Sloping Valley
MH8343s	Med2Crs	10	5	8343		MH8307s	Wet2V_Wet	30	14	8307	
MH8343s	Deep	10	5	8343		MH8307s	SlopeGT05	20	14	8307	
MH8305n	Crest2Mid	30	6	8305	05 Steep NE upper	MH8307s	Med2Crs	10	14	8307	
MH8305n	VDry2SIDry	30	6	8305		MH8307s	Deep	10	14	8307	
MH8305n	Steep_NE	20	6	8305		MH8307f	Valley	30	15	8307	07 < 5% Wet Flat Valley
MH8305n	Med2Crs	10	6	8305		MH8307f	Wet2V_Wet	30	15	8307	
MH8305n	Deep	10	6	8305		MH8307f	SlopeLT05	20	15	8307	
MH8315n	Crest2Mid	30	7	8315	01 <20% Gentle NE	MH8307f	Medium	10	15	8307	
MH8315n	VDry2SIDry	30	7	8315		MH8307f	Deep	10	15	8307	
MH8315n	Gentle_NE	20	7	8315		MH8378m	WetZ_LT05	50	16	8307	07 Wet Margins
MH8315n	Med2Crs	10	7	8315		MH8378m	WetZ_LT200	50	16	8307	
MH8315n	Deep	10	7	8315		MH8366s	Hi_Seep	80	17	8366	06 > 5% Sloping Seepage
MH8301m	Up2Mid	30	8	8301	01 <30% Upper Shedding	MH8366s	Med_WI	10	17	8366	
MH8301m	Dry2SIDry	30	8	8301		MH8366s	SlopeGT05	10	17	8366	
MH8301m	SlopeLT30	20	8	8301		MH8367s	Hi_Seep	80	18	8367	07 < 5% Flat, Wet Seepage
MH8301m	Med2Crs	10	8	8301		MH8367s	Wet2V_Wet	10	18	8367	
MH8301m	Deep	10	8	8301		MH8367s	SlopeLT05	10	18	8367	
						MH8308o	Organic	99	19	8308	08 Forested Organics



**PEM Entity Descriptions for: SBPS mk**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8301	SBPS mk	01	LP	d	j	8301 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8301 occupies the majority of upper shedding landform positions ranging from upper to lower landform positions. 8301 will also extend across the tops of broad low knolls and ridges and will occur on slopes steeper than 20% in lower and toe slope landform positions. 8301 attempts to capture the concepts of a classic mesic site series.
8302	SBPS mk	02	LC	s	r	8302 was mapped ONLY in areas mapped as shallow to bedrock. 8302 occupies dry crest landform positions with shallow soils. 8302 represents a classic dry shallow crest.
8303	SBPS mk	03	FA	w	x	8303 was mapped as a typical steep SW slope (> 35%) in crest to upper landform positions in areas of MEDIUM TEXTURED materials. 8303 is a classic steep, warm south aspect unit.
8304	SBPS mk	04	LF	c	d	8304 was mapped ONLY in areas of COARSE TEXTURED materials. 8304 occupies the full range of upper landform positions from crest to lower slope in these coarse textured areas. 8304 corresponds to the description of a typical 04 as occurring on all freely drained landform positions in areas of sandy soils.
8305	SBPS mk	05	SM	k	x	8305 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8305 occurs on steep (>35%) NE facing slopes. 8305 was meant to capture the concept of a cool dry aspect on steep upper slopes of ridges and knolls.
8306	SBPS mk	06	ST	d	y	8306 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8306 occupies gentle lower to toe slopes that are considered likely to receive seepage inputs from flow from upslope. 8306 areas often occur within or adjacent to sloping stream channels or draws. 8306 areas have sufficient slope that water and air do not pond and permanent high water tables do not develop. 8306 areas are anticipated to be high in nutrients and in available moisture.
8307	SBPS mk	07	SH	d	y	8307 areas were mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8307 occurs in ALL wet depressions, draws and the bottoms of sloping valleys and stream channels. The regional ecologist indicated that 07 was the predominant wet depressional site series with 08 occurring only in cold frosty depressions with organic soils.
8308	SBPS mk	08	BB	p	y	8308 areas were mapped ONLY in areas of ORGANIC MATERIALS. 8308 areas occupy the lowest, flattest and wettest positions in the landscape. These areas are characterized by cooler frosty conditions, permanently high water tables, nutrient poor moisture and organic soils.
8315	SBPS mk	01	LP	d	j	8315 was mapped MAINLY in areas of MEDIUM TEXTURED MATERIALS. 8315 occupies gently sloping (<30%) NE facing upper slope positions in landscapes of moderate to high relief. 8315 is meant to capture the concept of slightly cooler mesic conditions in upper slope positions. 8315 areas are anticipated to contain mainly 01 site series with a mixture of cool dry 05 site series.
8316	SBPS mk	06	ST	c	y	8316 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8316 was initially conceived of as a transition area between coarse dry 04 above it and moist wetter 06 below it. 8316 was anticipated to contain a mixture of dominantly 06 with lesser amounts of 04 and 01. In the end, areas of 8316 ended up being so small and thin that this entity was amalgamated with 8346 to create a somewhat larger entity that proved to be more amenable to mapping. As separate entities these 2 units were too small and fragmented to map effectively. As a single joined entity (8346) they were just large and coherent enough to be mapped.
8342	SBPS mk	04	LF	r	d	8342 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8342 occupies the dry, shedding portions of upper crests and knolls that are NOT shallow to bedrock. 8342 is meant to capture the concept of a deep dry upper crest.

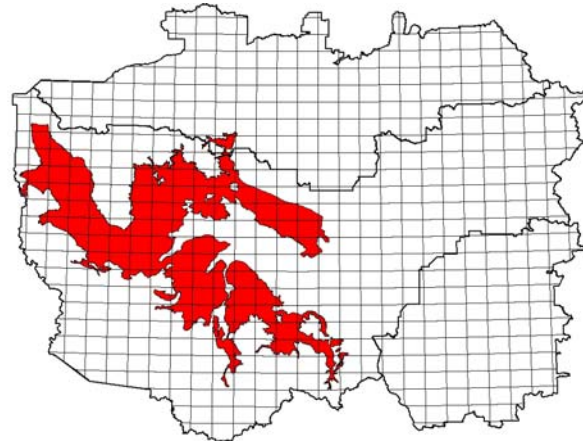
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8343	SBPS mk	04	LF	w	x	8343 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8343 occurs on gentle south facing slopes in the upper portions of high ridges and knolls in landscapes of moderate to high relief. 8343 is meant to capture the concept of a slightly warmer south aspect upper slope.
8346	SBPS mk	06	ST	c	y	8346 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8346 areas occur as very narrow strips around the margins of wetlands and adjacent to active stream channels. 8346 areas were predicted to consist mainly of wetter 06 site series that develops under the influence of seepage waters.
8347	SBPS mk	07	SH	c	y	8347 areas were mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8347 occupies essentially the same landform positions as 8307 except that it occurs in areas of coarser textured materials. As such, it may be that these areas may not be quite as wet and cold as the corresponding landform positions in areas of finer textured materials. 8347 areas may contain some less wet 06 and even some mesic 01.
8361	SBPS mk	01	LP	d	y	8361 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8361 was mapped as a transition zone that occupies mid to lower shedding landform positions. 8361 is predicted to contain a mixture of mainly mesic 01 site series along with some slightly more moist 06 site series and perhaps some slightly drier 04 site series. 8361 areas may be affected by periodic seepage but are not expected to display water tables above 50 cm.
8366	SBPS mk	06	ST	d	y	8366 was mapped in the drier and more moderately sloping portions of areas of observable SEEPAGE. The concept of SEEPAGE areas was that they would indicate areas where conditions were moister than expected or normal. As 06 is the dominant moister than normal site series it is anticipated that areas mapped as SEEPAGE will mostly consist of 06 site series.
8367	SBPS mk	07	SH	d	y	8367 was mapped in the wetter and more level (< 5%) portions of areas of observable SEEPAGE. The concept of SEEPAGE areas was that they would indicate areas where conditions were moister than expected or normal. In these wetter and more level areas of SEEPAGE we predict that the wetter 07 Site Series will predominate.
8391	SBPS mk	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8392	SBPS mk	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8393	SBPS mk	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8394	SBPS mk	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8395	SBPS mk	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8396	SBPS mk	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
8397	SBPS mk	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
8399	SBPS mk	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: SBPS mk**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8301	8301	01	SBPS mk	9	01	LP	d	j	1	06	ST			
8302	8302	02	SBPS mk	9	02	LC	s	r	1	01	LP			
8303	8303	03	SBPS mk	9	03	FA	w	x	1	01	LP			
8304	8304	04	SBPS mk	9	04	LF	c	d	1	01	LP			
8305	8305	05	SBPS mk	9	05	SM	k	x	1	01	LP			
8306	8306	06	SBPS mk	8	06	ST	d	y	2	01	LP			
8307	8307	07	SBPS mk	8	07	SH	d	y	2	08	BB			
8308	8308	08	SBPS mk	9	08	BB	p	y	1	07	SH			
8315	8301	01	SBPS mk	7	01	LP	d	j	3	05	SM			
8316	8316	06	SBPS mk	7	06	ST	c	y	2	04	LF	1	01	LP
8342	8342	04	SBPS mk	8	04	LF	r	d	2	01	LP			
8343	8343	04	SBPS mk	6	04	LF	w	x	4	01	LP			
8346	8346	06	SBPS mk	8	06	ST	c	y	2	04	LF			
8347	8347	07	SBPS mk	7	07	SH	c	y	2	06	ST	1	01	LP
8361	8301	01	SBPS mk	7	01	LP	d	y	2	06	ST	1	04	LF
8366	8366	06	SBPS mk	7	06	ST	d	y	2	01	LP	1	07	SH
8367	8367	07	SBPS mk	6	07	SH	d	y	3	06	ST	1		
8391	8391	OW	SBPS mk	10	00	OW								
8392	8392	WE	SBPS mk	10	00	WE	d	y						
8393	8393	ME	SBPS mk	10	00	ME								
8394	8394	PA	SBPS mk	10	00	PA								
8395	8395	BR	SBPS mk	10	00	BR								
8396	8396	DL	SBPS mk	10	00	DL								
8397	8397	TA	SBPS mk	10	00	TA								
8399	8399	GL	SBPS mk	10	00	GL								

**BGC Unit: SBPS xc****LMES Zone ID: 84****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	11,214.1	0.54%
Williams Lake TSA	1,123,462.4	22.78%
100 Mile House TSA	0.0	0.00%
<b>Cariboo Region</b>	<b>1,134,676.5</b>	<b>13.77%</b>

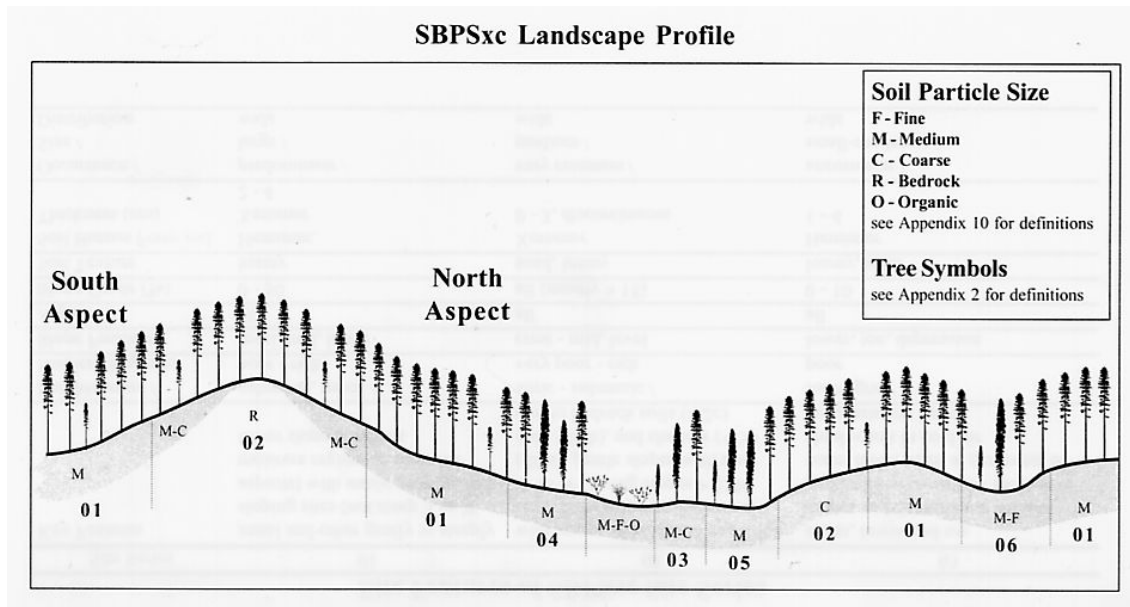
**List of Site Series Codes Defined for use in SBPS xc**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	LK	PI - Kinnikinnick - Feathermoss	mesic	All upper to lower moisture shedding locations
02	LC	PI - Kinnikinnick - Cladonia	submesic - subxeric	Shallow Crests, Coarse Textures, Steep SW slopes
02	LC	PI - Kinnikinnick - Cladonia, Shallow	submesic - subxeric	Shallow Crests
02	LC	PI - Kinnikinnick - Cladonia, Sand	submesic - subxeric	Coarse textured materials
02	LC	PI - Kinnikinnick - Cladonia, Typic	submesic - subxeric	Steep SW facing slopes (> 30%)
03	SB	Sxw - Scrub birch - Fen moss	subhygric	Wet, flat frosty toe slopes and wetland buffers
04	SF	Sxw - Scrub birch - Feathermoss	subhygric	Slightly moist, not frosty, seepage slopes in toes
05	SH	Sxw - Horsetail - Glow moss	subhygric - hygric	Wettest and flattest parts of depressions (< 5%)
06	SM	Sxw - Horsetail - Meadowrue	hygric - subhygric	Sloping valleys, rich wet, not frosty, high water table
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	MW	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GL	Glacier Permanent Ice and Snow		
00	RO	Rock		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

### Landscape Profile Diagram: SBPS xc



### Example Attribute Class Rule File for SBPS xc (arule8430)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.50
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20.00
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30.00
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20.00
5	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10.00
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4.00
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2.00
8	relzfile	Z2ST	Near_Base	5	15.00	0.00	20.00	0.00	20.00	5.00
9	relzfile	Z2ST	Above_Base	4	25.00	20.00	500.00	20.00	500.00	5.00
10	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.50
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.20
12	formfile	QWETI	Dry	5	6.80	6.80	6.80	0.00	7.00	0.20
13	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	7.00	8.40	1.20
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.50
15	formfile	QWETI	Med2SIWet	1	9.00	9.00	9.00	7.00	10.00	1.00
16	formfile	QWETI	SI_Wet	1	10.00	10.00	10.00	9.20	10.80	0.80
17	formfile	QWETI	SLWet2Wet	1	11.00	11.00	11.00	10.00	11.00	1.00
18	formfile	QWETI	Wet	1	11.50	11.50	11.50	11.00	12.00	0.50
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.50
20	formfile	SLOPE	Steep	4	18.00	18.00	18.00	15.00	100.00	3.00
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1.00
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1.00
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1.00
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1.00
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1.00
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1.00
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45.00
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45.00
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5.00
30	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1.00
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5.00
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20.00
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1.00
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50.00
36	geofile	Z2wet	WetZ_LT05	5	2.00	2.00	2.00	0.00	3.00	1.00
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.10
38	geofile	N2Wet	Sand_Fringe	4	3.00	3.00	3.00	2.00	4.00	1.00
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5.00
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5.00

**Example Fuzzy Ecological Class Rule File for SBPS xc (crule8430)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH8402c	Crest	20	1	8402	02 Shallow Crest	MH8414s	Med2SIWet	30	8	8401	01 Mid - Low SW
MH8402c	Dry	30	1	8402		MH8414s	SlopeLT20	10	8	8401	
MH8402c	SlopeLT30	20	1	8402		MH8414s	Gentle_SW	20	8	8401	
MH8402c	Med2Crs	10	1	8402		MH8414s	Deep	10	8	8401	
MH8402c	Shallow	40	1	8402		MH8443L	Low2Toe	30	9	8443	04 < 10% Lowlying Toe
MH8402c	Hi_Ridge	10	1	8402		MH8443L	Sl_Wet	30	9	8443	
MH8421c	Crest	20	2	8421	01 Deep Crest	MH8443L	SlopeLT10	20	9	8443	
MH8421c	Dry	30	2	8421		MH8443L	Med2Crs	10	9	8443	
MH8421c	SlopeLT30	20	2	8421		MH8443L	Near_Base	10	9	8443	
MH8421c	Med2Crs	10	2	8421		MH8413L	Low2Toe	30	10	8413	01 < 10% Elevated Toe
MH8421c	Deep	10	2	8421		MH8413L	Sl_Wet	30	10	8413	
MH8421c	Hi_Ridge	10	2	8421		MH8413L	SlopeLT10	20	10	8413	
MH8411c	Crest	20	3	8411		MH8413L	Med2Crs	10	10	8413	
MH8411c	Dry	30	3	8411	01 Deep Low Knoll	MH8413L	Above_Base	10	10	8413	
MH8411c	SlopeLT30	20	3	8411		MH8434t	Toe	30	11	8434	03 < 5% Lowlying Toe
MH8411c	Med2Crs	10	3	8411		MH8434t	SLWet2Wet	30	11	8434	
MH8411c	Deep	10	3	8411		MH8434t	SlopeLT05	20	11	8434	
MH8411c	Low_Knoll	10	3	8411		MH8434t	Medium	10	11	8434	
MH8402a	Crest2Mid	30	4	8422	02 Steep SW	MH8434t	Near_Base	10	11	8434	
MH8402a	VDry2SIDry	30	4	8422		MH8415t	Toe	30	12	8415	04 < 5% Upper Toe
MH8402a	Steep_SW	20	4	8422		MH8415t	SLWet2Wet	30	12	8415	
MH8402a	Med2Crs	10	4	8422		MH8415t	SlopeLT05	20	12	8415	
MH8402a	Deep	10	4	8422		MH8415t	Medium	10	12	8415	
MH8412n	Crest2Mid	30	5	8412	01k Steep NE	MH8415t	Above_Base	10	12	8415	
MH8412n	VDry2SIDry	30	5	8412		MH8406v	Valley	30	13	8406	06 < 5% Flat Valley
MH8412n	Steep_NE	20	5	8412		MH8406v	Wet2V_Wet	30	13	8406	
MH8412n	Med2Crs	10	5	8412		MH8406v	SlopeGT05	20	13	8406	
MH8412n	Deep	10	5	8412		MH8406v	Medium	10	13	8406	
MH8401u	Up2Mid	30	6	8401	01 Upper Mesic	MH8406v	Deep	10	13	8406	
MH8401u	Dry2SIDry	30	6	8401		MH8405f	Valley	30	14	8405	05 > 5% Sloping Valley
MH8401u	SlopeLT20	20	6	8401		MH8405f	Wet2V_Wet	30	14	8405	
MH8401u	Med2Crs	10	6	8401		MH8405f	SlopeLT05	20	14	8405	
MH8401u	Deep	10	6	8401		MH8405f	Medium	10	14	8405	
MH8414n	Mid2Low	30	7	8401	01 Mid-Low NE	MH8405f	Deep	10	14	8405	
MH8414n	Med2SIWet	30	7	8401		MH8453m	WetZ_LT05	50	15	8453	05 Margin to Wetland
MH8414n	SlopeLT20	10	7	8401		MH8453m	WetL_LT200	50	15	8453	
MH8414n	Gentle_NE	20	7	8401		MH8446s	Hi_Seep	80	16	8446	06 Seepage Area
MH8414n	Deep	10	7	8401		MH8446s	Med2Crs	20	16	8446	
						MH8455o	Organic	99	17	8455	05 Wet Organics
						ML8435f	Sand_Fringe	99	18	8435	03 Frosty Sand Fringe

**PEM Entity Descriptions for: SBPS xc**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8401	SBPS xc	01	LK	j	d	8401 was mapped in a variety of landform positions ranging mainly from upper to lower slopes. In areas of MEDIUM textured materials it occupies most of the landscape except steep upper slopes, shallow crests and the very lowest toe slopes and depressions.
8402	SBPS xc	02	LC	v	r	8402 was mapped as a typical dry crest with shallow (<50 cm) soils. It only occurs within areas mapped as shallow, but does not always occupy the full extent of areas mapped as shallow if these areas are not also dry crests.
8405	SBPS xc	05	SH	j	d	8405 areas were mapped ONLY in areas mapped as MEDIUM textured materials. 8405 areas occurred in the lowest and wettest parts of the landscape in depressions, hollows and swales that had slope gradients of less than 5%. These areas may contain a mixture of dominantly wet 05 site series along with a component of wet, frosty 03 site series.
8406	SBPS xc	06	SM	j	d	8406 areas were mapped ONLY in areas mapped as MEDIUM textured materials. 8406 areas were restricted to sloping valleys and channels that were expected to have both a high water table and strong onward movement of both seepage water and cold air due to slope gradients that encouraged onward flow. 8406 was not widely mapped. It occurs mainly along permanent streams that have persistent seepage and free water within 50 cm but that are not generally in areas of frost accumulation.
8411	SBPS xc	01	LK	d	x	8411 was mapped on the crests or crowns of low knolls and ridges. These areas may be slightly drier than most typical 01 areas but they are likely dominated by 01 site series with perhaps a bit of 02
8412	SBPS xc	01	LK	k	x	8412 was mapped on steep upper NE facing slopes with slope > 30% in areas mapped as MEDIUM TEXTURED. These steep NE facing slopes may be slightly drier than normal but are expected to consist mostly of 01 site series with perhaps some 02
8413	SBPS xc	01	LK	j	d	8413 was added, at the suggestion of the Regional Ecologist, to reduce the extent of the 8443 seepage areas. 8413 was mapped ONLY in areas mapped as having MEDIUM textured materials. 8413 occupies moist lower to toe slope positions that are more than 25 m above local base level. 8413 reduces the extent of 8443 by separating out similar lower to toe slope landform positions that are more than 25 m above local base level. 8413 areas are predicted to be occupied mainly by the normal mesic 01 site series along with some amounts of moister 04 site series.
8415	SBPS xc	04	SF	j	d	8415 was added, at the suggestion of the Regional Ecologist, to reduce the extent of the 8434 flat, frosty wet areas. 8415 was mapped ONLY in areas mapped as having MEDIUM textured materials. 8415 occupies moist, frosty toe slope positions that are more than 25 m above local base level. 8415 reduces the extent of 8434 by separating out similar level, toe slope landform positions that are more than 25 m above local base level. 8415 areas are predicted to be occupied mainly by the moist, not frosty 04 site series along with considerable amounts of normal mesic 01 and moist, frosty 03 site series.
8420	SBPS xc	02	LC	c	d	8420 was mapped ONLY in areas of COARSE textured materials. It occupies all upper landform positions from crest to lower slopes in these coarse areas, except for steep NE or SW slopes. It is expected to consist almost exclusively of coarse dry 02 site series.
8421	SBPS xc	01	LK	r	x	8421 was mapped on dry crests on high ridges that were NOT mapped as shallow. These dry crest positions likely contain some drier than mesic site series (02) along with typical 01
8422	SBPS xc	02	LC	w	d	8422 was mapped on steep dry SW slopes with slope > 30% in areas mapped as MEDIUM TEXTURED. These steep SW facing slopes are expected to be mostly drier than mesic and to consist of a mixture of 02a and 01 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8423	SBPS xc	01	LK	c	d	8423 was mapped ONLY in areas of COARSE textured materials. It occupies the very lowest to toe slope positions that are not part of defined channels or depressions. It may be dominated by the finer mesic 01 site series along with a mixture of coarse 02 and frosty 03 site series.
8424	SBPS xc	02	LC	c	d	8424 was mapped ONLY in areas of COARSE textured materials. It occupies lower to toe slope positions in these coarse areas. These lower areas may show some accumulation of finer textured slope wash and alluvium and may include considerable amounts of the slightly less dry 01 site series along with some drier 02 and 03.
8425	SBPS xc	05	SH	c	d	8425 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 8425 occupies the same lowest and wettest positions in the landscape as 8405, except that the landscape is dominated by coarse textured materials. We are assuming that 8425 contains a similar mix of 05 site series with some 03 that is postulated for 8405. It may contain somewhat less wet site series if the depressions and hollows are not infilled with finer textured materials and remain coarse textured.
8426	SBPS xc	06	SM	c	d	8426 areas are the COARSE textured equivalent of 8406 areas. 8426 areas were mapped ONLY in areas mapped as being COARSE textured. They were restricted to sloping valleys and channels that occur along permanent streams and that have persistent seepage and free water within 50 cm but that are not generally in areas of frost accumulation.
8427	SBPS xc	02	LC	w	c	8427 was mapped on steep dry SW slopes with slope > 30% in areas mapped as COARSE TEXTURED. These steep SW facing slopes are expected to be mostly drier than mesic and to consist of a mixture of 02a and 01 site series.
8428	SBPS xc	02	LC	k	c	8428 was mapped on steep upper NE facing slopes with slope > 30% in areas mapped as COARSE TEXTURED. These steep NE facing slopes may be slightly drier than normal and are expected to consist mostly of the drier 02k site series with perhaps some 01.
8432	SBPS xc	01	LK	c	x	8432 areas were mapped ONLY in areas of COARSE TEXTURE where SEEPAGE had been recognized. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. 8432 areas occupy the drier, shedding upslope locations in coarse areas affected by seepage. The Regional Ecologist recommended separating seepage areas on coarse textured materials into drier, upper shedding components (8432) occupied by the 02 Site Series and lower, wetter, receiving positions (8433) occupied by the wet, frosty 03 Site Series.
8433	SBPS xc	03	SB	c	y	8433 areas were mapped ONLY in areas of COARSE TEXTURE and SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. 8433 areas occupy the lower, wetter, receiving locations in coarse areas affected by seepage. The Regional Ecologist recommended separating seepage areas on coarse textured materials into drier, upper shedding components (8446) occupied by the 02 Site Series and lower, wetter, receiving positions occupied by the wet, frosty 03 Site Series.
8434	SBPS xc	03	SB	j	d	8434 was mapped ONLY in areas mapped as having MEDIUM textured materials. 8434 occupies the lowest toe slope positions that are not in defined drainage ways, channels or depressions. These areas are often marginal to wetlands and are low enough and level enough that they may accumulate and hold cold air drainage leading to cold frosty conditions that are also moderately wet. 8434 areas are considered likely to contain a mixture of wet frosty 03 and wet but not frosty 04 site series.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8435	SBPS xc	03	SB	j	d	8435 was mapped as a buffer around the margins of areas of non-productive brush or non-forested meadows. The regional ecologist indicated that these slightly wet frosty areas were typically around the margins of these brush or meadow areas. Such areas would typically be characterized by the presence of Black Spruce but we had no input data sets that provided us with a reliable indication of the presence or absence of Black Spruce. In the absence of any other effective means of predicting the locations where this wet frosty site series might occur, we elected to simply predict that all areas within a buffer marginal to areas of brush or meadow may contain a mixture of wetter and frosty site series 03 and 05.
8443	SBPS xc	04	SF	j	d	8443 was mapped ONLY in areas mapped as having MEDIUM textured materials. 8443 occupies the moist lower to toe slope positions that are expected to receive some seepage but that are not wet enough to have a water table above 50 cm and have sufficient slope that they are unlikely to accumulate and retain frosty cold air drainage. 8443 is considered to consist of mostly the slightly wetter 04 site series that occurs in seepage areas.
8446	SBPS xc	06	SM	y		8446 areas were mapped in areas of MEDIUM TEXTURE and SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of 06 and 04 site series to areas mapped as 8446.
8453	SBPS xc	05	SH	j	d	8453 areas were mapped around the margins of all non-forested wetlands and open water. These margin areas were considered likely to exhibit a mixture of wet 05 site series and wet frosty 03 site series. 8453 areas are likely very similar to areas mapped as 8405.
8455	SBPS xc	05	SH	p	j	8455 was mapped on ALL forested areas that were mapped as having ORGANIC textured materials. We are essentially accepting the interpreter's judgment that these are forested organic areas. They are expected to consist almost exclusively of 05 site series.
8463	SBPS xc	02	LC	c	d	8463 was added, at the suggestion of the Regional Ecologist, to reduce the extent of the 8424 toe slopes in coarse areas. 8463 was mapped ONLY in areas mapped as having COARSE textured materials. 8463 occupies moist lower to toe slope positions that are more than 25 m above local base level. 8463 reduces the extent of 8424 by separating out similar lower to toe slope landform positions that are more than 25 m above local base level. 8463 areas are predicted to be occupied mainly by the coarse, dry 02 site series along with some amounts of the normal mesic 01 site series and frosty 03 site series.
8465	SBPS xc	01	LK	c	d	8465 was added, at the suggestion of the Regional Ecologist, to reduce the extent of the 8423 flat, frosty wet areas. 8465 was mapped ONLY in areas mapped as having COARSE textured materials. 8465 occupies moist, frosty toe slope positions that are more than 25 m above local base level. 8465 reduces the extent of 8423 by separating out similar level, toe slope landform positions that are more than 25 m above local base level. 8465 areas are predicted to be occupied mainly by the normal mesic 01 site series along with inclusions of coarse frosty 03 site series and coarse, dry 02 site series.
8491	SBPS xc	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8492	SBPS xc	00	WE			These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by manual interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8493	SBPS xc	00	ME			These areas consist of all areas manually digitized by manual interpreters as being non-forested upland consisting of meadows.
8494	SBPS xc	00	PA			These areas consist of all areas manually digitized by manual interpreters as being non-forested upland consisting of improved pastures.
8495	SBPS xc	00	BR			These areas were mapped visually by manual interpreters as areas of scrub brush. This description appears to apply quite well to these areas of scrub brush.
8496	SBPS xc	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
8497	SBPS xc	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
8498	SBPS xc	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
8499	SBPS xc	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: SBPS xc**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8401	8401	01	SBPS xc	9	01	LK	j	d	1	04	SF			
8402	8402	02	SBPS xc	8	02	LC	v	r	2	01	LK			
8405	8405	05	SBPS xc	8	05	SH	j	d	2	03	SB			
8406	8406	06	SBPS xc	9	06	SM	j	d	1	04	SF			
8411	8401	01	SBPS xc	9	01	LK	d	x	1	02	LC			
8412	8412	01	SBPS xc	9	01	LK	k	x	1	02	LC			
8413	8401	01	SBPS xc	7	01	LK	j	d	3	04	SF			
8415	8415	04	SBPS xc	6	04	SF	j	d	2	01	LK	2	04	SF
8420	8420	02	SBPS xc	9	02	LC	c	d	1	01	LK			
8421	8421	01	SBPS xc	7	01	LK	r	x	3	02	LC			
8422	8422	02	SBPS xc	6	02	LC	w	d	4	01	LK			
8423	8423	01	SBPS xc	5	01	LK	c	d	3	02	LC	2	03	SB
8424	8420	02	SBPS xc	6	02	LC	c	d	4	01	LK			
8425	8425	05	SBPS xc	7	05	SH	c	d	3	03	SB			
8426	8426	06	SBPS xc	7	06	SM	c	d	3	04	SF			
8427	8427	02	SBPS xc	10	02	LC	w	c						
8428	8428	02	SBPS xc	6	02	LC	k	c	4	01	LK			
8432	8432	01	SBPS xc	6	01	LK	c	x	4	03	SB			
8433	8433	03	SBPS xc	6	03	SB	c	y	4	04	SF			
8434	8434	03	SBPS xc	7	03	SB	j	d	3	04	SF			
8435	8435	03	SBPS xc	7	03	SB	j	d	3	05	SH			
8443	8443	04	SBPS xc	8	04	SF	j	d	2	01	LK			
8446	8446	06	SBPS xc	6	06	SM	y		4	04	SF			
8453	8453	05	SBPS xc	7	05	SH	j	d	3	03	SB			
8455	8455	05	SBPS xc	9	05	SH	p	j	1	03	SB			
8463	8420	02	SBPS xc	6	02	LC	c	d	3	01	LK	1	03	SB
8465	8423	01	SBPS xc	6	01	LK	c	d	3	03	SB	1	02	LC
8491	8491	OW	SBPS xc	10	00	OW								
8492	8492	WE	SBPS xc	10	00	WE								
8493	8493	ME	SBPS xc	10	00	ME								
8494	8494	PA	SBPS xc	10	00	PA								
8495	8495	BR	SBPS xc	10	00	BR								
8496	8496	DL	SBPS xc	10	00	DL								
8497	8497	TA	SBPS xc	10	00	TA								
8498	8498	AV	SBPS xc	10	00	AV								
8499	8499	GL	SBPS xc	10	00	GL								

**BGC Unit: SBS dk****LMES Zone ID: 85****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	719.6	0.03%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	0.0	0.00%
Cariboo Region	719.6	0.01%

**List of Site Series Codes Defined for use in SBS dk**

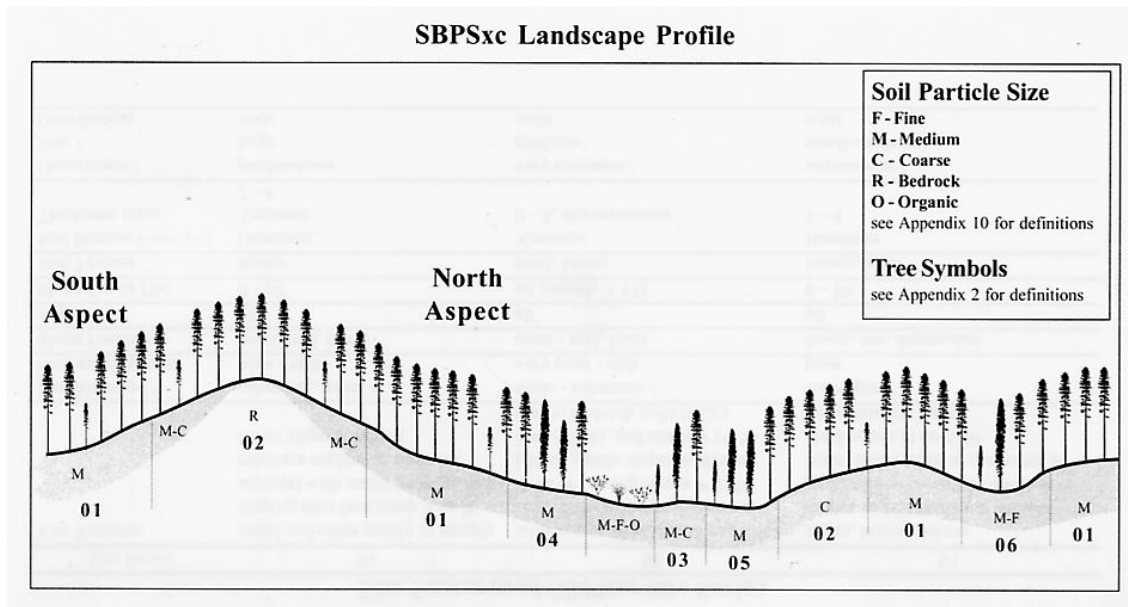
SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SP	Sxw - Spirea - Purple peavine	mesic	MEDIUM textures, All upper shedding parts of the landscape
02	LJ	PI - Juniper - Ricegrass	xeric	Shallow Crests, Thin, Dry Soils (No SHALLOW Forested Mapped)
03	LC	PI - Feathermoss - Cladina	subxeric	COARSE, All upper to lower shedding slopes (No COARSE Mapped)
04	DS	Fd - Soopolallie - Feathermoss	subxeric	Steep SW - Dry Warm Upper Slopes (Dry Aspen-Doug Fir Forest)
05	SF	Sxw - Spirea - Feathermoss	submesic	MEDIUM, Slightly Drier Forested Deep Crests and Knolls
06	ST	Sxw - Twinberry - Coltsfoot	subhygric	Moist, Richer, Forested Seepage, Sloping Valleys and Toes, WT > 50
07	SH	Sxw - Horsetail, Poorly drained	subhygric - hygric	Level to Gentle, Wet, Valleys, hollows and depressions, WT < 50 cm
08	CD	Act - Dogwood - Prickly rose	hygric	Cottonwoods on COARSE Low Benches (None Mapped)
09	BS	Sb - Creeping-snowberry - Sphagnum (Wb01 - Peat-moss)	hygric	Forested ORGANICS; Cold, Very Wet, Flat, Frosty Depressions
10	SS	Sb - Soft-leaved sedge - Sphagnum (Wb08 - Peat-moss)	hygric - subhydric	Forested Swamp - Mapped in Wet Margins to Lakes and Wetlands
81	SW	Saskatoon - Slender wheatgrass	xeric - subxeric	Steep SW - Dry Warm Grassed Upper Slopes, SHALLOW SOILS
82	BW	Bluegrass - Slender wheatgrass	subxeric - submesic	Steep SW - Dry Warm Grassed Upper Slopes, DEEP SOILS
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2005 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #24, "A Field Guide for Site Identification and Interpretation for the Prince George Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: SBS dk



## Example Attribute Class Rule File for SBS dk (arule8530)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
3	relzfile	PCTZ2ST	Up2Low	1	50.00	50.00	50.00	25.00	75.00	25
4	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	2.00	28.00	13
5	relzfile	PCTZ2ST	Not_Crest	5	80.00	80.00	80.00	0.00	85.00	5
6	relzfile	Z2PIT	Not_Valley	4	20.00	20.00	20.00	15.00	500.00	5
7	relzfile	Z2PIT	In_Valley	5	15.00	15.00	15.00	0.00	20.00	5
8	relzfile	PCTZ2PIT	Near_Base	5	10.00	10.00	10.00	0.00	15.00	5
9	geofile	ELEV	Z_GT_950	4	975.00	975.00	975.00	950.00	9999.00	25
10	geofile	ELEV	Z_LT_950	5	925.00	925.00	925.00	0.00	950.00	25
11	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
12	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
13	formfile	QWETI	Dry2Med	5	8.50	8.50	8.50	0.00	9.00	0.5
14	formfile	QWETI	SLWet2Wet	4	9.50	9.50	9.50	9.00	99.00	0.5
15	formfile	QWETI	Wet2V_Wet	4	11.50	11.50	11.50	11.00	50.00	0.5
16	formfile	SLOPE	Steep	4	25.00	25.00	25.00	20.00	100.00	5
17	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
18	formfile	SLOPE	SlopeLT20	5	18.00	18.00	18.00	0.00	20.00	2
19	formfile	SLOPE	SlopeGT05	4	7.00	7.00	7.00	6.00	100.00	1
20	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
21	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
22	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
23	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
24	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5
25	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
26	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
27	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
28	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
29	geofile	L2Wet	Wet_LT200	5	100.00	100.00	100.00	0.00	150.00	50
30	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
31	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
32	geofile	B3	No_FC	4	200.00	200.00	200.00	200.00	255.00	5
33	geofile	B3	Thin_FC	1	170.00	170.00	170.00	140.00	200.00	30
34	geofile	B3	Mod_FC	1	100.00	100.00	100.00	60.00	140.00	40
35	geofile	B3	Mod2Hi_FC	5	135.00	135.00	135.00	0.00	140.00	5
36	geofile	B3	Heavy_FC	5	50.00	50.00	50.00	0.00	60.00	10
37	formfile	NEW_ASP	Cottonwd	4	500.00	500.00	500.00	500.00	1000.00	10

### Example Fuzzy Ecological Class Rule File for SBS dk (crule8530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H8581c	Crest	20	1	8581	81 Shallow Crest, Grass	H8501n	Not_Crest	15	9	8501	01 Forested Up-Low NE
H8581c	VDry	20	1	8581		H8501n	Not_Valley	15	9	8501	
H8581c	SlopeLT20	20	1	8581		H8501n	Up2Low	20	9	8501	
H8581c	Med2Crs	10	1	8581		H8501n	Z_GT_950	10	9	8501	
H8581c	Shallow	40	1	8581		H8501n	Dry2Med	10	9	8501	
H8581c	Hi_Ridge	10	1	8581		H8501n	Gentle_NE	20	9	8501	
H8581c	No_FC	20	1	8581		H8501n	Mod2Hi_FC	20	9	8501	
H8581s	Not_Crest	10	2	8581	81 Steep SW Shallow Grass	H8501s	Not_Crest	15	10	8501	01 Forested Up-Low SW
H8581s	Not_Valley	10	2	8581		H8501s	Not_Valley	15	10	8501	
H8581s	Up2Mid	10	2	8581		H8501s	Up2Low	20	10	8501	
H8581s	VDry2SDry	10	2	8581		H8501s	Z_GT_950	10	10	8501	
H8581s	Steep_SW	20	2	8581		H8501s	Dry2Med	10	10	8501	
H8581s	Med2Crs	10	2	8581		H8501s	Gentle_SW	20	10	8501	
H8581s	Shallow	20	2	8581		H8501s	Heavy_FC	20	10	8501	
H8581s	Hi_Ridge	10	2	8581		H8516v	Crest	20	11	8516	06 Moist Crest in Valley
H8581s	No_FC	20	2	8581		H8516v	In_Valley	20	11	8516	
H8582s	Not_Crest	10	3	8582	82 Steep SW Dry Grass	H8516v	Up2Mid	20	11	8516	
H8582s	Not_Valley	10	3	8582		H8516v	Z_LT_950	10	11	8516	
H8582s	Up2Mid	10	3	8582		H8516v	VDry2SDry	10	11	8516	
H8582s	VDry2SDry	10	3	8582		H8516v	SlopeGT05	10	11	8516	
H8582s	Steep_SW	20	3	8582		H8516v	Mod2Hi_FC	10	11	8516	
H8582s	Med2Crs	10	3	8582		H8567v	Near_Base	20	12	8567	06 Moist Crest in Valley
H8582s	Deep	20	3	8582		H8567v	In_Valley	20	12	8567	
H8582s	Hi_Ridge	10	3	8582		H8567v	Crest	20	12	8567	
H8582s	No_FC	20	3	8582		H8567v	Z_LT_950	10	12	8567	
H8542s	Not_Crest	10	4	8542	04 Steep SW Dry Forest	H8567v	VDry2SDry	10	12	8567	
H8542s	Not_Valley	10	4	8542		H8567v	SlopeGT05	10	12	8567	
H8542s	Up2Mid	10	4	8542		H8567v	Mod2Hi_FC	10	12	8567	
H8542s	VDry2SDry	10	4	8542		H8506s	Not_Valley	30	13	8506	06 Moist Sloping Draws
H8542s	Steep_SW	20	4	8542		H8506s	Up2Low	20	13	8506	
H8542s	Med2Crs	10	4	8542		H8506s	Z_GT_950	10	13	8506	
H8542s	Shallow	20	4	8542		H8506s	SLWet2Wet	10	13	8506	
H8542s	Hi_Ridge	10	4	8542		H8506s	Slope_GT05	10	13	8506	
H8542s	Thin_FC	20	4	8542		H8506s	Mod2Hi_FC	10	13	8506	
H8541s	Not_Crest	10	5	8541	04 Steep SW Dry Forest	H8561t	Near_Base	20	14	8561	06 Moist Sloping Toes
H8541s	Not_Valley	10	5	8541		H8561t	In_Valley	20	14	8561	
H8541s	Up2Mid	10	5	8541		H8561t	Low2Toe	20	14	8561	
H8541s	VDry2SDry	10	5	8541		H8561t	Z_LT_950	10	14	8561	
H8541s	Steep_SW	20	5	8541		H8561t	SLWet2Wet	10	14	8561	
H8541s	Med2Crs	10	5	8541		H8561t	SlopeGT05	10	14	8561	
H8541s	Deep	20	5	8541		H8561t	Mod2Hi_FC	10	14	8561	
H8541s	Hi_Ridge	10	5	8541		H8566v	Near_Base	20	15	8566	06 Moist Level Valley Toe
H8541s	Thin_FC	20	5	8541		H8566v	In_Valley	20	15	8566	
H8502c	Crest	20	6	8502	02 Shallow Crest	H8566v	Low2Toe	20	15	8566	
H8502c	VDry	20	6	8502		H8566v	Z_LT_950	10	15	8566	
H8502c	SlopeLT20	20	6	8502		H8566v	SLWet2Wet	10	15	8566	
H8502c	Med2Crs	10	6	8502		H8566v	SlopeLT05	10	15	8566	
H8502c	Shallow	40	6	8502		H8566v	Mod2Hi_FC	10	15	8566	
H8502c	Hi_Ridge	10	6	8502		H8507f	Low2Toe	20	16	8507	07 Flat, Wet Valley Floor
H8502c	Mod_FC	20	6	8502		H8507f	Wet2V_Wet	25	16	8507	
H8551c	Crest	10	7	8551	05 Deep Dry Forest Crest	H8507f	SlopeLT05	25	16	8507	
H8551c	Not_Valley	10	7	8551		H8507f	Med2Crs	10	16	8507	
H8551c	VDry	20	7	8551		H8507f	Deep	10	16	8507	
H8551c	SlopeLT20	20	7	8551		H8507f	Mod2Hi_FC	10	16	8507	
H8551c	Med2Crs	10	7	8551		H8506s	Hi_Seep	80	17	8506	06 Moist Seepage Area
H8551c	Deep	10	7	8551		H8506s	Med2Crs	20	17	8506	
H8551c	Hi_Ridge	10	7	8551		H8510m	WetZ_LT05	50	18	8510	10 Wet Margins
H8551c	Mod_FC	10	7	8551		H8510m	WetL_LT200	50	18	8510	
H8515c	Crest	10	8	8515	01 Forested Crest in Valley	H8509o	Organic	99	19	8509	09 Forested Organics
H8515c	In_Valley	20	8	8515							
H8515c	VDry	20	8	8515							
H8515c	SlopeLT20	20	8	8515							
H8515c	Med2Crs	10	8	8515							
H8515c	Deep	10	8	8515							
H8515c	Mod_FC	10	8	8515							

**PEM Entity Descriptions for: SBS dk**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8501	SBS dk	01	SP	j	d	8501 areas were mapped on a wide range of mesic sites located on deep soils and gentle to moderate slopes from upper to lower slope positions. 8501 areas are associated with moderate to heavy tree cover as inferred from LandSat Band 3 data. gentle slope; deep, medium - textured soil
8502	SBS dk	02	LJ	v	r	8502 was mapped on dry upper crests with gentler slopes (< 20%) that were mapped as shallow to bedrock. Gentle slope; crest position; shallow soils over bedrock. No areas of shallow soils were mapped.
8503	SBS dk	03	LC	c	d	NO areas of 8503 were mapped in the small portion of the SBS dk that was included in the PEM as no coarse textured parent materials were mapped by interpreters. Gentle slope; deep, coarse - textured soils
8506	SBS dk	06	ST	j	d	8506 areas were mapped on deep soils in draws, hollows and gullies that drain down into the main valleys but that are not included in the main valleys. 8506 areas may be quite strongly sloping and are moister than normal due to sub-soil seepage from upslope drainage. Some of the 8506 areas that are located on steeper SW facing hillslopes may not be moist enough to qualify as 06 Site Series. These SW facing hillslopes may be dominated by 01 or even 05 Site Series. Gentle slope; deep, medium - textured soils, slightly richer than average
8507	SBS dk	07	SH	j	d	8507 areas were defined as occurring adjacent to stream channels and in the lowest and wettest portions of draws and hollows with very low slope gradients (< 5%). gentle slope to depressional; deep, medium - textured soil
8508	SBS dk	08	CD	a	c	8508 was not mapped in the Cariboo PEM project area because no areas of COARSE materials were mapped for the SBS dk and the Forest Cover maps did not indicate the presence of any Cottonwood vegetation. Active floodplain; deep, coarse - textured soil.
8509	SBS dk	09	BS	p	j	8509 was mapped ONLY where interpreters had visually mapped forested organic parent materials. Treed bog; organic wetland.
8510	SBS dk	10	SS	j	d	8510 areas were mapped in level to depressional low-lying areas around the margins of non-forested wetlands, lakes and ponds. 8510 areas most probably consist of a sequence of wetter than normal Site Series that grade from 10 nearest the wetland through 07 and then 06 as one progresses upslope away from the wetland. Forested swamp, poorly drained ; level to depressional; organic veneer or blanket
8515	SBS dk	01	SP	j	d	8515 was mapped on the tops of gentle ridges or knolls with deep soils located in valley bottoms and on islands in lakes. 8515 is associated with areas that have been mapped as leading spruce and which may therefore be somewhat moister than normal for this landform setting. 8515 areas may need to be reviewed and possibly relabeled as dominantly 06. At present they are estimated to contain a mixture of 01 and 06 site series. Gentle slope; deep, medium - textured soil
8516	SBS dk	06	ST	j	d	8516 areas were mapped on deep soils in upper to lower landform positions just below the crests of gentle ridges located in valley bottom positions near lakes. 8516 areas are associated with areas mapped as leading spruce by the forest cover mapping. These areas in valley bottoms may be slightly moister and richer than normal and may be mostly 06 with some 01. Gentle slope; deep, medium - textured soils, slightly richer than average
8541	SBS dk	04	DS	w	d	8541 was mapped on steep dry SW facing slopes with DEEP soils where the vegetation cover was interpreted to be sparse aspen or Douglas Fir. These areas may in fact be a deciduous (aspen) ecosystem. Significant slope, of warm aspect; medium textured deep soils.
8542	SBS dk	04	DS	w	s	8542 was mapped on steep dry SW facing slopes mapped as SHALLOW to bedrock where the vegetation cover was interpreted to be sparse aspen or Douglas Fir. These areas may in fact be a deciduous (aspen) ecosystem. Significant slope, of warm aspect; medium textured shallow soils over bedrock.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8551	SBS dk	05	SF	r	d	8551 was mapped on the slightly drier crests of high ridges and knolls that had deep soils and gentle slopes (< 20%) and moderately thick tree cover as inferred from LandSat Band 3 data. 8551 may simply be a slightly drier variant of typical 01. Gentle slope; deep, medium- textured soils
8561	SBS dk	06	ST	j	d	8561 areas were mapped on deep soils that occupy gently to moderately sloping (5-20%) toe slopes of hillslopes that slope down into the main valleys. 8561 areas are moister than normal due to accumulation of seepage from upslope drainage. 8506 areas probably include a component of drier 01 in addition to the moister 06 Site Series. Gentle slope; deep, medium - textured soils, slightly richer than average
8566	SBS dk	06	ST	j	d	8566 areas were mapped on deep soils that occupy the lowest and flattest (< 5%) portions of toe slopes and lower terraces in the main valleys. 8566 areas are associated with leading spruce forest cover which is typically indicative of moister than normal conditions. 8566 areas probably include components both 06 and 07 Site Series. Gentle slope; deep, medium - textured soils, slightly richer than average
8567	SBS dk	06	ST	j	d	8567 areas were mapped on deep soils on the upper portions of very gentle knolls located in valley bottom positions near lakes. 8567 areas are associated with areas mapped as leading spruce by the forest cover mapping. These areas in valley bottoms appear to be slightly moister and richer than normal and may be mostly 06 with some 01. Gentle slope; deep, medium - textured soils, slightly richer than average
8581	SBS dk	81	SW	w	s	8581 was mapped on steep SW facing slopes with SHALLOW soils, where there was no significant observable forest cover. It is assumed that these steep dry slopes are covered by grasses. Significant slope, warm aspect; medium textured shallow soil over bedrock, base rich soil.
8582	SBS dk	82	BW	w	d	8582 was mapped on steep SW facing slopes with DEEP soils where there was no significant observable forest cover. It is assumed that these steep dry slopes are covered by grasses. Significant slope, warm aspect; deep, medium - textured soil.
8591	SBS dk	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8592	SBS dk	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation. non-forested bog
8593	SBS dk	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Herb rich meadow (cow parsnip - large leaved avens).
8594	SBS dk	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8595	SBS dk	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8596	SBS dk	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.

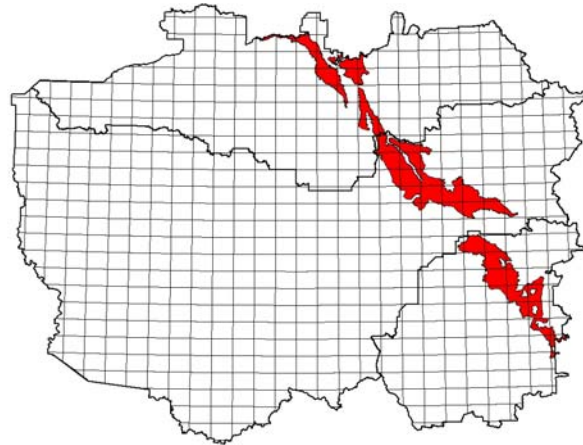


**PEM Entity Extended Legend with Proportions of Site Series for: SBS dk**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8501	8501	01	SBS dk	8	01	SP	j	d	2	06	ST			
8502	8502	02	SBS dk	7	02	LJ	v	r	2	01	SP	1	04	DS
8503	8503	03	SBS dk	10	03	LC	c	d						
8506	8506	06	SBS dk	6	06	ST	j	d	3	01	SP	1	05	SF
8507	8507	07	SBS dk	6	07	SH	j	d	3	06	ST	1	10	SS
8508	8508	08	SBS dk	10	08	CD	a	c						
8509	8509	09	SBS dk	10	09	BS	p	j						
8510	8510	10	SBS dk	6	10	SS	j	d	3	07	SH	1	06	ST
8515	8515	01	SBS dk	6	01	SP	j	d	4	06	ST			
8516	8516	06	SBS dk	7	06	ST	j	d	3	01	SP			
8541	8541	04	SBS dk	8	04	DS	w	d	2	05	SF			
8542	8542	04	SBS dk	6	04	DS	w	s	2	02	LJ	2	05	SF
8551	8551	05	SBS dk	6	05	SF	r	d	3	01	SP	1	02	LJ
8561	8506	06	SBS dk	7	06	ST	j	d	3	01	SP			
8566	8566	06	SBS dk	6	06	ST	j	d	3	07	SH	1	01	SP
8567	8516	06	SBS dk	7	06	ST	j	d	3	01	SP			
8581	8581	SW	SBS dk	7	81	SW	w	s	2	02	LJ	1	01	SP
8582	8582	BW	SBS dk	7	82	BW	w	d	2	01	SP	1	02	LJ
8591	8591	OW	SBS dk	10	00	OW								
8592	8592	WE	SBS dk	10	00	WE	d	y						
8593	8593	ME	SBS dk	10	00	ME								
8594	8594	PA	SBS dk	10	00	PA								
8595	8595	BR	SBS dk	10	00	BR								
8596	8596	DL	SBS dk	10	00	DL								

**BGC Unit: SBS dw1****LMES Zone ID: 86****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	84,206.1	4.06%
Williams Lake TSA	162,043.4	3.29%
100 Mile House TSA	117,901.5	9.56%
Cariboo Region	364,151.0	4.42%

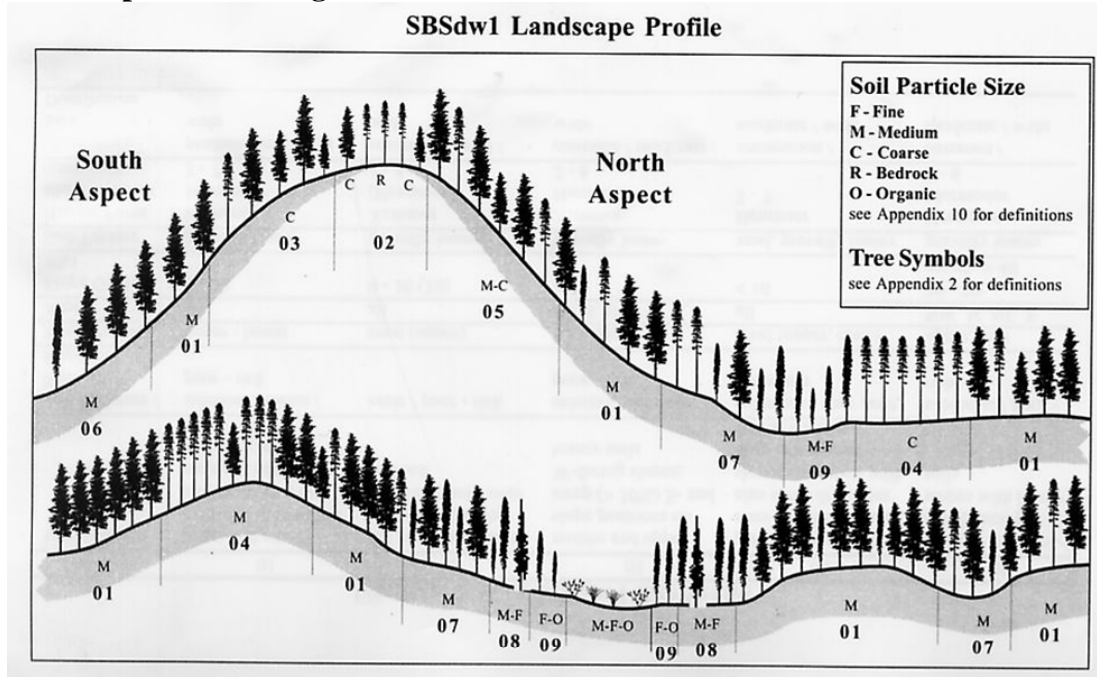
**List of Site Series Codes Defined for use in SBS dw1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SP	SxwFd - Pinegrass	mesic	All up to lower water shedding medium texture < 30% (COARSE TOES)
02	DC	FdPl - Cladonia	very xeric - xeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	DS	Fd - Saskatoon - Pinegrass	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04	LP	Pl - Pinegrass - Feathermoss	submesic	All COARSE upper shedding slopes, ALSO MEDIUM Deep Crests
05	SR	SxwFd - Ricegrass	submesic	Steep NE - Cool Dry slopes, ALSO COARSE Steep NE MID-LOW
06	ST	SxwFd - Thimbleberry	subhygric	Warm, Moist SW Toe Slopes (Rare Warm SW Seepage Toes)
07	SC	Sxw - Twinberry - Coltsfoot	subhygric	Moist - Not Frosty, Sloping Seepage, WT > 50 cm - MEDIUM & COARSE
08	SO	Sxw - Twinberry - Oak fern	subhygric	Moist, Rich, Not-Frosty, Fine Alluvial Sloping Valleys
09	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Flat (< 5%) Wet, Valleys and depressions, WT < 50 cm
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBS dw1**



**Example Attribute Class Rule File for SBS dw1 (arule8630)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	40.00	20.00	75.00	20.00	60.00	20
5	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	5.00	25.00	10
7	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
8	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
10	formfile	QWETI	VDry	5	6.10	6.10	6.10	0.00	6.30	0.2
11	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
12	formfile	QWETI	Dry	5	6.80	6.80	6.80	0.00	7.00	0.2
13	formfile	QWETI	Dry2SIDry	1	7.20	7.20	7.20	6.20	8.20	1
14	formfile	QWETI	SI_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
15	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
16	formfile	QWETI	Med2SIWet	1	9.40	9.40	9.40	8.80	10.00	0.6
17	formfile	QWETI	SI_Wet	1	9.60	9.60	9.60	8.80	10.40	0.8
18	formfile	QWETI	SIWet2Wet	1	10.00	10.00	10.00	9.40	10.60	0.6
19	formfile	QWETI	Wet	1	10.90	10.90	10.90	10.00	11.80	0.9
20	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
21	formfile	SLOPE	Steep	4	30.00	30.00	30.00	30.00	100.00	5
22	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
23	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1
24	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
25	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
26	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
27	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	200.00	200.00	200.00	0.00	250.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2st	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS dw1 (crule8630)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H8602c	Crest	30	1	8602	02 Shallow Crest	H8606s	Low2Toe	30	9	8606	06 < 20% Moist Low-Toe SW
H8602c	VDry	30	1	8602		H8606s	Sl_Wet	30	9	8606	
H8602c	SlopeLT30	10	1	8602		H8606s	SlopeLT20	10	9	8606	
H8602c	Med2Crs	10	1	8602		H8606s	Gentle_SW	20	9	8606	
H8602c	Shallow	40	1	8602		H8606s	Deep	10	9	8606	
H8602c	Hi_Ridge	10	1	8602		H8607L	Low2Toe	30	10	8607	07 < 15% Moist Low-Toe
H8642c	Crest	30	2	8642	04 Deep Dry High Ridge	H8607L	SLWet2Wet	30	10	8607	
H8642c	VDry	30	2	8642		H8607L	SlopeLT15	20	10	8607	
H8642c	SlopeLT30	10	2	8642		H8607L	Med2Crs	10	10	8607	
H8642c	Med2Crs	10	2	8642		H8607L	Deep	10	10	8607	
H8642c	Deep	10	2	8642		H8677t	Toe	30	11	8607	07 < 10% Moist Toe
H8642c	Hi_Ridge	10	2	8642		H8677t	SLWet2Wet	30	11	8607	
H8614c	Crest	20	3	8614	04 Deep Dry Low Knoll	H8677t	SlopeLT10	20	11	8607	
H8614c	VDry	30	3	8614		H8677t	Med2Crs	10	11	8607	
H8614c	SlopeLT30	20	3	8614		H8677t	Deep	10	11	8607	
H8614c	Med2Crs	10	3	8614		H8609s	Valley	30	12	8609	09 > 5% Sloping MED Valley
H8614c	Deep	10	3	8614		H8609s	Wet2V_Wet	30	12	8609	
H8614c	Low_Knoll	10	3	8614		H8609s	SlopeGT05	20	12	8609	
H8603s	Crest2Mid	30	4	8603	03 Steep SW upper	H8609s	Medium	10	12	8609	
H8603s	VDry2SDry	30	4	8603		H8609s	Deep	10	12	8609	
H8603s	Steep_SW	20	4	8603		H8608v	Valley	30	13	8608	08 > 5% FINE Alluvial
H8603s	Med2Crs	10	4	8603		H8608v	Wet2V_Wet	30	13	8608	
H8603s	Deep	10	4	8603		H8608v	SlopeGT05	20	13	8608	
H8605n	Crest2Mid	30	5	8605	05 Steep NE upper	H8608v	Fine	10	13	8608	
H8605n	VDry2SDry	30	5	8605		H8608v	Deep	10	13	8608	
H8605n	Steep_NE	20	5	8605		H8609f	Valley	30	14	8609	09 < 5% Flat Fine Valley
H8605n	Med2Crs	10	5	8605		H8609f	Wet2V_Wet	30	14	8609	
H8605n	Deep	10	5	8605		H8609f	SlopeLT05	20	14	8609	
H8601u	Up2Mid	30	6	8601	01 <30% UP-MID Shedding	H8609f	Fine	10	14	8609	
H8601u	Dry2SDry	30	6	8601		H8609f	Deep	10	14	8609	
H8601u	SlopeLT30	20	6	8601		H8609v	Valley	30	15	8609	09 < 5% Flat MED Valley
H8601u	Med2Crs	10	6	8601		H8609v	Wet2V_Wet	30	15	8609	
H8601u	Deep	10	6	8601		H8609v	SlopeLT05	20	15	8609	
H8601L	Mid2Low	30	7	8601	01 <30% MID-LOW Shedding	H8609v	Med2Crs	10	15	8609	
H8601L	Dry2SDry	30	7	8601		H8609v	Deep	10	15	8609	
H8601L	SlopeLT30	20	7	8601		H8678m	WetZ_LT05	50	16	8609	09 Wet MEDIUM Margins
H8601L	Med2Crs	10	7	8601		H8678m	Wet_LT200	50	16	8609	
H8601L	Deep	10	7	8601		H8676s	Hi_Seep	80	17	8676	07 Drier Seepage Areas
H8615n	Low2Toe	30	8	8615	01 < 20% Low-Toe NE	H8676s	Sl_Wet	10	17	8676	
H8615n	Sl_Wet	30	8	8615		H8676s	SlopeGT05	10	17	8676	
H8615n	SlopeLT20	10	8	8615		H8678s	Hi_Seep	80	18	8678	07 Wetter Seepage Areas
H8615n	Gentle_NE	20	8	8615		H8678s	Wet2V_Wet	10	18	8678	
H8615n	Deep	10	8	8615		H8678s	SlopeLT05	10	18	8678	
						H8609o	Organic	99	19	8609	09 Forested Organics

**PEM Entity Descriptions for: SBS dw1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8601	SBS dw1	01	SP	d	j	8601 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 8601 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. This is the predominant site series in the BEC variant.
8602	SBS dw1	02	DC	s	r	8602 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 8602 occurs on the driest crest positions of high ridges that are shallow to bedrock. 8602 can occur in areas of any texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
8603	SBS dw1	03	DS	w	x	8603 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8603 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit.
8605	SBS dw1	05	SR	k		8605 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8605 occurs on steep, cool upper NE facing slopes. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit.
8606	SBS dw1	06	ST	w	y	8606 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS and ONLY in landscapes of moderate to high relief. 8606 occupies moderately to gently sloping lower to toe slopes that have a clear SW aspect. 8606 is a rich, warm seepage unit. The regional ecologist indicated that the 06 site series was not extensive in the map area and only occurred on warm, SW facing seepage slopes.
8607	SBS dw1	07	SC	d	y	8607 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8607 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 8607 is the most common and extensive wetter than mesic site series. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables.
8608	SBS dw1	08	SO	d	y	8608 was mapped ONLY in areas of FINE TO MEDIUM TEXTURED MATERIALS. 8608 areas occur in sloping valleys and draws and along the margins of active stream channels. The regional ecologist indicated that the 08 site series was relatively uncommon and was restricted mainly to finer textured, moist, rich alluvial to lacustrine materials. 8608 was therefore only predicted for areas that had been mapped as finer textured and was also restricted to sloping hollows and depressions that would maintain moving, rather than stagnant, sub-surface water regimes.
8609	SBS dw1	09	SH	d	y	8609 was mapped ONLY in areas of MEDIUM TO FINE TEXTURED materials. 8609 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 8609 areas also occupy the low-lying margins around non-forested wetlands and open water bodies. All areas mapped as being forested organics were also assigned to 8609. 8609 areas are predicted to have permanently high water tables and wet cool conditions.
8611	SBS dw1	01	SP	k	c	8611 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8611 occurs on the upper third of steep, cool upper NE facing slopes. Slope gradient is greater than 30% and aspect is from 315 to 135. The regional ecologist indicated that the upper 1/4 to 1/3 of these steep NE facing slopes in areas of coarse textured materials was more likely to be dominated by the 01 site series. Consequently the normal definition of a 8605 unit was altered to define this 8611 unit that occupies the upper 1/3 of these steep NE facing slopes.
8614	SBS dw1	04	LP	d	x	8614 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 8614 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to contain an almost equal mixture of 04 and 01 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8615	SBS dw1	01	SP	d	y	8615 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8615 occupies gentle NE facing lower to toe slopes. 8615 was needed to provide a counterbalance to an opposite classification of SW facing lower to toe slopes as site series 06.
8640	SBS dw1	04	LP	c	d	8640 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8640 occupies gentle to moderate (<30%) upper shedding slope positions of ALL ASPECTS in areas of coarse textured materials. 8640 areas are predicted to contain drier than mesic 04 Site Series.
8641	SBS dw1	01	SP	c	d	8641 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8641 occupies gentle, lower to toe slope positions of ALL ASPECTS in areas of coarse textured materials. 8641 areas are predicted to contain some finer textured slope wash and slightly moister conditions leading to a predicted composition of dominantly 01 site series along with some 04 site series.
8642	SBS dw1	04	LP	d	x	8642 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 8642 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 04 site series along with some potential inclusions of 02 and 01 site series.
8643	SBS dw1	03	DS	c	w	8643 was mapped ONLY in areas of COARSE TEXTURED materials. 8643 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315.
8644	SBS dw1	04	LP	c	d	8644 was mapped ONLY in areas of COARSE TEXTURED MATERIALS with no high water tables. 8644 occupies all crests to lower slope landform positions (the upper part of the landscape) in these areas of coarse textured materials. This is the classic 04 unit.
8645	SBS dw1	05	SR	c	k	8645 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8645 occurs on the lower two thirds of steep, cool upper NE facing slopes. Slope gradient is greater than 30% and aspect is from 315 to 135. The regional ecologist indicated that the upper 1/4 to 1/3 of these steep NE facing slopes in areas of coarse textured materials was more likely to be dominated by the 01 site series. Consequently the normal definition of a 8605 unit was altered to separate steep NE slopes into top portions (8611) and bottom portions (8645).
8646	SBS dw1	01	SP	c	d	8646 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8646 occupies gentle, lower to toe slope positions of ALL ASPECTS in areas of coarse textured materials. 8646 areas are predicted to contain some finer textured slope wash and slightly moister conditions leading to a predicted composition of dominantly 01 site series along with some moister 07 site series.
8647	SBS dw1	07	SC	c	y	8647 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8647 areas occur in lower to toe landform positions and in concave hollows and draws in areas of coarse textured materials. These coarse textured areas tend to have less extensive areas of wetter than mesic site series than do areas of medium textured materials. 8647 therefore occupies only a limited extent of most areas mapped as having coarse textured materials.
8648	SBS dw1	07	SC	c	y	8648 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 8648 areas occur in the lowest and most levels portions of lower to toe landform positions and in concave hollows and draws in areas of coarse textured materials. These coarse textured areas tend to have less extensive areas of wetter than mesic site series than do areas of medium textured materials. 8648 therefore occupies only a limited extent of most areas mapped as having coarse textured materials. 8648 was merged with 8647 for predictive purposes.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8649	SBS dw1	09	SH	c	y	8649 was mapped ONLY in areas of COARSE TEXTURED materials. 8649 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 8649 areas also occupy the low-lying margins around non-forested wetlands and open water bodies. 8649 areas are predicted to have permanently high water tables and wet cool conditions.
8674	SBS dw1	07	SC	c	y	8674 was mapped ONLY in areas of COARSE TEXTURED materials. 8674 areas occupy sloping hollow and draw locations in areas mapped as coarse textured. These coarse textured materials may allow for slightly better drainage and less wet conditions so a larger proportion of less wet 07 site series is predicted.
8676	SBS dw1	07	SC	d	y	8676 areas were mapped in the drier and more moderately sloping (> 5%) portions of areas where SEEPAGE was recognized. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign the 07 site series to areas mapped as 8676.
8678	SBS dw1	08	SO	d	y	8678 areas were mapped in the lower, flatter and wetter portions of areas where SEEPAGE was recognized. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. In wetter and more level areas of SEEPAGE we predict that the moister 08 Site Series will dominate.
8691	SBS dw1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8692	SBS dw1	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8693	SBS dw1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8694	SBS dw1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8695	SBS dw1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8696	SBS dw1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
8697	SBS dw1	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS dw1**

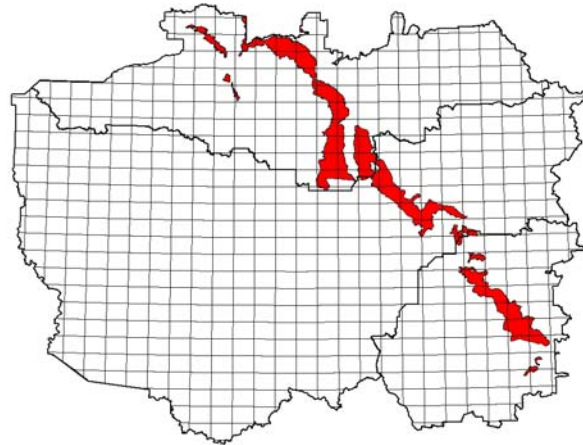
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8601	8601	01	SBS dw1	9	01	SP	d	j	1	07	SC			
8602	8602	02	SBS dw1	8	02	DC	s	r	1	04	LP	1	01	SP
8603	8603	03	SBS dw1	8	03	DS	w	x	1	04	LP	1	01	SP
8605	8605	05	SBS dw1	7	05	SR	k		2	01	SP	1	07	SC
8606	8606	06	SBS dw1	7	06	ST	w	y	2	07	SC	1	01	SP
8607	8607	07	SBS dw1	6	07	SC	d	y	3	01	SP	1	06	ST
8608	8608	08	SBS dw1	7	08	SO	d	y	3	07	SC			
8609	8609	09	SBS dw1	8	09	SH	d	y	2	07	SC			
8611	8611	01	SBS dw1	8	01	SP	k	c	2	05	SR			
8614	8642	04	SBS dw1	6	04	LP	d	x	4	01	SP			
8615	8601	01	SBS dw1	8	01	SP	d	y	2	07	SC			
8640	8644	04	SBS dw1	9	04	LP	c	d	1	01	SP			
8641	8641	01	SBS dw1	6	01	SP	c	d	3	04	LP	1	07	SC
8642	8642	04	SBS dw1	8	04	LP	d	x	2	01	SP			
8643	8643	03	SBS dw1	9	03	DS	c	w	1	04	LP			
8644	8644	04	SBS dw1	9	04	LP	c	d	1	04	LP			
8645	8645	05	SBS dw1	8	05	SR	c	k	2	01	SP			
8646	8641	01	SBS dw1	7	01	SP	c	d	2	07	SC	1	04	LP
8647	8647	07	SBS dw1	7	07	SC	c	y	2	01	SP	1	04	LP
8648	8647	07	SBS dw1	7	07	SC	c	y	2	01	SP	1	04	LP
8649	8649	09	SBS dw1	9	09	SH	c	y	1	07	SC			
8674	8647	07	SBS dw1	8	07	SC	c	y	2	01	SP			
8676	8686	07	SBS dw1	8	07	SC	d	y	2	01	SP			
8678	8678	08	SBS dw1	7	08	SO	d	y	3	07	SC			
8691	8691	OW	SBS dw1	10	00	OW								
8692	8692	WE	SBS dw1	10	00	WE	d	y						
8693	8693	ME	SBS dw1	10	00	ME								
8694	8694	PA	SBS dw1	10	00	PA								
8695	8695	BR	SBS dw1	10	00	BR								
8696	8696	DL	SBS dw1	10	00	DL								
8697	8697	TA	SBS dw1	10	00	TA								





**BGC Unit: SBS dw2****LMES Zone ID: 87****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	186,390.4	8.98%
Williams Lake TSA	75,418.8	1.53%
100 Mile House TSA	84,897.8	6.88%
Cariboo Region	346,706.9	4.21%

**List of Site Series Codes Defined for use in SBS dw2**

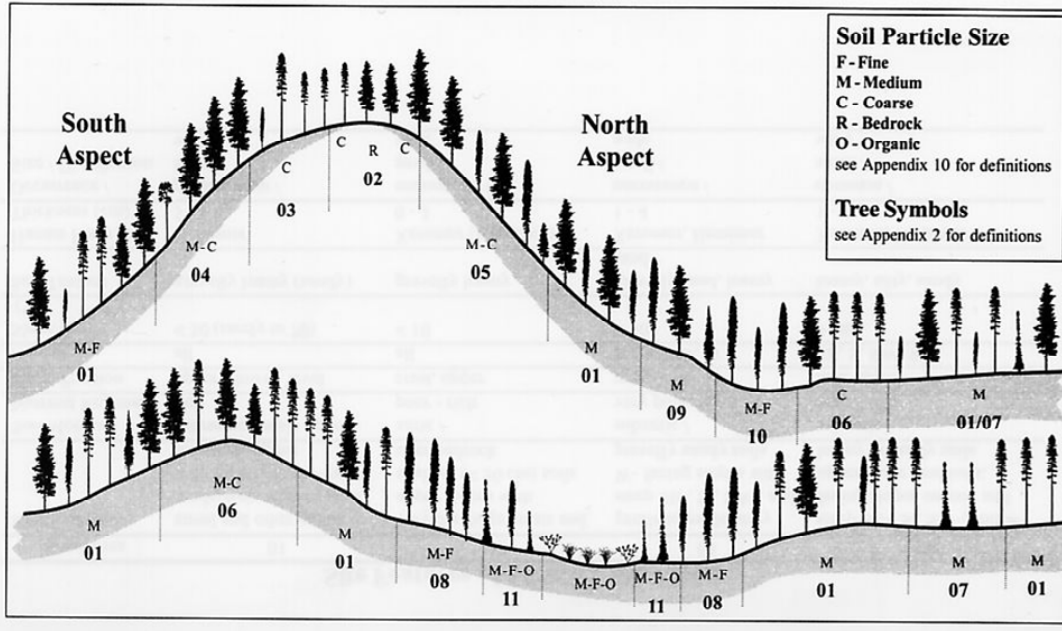
SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SP	SxwFd - Pinegrass	mesic	All MEDIUM Texture upper to lower water shedding < 30%
02	DC	FdPI - Cladonia	xeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	LK	PI - Kinnikinnick - Wavy-leaved moss	subxeric	COARSE - Rare, Restricted to 10-30% Warm SW Slopes on eskers
04	DP	Fd - Pinegrass - Aster	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes Coarse)
05	SM	SxwFd - Cat's-tail moss	submesic	Steep NE - Cool Dry slopes, Upper - Mid Only, MEDIUM & COARSE
06	LP	PI - Pinegrass - Feathermoss	submesic	All COARSE upper shedding slopes, ALSO MEDIUM Deep Crests
07	BF	PIsb - Feathermoss	mesic	Cool, Frosty Mesic to Submesic, Not Moist, Gentle MID-TOE
08	ST	Sxw - Twinberry	subhygric - hygric	Moist - Frosty, Sloping Seepage, WT > 50 cm - MEDIUM & COARSE
09	SD	Sxw - Devil's club - Knight's plume	hygric	Moist, Rich, Not-Frosty, Sloping Seepage (NOT MAPPED - RARE)
10	SH	Sxw - Horsetail	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm
11	BS	Sb - Soft-leaved sedge - Sphagnum (Wb08 - Sb - Soft-leaved sedge - Peat-moss)	hygric - subhydric	Forested ORGANICS; Cold, Very Wet, Flat, Frosty Depressions
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBS dw2**

**SBSdw2 Landscape Profile**



**Example Attribute Class Rule File for SBS dw2 (arule8730)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	relzfile	PCTZ2ST	Crest	4	92.00	92.00	92.00	90.00	100.00	2
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	45.00	45.00	45.00	20.00	70.00	25
5	relzfile	PCTZ2ST	Low2Toe	1	10.00	10.00	10.00	2.00	10.00	10
6	relzfile	PCTZ2ST	Toe	1	5.00	5.00	5.00	1.00	9.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.80	6.80	6.80	0.00	7.00	0.2
10	formfile	QWETI	VDry2SI Dry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.70	7.30	0.8
12	formfile	QWETI	Dry2SI Dry	1	7.50	7.50	7.50	6.25	8.75	1.25
13	formfile	QWETI	SI_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med2SIWet	1	9.40	9.40	9.40	8.40	10.40	1
16	formfile	QWETI	SI_Wet	1	10.20	10.20	10.20	9.40	11.00	0.8
17	formfile	QWETI	SLWet2Wet	1	11.20	11.20	11.20	10.20	12.20	1
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	20.00	20.00	20.00	15.00	100.00	5
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	10.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1
24	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
25	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
26	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
27	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2st	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2st	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS dw2 (crule8730)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH8702c	Crest	30	1	8702	02 Shallow Crest	MH8717s	Low2Toe	30	8	8701	01 < 5% Low-Toe SW
MH8702c	VDry	30	1	8702		MH8717s	Med2SIWet	30	8	8701	
MH8702c	SlopeLT30	10	1	8702		MH8717s	SlopeLT05	10	8	8701	
MH8702c	Med2Crs	10	1	8702		MH8717s	Gentle_SW	20	8	8701	
MH8702c	Shallow	40	1	8702		MH8717s	Deep	10	8	8701	
MH8702c	Hi_Ridge	10	1	8702		MH8708L	Low2Toe	30	9	8708	08 < 15% Moist Low-Toe
MH8706c	Crest	30	2	8706	06 Deep Dry High Ridge	MH8708L	SI_Wet	30	9	8708	
MH8706c	VDry	30	2	8706		MH8708L	SlopeLT15	20	9	8708	
MH8706c	SlopeLT30	10	2	8706		MH8708L	Med2Crs	10	9	8708	
MH8706c	Med2Crs	10	2	8706		MH8708L	Deep	10	9	8708	
MH8706c	Deep	10	2	8706		MH8788t	Toe	30	10	8708	08 < 10% Moist Toe
MH8706c	Hi_Ridge	10	2	8706		MH8788t	SLWet2Wet	30	10	8708	
MH8716c	Crest	30	3	8701	01 Deep Mesic Low Knoll	MH8788t	SlopeLT10	20	10	8708	
MH8716c	VDry	30	3	8701		MH8788t	Med2Crs	10	10	8708	
MH8716c	SlopeLT30	10	3	8701		MH8788t	Deep	10	10	8708	
MH8716c	Med2Crs	10	3	8701		MH8708v	Valley	30	11	8708	08 > 10% Sloping Valley
MH8716c	Deep	10	3	8701		MH8708v	Wet2V_Wet	30	11	8708	
MH8716c	Low_Knoll	10	3	8701		MH8708v	SlopeGT05	10	11	8708	
MH8074s	Crest2Mid	30	4	8704	04 Steep SW upper	MH8708v	SlopeGT10	10	11	8708	
MH8074s	VDry2SDry	30	4	8704		MH8708v	Medium	10	11	8708	
MH8074s	Steep_SW	20	4	8704		MH8708v	Deep	10	11	8708	
MH8074s	Med2Crs	10	4	8704		MH8710v	Valley	30	12	8710	10 5-10% Sloping Valley
MH8074s	Deep	10	4	8704		MH8710v	Wet2V_Wet	30	12	8710	
MH8705n	Crest2Mid	30	5	8705	05 Steep NE upper	MH8710v	SlopeGT05	10	12	8710	
MH8705n	VDry2SDry	30	5	8705		MH8710v	SlopeLT10	10	12	8710	
MH8705n	Steep_NE	20	5	8705		MH8710v	Medium	10	12	8710	
MH8705n	Med2Crs	10	5	8705		MH8710v	Deep	10	12	8710	
MH8705n	Deep	10	5	8705		MH8711f	Valley	30	13	8710	10 < 5% Flat Wet Valley
MH8701u	Up2Low	30	6	8701	01 <30% UP-LOW Shedding	MH8711f	Wet2V_Wet	30	13	8710	Fine Textured Materials
MH8701u	Dry2SDry	30	6	8701		MH8711f	SlopeLT05	20	13	8710	
MH8701u	SlopeLT30	20	6	8701		MH8711f	Fine	10	13	8710	
MH8701u	Med2Crs	10	6	8701		MH8711f	Deep	10	13	8710	
MH8701u	Deep	10	6	8701		MH8711v	Valley	30	14	8710	10 < 5% Flat Wet Valley
MH8717n	Low2Toe	30	7	8701	01 < 5% Low-Toe NE	MH8711v	Wet2V_Wet	30	14	8710	Med Textured Materials
MH8717n	Med2SIWet	30	7	8701		MH8711v	SlopeLT05	20	14	8710	
MH8717n	SlopeLT05	10	7	8701		MH8711v	Med2Crs	10	14	8710	
MH8717n	Gentle_NE	20	7	8701		MH8711v	Deep	10	14	8710	
MH8717n	Deep	10	7	8701		MH8778m	WetZ_LT05	50	15	8710	10 Wet MEDIUM Margins
						MH8778m	WetL_LT200	50	15	8710	
						MH8789s	Hi_Seep	80	16	8789	08 All Seepage Areas
						MH8789s	Med2Crs	20	16	8789	
						MH8711o	Organic	99	17	8711	11 Forested Organics

**PEM Entity Descriptions for: SBS dw2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8701	SBS dw2	01	SP			8701 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8701 occurs across a wide range of upper landform positions from low crests to moderate upper slopes to moderately sloping lower to toe slopes. 8701 is the main mesic site series and occupies the most extensive extent of the subzone. Most 8701 areas are anticipated to contain a small amount of other site series. In particular cool, frosty mesic to sub-mesic 07 site series may occur in small draws, depressions and relatively level lower slope positions within areas classified as 8701.
8702	SBS dw2	02	DC	v	x	8702 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 8702 occurs on the driest crest positions of high ridges that are shallow to bedrock. 8702 can occur in areas of any texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
8703	SBS dw2	03	LK	c	w	8703 was mapped ONLY in areas of COARSE TEXTURED materials. 8703 occurs ONLY on gentle to moderate (10-30%) warm SW facing upper slopes in areas of coarse textured materials. The regional ecologist indicated that this site series was difficult to model as it really only occurred in really coarse glaciofluvial outwash and on the warm (SW) sides of eskers. 8703 is defined for the purposes of this project but little 8703 is predicted and that which does occur may not be correctly predicted.
8704	SBS dw2	04	DP	w	x	8704 was mapped on STEEP SW SLOPES (>30%) on ALL textures of parent material. 8704 occurs ONLY on steep SW facing slopes with warm dry conditions.
8705	SBS dw2	05	SM	k	x	8705 was mapped ONLY on STEEP NE SLOPES (>30%) on ALL textures of parent material. 8705 occurs ONLY on the upper to mid portions of steep NE facing cool, dry slopes.
8706	SBS dw2	06	LP	x	d	8706 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8706 occupies the dry, divergent crests or crowns of high ridges and knolls. 8706 represents the main drier than mesic site series in the SBSdw2. It was allowed to occupy all divergent upper crown positions and extends somewhat further down-slope than comparable deep, dry crest entities in other variants.
8708	SBS dw2	08	ST	j	d	8708 was mapped ONLY in NON-FROSTY areas of MEDIUM TEXTURED materials. 8708 occurs on gently sloping lower to toe slopes that receive seepage moisture from upslope. These moist seepage slopes may be somewhat cold and frosty. 8708 is meant to capture the concept of a moist seepage slope that has sufficient slope that sub-surface moisture does not accumulate to create permanently high water tables. According to the regional ecologist 08 is the dominant moister than mesic site series in this zone. 8708 is predicted to contain a mixture of moist, cool 08 Site Series and near mesic, frosty, cool 07 site series.
8709	SBS dw2	09	SD			8709 is a reserved identifier but NO 8709 was predicted or mapped for the Cariboo PEM. The regional ecologist indicated that the 09 site series was restricted geographically to just a very few localities and that this made it difficult to predict the spatial locations of 09 site series through a general modeling exercise. The regional ecologist recommended simply allowing for a small proportion (5%) of the 09 site series to occur in areas mapped as 08 site series.
8710	SBS dw2	10	SH	j	y	8710 was mapped on ALL textures of parent material and in both frosty and non frosty areas. 8710 occupies the lowest and wettest portions of the landscape, these being depressions and gently sloping to level hollows draws and flats. The regional ecologist indicated that all areas with permanently high water tables that did NOT develop on organic textured materials would be considered to belong to site series 10. Consequently all of the different landscape situations that were predicted to have permanently high water tables and that were NOT mapped as having ORGANIC materials were predicted to be site series 10.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8711	SBS dw2	11	BS	p	y	8711 was mapped ONLY on ORGANIC textured materials. 8710 occurs in the lowest, flattest and wettest portions of the landscape in areas of ORGANIC materials.
8716	SBS dw2	01	SP	c	d	8716 was mapped ONLY in NON FROSTY areas of COARSE TEXTURED materials. 8716 occurs in lower to toe slope landform positions in areas of coarse textured materials. 8716 is predicted to contain a mixture of mesic 01, cool mesic 07 and cool moist 08 site series. 8716 tends to occur as a very narrow band along the lower margins of coarse knolls and rises. After final review, 8716 was amalgamated with 8761 as 8761
8717	SBS dw2	07	BF	j	d	8717 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8717 occurs on gently sloping mid to lower slopes assumed to be subject to accumulation of cold air and frost. 8717 is predicted to contain a significant proportion of frosty 07 site series in addition to some normal mesic 01 site series and possibly some moister 08 site series.
8761	SBS dw2	06	LP	c	d	8761 was mapped ONLY in areas of COARSE TEXTURED materials. 8761 was designed to define a zone of transition between dry 06 in upper landform positions and less dry 01 and 08 in lower landform positions. 8761 occurs in lower slope positions just below 8766 in areas of coarse materials. 8761 ended up being of very minor extent and was amalgamated with 8716 below it as 8761. 8761 was anticipated to contain a mixture of dry 06 and slightly less dry mesic 01.
8766	SBS dw2	06	LP	c	d	8766 was mapped ONLY in areas of COARSE TEXTURED materials. 8766 occupies most upper landform positions from crest to toe slopes in these areas of rapidly drained coarse materials. The regional ecologist indicated that the coarse, dry 03 site series described for this BEC variant was both rather rare and difficult to model. The regional ecologist recommended calling almost all drier than mesic areas that were not on steep NE or SW facing slopes the 06 site series. All freely drained upper slope positions in areas of coarse textured materials were therefore mapped as the 06 site series via the 8766 map entity.
8767	SBS dw2	07	BF	c	d	8767 was mapped ONLY in FROSTY areas of COARSE TEXTURED materials. 8767 was intended to occupy gently sloping lower to toe slope landform positions below the upper crown of the landscape occupied by 8766. 8767 was an attempt to recognize slightly frosty toe slopes that were only slightly moist and were likely to be occupied mainly by cool frosty, mesic 07 site series mixed with lesser components of coarse, dry 06 and cool, frosty, slightly moist seepage 08 site series.
8768	SBS dw2	07	BF	c	y	8768 was mapped ONLY in NON-FROSTY areas of COARSE TEXTURED materials. 8768 was intended to occupy gently sloping toe slope landform positions and sloping draws and hollows that were not expected to have permanently high water tables. 8768 occupies toe slopes and hollows that would normally be anticipated to contain moist seepage site series (08) but which may be drier than normal due to the coarse textured materials. These dry draws are still anticipated to collect cold air and to develop frosty conditions associated with the 07 site series. They may also be affected by seepage and contain some 08 site series.
8770	SBS dw2	01	SP	j	d	8770 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 8770 was intended to occupy gently sloping mid to lower slope landform positions that are convex, shedding and mesic in moisture regime but that are slightly affected by cold frosty conditions. It is predicted that 8770 areas will contain a mixture of normal mesic 01 and cool frosty 07 site series.
8771	SBS dw2	07	BF	j	y	8771 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 8771 was intended to occupy gently sloping landform positions from mid to lower slopes below 8770. 8771 was an attempt to recognize frosty toe slopes that might be moistened by seepage as well as affected by cold frost air. It is predicted that 8771 areas will be occupied by both cool frosty, mesic 07 site series and moist, cool 08 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8776	SBS dw2	01	SP	j	d	8776 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 8776 occupies the uppermost shedding landscape positions from crowns to mid slope in frosty areas of medium textured materials. These crown areas are predicted to contain a mixture of normal mesic 01 and mesic but frosty 07 site series.
8778	SBS dw2	08	ST	j	d	8778 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 8778 was intended to occupy gently sloping lower to toe slope landform positions and sloping draws and hollows in medium textured areas. These low, confined landform positions are expected to collect and hold cold air and to therefore be quite frosty. 8778 areas are predicted to contain a mixture of cold frosty moist 08 site series and cold, frosty, not moist 07 site series. 8778 areas occur below areas mapped as 8771 and above areas in level valleys and hollows mapped as 8710.
8789	SBS dw2	08	ST	y	d	8789 areas were mapped in all areas of recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of 08 and 07 site series to areas mapped as 8789.
8791	SBS dw2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8792	SBS dw2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8793	SBS dw2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8794	SBS dw2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8795	SBS dw2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8796	SBS dw2	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
8799	SBS dw2	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS dw2**

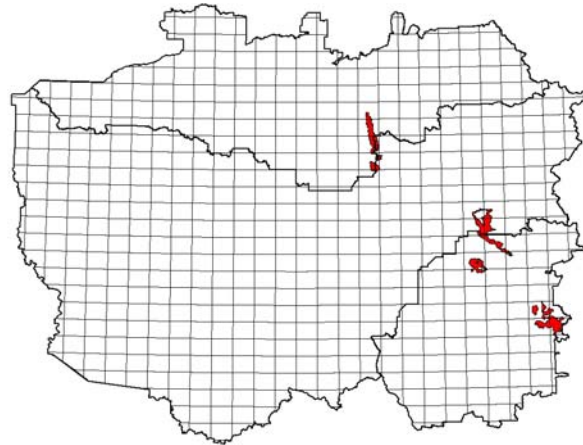
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8701	8701	01	SBS dw2	9	01	SP			1	08	ST			
8702	8702	02	SBS dw2	7	02	DC	v	x	2	06	LP	1	01	SP
8703	8703	03	SBS dw2	6	03	LK	c	w	3	04	DP	1	06	LP
8704	8704	04	SBS dw2	7	04	DP	w	x	2	06	LP	1	01	SP
8705	8705	05	SBS dw2	7	05	SM	k	x	2	01	SP	1	06	LP
8706	8706	06	SBS dw2	6	06	LP	x	d	4	01	SP	0		
8708	8708	08	SBS dw2	6	08	ST	j	d	2	07	BF	2	01	SP
8709	8709	09	SBS dw2	10	09	SD								
8710	8710	10	SBS dw2	7	10	SH	j	y	2	08	ST	1	11	BS
8711	8711	11	SBS dw2	7	11	BS	p	y	2	10	SH	1	08	ST
8716	8716	01	SBS dw2	7	01	SP	c	d	2	07	BF	1	08	ST
8717	8717	07	SBS dw2	6	07	BF	j	d	3	01	SP	1	08	ST
8761	8766	06	SBS dw2	6	06	LP	c	d	4	01	SP			
8766	8766	06	SBS dw2	9	06	LP	c	d	1	01	SP			
8767	8767	07	SBS dw2	6	07	BF	c	d	3	06	LP	1	08	ST
8768	8768	07	SBS dw2	6	07	BF	c	y	3	08	ST	1	01	SP
8770	8776	01	SBS dw2	7	01	SP	j	d	3	07	BF			
8771	8771	07	SBS dw2	7	07	BF	j	y	2	08	ST	1	01	SP
8776	8776	01	SBS dw2	8	01	SP	j	d	2	07	BF			
8778	8778	08	SBS dw2	7	08	ST	j	d	3	07	BF			
8789	8789	08	SBS dw2	7	08	ST	y	d	3	07	BF			
8791	8791	OW	SBS dw2	10	00	OW								
8792	8792	WE	SBS dw2	10	00	WE	d	y						
8793	8793	ME	SBS dw2	10	00	ME								
8794	8794	PA	SBS dw2	10	00	PA								
8795	8795	BR	SBS dw2	10	00	BR								
8796	8796	DL	SBS dw2	10	00	DL								
8799	8799	GL	SBS dw2	10	00	GL								





**BGC Unit: SBS mc1****LMES Zone ID: 88****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	9,916.3	0.48%
Williams Lake TSA	14,047.8	0.28%
100 Mile House TSA	27,676.5	2.24%
Cariboo Region	51,640.6	0.63%

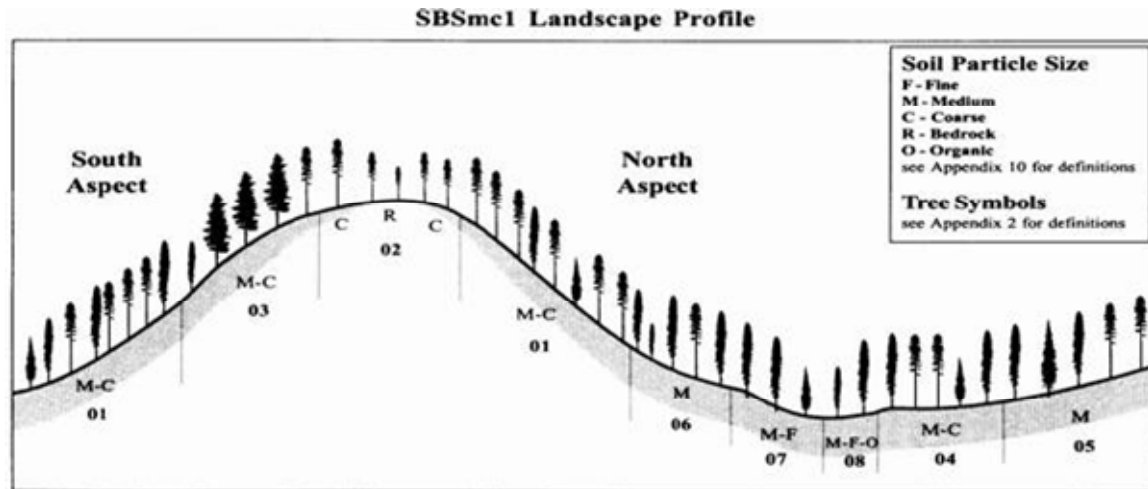
**List of Site Series Codes Defined for use in SBS mc1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SB	Sxw - Huckleberry, Sand	mesic	All COARSE TEXTURED upper to lower water shedding < 30%
01	SB	Sxw - Huckleberry, Shallow	mesic	01b - All SHALLOW upper to lower water shedding < 30%
01	SB	Sxw - Huckleberry, Typic	mesic	All MEDIUM TEXTURED upper to lower water shedding < 30%
02	LC	Pl - Cladonia - Haircap moss	xeric - subxeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	DP	Fd - Pinegrass - Aster	xeric - subxeric	Steep SW - Dry Warm Upper Slopes (includes Coarse)
04	SL	Sxw - Huckleberry - Labrador tea	submesic - mesic	COARSE - Rare, Restricted to Frosty Benches near Moffat Creek
05	SS	Sxw - Spirea - Glow moss	subhygric	Cold, Moist, Frosty, Level to Gentle Toes, Draws and Hollows
06	SO	Sxw - Oak fern	subhygric	Moist - Non-Frosty, Sloping Seepage, WT > 50 cm - MED & CRS
07	SD	Sxw - Devil's club - Step moss	subhygric	Moist, Rich, Not-Frosty, Sloping Seepage (NOT MAPPED - RARE)
08	SH	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ALSO Forested ORGANICS
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

## Landscape Profile Diagram: SBS mc1



## Example Attribute Class Rule File for SBS mc1 (arule8860)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
11	formfile	QWETI	SI_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	SI_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2SI_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	SI_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
18	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
19	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
20	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
21	formfile	SLOPE	SlopeLT20	5	22.50	25.00	25.00	0.00	25.00	2.5
22	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
26	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
27	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
28	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
29	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
30	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
31	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
32	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50
33	geofile	Z2wet	WetZ_LT05	5	3.00	3.00	3.00	0.00	4.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
37	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mc1 (crule8860)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH8802r	Crest	35	1	8802	02 Shallow Crest	MH8861u	Up2Mid	35	10	8861	06 5-20% Wet Up Swale
MH8802r	Dry_WI	25	1	8802		MH8861u	Wet2V_Wet	25	10	8861	
MH8802r	Hi_Ridge	20	1	8802		MH8861u	SlopeLT20	15	10	8861	
MH8802r	Shallow	40	1	8802		MH8861u	SlopeGT05	5	10	8861	
MH8802r	Med2CrS	10	1	8802		MH8861u	Medium	10	10	8861	
MH8821r	Crest	35	2	8821		MH8861u	Deep	10	10	8861	
MH8821r	Dry_WI	25	2	8821	01 Deep Dry High Ridge	MH8811L	Mid2Toe	35	11	8810	01 <30% DEEP Mid-Toe
MH8821r	Hi_Ridge	20	2	8821		MH8811L	Med2S_Wet	25	11	8810	
MH8821r	Deep	10	2	8821		MH8811L	SlopeLT30	20	11	8810	
MH8821r	Med2CrS	10	2	8821		MH8811L	Medium	10	11	8810	
MH8813n	Crest2Mid	35	3	8813		MH8811L	Deep	10	11	8810	
MH8813n	Dry2Med_WI	25	3	8813	01k Steep NE upper	MH8806s	Toe	35	12	8806	06 5-20% Moist Toe Slope
MH8813n	Steep_NE	20	3	8813		MH8806s	Sl_Wet2Wet	25	12	8806	
MH8813n	Med2CrS	10	3	8813		MH8806s	SlopeLT20	15	12	8806	
MH8813n	Deep	10	3	8813		MH8806s	SlopeGT05	5	12	8806	
MH8803s	Crest2Mid	35	4	8803	03 Steep SW upper	MH8806s	Med2CrS	10	12	8806	
MH8803s	Dry2Med_WI	25	4	8803		MH8806s	Deep	10	12	8806	
MH8803s	Steep_SW	20	4	8803		MH8856s	Toe	35	13	8804	04 < 5% Moist Level Toe
MH8803s	Med2CrS	10	4	8803		MH8856s	Sl_Wet2Wet	25	13	8804	Moffat Creek Area Only
MH8803s	Deep	10	4	8803		MH8856s	SlopeLT10	15	13	8804	Elsewhere is 8856 = 05
MH8811n	Crest2Mid	35	5	8811	05 Gentle Deep Upper NE	MH8856s	SlopeLT05	5	13	8804	
MH8811n	Dry2Med_WI	25	5	8811		MH8856s	Med2CrS	10	13	8804	
MH8811n	Gentle_NE	20	5	8811		MH8856s	Deep	10	13	8804	
MH8811n	Med2CrS	10	5	8811		MH8805t	Toe2Valley	35	14	8805	05 < 5% Moist Frosty Toe
MH8811n	Deep	10	5	8811		MH8805t	Wet	25	14	8805	
MH8811s	Crest2Mid	35	6	8811	05 Gentle Deep Upper SW	MH8805t	SlopeLT10	15	14	8805	
MH8811s	Dry2Med_WI	25	6	8811		MH8805t	SlopeLT05	5	14	8805	
MH8811s	Gentle_SW	20	6	8811		MH8805t	Med2Fine	10	14	8805	
MH8811s	Med2CrS	10	6	8811		MH8805t	Deep	10	14	8805	
MH8811s	Deep	10	6	8811		MH8875t	Toe2Valley	35	15	8875	06 > 5% Moist Non-Frosty Toe
MH8812r	Crest2Mid	35	7	8812	01b <30% SHALLOW Upper	MH8875t	Wet	25	15	8875	
MH8812r	Dry2Med_WI	25	7	8812		MH8875t	SlopeLT10	15	15	8875	
MH8812r	SlopeLT30	20	7	8812		MH8875t	SlopeGT05	5	15	8875	
MH8812r	Medium	10	7	8812		MH8875t	Med2Fine	10	15	8875	
MH8812r	Shallow	40	7	8812		MH8875t	Deep	10	15	8875	
MH8801m	Up2Mid	35	8	8801	01 <30% DEEP Upper	MH8867v	Valley	35	16	8867	06 > 5% Sloping Valley
MH8801m	Sl_Dry2Med	25	8	8801		MH8867v	Wet2V_Wet	25	16	8867	
MH8801m	SlopeLT30	20	8	8801		MH8867v	SlopeGT05	20	16	8867	
MH8801m	Medium	10	8	8801		MH8867v	Med2Fine	10	16	8867	
MH8801m	Deep	10	8	8801		MH8867v	Deep	10	16	8867	
MH8801m	Hi_Ridge	10	8	8801		MH8805v	Valley	35	17	8855	08 < 5% Flat, Wet Valley
MH8816u	Up2Mid	35	9	8816	06 5-20% Moist Up Swale	MH8805v	Wet2V_Wet	25	17	8855	
MH8816u	Wet	25	9	8816		MH8805v	SlopeLT05	20	17	8855	
MH8816u	SlopeLT20	15	9	8816		MH8805v	Med2Fine	10	17	8855	
MH8816u	SlopeGT05	5	9	8816		MH8805v	Deep	10	17	8855	
MH8816u	Medium	10	9	8816		MH8885m	WetL_LT200	50	18	8885	08 Wet MEDIUM Margins
MH8816u	Deep	10	9	8816		MH8885m	WetZ_LT05	50	18	8885	
						MH8888o	Organic	99	19	8888	08 Forested ORGANICS
						MH8866s	Hi_Seep	90	20	8866	06 All Seepage Areas
						MH8866s	Med2Fine	10	20	8866	

**PEM Entity Descriptions for: SBS mc1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8801	SBS mc1	01	SB	d	j	8801 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 8801 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. This is the predominant site series in the BEC variant. Gentle slope; deep, medium - textured soil
8802	SBS mc1	02	LC	s	r	8802 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 8802 occurs on the driest crest positions of high ridges that are shallow to bedrock. 8802 can occur in areas of any texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow soils over bedrock
8803	SBS mc1	03	DP	w	x	8803 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8803 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 35% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
8804	SBS mc1	04	SL	c	d	8804 was mapped ONLY in a defined geographic region consisting of the Upper Moffat Creek Drainage. Within this defined area 8804 was mapped on very gently sloping to nearly level lower to toe slopes on small, terraces or high bank landscape positions adjacent to small stream channels and draws .8804 areas occur in valley bottom sites where cold air accumulates. 8804 occupy gentle slopes and cool sites with deep coarse textured soils.
8805	SBS mc1	05	SS	d	y	8805 areas were mapped in areas of MEDIUM textured materials. 8805 areas occupy nearly level to very gently sloping toe slopes and draws that accumulate and hold both cold air and seepage. 8805 areas are predicted to be occupied mainly by the cold, moist, FROSTY 05 Site Series. Lower slope, receiving moisture; deep, medium - textured soils
8806	SBS mc1	06	SO	d	y	8806 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8806 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 8806 is the most common and extensive wetter than mesic site series. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured soils
8810	SBS mc1	01	SB	d	y	8810 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS 8810 occurs on gently sloping mid to lower slope landform positions and in some mid to lower slope draws and hollows. These areas may receive slightly greater amounts of seepage than typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. 8810 areas are predicted to be dominated by the normal mesic 01 Site Series with perhaps some slightly moister 06 Site Series. Mid to lower slope, receiving moisture; deep, medium - textured soils
8811	SBS mc1	01	SB	d	j	8811 was mapped ONLY in areas of MODERATE to HIGH RELIEF and MEDIUM TEXTURED MATERIALS. 8811 occurs in the upper portions of relatively long slopes in areas of moderate to high relief. 8811 was defined to act as a counter-balance to entities defined to recognize steep SW and steep NE upper slopes. 8811 areas have definitions that are almost identical to those for steep NE or steep SW upper slopes EXCEPT that slope gradients are defined to be less than 30%. 8811 areas are predicted to be occupied mainly by normal mesic 01 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8812	SBS mc1	01 b	SB	s	x	8812 was mapped ONLY in areas of MODERATE to HIGH RELIEF and SHALLOW SOILS. 8812 occurs in the upper portions of relatively long slopes in areas of moderate to high relief. 8812 was defined recognize shallow soils in upper slope positions as described in the ecological key for shallow phase 01b Site series 8811 areas are predicted to be occupied mainly by a shallow phase (01b) of the normal mesic 01 Site Series.
8813	SBS mc1	01	SB	k	x	8813 was mapped ONLY in areas of MEDIUM TEXTURED materials. 8813 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 35% and the aspect must be from 315 to 135. This is a classic STEEP NE unit. 8813 was defined to act as a counter-balance to the steep SW unit 8803. 8813 areas are predicted to be dominated by normal mesic 01 Site Series. Significant slope, of cool aspects; deep, medium - textured soils
8816	SBS mc1	06	SO	d	y	8816 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8816 occurs in narrow to broad concavities and draws in upper to lower slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage that typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. 8816 areas are transition areas that predicted to be dominated by a mixture of moister than normal 06 Site series and normal mesic 01 Site Series. Mid to lower slope, receiving moisture; deep, medium - textured soils
8821	SBS mc1	01	SB	r	d	8821 was mapped on gently sloping upper to crest landform positions in areas that were NOT mapped as SHALLOW to BEDROCK. 8821 occurs on the slightly drier than normal crest positions of high ridges that are NOT shallow to bedrock. 8821 can occur in areas of any texture as mapped by JMJ as long as the depth to bedrock is indicated as more than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; deep soils.
8855	SBS mc1	08	SH	d	y	8855 areas were mapped in level to flat wet valleys with slopes < 5% in areas of MEDIUM TEXTURED materials. 8855 areas occur in flat, non-draining depressions where the water table is often above 50 cm and cold air can accumulate to create FROSTY conditions. 8855 areas are predicted to be occupied mainly by the wet frosty 08 Site Series. Gentle slope or depressional areas with deep, fine-textured soils.
8856	SBS mc1	05	SS	j	y	8856 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8856 occurs on very gently sloping lower to toe slope landform positions that receive seepage and may accumulate both seepage moisture and frosty cold air. 8856 areas tend to have gentler slopes than 8806 areas and to occur lower in the landscape, topographically below 8806 areas. 8856 areas were defined to permit recognition of lower to toe slope landform positions that might be expected to be slightly wetter than normal 06 Site Series and possibly also to be slightly colder and frostier. 8856 areas are presently predicted to be occupied mainly by the frosty moist 05 Site Series with some moist, non-frosty 06 Site Series. Lower to toe slope, receiving moisture; deep, medium - textured soils
8861	SBS mc1	06	SO	d	y	8861 areas were mapped in areas of MEDIUM TEXTURED MATERIALS. 8861 areas occur in the lowest and wettest portions of sloping hollows and draws mainly in upper to mid landform positions. 8861 areas are expected to contain a mixture of very moist seepage entities that are not affected by the accumulation of cold air and frost. Thus 8861 area will most likely contain a mixture of normal moist seepage 06 Site Series and perhaps some frosty moist 05 or 08 Site Series.
8866	SBS mc1	06	SO	d	y	8866 areas were mapped in all areas of recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 06 and 07 Site Series and moist, cold, frosty 05 Site Series to areas mapped as 8866.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8867	SBS mc1	06	SO	d	y	8867 areas were mapped in sloping valleys, swales, side slopes and depressions with gradients > 5% in areas of MEDIUM TEXTURED soils. 8867 areas are characterized by moving, aerated groundwater and very rich, very moist soils. 8867 areas are predicted to be occupied by one of the NON-FROSTY, MOIST Site Series 07 or 06. In most portions of the Cariboo the climate is too frosty to permit a devils club seepage unit (07) to occur in this setting so the regional ecologist predicts that these areas will mainly be occupied by the more common 06 seepage unit. In the Canim Lake area this same landform position is dominantly occupied by the moister, richer 07 Devil's Club Site Series. It is therefore possible that this unit may include some areas associated with the rich, moist 07 Site Series. Lower slope to depression, deep medium-textured soils.
8875	SBS mc1	06	SO	d	y	8875 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 8875 occurs on very gently sloping toe slope landform positions that receive seepage and that may or may not accumulate both seepage moisture and cold, frosty air. 8875 occurs topographically below the more common 8806 seepage unit and often occurs topographically above flatter, wetter and frostier areas mapped as 8805, 8855, 8856 and 8885. It is meant to capture the concept of a lower toe slope area that is quite level and likely receives and retains more seepage than most lower slopes. It was initially predicted that 8875 areas would be dominated by the moister 07 Devils Club seepage unit rather than the less moist 06 that is the dominant seepage unit for this Subzone. The Regional Ecologist reviewed this concept and indicated that 8875 areas WOULD NOT be occupied by devils club or the 07 Site Series but rather by the wetter end of the 06 site series.
8885	SBS mc1	08	SH	d	y	8885 areas were mapped in level to depression low-lying areas around the margins of non-forested wetlands, lakes and ponds. 8885 areas most probably consist of a sequence of wetter than normal Site Series that grade from 08 nearest the wetland through 05 and then 06 as one progresses upslope away from the wetland. Forested swamp, poorly drained ; level to depression; organic veneer or blanket
8888	SBS mc1	08	SH			8888 was mapped ONLY on ORGANIC textured materials. 8888 occurs in the lowest, flattest and wettest portions of the landscape in areas of ORGANIC materials.
8891	SBS mc1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8892	SBS mc1	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8893	SBS mc1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8894	SBS mc1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8895	SBS mc1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8896	SBS mc1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS mc1**

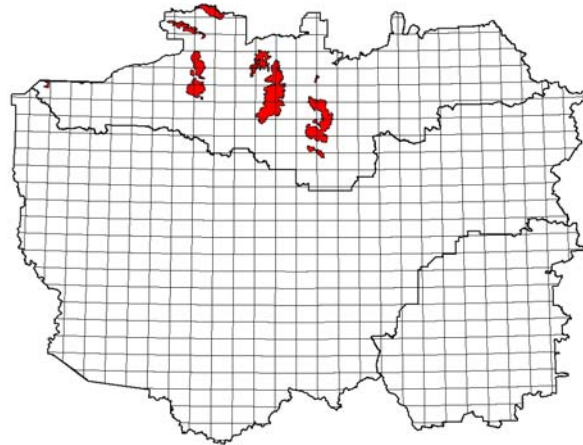
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8801	8801	01	SBS mc1	9	01	SB	d	j	1	06	SO			
8802	8802	02	SBS mc1	8	02	LC	s	r	2	01	SB			
8803	8803	03	SBS mc1	8	03	DP	w	x	2	01	SB			
8804	8804	04	SBS mc1	8	04	SL	c	d	1	01	SB	1	05	SS
8805	8805	05	SBS mc1	8	05	SS	d	y	1	01	SB	1	06	SO
8806	8806	06	SBS mc1	8	06	SO	d	y	1	01	SB	1	05	SS
8810	8801	01	SBS mc1	8	01	SB	d	y	2	06	SO			
8811	8801	01	SBS mc1	9	01	SB	d	j	1	03	DP			
8812	8812	01b	SBS mc1	8	01	SB	s	x	2	02	LC			
8813	8813	01	SBS mc1	10	01	SB	k	x						
8816	8806	06	SBS mc1	7	06	SO	d	y	3	01	SB			
8821	8821	01	SBS mc1	9	01	SB	r	d	1	02	LC			
8855	8855	08	SBS mc1	7	08	SH	d	y	2	05	SS	1	01	SB
8856	8805	05	SBS mc1	7	05	SS	j	y	2	06	SO	1	01	SB
8861	8806	06	SBS mc1	7	06	SO	d	y	2	05	SS	1	08	SH
8866	8866	06	SBS mc1	6	06	SO	d	y	2	07	SD	2	05	SS
8867	8867	06	SBS mc1	7	06	SO	d	y	3	07	SD			
8875	8806	06	SBS mc1	7	06	SO	d	y	2	07	SD	1	05	SS
8885	8885	08	SBS mc1	7	08	SH	d	y	2	05	SS	1	06	SO
8888	8888	08	SBS mc1	10	08	SH								
8891	8891	OW	SBS mc1	10	00	OW								
8892	8892	WE	SBS mc1	10	00	WE	d	y						
8893	8893	ME	SBS mc1	10	00	ME								
8894	8894	PA	SBS mc1	10	00	PA								
8895	8895	BR	SBS mc1	10	00	BR								
8896	8896	DL	SBS mc1	10	00	DL								





**BGC Unit: SBS mc2****LMES Zone ID: 89****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	111,969.0	5.39%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	0.0	0.00%
Cariboo Region	111,969.0	1.36%

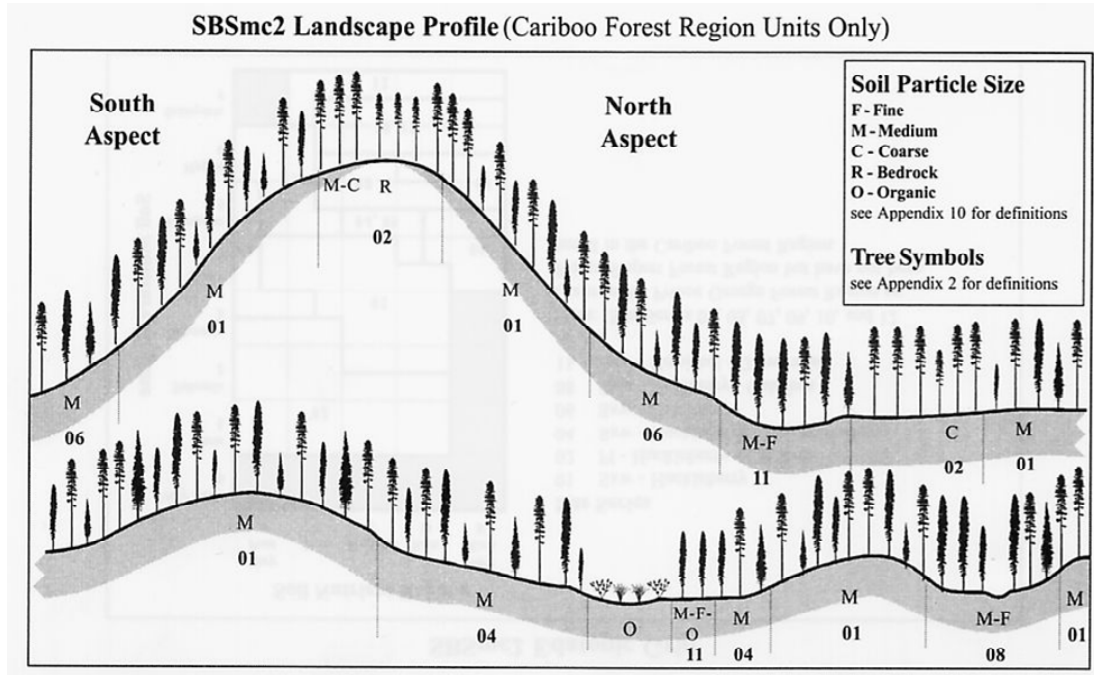
**List of Site Series Codes Defined for use in SBS mc2**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SB	Sxw - Huckleberry, Mesic, coarse-textured	submesic - mesic	01b - COARSE TEXTURED Slightly moister Low-Toe Receiving
01	SB	Sxw - Huckleberry, Shallow	submesic - mesic	01b - All SHALLOW upper to lower water shedding < 30%
01	SB	Sxw - Huckleberry, Typic	mesic	01a - All MEDIUM TEXTURED upper to lower water shedding < 30%
02	PH	Pl - Huckleberry - Cladonia	xeric - subxeric	02a - Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
02	PH	Pl - Huckleberry - Cladonia, Typic	xeric - subxeric	02a - Steep SW - Dry Warm Upper Slopes (includes COARSE)
02	PH	Pl - Huckleberry - Cladonia, Sand	xeric - subxeric	02b - All COARSE TEXTURED upper to lower water shedding < 30%
03	BM	SbPl - Feathermoss	submesic - subhygric	Not defined for use in Cariboo - None Predicted
04	HB	Sxw - Huckleberry - Dwarf blueberry	mesic - subhygric	Cold, Moist, Frosty, Level to Gentle Toes, Not in Stream Channels
05	TC	Sxw - Twinberry - Coltsfoot	subhygric	Not defined for use in Cariboo - None Predicted
06	SO	Sxw - Oak fern	subhygric	Moist, Non-Frosty, Sloping Seepage, WT > 50 cm - MED & CRS
07	BF	Sxw - Scrub birch - Feathermoss	hygric	Not defined for use in Cariboo - None Predicted
08	ST	Sxw - Twinberry - Oak fern	subhygric	Moist - Wet, Frosty Low-Toe, Adjacent to Streams, Sloping Valleys
09	SD	Sxw - Devil's club	subhygric	Not defined for use in Cariboo - None Predicted
10	SH	Sxw - Horsetail	hygric - subhydric	Not defined for use in Cariboo - None Predicted
11	HG	Sxw - Horsetail - Glow moss (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ALSO Forested ORGANICS
12	SS	SbSxw - Scrub birch - Sedge (Wb05 - Sb - Water sedge- Peat-moss)	subhydric	Not defined for use in Cariboo, Forested Wetlands - None Predicted
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBS mc2**



**Example Attribute Class Rule File for SBS mc2 (arule8930)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.30	7.30	7.30	0.00	7.80	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	14.00	14.00	4.00	24.00	10
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	5	6.00	6.00	6.00	0.00	6.20	0.2
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	SL_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med2SIWet	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	SL_Wet	1	9.40	9.40	9.40	8.70	10.10	0.7
17	formfile	QWETI	SLWet2Wet	1	10.50	10.00	11.00	10.00	11.00	0.5
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	11.50	11.00	50.00	11.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	5
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	1
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	5
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	20
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	1
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	50
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.50	1
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mc2 (crule8930)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H2802a	Crest	30	1	8902	02a Shallow Crest	H2805s	Mid2Low	30	9	8906	06 < 20% Moist Mid-Low SW
H2802a	Dry	30	1	8902		H2805s	Med2SIWet	30	9	8906	
H2802a	SlopeLT30	20	1	8902		H2805s	SlopeLT20	10	9	8906	
H2802a	Med2Crs	10	1	8902		H2805s	Gentle_SW	20	9	8906	
H2802a	Shallow	80	1	8902		H2805s	Deep	10	9	8906	
H2802a	Hi_Ridge	10	1	8902		H2815s	Mid2Low	30	10	8901	01 > 20% Drier Mid-Low SW
H2812r	Crest	30	2	8912	01b Deep Dry High Ridge	H2815s	Med2SIWet	30	10	8901	
H2812r	Dry	30	2	8912		H2815s	SlopeGT20	10	10	8901	
H2812r	SlopeLT30	10	2	8912		H2815s	Gentle_SW	20	10	8901	
H2812r	Med2Crs	10	2	8912		H2815s	Deep	10	10	8901	
H2812r	Deep	20	2	8912		H2804L	Low2Toe	30	11	8904	04 < 10% Moist Frosty Toe
H2812r	Hi_Ridge	10	2	8912		H2804L	Sl_Wet	30	11	8904	
H2801r	Crest	30	3	8901		H2804L	SlopeLT10	20	11	8904	
H2801r	Dry	30	3	8901	01a Deep Mesic Low Knoll	H2804L	Med2Crs	10	11	8904	
H2801r	SlopeLT30	10	3	8901		H2804L	Deep	10	11	8904	
H2801r	Med2Crs	10	3	8901		H2804L	Low2Toe	30	12	8906	05 > 10% Moist Sloping Toe
H2801r	Deep	20	3	8901		H2864L	Sl_Wet	30	12	8906	
H2801r	Low_Knoll	10	3	8901		H2864L	SlopeGT10	20	12	8906	
H2802s	Crest2Mid	30	4	8922	02a Steep SW Dry Upper	H2864L	Med2Crs	10	12	8906	
H2802s	VDry2SIDry	30	4	8922		H2864L	Deep	10	12	8906	
H2802s	Steep_SW	20	4	8922		H2807t	Toe	30	13	8904	04 < 10% Moist Frosty Toe
H2802s	Med2Crs	10	4	8922		H2807t	SLWet2Wet	30	13	8904	
H2802s	Deep	10	4	8922		H2807t	SlopeLT10	20	13	8904	
H2801n	Crest2Mid	30	5	8913	01a Steep NE Upper	H2807t	Medium	10	13	8904	
H2801n	VDry2SIDry	30	5	8913		H2807t	Deep	10	13	8904	
H2801n	Steep_NE	20	5	8913		H2808v	Valley	30	14	8908	08 > 5% Sloping Valley
H2801n	Med2Crs	10	5	8913		H2808v	Wet2V_Wet	30	14	8908	
H2801n	Deep	10	5	8913		H2808v	SlopeGT05	20	14	8908	
H2801u	Up2Mid	30	6	8901	01a <30% DEEP UP-MID	H2808v	Medium	5	14	8908	
H2801u	Dry2SIDry	30	6	8901		H2808v	Deep	10	14	8908	
H2801u	SlopeLT30	20	6	8901		H2811f	Valley	30	15	8911	11 < 5% Flat, Wet Valley
H2801u	Med2Crs	10	6	8901		H2811f	Wet2V_Wet	30	15	8911	
H2801u	Deep	10	6	8901		H2811f	SlopeLT05	20	15	8911	
H2806n	Mid2Low	30	7	8906	06 < 20% Moist Mid-Low NE	H2811f	Medium	10	15	8911	
H2806n	Med2SIWet	30	7	8906		H2811f	Deep	10	15	8911	
H2806n	SlopeLT20	10	7	8906		H2811m	WetZ_LT05	50	16	8911	11 Wet MEDIUM Margins
H2806n	Gentle_NE	20	7	8906		H2811m	WetL_LT200	50	16	8911	
H2806n	Deep	10	7	8906		H2866s	Hi_Seep	80	17	8966	06 All Seepage Areas
H2816n	Mid2Low	30	8	8901		H2866s	Med2Crs	20	17	8966	
H2816n	Med2SIWet	30	8	8901	01 > 20% Drier Mid-Low NE	H2811o	Organic	99	18	8911	11 Forested ORGANICS
H2816n	SlopeGT20	10	8	8901							
H2816n	Gentle_NE	20	8	8901							
H2816n	Deep	10	8	8901							

**PEM Entity Descriptions for: SBS mc2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8901	SBS mc2	01	SB	j	d	8901 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8901 areas occur across the full range of upper to lower shedding landform positions from the crests of low ridges and knolls through all upper and mid slopes that are not steeply sloping (> 30%) down to the break in slope at toe slopes. 8901 is the predominant site series.
8902	SBS mc2	02 a	PH	v	r	8902 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8902 occurs mainly on the dry crests of high ridges but can occur in any areas of shallow (< 50 cm) materials. 8902 attempts to capture the concepts of the 02a unit as defined in the field guide.
8903	SBS mc2	03	BM			NOT MAPPED. NOT DEFINED IN CARIBOO FIELD GUIDE.
8904	SBS mc2	04	HB	j	d	8904 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8904 areas occur in very gently sloping lower to toe slope landscape positions that occur down slope of, and below, more steeply sloping 8906 seepage areas. 8904 areas are predicted to be moistened by seepage from above and to be affected by frostiness from cold air drainage. 8904 areas do not have sufficient slope to disperse, or pass on, seepage water or cold air. Consequently both seepage waters and cold air accumulate to create frosty conditions and permanently high water tables. 8904 areas tend to occur slightly upslope of and around the margins of low, flat, wet depressional areas predicted to contain site series 11 or, less frequently, 08 and just topographically below higher and less frosty 8906 areas that are affected by seepage but that have sufficiently steep slopes that cold air does not accumulate.
8905	SBS mc2	05	TC			NOT MAPPED. NOT DEFINED IN CARIBOO FIELD GUIDE.
8906	SBS mc2	06	SO	k	j	8906 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8906 areas occur in lower to toe slope landscape positions that are predicted to be moistened by seepage from above but that have sufficient slope that neither the seepage water nor cold air accumulate to create frosty conditions or permanently high water tables. 8901 areas were predicted to occur preferentially on cooler N and NE facing hillslopes. 8906 areas were restricted to occurring only on the lowest and presumably wettest toe slope positions on warmer S and SW facing hillslopes. The Field Guide indicated that the 06 site series was relatively uncommon in this BEC variant. It may well be that the 06 site series has been over predicted for this PEM project as considerable 06 site series has been predicted.
8907	SBS mc2	07	BF			NOT MAPPED. NOT DEFINED IN CARIBOO FIELD GUIDE.
8908	SBS mc2	08	ST	j	d	8908 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8908 areas occur in sloping draws, hollows and depressions with slopes greater than 5%. These sloping draws tend to have persistent seepage within 50 cm of the surface and may be slightly frosty, but some of the cold air drains away. 8908 areas are predicted to contain mainly 08 site series along with frosty, moist 04 site series and not frosty, less wet 06 site series.
8909	SBS mc2	09	SD			NOT MAPPED. NOT DEFINED IN CARIBOO FIELD GUIDE.
8910	SBS mc2	10	SH			NOT MAPPED. NOT DEFINED IN CARIBOO FIELD GUIDE.
8911	SBS mc2	11	HG	j	d	8911 areas were mapped on ALL TEXTURES of material. 8911 areas occur in the lowest, flattest and wettest portions of very gently sloping to level hollows, flats and depressions. 8911 areas are predicted to be cold and frosty and to have persistent seepage within 50 cm of the surface. 8911 areas are predicted to be wetter and colder than 8908 areas.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8912	SBS mc2	01 b	SB	r	x	8912 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8912 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow by JMJ. 8912 areas were defined to permit the possibility of recognizing areas of typical mesic 01 site series that might also contain a proportion of the slightly drier sub-mesic 01b site series variant and perhaps some shallow 02a site series in areas not mapped as shallow by JMJ.
8913	SBS mc2	01 a	SB	k	x	8913 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8913 areas occur on cool, dry steep N and NE facing hillslopes with slopes greater than 30%. The Field Guide key and the regional ecologist indicate that these areas are occupied by the 01 site series. 8913 areas were identified separately from typical 01 areas so as to permit the possibility of predicting a slightly different mixture of included, sub-dominant site series. 8913 areas are predicted to contain a mixture of typical 01a site series along with a proportion of slightly drier 01b and perhaps some slightly moister 06 site series.
8920	SBS mc2	02 b	PH	c	d	8920 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8920 occurs on all upper shedding landform positions ranging from crests to lower slopes that are NOT mapped as SHALLOW to bedrock or as having evidence of SEEPAGE. 8920 areas attempt to capture the concept of the 02b site series as very dry areas with coarse sandy soils.
8921	SBS mc2	01 b	SB	c	j	8921 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8921 areas occur in lower to toe slopes and gently sloping hollows in areas of coarse textured materials. 8921 areas may contain slightly less coarse textured materials due to slope wash and accumulation of medium textured materials in these toe slopes and hollows. 8921 areas may also be slightly more moist than typical for coarse areas due to the possibility of higher moisture levels from subsurface water tables or seepage. 8921 areas are predicted to contain a mixture of the dry variant 01b site series and dry coarse 02b site series.
8922	SBS mc2	02 a	PH	w	d	8922 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 8922 occurs on warm steep S or SW facing hillslopes with slopes greater than 30%. There is some confusion regarding the correct site series to assign to this landscape setting. The Field Guide key and site features table indicate that steep dry SW slopes should be classified as 02a. The regional ecologist indicated that this landscape position was more often occupied by the slightly dry 01b site series variant. It is predicted that 8922 areas will contain a mixture of very dry 02a and slightly less dry 01b site series.
8924	SBS mc2	04	HB	c	d	8924 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8924 areas occupy the same relative landform positions as 8904 areas but they occur on coarse textured materials and this can affect the composition of included site series. 8924 areas occur slightly upslope of and around the margins of low, wet, flat to depressional areas predicted to contain site series 11, or less frequently, 08 in these areas of coarse textured materials. 8924 areas are predicted to contain a mixture of cold frosty 04 site series, slightly dry 01b site series and coarse dry 02b site series.
8928	SBS mc2	08	ST	c	d	8928 areas were mapped ONLY in areas of COARSE TEXTURED materials. 8928 areas occur in the same relative landform positions as 8908, except that the materials are coarse textured. 8928 occurs in sloping draws, hollows and depressions with slopes greater than 5%. These sloping draws tend to have persistent seepage within 50 cm of the surface and may be slightly frosty, but some of the cold air drains away. 8928 areas are predicted to contain mainly 08 site series along with frosty, moist 04 site series and not frosty, less wet 06 site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
8966	SBS mc2	06	SO	y		8966 areas were mapped on ALL MATERIAL TEXTURES where ever SEEPAGE was recognized. The concept of the seepage class was that it recognized areas that were moister than expected for the landscape position and environmental setting. In almost all cases this equated to recognizing seepage areas in areas that would otherwise have been expected to be typical 01 mesic sites. These SEEPAGE areas are therefore predicted to contain mainly the slightly wetter than mesic 06 site series that is reported to occupy most seepage areas not affected by frostiness.
8991	SBS mc2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
8992	SBS mc2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
8993	SBS mc2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
8994	SBS mc2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
8995	SBS mc2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
8996	SBS mc2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS mc2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
8901	8901	01a	SBS mc2	8	01a	SB	j	d	2	08	ST			
8902	8902	02a	SBS mc2	8	02a	PH	v	r	2	01b	SB			
8903	8903	03	SBS mc2	10	03	BM								
8904	8904	04	SBS mc2	7	04	HB	j	d	2	08	ST	1	11	HG
8905	8905	05	SBS mc2	10	05	TC								
8906	8906	06	SBS mc2	8	06	SO	k	j	2	01	SB			
8907	8907	07	SBS mc2	10	07	BF			0					
8908	8908	08	SBS mc2	7	08	ST	j	d	2	04	HB	1	06	SO
8909	8909	09	SBS mc2	10	09	SD								
8910	8910	10	SBS mc2	10	10	SH								
8911	8911	11	SBS mc2	8	11	HG	j	d	2	08	ST			
8912	8912	01b	SBS mc2	6	01b	SB	r	x	2	01a	SB	2	02a	PH
8913	8913	01a	SBS mc2	6	01a	SB	k	x	3	01b	SB	1	06	SO
8920	8920	02b	SBS mc2	9	02b	PH	c	d	1	01b	SB			
8921	8921	01b	SBS mc2	7	01b	SB	c	j	3	02b	PH			
8922	8922	02a	SBS mc2	6	02a	PH	w	d	4	01b	SB			
8924	8924	04	SBS mc2	5	04	HB	c	d	3	01b	SB	2	02	PH
8928	8928	08	SBS mc2	7	08	ST	c	d	2	04	HB	1	06	SO
8966	8966	06	SBS mc2	7	06	SO	y		2	04	HB	1	01a	SB
8991	8991	OW	SBS mc2	10	00	OW								
8992	8992	WE	SBS mc2	10	00	WE	d	y						
8993	8993	ME	SBS mc2	10	00	ME								
8994	8994	PA	SBS mc2	10	00	PA								
8995	8995	BR	SBS mc2	10	00	BR								
8996	8996	DL	SBS mc2	10	00	DL								





**BGC Unit: SBS mc3****LMES Zone ID: 90****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	19,999.3	0.96%
Williams Lake TSA	433.8	0.01%
100 Mile House TSA	0.0	0.00%
Cariboo Region	20,433.1	0.25%

**List of Site Series Codes Defined for use in SBS mc3**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SB	Sxw - Huckleberry	mesic	All MEDIUM TEXTURED upper to lower water shedding < 30%
02	LJ	PI - Juniper - Dwarf blueberry	xeric	Shallow Crests, Thin, Dry Soils - MEDIUM & COARSE
03	LF	PI - Feathermoss - Cladina	subxeric	All COARSE TEXTURED, DEEP upper to lower water shedding < 30%
04	SS	Sxw - Huckleberry - Soopolallie	submesic	Steep SW - Dry Warm Upper Slopes (includes COARSE)
05	BH	Sb - Huckleberry - Spirea	submesic - mesic	Frosty, Mesic, Upper to Lower water shedding in frosty areas
06	BF	SbPI - Feathermoss	subhygric	Cold, Frosty, Moist to Wet, Level to Gentle Toes. WT < 50 cm
07	ST	Sxw - Twinberry	subhygric	Moist, Non-Frosty, Sloping Seepage, WT > 50 cm - MED & CRS
08	SH	Sxw - Horsetail (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ALSO Frosty, Sloping Valleys
09	BB	SbSxw - Scrub birch - Sedge (Wb05 - Sb - Water sedge - Peat-moss)	subhydric	Forested ORGANICS, Flat, Wet, Frosty Depressions
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2005; and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #24, "A Field Guide for Site Identification and Interpretation for the Prince George Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: SBS mc3

No Profile Diagram available

### Example Attribute Class Rule File for SBS mc3 (arule9030)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Up	1	80.00	80.00	80.00	70.00	90.00	10
3	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
4	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
5	relzfile	PCTZ2ST	Up2Low	1	50.00	50.00	50.00	25.00	75.00	25
6	relzfile	PCTZ2ST	Mid2Low	1	40.00	40.00	40.00	20.00	60.00	20
7	relzfile	PCTZ2ST	Low2Toe	1	15.00	15.00	15.00	2.00	28.00	13
8	relzfile	PCTZ2ST	Toe	1	7.00	7.00	7.00	2.00	12.00	5
9	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
10	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	VDry2SlDry	5	7.80	7.80	7.80	0.00	8.00	0.2
12	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.70	7.30	0.8
13	formfile	QWETI	Dry2SlDry	1	7.50	7.50	7.50	6.50	8.50	1
14	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
15	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
16	formfile	QWETI	Med2SlWet	1	9.20	9.20	9.20	8.20	10.20	1
17	formfile	QWETI	Sl_Wet	1	10.20	10.20	10.20	9.40	11.00	0.8
18	formfile	QWETI	SLWet2Wet	1	11.20	11.20	11.20	10.20	12.20	1
19	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
20	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
21	formfile	SLOPE	Steep	4	18.00	18.00	18.00	15.00	100.00	3
22	formfile	SLOPE	SlopeLT05	3	2.00	2.00	2.00	0.00	3.00	1
23	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	1
24	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
25	formfile	SLOPE	SlopeLT30	5	35.00	35.00	35.00	0.00	37.00	2
26	formfile	SLOPE	SlopeGT05	4	3.00	3.00	3.00	2.00	100.00	1
27	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mc3 (crule9030)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
H2902c	Crest	20	1	9002	02 Shallow Crest	H2951n	Low2Toe	30	9	9017	01 < 20% Drier Low-Toe NE
H2902c	VDry	30	1	9002		H2951n	Med2SIWet	30	9	9017	
H2902c	SlopeLT20	20	1	9002		H2951n	SlopeLT20	10	9	9017	
H2902c	Med2Crs	10	1	9002		H2951n	Gentle_NE	30	9	9017	
H2902c	Shallow	80	1	9002		H2951n	Deep	10	9	9017	
H2902c	Hi_Ridge	10	1	9002		H2907s	Low2Toe	30	10	9017	01 < 20% Drier Low-Toe SW
H2903c	Crest	20	2	9012	01 Deep Dry High Ridge	H2907s	Med2SIWet	30	10	9017	
H2903c	VDry	30	2	9012		H2907s	SlopeLT20	20	10	9017	
H2903c	SlopeLT15	20	2	9012		H2907s	Gentle_SW	20	10	9017	
H2903c	Med2Crs	10	2	9012		H2907s	Deep	10	10	9017	
H2903c	Deep	10	2	9012		H2907L	Low2Toe	30	11	9007	07 < 15% Moist Low-Toe
H2903c	Hi_Ridge	10	2	9012		H2907L	Sl_Wet	30	11	9007	
H2943s	Crest2Up	30	3	9001	01 Deep Mesic Low Knoll	H2907L	SlopeLT15	20	11	9007	
H2943s	Dry	30	3	9001		H2907L	Med2Crs	10	11	9007	
H2943s	Gentle_SW	20	3	9001		H2907L	Deep	10	11	9007	
H2943s	Med2Crs	10	3	9001		H2906t	Toe	30	12	9006	06 < 5% Wet Frosty Toe
H2943s	Deep	10	3	9001		H2906t	SLWet2Wet	30	12	9006	
H2904s	Crest2Mid	30	4	9004	04 Steep SW Dry Upper	H2906t	SlopeLT05	20	12	9006	
H2904s	VDry2SIDry	30	4	9004		H2906t	Med2Crs	10	12	9006	
H2904s	Steep_SW	30	4	9004		H2906t	Deep	10	12	9006	
H2904s	Med2Crs	10	4	9004		H2908v	Valley	30	13	9008	08 > 5% Sloping Valley
H2904s	Deep	10	4	9004		H2908v	Wet2V_Wet	30	13	9008	
H2905n	Crest2Mid	30	5	9011	01 Steep NE Upper	H2908v	SlopeGT05	20	13	9008	
H2905n	VDry2SIDry	30	5	9011		H2908v	Med2Crs	10	13	9008	
H2905n	Steep_NE	30	5	9011		H2908v	Deep	10	13	9008	
H2905n	Med2Crs	10	5	9011		H2909f	Valley	30	14	9008	08 < 5% Flat, Wet Valley
H2905n	Deep	10	5	9011		H2909f	Wet2V_Wet	30	14	9008	9009 in Frost Zone Areas
H2901u	Mid2Low	30	6	9001	01a <20% DEEP MID-LOW	H2909f	SlopeLT05	20	14	9008	
H2901u	Dry2SIDry	30	6	9001		H2909f	Fine	10	14	9008	
H2901u	SlopeLT20	30	6	9001		H2909f	Deep	10	14	9008	
H2901u	Med2Crs	10	6	9001		H2909v	Valley	30	15	9008	08 < 5% Flat, Wet Valley
H2901u	Deep	10	6	9001		H2909v	Wet2V_Wet	30	15	9008	9009 in Frost Zone Areas
H2941s	Mid2Low	30	7	9004	04 Steep SW Dry MID-LOW	H2909v	SlopeLT05	20	15	9008	
H2941s	Dry2SIDry	30	7	9004		H2909v	Med2Crs	10	15	9008	
H2941s	Steep_SW	30	7	9004		H2909v	Deep	10	15	9008	
H2941s	Med2Crs	10	7	9004		H2989m	WetZ_LT05	50	16	9008	08 Wet MEDIUM Margins
H2941s	Deep	10	7	9004		H2989m	WetL_LT200	50	16	9008	9009 in Frost Zone Areas
H2915n	Mid2Low	30	8	9011	01 Steep NE Cool MID-LOW	H2976s	Hi_Seep	80	17	9007	07 All Seepage Areas
H2915n	Dry2SIDry	30	8	9011		H2976s	Med2Crs	20	17	9007	
H2915n	Steep_NE	30	8	9011		H2914c	Crest	20	18	9001	01 Deep Mesic Low Knoll
H2915n	Med2Crs	10	8	9011		H2914c	VDry	30	18	9001	
H2915n	Deep	10	8	9011		H2914c	SlopeLT15	20	18	9001	
						H2914c	Med2Crs	10	18	9001	
						H2914c	Deep	10	18	9001	
						H2914c	Low_Knoll	10	18	9001	
						H2909o	Organic	99	19	9009	09 Forested ORGANICS

**PEM Entity Descriptions for: SBS mc3**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9001	SBS mc3	01	SB	j	d	9001 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9001 areas occur across the full range of upper to lower shedding landform positions from the crests of low ridges and knolls through all upper and mid slopes that are not steeply sloping (> 20%) down to the break in slope at toe slopes. 9001 is the predominant site series.
9002	SBS mc3	02	LJ	v	r	9002 areas were mapped ONLY in areas of MEDIUM TEXTURED materials and SHALLOW depth to bedrock. 9002 occurs mainly on the dry crests of high ridges but can occur anywhere where JMJ has recognized areas of shallow (< 50 cm) materials. 9002 attempts to capture the concepts of a dry shallow 02 unit as defined in the field guide.
9003	SBS mc3	03	LF	c	d	9003 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9003 occurs on all upper shedding landform positions ranging from crests to lower slopes that are NOT mapped as SHALLOW to bedrock or as having evidence of SEEPAGE. 9003 areas attempt to capture the concept of the 03 site series as very dry areas with coarse sandy soils.
9004	SBS mc3	04	SS	w	d	9004 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9004 occurs on warm steep S or SW facing hillslopes with slopes greater than 20%. 9004 is defined as a pretty standard steep SW facing hill slope. The field guide and the regional ecologist both predict that 9004 areas will contain mainly sub-mesic 04 site series with perhaps some inclusions of mesic 01 site series.
9006	SBS mc3	06	BF	j	d	9006 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9006 areas occur on very gently sloping to level toe slope landscape positions that are predicted to accumulate and hold both seepage water and cold air transmitted from upslope. The cold air and seepage waters accumulate to create frosty conditions and permanently high water tables. 9006 areas are predicted to be occupied mainly by moist cold, frosty 06 site series with lesser components of moist, non-frosty 07 site series and cold, wet, frosty 09 site series. 9006 areas usually occur adjacent to, and slightly upslope of, cold wet depressions occupied by 08 or 09 site series.
9007	SBS mc3	07	ST	j	d	9007 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9007 areas occur on gently to moderately sloping lower to toe slope landscape positions that are predicted to be moistened by seepage from above but that have sufficient slope that neither the seepage water nor cold air accumulate to create frosty conditions or permanently high water tables. 9007 areas are predicted to be occupied mainly the 07 site series which is considered to be the main non-frosty, slightly moister than mesic seepage entity.
9008	SBS mc3	08	SH	j	d	9008 areas were mapped in areas of MEDIUM TEXTURE materials. 9008 areas occur in almost all low-lying depressions, hollows, draws and flats that are predicted to have permanently high water tables and that are NOT expected to contain organic soils. In areas of ELEVATED FROST HAZARD 9008 areas are restricted to occurring in sloping draws with slopes greater than 5%. In areas that are not expected to have an elevated frost hazard, 9008 areas occupy all low, wet depressional areas EXCEPT those mapped as having ORGANIC soils.
9009	SBS mc3	09	BB	p	j	9009 areas were mapped mainly in areas of ORGANIC TEXTURED materials. 9009 areas occur in low-lying depressions, hollows, draws and flats that were mapped as having ORGANIC soils. 9009 areas were also predicted to occur in the lowest and wettest landform positions in areas identified as having an ELEVATED FROST HAZARD. It was predicted that the wetlands in these areas of ELEVATED FROST would likely contain ORGANIC soils, even these had not been recognized and mapped them as such. Most of these 9009 areas that were not mapped as ORGANIC are quite small and occur in close proximity to somewhat larger wetlands that were mapped as ORGANIC.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9011	SBS mc3	01	SB	k	d	9011 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9011 areas occur on cool, dry steep N and NE facing hillslopes with slopes greater than 20%. The regional ecologist indicated that these steep NE facing slopes are occupied by the 01 site series. 9011 areas were identified separately from typical 01 areas so as to permit the possibility of predicting a slightly different mixture of included, sub-dominant site series. 9011 areas are predicted to contain a mixture of typical 01 site series along with a proportion of some slightly moister 07 site series.
9012	SBS mc3	01	SB	r	x	9012 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9012 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 9012 areas were defined to permit the possibility of recognizing areas of typical mesic 01 site series that might also contain a proportion of the slightly drier submesic site series and perhaps some shallow 02 site series in areas not mapped as shallow.
9017	SBS mc3	01	SB	y	j	9017 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9017 areas occur on gently sloping lower to toe slope landform positions that are still convex (shedding) but that may be beginning to show evidence of slightly moister conditions from upslope seepage. 9017 is consciously defined as a transition zone from clearly mesic 9001 above to sloping seepage area 9007 below. 9017 is predicted to contain a mixture of mesic 01 and the slightly moister 07 seepage unit below.
9031	SBS mc3	01	SB	c	d	9031 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9031 areas occur on gently to moderately sloping lower to toe slopes in areas of coarse textured materials. These lower to toe slopes may contain an accumulation of slightly finer textured slope wash materials and may be subject to minor amounts of periodic moistening from seepage or from snow melt. 9031 areas are predicted to contain mainly mesic 01 site series with perhaps some slightly more moist 07 and some wetter 08 site series.
9036	SBS mc3	06	BF	c	j	9036 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9036 occurs on very gently sloping to nearly level mid to toe slopes in areas of coarse textured materials. These low gradient toe slopes in frost prone areas are predicted to contain mainly wet, frosty 06 site series with lesser components of mesic but still frosty 05 site series and some much wetter frosty 08 site series in depressions. 9036 areas usually occur adjacent to, and slightly upslope of cold wet depressions occupied by 09 site series.
9037	SBS mc3	07	ST	c	j	9037 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9037 areas occur in sloping draws, channels and concavities in areas of coarse textured materials. These hollows may be in-filled with somewhat finer textured materials and may be subject to moister conditions arising from seepage or high sub-surface water tables. 9037 areas are predicted to contain a mixture of slightly wetter than mesic 07 site series, mesic 01 site series and perhaps some wet 08 site series.
9038	SBS mc3	08	SH	c	j	9038 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9038 areas occupy the same low, wet landform positions as 9008 except that they occur in areas mapped as coarse textured. The coarse textured substrate may improve drainage and reduce wetness but these areas are still expected to experience elevated incidence of frost and high water tables.
9039	SBS mc3	09	BB	p	c	9039 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9039 areas occupy the same low, wet landform positions as 9009 except that they occur in areas mapped as coarse textured. If these areas are mapped as ORGANIC then they are classified as 9039.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9051	SBS mc3	05	BH	j	d	9051 areas were mapped ONLY in areas of ELEVATED FROST hazard and on MEDIUM TEXTURED materials. 9051 occurs on a wide range of upper to lower landform positions on low rises and knolls in areas of elevated frost hazard. These upper to lower landform positions are predicted to contain mainly frosty mesic 05 site series with a lesser component of non-frosty 01 site series and some wetter frosty 06 site series.
9052	SBS mc3	01	SB	j	d	9052 areas were mapped ONLY in areas of ELEVATED FROST hazard and on MEDIUM TEXTURED materials. 9052 occurs on upper crown landform positions on low rises and knolls in areas of elevated frost hazard. These upper crown positions are predicted to contain mainly normal mesic 01 site series with perhaps a small component of slightly frosty, but still mesic, 05 site series.
9055	SBS mc3	05	BH	j	d	9055 areas were mapped ONLY in areas of ELEVATED FROST hazard and on MEDIUM TEXTURED materials. 9055 occurs in a narrow zone at mid slope between the frosty mesic 9051 above it and the moister, frosty 9056 below it. In the end, only extremely small areas of 9055 areas were predicted and most of the landscape in frosty areas was classified as 9051 or 9056. In the final PEM map these 9055 areas are amalgamated with 9056 to create a larger and more continuous spatial entity.
9056	SBS mc3	06	BF	j	d	9056 areas were mapped ONLY in areas of ELEVATED FROST hazard and on MEDIUM TEXTURED materials. 9056 occurs on very gently sloping to nearly level mid to toe slopes in areas of elevated frost hazard. These low gradient toe slopes in frost prone areas contain mainly wet, frosty 06 site series with lesser components of mesic but still frosty 05 site series and some much wetter frosty 08 site series in depressions. 9056 areas usually occur adjacent to, and slightly upslope of cold wet depressions occupied by 09 site series.
9091	SBS mc3	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9092	SBS mc3	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9093	SBS mc3	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9094	SBS mc3	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9095	SBS mc3	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9096	SBS mc3	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS mc3**

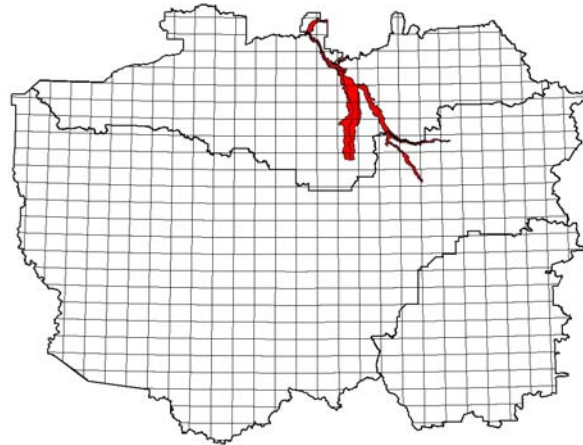
LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9001	9001	01	SBS mc3	9	01	SB	j	d	1	07	ST			
9002	9002	02	SBS mc3	8	02	LJ	v	r	2	01	SB			
9003	9003	03	SBS mc3	8	03	LF	c	d	2	01	SB			
9004	9004	04	SBS mc3	7	04	SS	w	d	3	01	SB			
9006	9006	06	SBS mc3	7	06	BF	j	d	2	07	ST	1		BB
9007	9007	07	SBS mc3	7	07	ST	j	d	2	01	SB	1		BF
9008	9008	08	SBS mc3	8	08	SH	j	d	2	06	BF			
9009	9009	09	SBS mc3	10	09	BB	p	j						
9011	9011	01	SBS mc3	8	01	SB	k	d	2	07	ST			
9012	9012	01	SBS mc3	8	01	SB	r	x	2	02	LJ			
9017	9001	01	SBS mc3	7	01	SB	y	j	3	07	ST			
9031	9031	01	SBS mc3	6	01	SB	c	d	3	07	ST	1	08	SH
9036	9036	06	SBS mc3	7	06	BF	c	j	2	05	BH	1	08	SH
9037	9037	07	SBS mc3	6	07	ST	c	j	3	01	SB	1	08	SH
9038	9038	08	SBS mc3	8	08	SH	c	j	2	06	BF			
9039	9039	09	SBS mc3	10	09	BB	p	c						
9051	9051	05	SBS mc3	7	05	BH	j	d	2	01	SB	1	06	BF
9052	9052	01	SBS mc3	8	01	SB	j	d	2	05	BH			
9055	9051	05	SBS mc3	7	05	BH	j	d	2	06	BF	1	01	SB
9056	9056	06	SBS mc3	7	06	BF	j	d	2	05	BH	1	08	SH
9091	9091	OW	SBS mc3	10	00	OW								
9092	9092	WE	SBS mc3	10	00	WE	d	y						
9093	9093	ME	SBS mc3	10	00	ME								
9094	9094	PA	SBS mc3	10	00	PA								
9095	9095	BR	SBS mc3	10	00	BR								
9096	9096	DL	SBS mc3	10	00	DL								





**BGC Unit: SBS mh****LMES Zone ID: 91****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	73,783.8	3.55%
Williams Lake TSA	11,255.4	0.23%
100 Mile House TSA	0.0	0.00%
<b>Cariboo Region</b>	<b>85,039.3</b>	<b>1.03%</b>

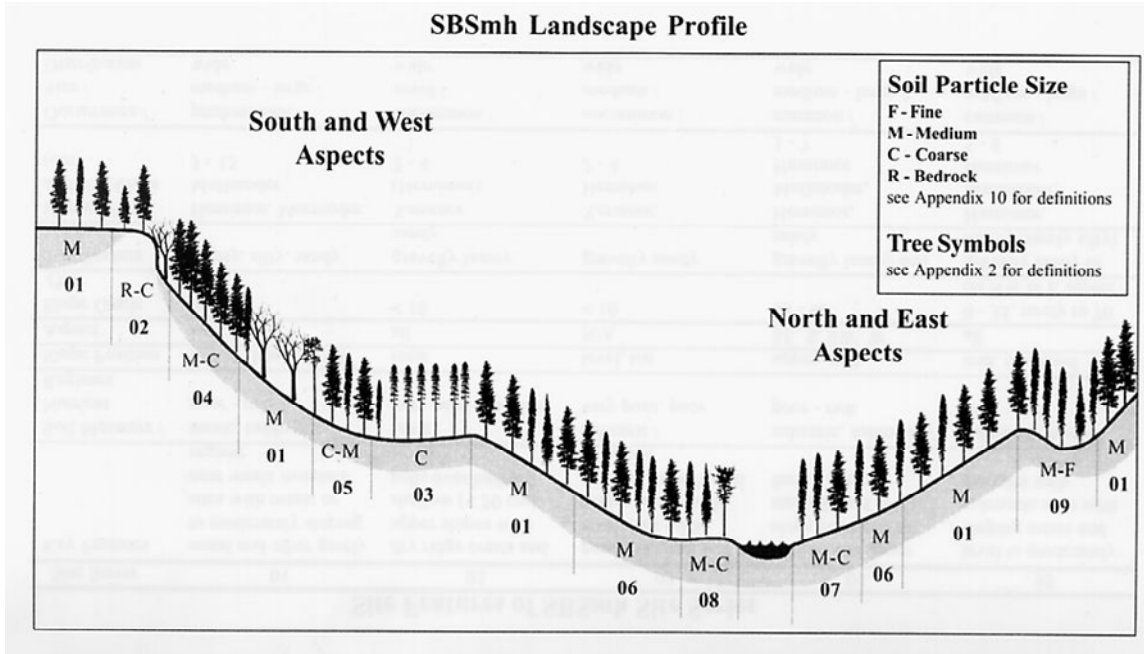
**List of Site Series Codes Defined for use in SBS mh**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	SN	SxwFd - Hazelnut	mesic	All MEDIUM TEXTURED upper to lower water shedding < 30%
02	DC	FdPI - Cladonia	xeric	ALL SHALLOW, (Mainly Crests) Thin, Dry Soils - MEDIUM & COARSE
03	LV	FdPI - Velvet-leaved blueberry - Cladonia	subxeric	COARSE TEXTURED, Restricted to Flat, Frosty Terraces North of the Blackwater River
04	DD	Fd - Douglas maple - Step moss	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes COARSE)
05	SF	SxwFd - Feathermoss	submesic - mesic	Drier than mesic, Not Frosty, Most COARSE areas, ALL Steep NE on MEDIUM or COARSE, Deep High Ridges on MEDIUM.
06	SC	SxwFd - Coltsfoot	subhygric	Moist , Non-Frosty, Gentle Sloping TOE, WT > 50 cm - MED & CRS
07	SD	SxwEp - Devil's club	subhygric - hygric	Moist , Non-Frosty, Rich Sloping Seepage, WT > 50 cm, Restricted to particular Northerly geographic locations and to gentle NE slopes.
08	OF	Sxw - Ostrich fern	subhygric - hygric	NOT MODELLED - Rich, moist, alluvium with Cottonwood vegetation
09	SH	Sxw - Horsetail - Glow moss	hygric - subhydric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ALSO Forested ORGANICS
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GB	Gravel Bar		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

### Landscape Profile Diagram: SBS mh



### Example Attribute Class Rule File for SBS mh (arule9130)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Up2Low	1	50.00	50.00	50.00	25.00	75.00	25
5	relzfile	PCTZ2ST	Mid2Low	1	40.00	40.00	40.00	20.00	60.00	20
6	relzfile	PCTZ2ST	Low2Toe	1	20.00	20.00	20.00	10.00	30.00	10
7	relzfile	PCTZ2ST	Toe	1	10.00	10.00	10.00	2.00	18.00	8
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SlDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.70	7.30	0.8
12	formfile	QWETI	Dry2SlDry	1	7.50	7.50	7.50	6.50	8.50	1
13	formfile	QWETI	Sl_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med2SlWet	1	9.20	9.20	9.20	8.20	10.20	1
16	formfile	QWETI	Sl_Wet	1	10.20	10.20	10.20	9.40	11.00	0.8
17	formfile	QWETI	SlWet2Wet	1	11.00	11.00	11.00	10.00	13.00	1
18	formfile	QWETI	Wet	1	11.00	10.50	11.50	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
21	formfile	SLOPE	SlopeLT05	3	2.00	2.00	2.00	0.00	3.00	1
22	formfile	SLOPE	SlopeLT15	5	15.00	0.00	15.00	0.00	15.00	5
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	35.00	35.00	35.00	0.00	37.00	2
25	formfile	SLOPE	SlopeGT05	4	3.00	3.00	3.00	2.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	20.00	20.00	20.00	20.00	100.00	1
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	51.00	51.00	51.00	0.00	50.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mh (crule9130)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
HM9102c	Crest	20	1	9102	02 Shallow Crest	HM9106LS	Low2Toe	30	10	9161	01 <15% Drier Low-Toe SW
HM9102c	VDry	30	1	9102		HM9106LS	Sl_Wet	30	10	9161	
HM9102c	SlopeLT15	20	1	9102		HM9106LS	SlopeLT15	20	10	9161	
HM9102c	Med2Crs	10	1	9102		HM9106LS	SW_Aspect	10	10	9161	
HM9102c	Shallow	80	1	9102		HM9106LS	Deep	10	10	9161	
HM9102c	Hi_Ridge	10	1	9102		HM9106LN	Low2Toe	30	11	9166	01 <15% Drier Low-Toe NE
HM9121c	Crest	20	2	9121	05 Deep Dry High Ridge	HM9106LN	Sl_Wet	30	11	9166	
HM9121c	VDry	30	2	9121		HM9106LN	SlopeLT15	20	11	9166	
HM9121c	SlopeLT15	20	2	9121		HM9106LN	NE_Aspect	10	11	9166	
HM9121c	Med2Crs	10	2	9121		HM9106LN	Deep	10	11	9166	
HM9121c	Deep	10	2	9121		HM9107t	Toe	30	12	9106	06 <20% Moist Low-Toe SW
HM9121c	Hi_Ridge	10	2	9121		HM9107t	SLWet2Wet	30	12	9106	
HM9104s	Crest2Mid	30	3	9104	04 Steep SW Dry Upper	HM9107t	SlopeLT20	20	12	9106	
HM9104s	VDry2SDry	30	3	9104		HM9107t	SW_Aspect	10	12	9106	
HM9104s	Steep_SW	30	3	9104		HM9107t	Deep	10	12	9106	
HM9104s	Med2Crs	10	3	9104		HM9107t	Toe	30	13	9176	06 <20% Moist Low-Toe NE
HM9104s	Deep	10	3	9104		HM9176t	SLWet2Wet	30	13	9176	
HM9115n	Crest2Mid	30	4	9115	05 Steep NE Upper	HM9176t	SlopeLT20	20	13	9176	
HM9115n	VDry2SDry	30	4	9115		HM9176t	NE_Aspect	10	13	9176	
HM9115n	Steep_NE	30	4	9115		HM9176t	Deep	10	13	9176	
HM9115n	Med2Crs	10	4	9115		HM9107s	Toe	30	14	9116	06 <20% Moist-Wet Toe
HM9115n	Deep	10	4	9115		HM9107s	SLWet2Wet	30	14	9116	
HM9101u	Mid2Low	30	5	9111	01 <20% DEEP MID-LOW	HM9107s	SlopeLT20	20	14	9116	
HM9101u	Dry2SDry	30	5	9111		HM9107s	Med2Crs	10	14	9116	
HM9101u	SlopeLT20	30	5	9111		HM9107s	Deep	10	14	9116	
HM9101u	Med2Crs	10	5	9111		HM9107s	Toe	30	14	9116	06 >20% Moist-Wet Toe
HM9101u	Deep	10	5	9111		HM9107s	SLWet2Wet	30	14	9116	
HM9141s	Mid2Low	30	6	9141	04 Steep SW Dry MID-LOW	HM9107s	SlopeGT20	20	14	9116	
HM9141s	Dry2SDry	30	6	9141		HM9107s	Med2Crs	10	14	9116	
HM9141s	Steep_SW	30	6	9141		HM9107s	Deep	10	14	9116	
HM9141s	Med2Crs	10	6	9141		HM9177v	Valley	30	15	9177	07 > 5% Sloping Valley NE
HM9141s	Deep	10	6	9141		HM9177v	Wet2V_Wet	30	15	9177	
HM9151n	Mid2Low	30	7	9151	05 Steep NE Cool MID-LOW	HM9177v	SlopeGT05	20	15	9177	
HM9151n	Dry2SDry	30	7	9151		HM9177v	NE_Aspect	10	15	9177	
HM9151n	Steep_NE	30	7	9151		HM9177v	Deep	10	15	9177	
HM9151n	Med2Crs	10	7	9151		HM9167v	Valley	30	16	9167	06 > 5% Sloping Valley SW
HM9151n	Deep	10	7	9151		HM9167v	Wet2V_Wet	30	16	9167	
HM9101n	Low2Toe	30	8	9101	01 < 20% Drier Low-Toe NE	HM9167v	SlopeGT05	20	16	9167	
HM9101n	Med2SIWet	30	8	9101		HM9167v	SW_Aspect	10	16	9167	
HM9101n	SlopeLT20	10	8	9101		HM9167v	Deep	10	16	9167	
HM9101n	Gentle_NE	30	8	9101		HM9189v	Valley	30	17	9109	09 < 5% Flat, Wet Valley
HM9101n	Deep	10	8	9101		HM9189v	Wet2V_Wet	30	17	9109	
HM9101s	Low2Toe	30	9	9101	01 < 20% Drier Low-Toe SW	HM9189v	SlopeLT05	20	17	9109	
HM9101s	Med2SIWet	30	9	9101		HM9189v	Med2Crs	10	17	9109	
HM9101s	SlopeLT20	20	9	9101		HM9189v	Deep	10	17	9109	
HM9101s	Gentle_SW	20	9	9101		HM9188m	WetZ_LT05	50	18	9188	09 Wet MEDIUM Margins
HM9101s	Deep	10	9	9101		HM9188m	WetL_LT200	50	18	9188	
						HM9166s	Hi_Seep	80	19	9169	06 All Seepage Areas
						HM9166s	Med2Crs	20	19	9169	
						HM9199o	Organic	99	20	9199	09 Forested ORGANICS

**PEM Entity Descriptions for: SBS mh**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9101	SBS mh	01	SN	j	d	9101 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9101 areas occur from mid to lower slopes in shedding landform positions that are not steeply sloping (< 35%). 9101 was defined separately from 9111 in order to be able to separate upper from lower 01. 01 site series is the predominant site series.
9102	SBS mh	02	DC	s	r	9102 areas were mapped in ALL areas that are SHALLOW . 9102 occurs mainly on the dry crests of high ridges but can occur in any recognized areas of shallow (< 50 cm) materials. 9102 attempts to capture the concepts of a dry shallow 02 unit as defined in the field guide. Very little 9102 was predicted as very few areas of shallow were mapped.
9103	SBS mh	05	SF	c	j	9103 areas were mapped ONLY in NON-FROSTY areas of COARSE TEXTURED materials. 9103 areas were restricted to occurring on gentle slopes of < 5% that were not located in the floor of a main river valley. These level coarse areas on benches and terraces above the river valley floor were considered to represent non-frosty glaciofluvial terraces where the 05 Site Series is anticipated to occur instead of 03. 9103 areas are classified as 05 south of the Blackwater River and reclassified to 9133 and Site Series 03 north of the Blackwater River
9104	SBS mh	04	DD	w	x	9104 areas were mapped ONLY in areas of MEDIUM textured materials and ONLY on STEEP SW facing slopes with slopes greater than 35%. 9104 areas occupy UPPER portions of steep slopes. Steep SW slopes lower in the landscape are mapped as 9141. Both 9104 and 9141 are predicted to be occupied mainly by the drier 04 Site Series.
9106	SBS mh	06	SC	j	w	9106 areas were mapped ONLY in areas of MEDIUM TEXTURED materials and ONLY on slopes with a SW exposure. 9106 areas occur on very gently sloping to level toe slope landscape positions with a SW exposure that are predicted to be moistened by seepage water transmitted from upslope. 9106 areas are predicted to be occupied mainly by the slightly moist 06 site series. The 06 site series is not affected by a permanently high water table or by frosty conditions. As it did not prove possible to predict the spatial distribution of the 07 site series effectively, it is predicted that 9106 areas may also contain a proportion of very moist, rich 07 site series. The regional ecologist indicated that the 07 site series only occurred in the northern part of the SBS mh and that it occurred mainly in toe slope positions on the bottoms of long gentle north facing (cool) slopes. The regional ecologist suggested that 07 not be mapped in most parts of the Cariboo PEM area but that it be described as occurring within areas of 9106 in some small proportion.
9107	SBS mh	07	SD	j	k	The regional ecologist suggested that the 07 site series not be predicted in most map areas as it was difficult to model correctly. He indicated that the 07 site series was restricted to occurring in a limited geographic area in the northern part of the SBS mh. He further indicated that the 07 site series developed mainly on toe slopes of long gentle slopes with cool N facing aspects. 9107 is predicted only in a restricted area in the northern part of the extent of the SBS mh.
9108	SBS mh	08	OF	a	y	NO AREAS OF 9108 WERE PREDICTED. The regional ecologist suggested that the 08 site series not be predicted as it was difficult to model correctly. He indicated that the 08 site series was of very restricted distribution. The 08 site series was described as being restricted to occurring as a very narrow band of rich, moist medium textured alluvial deposits that developed adjacent to major channels and that were vegetated with cottonwood and spruce. It did not prove possible to model this spatial distribution effectively with the input data sets that were available. It would probably prove more effective to interpret the distribution of the 08 site series manually from aerial or satellite imagery.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9109	SBS mh	09	SH	d	y	9109 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9109 areas occur in the lowest, wettest and flattest parts of the landscape in swales, hollows and depressions with slopes of less than 5%.
9111	SBS mh	01	SN	j	d	9111 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9111 areas occur across the upper to mid portions of upper shedding landform positions that are not steeply sloping (< 35%). 9111 was added to separate the 01 Site Series into upper and lower components but both components are dominated by the 01 Site Series.
9115	SBS mh	05	SF	k	x	9115 areas were mapped on STEEP NE facing hillslopes ONLY in areas of MEDIUM TEXTURED materials. There is no cool, dry site series defined for use in the SBS mh and the regional ecologist indicated that these steep NE facing hillslopes were most likely to be occupied mainly by the 05 site series. It was thought that 9115 areas could contain a proportion of the sub-mesic to mesic 05 site series particularly towards the base of the steep slopes if coarser textured materials accumulate there.
9116	SBS mh	06	SC	d	y	9116 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9116 areas occur in lower to toe slope landform positions, often just below the break of slope below steep escarpments. The regional ecologist indicated that seepage, especially at the base of sloping escarpments often results in the development of the slightly moist 06 seepage site series. 9116 areas are not perfectly or consistently predicted and this mapping entity could be improved by developing additional derivatives to identify areas below sharp breaks in slope.
9121	SBS mh	05	SF	d	x	9121 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9121 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow by JMJ. 9121 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier sub-mesic site series (05) and perhaps some shallow 02 site series in areas not mapped as shallow along with typical 01.
9130	SBS mh	05	SF	c	w	9130 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9130 areas occupy SW facing water-shedding lower to toe slope positions in coarse areas with slopes > 5% and < 35%. 9130 areas are predicted to be occupied dominantly by the drier 05 Site Series but may be affected by seepage and contain some 01 and moist 06 Site Series.
9131	SBS mh	05	SF	c	k	9131 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9131 areas occupy NE facing water-shedding lower to toe slope positions in coarse areas with slopes > 5% and < 35%. 9131 areas are predicted to be occupied dominantly by the drier 05 Site Series but may be affected by seepage and contain some 01 and moist 07 or 06 Site Series.
9132	SBS mh	05	SF	c	j	9132 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9132 occurs mainly on the level to gently sloping (<5%) dry crests of high ridges but 9132 is often over-ridden by class 9103.
9133	SBS mh	03	LV	c	j	9133 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9133 areas are identical to 9103 areas except that they occur north of the Blackwater River in an area that has a higher incidence of cold, frosty conditions. 9133 areas were restricted to occurring on gentle slopes of < 5% that were not located in the floor of a main river valley. These level coarse areas on benches and terraces above the river valley floor were considered to represent frosty glaciofluvial terraces where the 03 Site Series is anticipated to occur. 9133 areas are mapped as 9103 and classified as 05 south of the Blackwater River and classified as 9133 and Site Series 03 north of the Blackwater River

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9134	SBS mh	04	DD	w	c	9134 areas were mapped ONLY in areas of COARSE textured materials and ONLY on STEEP SW facing slopes with slopes greater than 35%. 9134 areas occupy UPPER and LOWER portions of steep slopes in COARSE AREAS. Both 9144 and 9134 are predicted to be occupied mainly by the drier 04 Site Series.
9136	SBS mh	06	SC	c	y	9136 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9136 areas occur in sloping upper draws and hollows in areas of coarse textured materials. 9136 areas are predicted to contain mainly the slightly moist 06 site series.
9137	SBS mh	06	SC	c	y	9137 areas were mapped in all COARSE TEXTURED areas of recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In COARSE MATERIALS, these would be areas that would be normally expected to consist of 05 site series but that were, for some reason, wetter than mesic. We arbitrarily assign the most common moist, seepage 06 Site Series to areas mapped as 9137.
9138	SBS mh	09	SH	c	y	9138 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9138 areas occupy the low-lying areas around the margins of open water and non-forested wetlands as mapped by JMJ. It is predicted that 9138 areas will predominantly contain the wet 09 site series. 9138 areas are essentially identical to 9109 areas but 9138 areas were classified separately simply to permit visual evaluation of the effectiveness of applying the wetland margin concept to map wet areas.
9139	SBS mh	09	SH	c	y	9139 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9139 areas occur in the lowest, wettest and flattest parts of the landscape in swales, hollows and depressions with slopes of less than 5%. 9139 areas are the COARSE TEXTURED equivalent of 9109 areas.
9141	SBS mh	04	DD	w	x	9141 areas were mapped ONLY in areas of MEDIUM textured materials and ONLY on the lower portions of STEEP SW facing slopes with slopes greater than 35%. 9141 areas occupy LOWER portions of steep slopes. Steep SW slopes higher in the landscape are mapped as 9104. Both 9104 and 9141 are predicted to be occupied mainly by the drier 04 Site Series.
9143	SBS mh	05	SF	c	k	9143 areas were mapped on STEEP NE facing hillslopes and ONLY in areas of COARSE TEXTURED materials. There is no cool, dry site series defined for use in the SBS mh and the regional ecologist indicated that these steep NE facing hillslopes were most likely to be occupied mainly by the 05 site series. 9143 is the COARSE textured equivalent of 9115 and 9151.
9144	SBS mh	04	DD	w	c	9144 areas were mapped ONLY in areas of COARSE textured materials and ONLY on STEEP SW facing slopes with slopes greater than 35%. 9144 areas occupy UPPER portions of steep slopes. 9144 areas are predicted to be occupied mainly by the drier 04 Site Series.
9146	SBS mh	05	SF	c	w	9146 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9146 areas occur in steeply sloping hollows and draws with STEEP SW, WARM ASPECTS. These steeply sloping hollows were mapped separately to permit recognition of slightly moister conditions in draws on steep SW slopes. 9146 areas are predicted to be occupied by the slightly dry 05 Site Series.
9147	SBS mh	01	SN	c	k	9147 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9147 areas occur in steeply sloping hollows and draws with STEEP NE, COOL ASPECTS. These steeply sloping hollows were mapped separately to permit recognition of slightly moister conditions in draws on steep NE slopes. 9147 areas are predicted to be occupied by the normal mesic 01 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9151	SBS mh	05	SF	k	x	9151 areas were mapped on the lower portions of STEEP NE facing hillslopes in areas of MEDIUM TEXTURED materials. It was thought that these lower 9151 areas could contain the sub-mesic to mesic 05 site series particularly towards the base of the steep slopes if coarser textured materials accumulate there. This unique environmental setting was defined and mapped separately from the upper steep NE slopes labeled as 9115 in order to permit it to receive a slightly different description of component inclusions than would be assigned to a typical 9115 area. In the end, both 9115 and 9151 areas were designated as being occupied mainly by the 05 Site Series.
9152	SBS mh	05	SF	c	j	9152 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9152 areas occupy dry crest positions with slopes > 5% and less than 30%. These deep dry crests are predicted to be occupied by the slightly dry 05 Site Series.
9153	SBS mh	05	SF	c	x	9153 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9153 areas are defined as occupying upper to lower slope positions with slopes > 5% and < 30%. These deep dry upper to lower slopes are predicted to be occupied by the slightly dry 05 Site Series. 9153 areas can be best described as relatively steep escarpments and steps that separate coarse textured level terraces or benches mapped as 9103.
9156	SBS mh	01	SN	c	j	9156 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9156 areas are defined as occurring on nearly level (< 5%) slopes within valley bottom positions with SW aspects that are interpreted to not exhibit moist conditions. These are drier areas in flat valley bottoms.
9157	SBS mh	01	SN	c	j	9157 areas were mapped ONLY in areas of COARSE TEXTURE materials. 9157 areas are defined as occurring on nearly level (< 5%) slopes within valley bottom positions with NE aspects that are interpreted to not exhibit moist conditions. These are drier areas in flat valley bottoms.
9161	SBS mh	01	SN	d	y	9161 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 9161 areas occupy transition zones in mid to lower landform positions with a SW exposure. It was thought that 9161 areas might contain a significant amount of moist 06 seepage; however, the Regional Ecologist decided that these areas would most likely be dominated by normal mesic 01 Site Series with perhaps a component of moister than mesic 06 Site Series.
9163	SBS mh	06	SC	c	w	9163 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9163 areas occur in SW facing swales, hollows and sloping depressions with slopes greater than 5% in areas of coarse textured materials. The regional ecologist indicated that these sloping hollows with a warm SW orientation were most likely to be dominated by the slightly moist 06 site series with a lesser component of mesic 01 site series. 9163 areas are the COARSE TEXTURED equivalent of 9167 areas.
9166	SBS mh	01	SN	d	y	9166 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 9166 areas occupy transition zones in mid to lower landform positions with a NE exposure. It was thought that 9166 areas might contain a significant amount of moist 06 seepage; however, the Regional Ecologist decided that these areas would most likely be dominated by normal mesic 01 Site Series with perhaps a component of moister than mesic 06 Site Series.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9167	SBS mh	06	SC	j	w	9167 areas were mapped in sloping valleys, swales, side slopes and depressions with SW exposures and gradients > 5% in areas of MEDIUM TEXTURED soils. 9167 areas are characterized by moving, aerated groundwater and moist soils. 9167 areas are predicted to be occupied by the SLIGHTLY MOIST SEEPAGE Site Series 06. In this geographic area the climate is too dry to permit a devils club seepage unit (07) to occur anywhere except in very moist N facing swales with long upslope accumulation areas, so the regional ecologist predicts that these areas will mainly be occupied by the more common 06 seepage unit. Lower slope to depression, deep medium-textured soils.
9169	SBS mh	06	SC	j	y	9169 areas were mapped in all areas of MEDIUM TEXTURED materials AND SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign the most common moist, seepage 06 Site Series to areas mapped as 9169.
9173	SBS mh	07	SD	c	j	9173 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9173 areas occur in NE facing swales, hollows and sloping depressions with slopes greater than 5% in areas of coarse textured materials. The regional ecologist indicated that these sloping hollows with a cool NE orientation were most likely to be dominated by the moist rich 07 seepage site series with a lesser component of less moist 06 site series. 9173 areas are the COARSE TEXTURED equivalent of 9177 areas.
9176	SBS mh	06	SC	j	k	9176 areas were mapped ONLY in areas of MEDIUM TEXTURED materials and ONLY on slopes with a NE exposure. 9176 areas occur on very gently sloping to level toe slope landscape positions with a NE exposure that are predicted to be moistened by seepage water transmitted from upslope. 9176 areas are predicted to be occupied mainly by the slightly moist 06 site series. The 06 site series is not affected by a permanently high water table or by frosty conditions. As it did not prove possible to predict the spatial distribution of the 07 site series effectively, it is predicted that 9106 areas may also contain a proportion of very moist, rich 07 site series. The regional ecologist indicated that the 07 site series only occurred in the northern part of the SBS mh and that it occurred mainly in toe slope positions on the bottoms of long gentle north facing (cool) slopes. The regional ecologist suggested that 07 not be modeled in some areas but rather that it be described as occurring within areas of 9106 in some small proportion. 9176 areas are the NE facing equivalent of 9106 lower slope seepage areas.
9177	SBS mh	07	SD	j	k	9177 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9177 areas occur in NE facing swales, hollows and sloping depressions with slopes greater than 5% in areas of coarse textured materials. The regional ecologist indicated that these sloping hollows with a cool NE orientation were most likely to be dominated by the moist rich 07 seepage site series with a lesser component of less moist 06 site series. 9177 areas are the MEDIUM TEXTURED equivalent of 9137 areas.
9179	SBS mh	06	SC	c	y	9179 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9179 areas were defined as level to very gently sloping (< 5% slope) moist hollows and swales with a NE exposure that were located near or within defined channels. These COARSE areas occur IN-VALLEYS, are FLAT, MOIST and have a NE ASPECT. 9179 areas are predicted to be occupied mainly by the moist 06 Site Series with some wetter 09 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9188	SBS mh	09	SH	d	y	9188 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9188 areas occupy the low-lying areas around the margins of open water and non-forested wetlands. It is predicted that 9188 areas will predominantly contain the wet 09 site series. 9188 areas are essentially identical to 9109 areas but 9188 areas were classified separately simply to permit visual evaluation of the effectiveness of applying the wetland margin concept to map wet areas.
9189	SBS mh	06	SC	c	y	9189 areas were mapped ONLY in areas of COARSE TEXTURED materials. 9189 areas were defined as level to very gently sloping (< 5% slope) moist hollows and swales with a SW exposure that were located near or within defined channels. These COARSE areas occur IN-VALLEYS, are FLAT, MOIST and have a SW ASPECT. 9189 areas are predicted to be occupied mainly by the moist 06 Site Series with some wetter 09 Site Series.
9190	SBS mh	00	GB			Gravel bar.
9191	SBS mh	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9192	SBS mh	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9193	SBS mh	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9194	SBS mh	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9195	SBS mh	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9196	SBS mh	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
9197	SBS mh	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
9198	SBS mh	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
9199	SBS mh	09	SH			9199 areas were mapped ONLY in areas of ORGANIC TEXTURED materials. 9199 areas occur in the lowest, wettest and flattest parts of the landscape in swales, hollows and depressions with slopes of less than 5%. All areas mapped as ORGANIC were classified as 9199.

**PEM Entity Extended Legend with Proportions of Site Series for: SBS mh**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9101	9101	01	SBS mh	9	01	SN	j	d	1	06	SC			
9102	9102	02	SBS mh	9	02	DC	s	r	1	04	DD			
9103	9103	05	SBS mh	9	05	SF	c	j	1	01	SN			
9104	9104	04	SBS mh	9	04	DD	w	x	1	01	SN			
9106	9106	06	SBS mh	7	06	SC	j	w	2	07	SD	1	01	SN
9107	9107	07	SBS mh	7	07	SD	j	k	2	06	SC	1	01	SN
9108	9108	08	SBS mh	10	08	OF	a	y						
9109	9109	09	SBS mh	9	09	SH	d	y	1	01	SN			
9111	9101	01	SBS mh	9	01	SN	j	d	1	06	SC			
9115	9115	05	SBS mh	7	05	SF	k	x	3	01	SN			
9116	9116	06	SBS mh	6	06	SC	d	y	3	01	SN	1	05	SF
9121	9121	05	SBS mh	6	05	SF	d	x	3	01	SN	1	02	DC
9130	9153	05	SBS mh	7	05	SF	c	w	2	01	SN	1	06	SC
9131	9153	05	SBS mh	7	05	SF	c	k	2	01	SN	1	06	SC
9132	9103	05	SBS mh	9	05	SF	c	j	1	01	SN			
9133	9133	03	SBS mh	9	03	LV	c	j	1	05	SF			
9134	9134	04	SBS mh	9	04	DD	w	c	1	01	SN			
9136	9136	06	SBS mh	7	06	SC	c	y	2	05	SF	1	01	SN
9137	9137	06	SBS mh	8	06	SC	c	y	2	01	SN			
9138	9138	09	SBS mh	9	09	SH	c	y	1	06	SC			
9139	9139	09	SBS mh	9	09	SH	c	y	1	01	SN			
9141	9104	04	SBS mh	9	04	DD	w	x	1	01	SN			
9143	9143	05	SBS mh	8	05	SF	c	k	2	01	SN			
9144	9134	04	SBS mh	9	04	DD	w	c	1	01	SN			
9146	9146	05	SBS mh	7	05	SF	c	w	2	01	SN	1	06	SC
9147	9147	01	SBS mh	7	01	SN	c	k	2	05	SF	1	07	SD
9151	9115	05	SBS mh	7	05	SF	k	x	3	01	SN			
9152	9152	05	SBS mh	9	05	SF	c	j	1	01	SN			
9153	9153	05	SBS mh	10	05	SF	c	x						
9156	9156	01	SBS mh	6	01	SN	c	j	3	05	SF	1	06	SC
9157	9157	01	SBS mh	6	01	SN	c	j	3	05	SF	1	07	SD
9161	9101	01	SBS mh	7	01	SN	d	y	3	06	SC			
9163	9163	06	SBS mh	7	06	SC	c	w	3	01	SN			
9166	9101	01	SBS mh	7	01	SN	d	y	3	06	SC			
9167	9167	06	SBS mh	8	06	SC	j	w	2	01	SN			
9169	9169	06	SBS mh	8	06	SC	j	y	2	01	SN			
9173	9173	07	SBS mh	7	07	SD	c	j	2	06	SC	1	01	SN
9176	9176	06	SBS mh	7	06	SC	j	k	2	07	SD	1	01	SN
9177	9177	07	SBS mh	7	07	SD	j	k	2	06	SC	1	01	SN
9179	9179	06	SBS mh	8	06	SC	c	y	2	09	SH			
9188	9188	09	SBS mh	9	09	SH	d	y	1	01	SN			
9189	9189	06	SBS mh	8	06	SC	c	y	2	09	SH			
9190	9190	GB	SBS mh	10	00	GB								
9191	9191	OW	SBS mh	10	00	OW								
9192	9192	WE	SBS mh	10	00	WE	d	y						
9193	9193	ME	SBS mh	10	00	ME								
9194	9194	PA	SBS mh	10	00	PA								
9195	9195	BR	SBS mh	10	00	BR								
9196	9196	DL	SBS mh	10	00	DL								
9197	9197	TA	SBS mh	10	00	TA								
9198	9198	AV	SBS mh	10	00	AV								
9199	9199	09	SBS mh	10	09	SH								

**BGC Unit: SBS mm****LMES Zone ID: 92****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	0.0	0.00%
100 Mile House TSA	11,398.2	0.92%
Cariboo Region	11,398.2	0.14%

**List of Site Series Codes Defined for use in SBS mm**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01		Sxw - Falsebox - Knight's plume	mesic	All MEDIUM TEXTURED upper to lower water shedding < 30%
02		PI - Huckleberry - Cladonia	xeric - subxeric	ALL SHALLOW Crests, Thin, Dry Soils - MEDIUM & COARSE
03		PI - Douglas-fir - Juniper	xeric - subxeric	Steep SW - Dry Warm Upper Slopes (includes COARSE)
04		PI - Soopolallie - Pinegrass	subxeric - submesic	Drier than mesic, Deep High Ridges and Moderate SW on MEDIUM.
05		Sxw - Soopolallie - Falsebox	subhygric	Slightly Moist - Seepage Slopes LOW-TOE, WT > 50 cm - MED & CRS
06		Sxw - Huckleberry - Falsebox	subhygric	Rich Moist Devil's Club - Sloping Valleys, WT > 50 cm
07		Sxw - Oak fern	subhygric - hygric	Cold, Frosty, Moist to Wet, Level to Gentle Toes. WT < 50 cm
08		Sxw - Horsetail	hygric - subhydric	Not Modelled Separately, Described as inclusions with 09
09		Sedge - Sphagnum	subhydric - hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ALSO Forested ORGANICS
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	TA	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GB	Gravel Bar		
00	GL	Grassland		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts for this BGC Unit were based on information presented in a preliminary and provisional updated classification being prepared for the Kamloops region as interpreted for the Cariboo PEM project by the Regional Ecologist. No alpha codes have yet been assigned for this provisional classification.

## Landscape Profile Diagram: SBS mm

No Landscape Profile diagram available

### Example Attribute Class Rule File for SBS mm (arule9230)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	1	80.00	80.00	80.00	70.00	90.00	10
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	50.00	70.00	10
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
7	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Drier	1	7.50	6.50	8.50	6.50	8.50	1
13	formfile	LNQAREA	Less_dry	1	9.00	8.50	8.50	8.50	9.50	0.5
14	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
15	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
16	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
17	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
18	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
19	formfile	SLOPE	Steep	4	35.00	35.00	35.00	30.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
21	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
22	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
23	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
24	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
31	geofile	TEXTURE	Med2CrS	4	45.00	40.00	40.00	40.00	100.00	10
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	L2Wet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
39	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mm (crule9230)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9202r	Crest	35	1	9202	02 Shallow Crest	MH9217u	Up2Mid	35	12	9217	07 < 5% Wet UP-MID
MH9202r	Dry_WI	25	1	9202		MH9217u	Wet2V_Wet	25	12	9217	
MH9202r	Hi_Ridge	20	1	9202		MH9217u	SlopeLT20	15	12	9217	
MH9202r	Shallow	40	1	9202		MH9217u	SlopeLT05	5	12	9217	
MH9202r	Med2CrS	10	1	9202		MH9217u	Med2CrS	10	12	9217	
MH9224r	Crest	35	2	9224	04 Deep Dry High Ridge	MH9217u	Deep	10	12	9217	
MH9224r	Dry_WI	25	2	9224		MH9211L	Mid2Toe	35	13	9211	01 < 30% Not Wet MID-TOE
MH9224r	Hi_Ridge	20	2	9224		MH9211L	Med2S_Wet	25	13	9211	
MH9224r	Deep	10	2	9224		MH9211L	SlopeLT30	20	13	9211	
MH9224r	Med2CrS	10	2	9224		MH9211L	Med2CrS	10	13	9211	
MH9221k	Crest	35	3	9221	01 Deep Low Knoll	MH9211L	Deep	10	13	9211	
MH9221k	Dry_WI	25	3	9221		MH9205s	Toe	35	14	9205	05 5-20% Moist Toe
MH9221k	Low_Knoll	20	3	9221		MH9205s	Sl_Wet2Wet	25	14	9205	
MH9221k	Deep	10	3	9221		MH9205s	SlopeLT20	15	14	9205	
MH9221k	Med2CrS	10	3	9221		MH9205s	SlopeGT05	5	14	9205	
MH9210n	Crest2Mid	35	4	9210	01k Steep NE Upper	MH9205s	Med2CrS	10	14	9205	
MH9210n	Dry2Med_WI	25	4	9210		MH9205s	Deep	10	14	9205	
MH9210n	Steep_NE	20	4	9210		MH9277s	Toe	35	15	9207	07 < 5% Frosty, Wet Toe
MH9210n	Med2CrS	10	4	9210		MH9277s	Sl_Wet2Wet	25	15	9207	
MH9210n	Deep	10	4	9210		MH9277s	SlopeLT10	15	15	9207	
MH9203s	Crest2Mid	35	5	9203	03 Steep SW Dry Upper	MH9277s	SlopeLT05	5	15	9207	
MH9203s	Dry2Med_WI	25	5	9203		MH9277s	Med2CrS	10	15	9207	
MH9203s	Steep_SW	20	5	9203		MH9277s	Deep	10	15	9207	
MH9203s	Med2CrS	10	5	9203		MH9209t	Toe2Valley	35	16	9279	09 < 5% Frosty, V. Wet Toe
MH9203s	Deep	10	5	9203		MH9209t	Wet	25	16	9279	
MH9201n	Crest2Mid	35	6	9201	01 <10% Gentle Upper NE	MH9209t	SlopeLT10	15	16	9279	
MH9201n	Dry2Med_WI	25	6	9201		MH9209t	SlopeLT05	5	16	9279	
MH9201n	NE_Aspect	15	6	9201		MH9209t	Med2CrS	10	16	9279	
MH9201n	SlopeLT10	15	6	9201		MH9209t	Deep	10	16	9279	
MH9201n	Med2CrS	5	6	9201		MH9207t	Toe2Valley	35	17	9207	07 5-10% Frosty, Wet Toe
MH9201n	Deep	5	6	9201		MH9207t	Wet	25	17	9207	
MH9201s	Crest2Mid	35	7	9201	01 <10% Gentle Upper SW	MH9207t	SlopeLT10	15	17	9207	
MH9201s	Dry2Med_WI	25	7	9201		MH9207t	SlopeGT05	5	17	9207	
MH9201s	SW_Aspect	15	7	9201		MH9207t	Med2CrS	10	17	9207	
MH9201s	SlopeLT10	15	7	9201		MH9207t	Deep	10	17	9207	
MH9201s	Med2CrS	5	7	9201		MH9206v	Valley	35	18	9206	06 > 5% Sloping Valley
MH9201s	Deep	5	7	9201		MH9206v	Wet2V_Wet	25	18	9206	
MH9241u	Crest2Mid	35	8	9241	04 10-30% Drier UP-MID	MH9206v	SlopeGT05	20	18	9206	
MH9241u	Dry2Med_WI	25	8	9241		MH9206v	Med2CrS	10	18	9206	
MH9241u	Drier	10	8	9241		MH9206v	Deep	10	18	9206	
MH9241u	SlopeLT30	10	8	9241		MH9289v	Valley	35	19	9289	09 < 5% Flat, Wet Valley
MH9241u	SlopeGT10	10	8	9241		MH9289v	Wet2V_Wet	25	19	9289	
MH9241u	Med2CrS	5	8	9241		MH9289v	SlopeLT05	20	19	9289	
MH9241u	Deep	5	8	9241		MH9289v	Med2CrS	10	19	9289	
MH9214u	Crest2Mid	35	9	9201	01 10-30% Less Dry UP-MID	MH9289v	Deep	10	19	9289	
MH9214u	Dry2Med_WI	25	9	9201		MH9270m	WetL_LT200	50	20	9270	09 Wet MEDIUM Margins
MH9214u	Less_dry	10	9	9201		MH9270m	WetZ_LT05	50	20	9270	
MH9214u	SlopeLT30	10	9	9201		MH9209o	Organic	99	21	9209	09 Forested ORGANICS
MH9214u	SlopeGT10	10	9	9201		MH9278s	Hi_Seep	90	22	9278	07 Drier Seepage Areas
MH9214u	Med2CrS	5	9	9201		MH9278s	Sl_Wet2Wet	10	22	9278	
MH9214u	Deep	5	9	9201		MH9287s	Hi_Seep	90	23	9287	09 Wetter Seepage Areas
MH9201m	Up2Mid	35	10	9201	01 <30% Less Dry UP-MID	MH9287s	Wet2V_Wet	10	23	9287	
MH9201m	Sl_Dry2Med	25	10	9201		MH9215t	Mid2Toe	35	24	9215	05 5-20% Moist Mid-Toe
MH9201m	SlopeLT30	20	10	9201		MH9215t	Wet	25	24	9215	
MH9201m	Med2CrS	5	10	9201		MH9215t	SlopeLT20	15	24	9215	
MH9201m	Deep	5	10	9201		MH9215t	SlopeGT05	5	24	9215	
MH9201m	Hi_Ridge	10	10	9201		MH9215t	Med2CrS	5	24	9215	
MH9215u	Up2Mid	35	11	9215	05 5-20% Moist UP-MID	MH9215t	Deep	5	24	9215	
MH9215u	Wet	25	11	9215							
MH9215u	SlopeLT20	15	11	9215							
MH9215u	SlopeGT05	5	11	9215							
MH9215u	Med2CrS	5	11	9215							
MH9215u	Deep	5	11	9215							

**PEM Entity Descriptions for: SBS mm**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9201	SBS mm	01		d	j	9201 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 9201 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes (< 30%) and on ALL ASPECTS. This is the predominant site series in the BEC variant.
9202	SBS mm	02		s	r	9202 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 9202 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9202 can occur in areas of MEDIUM texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest.
9203	SBS mm	03		w	x	9203 was mapped ONLY in areas of MEDIUM TEXTURED materials. 9203 occupies STEEP UPPER to LOWER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. STEEP SW slopes are dominated by the drier 03 Site Series.
9205	SBS mm	05		d	j	9205 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9205 occupies moderately to gently sloping lower to toe slopes (5-20%) that receive moisture from above but that do not accumulate and retain seepage to create permanently high water tables. 9205 is a slightly moist seepage unit. Lower to toe slope, receiving, deep, medium textured soils.
9206	SBS mm	06		d	y	9206 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9206 areas occur in sloping valleys and draws and along the margins of active stream channels. 9206 occurs in sloping hollows, draws, some toe slopes and depressions that maintain rich, moving, rather than stagnant, sub-surface water regimes. Rich, moist devil's club unit in sloping valleys.
9207	SBS mm	07		d	j	9207 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9207 occupies nearly level to very gently sloping (5-10%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 9207 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
9209	SBS mm	09		p	j	9209 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 09 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
9210	SBS mm	01		k	d	9210 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9210 occurs on steep, cool NE facing slopes in UPPER to LOWER landform positions. Slope gradient is greater than 30% and aspect is from 315 to 135. This is pretty much a standard steep NE slope unit in UPPER to LOWER landform positions. 9210 areas are dominated by the normal mesic 01 Site Series.
9211	SBS mm	01		d	j	9211 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9211 occupies moderately to gently sloping (< 30%) mid to lower slopes that were initially considered as transition areas from normal mesic 01 to slightly moister 05. Upon review, the regional ecologist indicated that these slightly moister mid to lower slopes would still be dominated by the normal mesic 01 Site Series. Deep, medium textured soils on gentle mid to lower slopes.
9215	SBS mm	05		d	j	9215 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9215 areas occur in gently sloping valleys and draws in upper to mid landform positions. The regional ecologist indicated that these gently sloping upper draws would most likely be dominated by the slightly moist 05 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9217	SBS mm	07		d	j	9217 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9217 areas occur in the wettest and flattest portions of valleys and draws in upper to lower landform positions. The regional ecologist indicated that these wet, level draws would most likely be dominated by the very moist 07 Site Series.
9221	SBS mm	01		d	x	9221 was mapped on the slightly drier tops of low knolls or ridges in areas of MEDIUM TEXTURED MATERIALS. 9221 occupies the slightly drier shedding locations on the tops of low knolls and ridges in landscapes of moderate to high relief. It is predicted to be dominated by the 01 Site Series along with perhaps a minor component of slightly drier 04 Site Series.
9224	SBS mm	04		d	x	9224 was mapped on deep dry ridges and crests on MEDIUM TEXTURED MATERIALS. 9224 occupies the highest and driest shedding locations on the crests of high ridges in landscapes of moderate to high relief. It is predicted to contain a mixture of predominantly 04 site series along with some potential inclusions of 01 and 02 site series.
9241	SBS mm	04		d	x	9241 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9241 occurs on moderate (10-30%) UPPER slopes that are slightly drier and warmer than normal. The Regional Ecologist suggested that these moderate SW slopes be classified as the 04 Site Series.
9270	SBS mm	09		d	j	9270 areas were mapped only in areas mapped as MEDIUM TEXTURED. 9270 areas occupy the low-lying margins surrounding wetlands and open water bodies. 9270 areas are predicted to consist of a mixture of the wettest Site Series including 09 and 08.
9278	SBS mm	07		d	j	9278 areas occur on slopes GREATER THAN 5% in the drier portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the slightly moist 07 and 05 Site Series.
9279	SBS mm	09		d	j	9279 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9279 occupies nearly level (<5%) lower to toe slopes that typically occur adjacent to wetland margins or in level toes but that seldom project into drainages or hollows. 9279 areas accumulate both moisture and cold air and can exhibit both frostiness and high water tables. Moist cold toe slopes, often adjacent to, but not within, stream channels.
9287	SBS mm	09		d	j	9287 areas occur on slopes LESS THAN 5% in the wetter portions of areas of noticeable SEEPAGE and MEDIUM TEXTURES. The regional ecologist recommended predicting that these relatively level, wet seepage areas be described as being occupied by the very wet 09 and 08 site series.
9289	SBS mm	09		d	y	9289 was mapped ONLY in areas of MEDIUM TEXTURED materials. 9289 areas occur in the lowest, wettest and flattest bottoms of hollows, drainage ways and depressions. 9289 areas are predicted to have permanently high water tables and very wet cool conditions (water table < 30 cm).
9291	SBS mm	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9292	SBS mm	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9293	SBS mm	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
9294	SBS mm	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9295	SBS mm	00	BR			These areas were mapped visually by interpreters as areas of scrub brush. Generally moist scrub birch or short-fruited willow shrub carrs; also includes a less common drier shrub carr that lacks glowmoss and other moisture indicating herbs.
9296	SBS mm	00	DL			These areas consist of all sites that have been disturbed by human activities in such as manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
9297	SBS mm	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
9298	SBS mm	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
9299	SBS mm	00	GL			These areas consist of all sites that were recognized as natural grassland areas by the manual interpretation process.

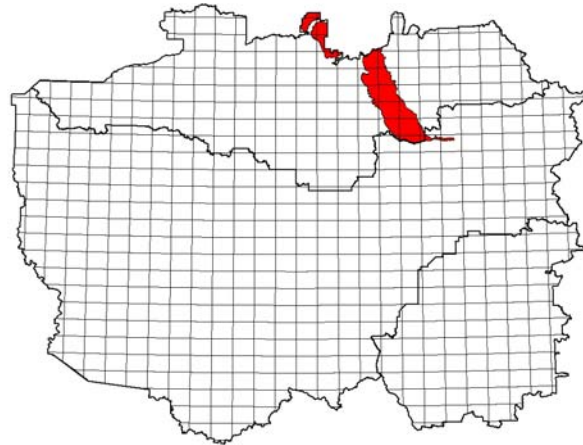
**PEM Entity Extended Legend with Proportions of Site Series for: SBS mm**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9201	9201	01	SBS mm	9	01		d	j	1	05				
9202	9202	02	SBS mm	8	02		s	r	1	03		1	01	
9203	9203	03	SBS mm	9	03		w	x	1	04				
9205	9205	05	SBS mm	7	05		d	j	3	07				
9206	9206	06	SBS mm	7	06		d	y	3	05				
9207	9207	07	SBS mm	7	07		d	j	3	05				
9209	9209	09	SBS mm	9	09		p	j	1	08				
9210	9210	01k	SBS mm	7	01		k	d	3	04				
9211	9201	01	SBS mm	7	01		d	j	3	05				
9215	9205	05	SBS mm	10	05		d	j						
9217	9217	07	SBS mm	9	07		d	j	1	05				
9221	9201	01	SBS mm	7	01		d	x	3	04				
9224	9224	04	SBS mm	8	04		d	x	2	01				
9241	9241	04	SBS mm	8	04		d	x	2	01				
9270	9270	09	SBS mm	7	09		d	j	3	08				
9278	9278	07	SBS mm	9	07		d	j	1	05				
9279	9209	09	SBS mm	7	09		d	j	3	07				
9287	9287	09	SBS mm	7	09		d	j	3	08				
9289	9289	09	SBS mm	8	09		d	y	2	08				
9291	9291	OW	SBS mm	10	00	OW								
9292	9292	WE	SBS mm	10	00	WE	d	y						
9293	9293	ME	SBS mm	10	00	ME								
9294	9294	PA	SBS mm	10	00	PA								
9295	9295	BR	SBS mm	10	00	BR								
9296	9296	DL	SBS mm	10	00	DL								
9297	9297	TA	SBS mm	10	00	TA								
9298	9298	AV	SBS mm	10	00	AV								
9299	9299	GL	SBS mm	10	00	GL								



**BGC Unit: SBS mw****LMES Zone ID: 93****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	133,783.8	6.44%
Williams Lake TSA	3,173.8	0.06%
100 Mile House TSA	0.0	0.00%
Cariboo Region	136,957.5	1.66%

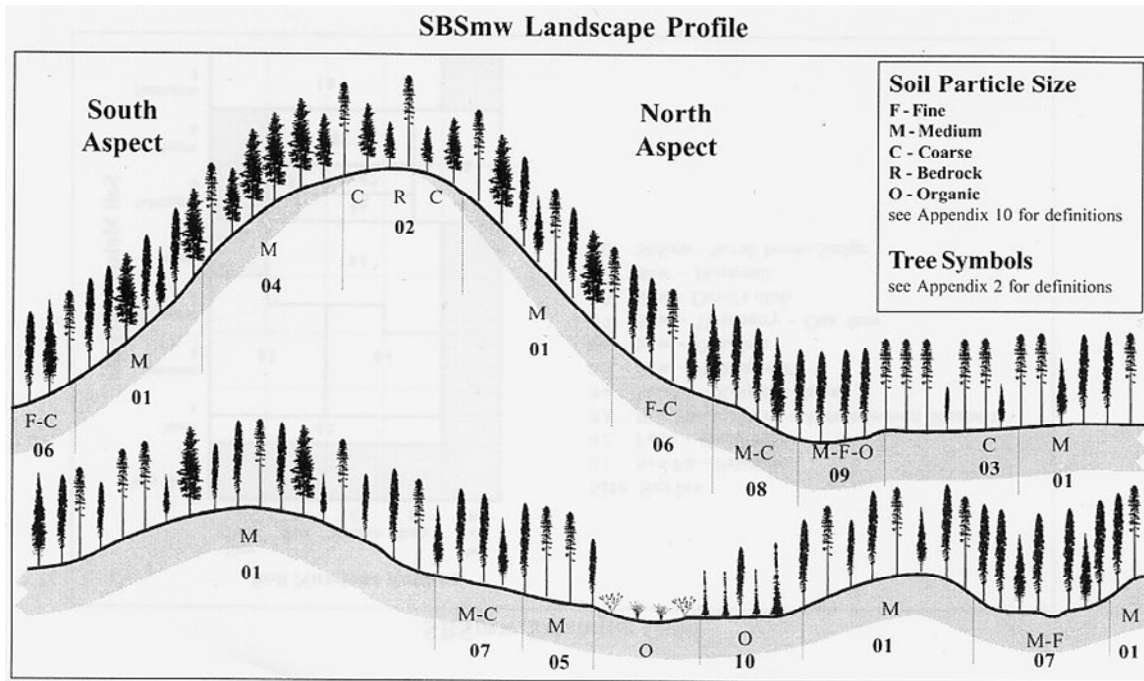
**List of Site Series Codes Defined for use in SBS mw**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SF	SxwFd - Falsebox	mesic	All MEDIUM upper to lower water shedding < 30%. Also Steep NE
02	DH	FdBl - Huckleberry	xeric - very xeric	SHALLOW Crests, Thin, Dry Soils - MEDIUM & COARSE
03	LV	Pl - Huckleberry - Velvet-leaved blueberry	xeric - submesic	COARSE TEXTURED, All non-Frosty Upper Shedding, COARSE < 30%
04	SK	SxwFd - Knight's plume	xeric - subxeric	Steep SW - Dry Warm Upper Slopes (includes COARSE). ALSO SHALLOW Gentle UPPER
05	SP	Sxw - Pink spirea	subhygric	Moist, Frosty LOW-TOE, Never Predicted as Dominant
06	SO	Sxw - Oak fern	subhygric	Moist, Non-Frosty, Gentle Sloping TOE, WT > 50 cm - COARSE & MED
07	ST	Sxw - Twinberry - Oak fern	subhygric	Moist, Frosty, Low, Flat, Wet Frosty TOE - MEDIUM and COARSE
08	SD	Sxw - Devil's club	subhygric	Moist, Non-Frosty, Rich Sloping Seepage, WT > 50 cm
09	SH	Sxw - Horsetail (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm
10	BS	SbSxw - Scrub birch - Sedge (Wb05 - Sb- Water sedge - Peat-moss)	subhydric	Forested ORGANICS, Flat, Wet, Frosty Depressions
11		Pl - Huckleberry - Knight's plume		Frosty, Mesic, Upper to Lower water shedding in frosty areas
12		Sxw - Pink spirea - Sphagnum		Very Frosty Areas - Level to Gentle, Wet Flat Valleys and Margins
13		Sxw - Mountain alder - Lady fern		Very Frosty Areas - Moist, Rich in Sloping Valleys in Frosty Areas
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Non-forested Talus Slopes		
00	AV	Non-forested Avalanche Tracks		
00	GB	Gravel Bar		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBS mw**



**Example Attribute Class Rule File for SBS mw (arule9330)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	formfile	LNQAREA	Up2Low	5	8.00	8.00	8.00	0.00	9.50	1.5
5	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
6	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
7	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
8	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
9	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
11	formfile	QWETI	SI_Dry_WI	5	8.50	8.50	8.50	0.00	9.00	0.5
12	formfile	QWETI	SI_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
13	formfile	QWETI	Med2SI_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
14	formfile	QWETI	SI_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
15	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
16	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
17	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
18	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
19	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
20	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
21	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
22	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
23	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
24	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
25	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
26	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
27	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
28	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
29	geofile	TEXTURE	Med2CrS	4	45.00	40.00	40.00	40.00	100.00	10
30	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
31	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
32	geofile	LZWet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
33	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
36	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
37	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS mw (crule9330)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9302r	Crest	35	1	9302	02 Shallow Crest	MH9367u	Up2Mid	35	12	9367	07 < 5% Wet UP-MID
MH9302r	Dry_WI	25	1	9302		MH9367u	Wet2V_Wet	25	12	9367	
MH9302r	Hi_Ridge	20	1	9302		MH9367u	SlopeLT20	15	12	9367	
MH9302r	Shallow	40	1	9302		MH9367u	SlopeLT05	5	12	9367	
MH9302r	Med2CrS	10	1	9302		MH9367u	Medium	10	12	9367	
MH9342r	Crest	35	2	9342	04 Deep Dry High Ridge	MH9367u	Deep	10	12	9367	
MH9342r	Dry_WI	25	2	9342		MH9386L	Mid2Toe	35	13	9386	06 < 30% Moist MID-TOE
MH9342r	Hi_Ridge	20	2	9342		MH9386L	Med2Sl_Wet	25	13	9386	
MH9342r	Deep	10	2	9342		MH9386L	SlopeLT30	20	13	9386	
MH9342r	Med2CrS	10	2	9342		MH9386L	Medium	10	13	9386	
MH9314k	Crest	35	3	9314	01 Deep Mesic Low Knoll	MH9386L	Deep	10	13	9386	
MH9314k	Dry_WI	25	3	9314		MH9308s	Toe	35	14	9308	08 5-20% Wet Sloping Toe
MH9314k	Low_Knoll	20	3	9314		MH9308s	Sl_Wet2Wet	25	14	9308	
MH9314k	Deep	10	3	9314		MH9308s	SlopeLT20	15	14	9308	
MH9314k	Med2CrS	10	3	9314		MH9308s	SlopeGT05	5	14	9308	
MH9311n	Crest2Mid	35	4	9341	01 Steep NE Upper	MH9308s	Med2CrS	10	14	9308	
MH9311n	Dry2Med_WI	25	4	9341		MH9308s	Deep	10	14	9308	
MH9311n	Steep_NE	20	4	9341		MH9378s	Toe	35	15	9378	07 < 5% Frosty, Wet Toe
MH9311n	Med2CrS	10	4	9341		MH9378s	Sl_Wet2Wet	25	15	9378	
MH9311n	Deep	10	4	9341		MH9378s	SlopeLT10	15	15	9378	
MH9304s	Crest2Mid	35	5	9304	04 Steep SW Dry Upper	MH9378s	SlopeLT05	5	15	9378	
MH9304s	Dry2Med_WI	25	5	9304		MH9378s	Med2CrS	10	15	9378	
MH9304s	Steep_SW	20	5	9304		MH9378s	Deep	10	15	9378	
MH9304s	Med2CrS	10	5	9304		MH9307t	Toe2Valley	35	16	9307	07 < 5% Frosty, V. Wet Toe
MH9304s	Deep	10	5	9304		MH9307t	Wet	25	16	9307	
MH9324n	Crest2Mid	35	6	9324	04 Gentle SHALLOW NE	MH9307t	SlopeLT10	15	16	9307	
MH9324n	Dry2Med_WI	25	6	9324		MH9307t	SlopeLT05	5	16	9307	
MH9324n	Gentle_NE	20	6	9324		MH9307t	Med2Fine	10	16	9307	
MH9324n	Med2CrS	10	6	9324		MH9307t	Deep	10	16	9307	
MH9324n	Shallow	10	6	9324		MH9387t	Toe2Valley	35	17	9387	07 5-10% Frosty, Wet Toe
MH9324s	Crest2Mid	35	7	9324	04 Gentle SHALLOW SW	MH9387t	Wet	25	17	9387	
MH9324s	Dry2Med_WI	25	7	9324		MH9387t	SlopeLT10	15	17	9387	
MH9324s	Gentle_SW	20	7	9324		MH9387t	SlopeGT05	5	17	9387	
MH9324s	Med2CrS	10	7	9324		MH9387t	Med2Fine	10	17	9387	
MH9324s	Shallow	10	7	9324		MH9387t	Deep	10	17	9387	
MH9301u	Crest2Mid	35	8	9301	01 <30% DEEP CREST-MID	MH9379v	Valley	35	18	9379	13 > 5% Sloping Valley
MH9301u	Dry2Med_WI	25	8	9301		MH9379v	Wet2V_Wet	25	18	9379	
MH9301u	SlopeLT30	20	8	9301		MH9379v	SlopeGT05	20	18	9379	
MH9301u	Medium	10	8	9301		MH9379v	Med2Fine	10	18	9379	
MH9301u	Deep	40	8	9301		MH9379v	Deep	10	18	9379	
MH9316m	Up2Mid	35	9	9316	01 < 30% DEEP UP-MID	MH9309v	Valley	35	19	9309	09 < 5% Flat, Wet Valley
MH9316m	Sl_Dry2Med	25	9	9316		MH9309v	Wet2V_Wet	25	19	9309	
MH9316m	SlopeLT30	20	9	9316		MH9309v	SlopeLT05	20	19	9309	
MH9316m	Medium	10	9	9316		MH9309v	Med2Fine	10	19	9309	
MH9316m	Deep	10	9	9316		MH9309v	Deep	10	19	9309	
MH9316m	Hi_Ridge	10	9	9316		MH9399m	WetL_LT200	50	20	9312	12 Wet MEDIUM Margins
MH9361u	Up2Mid	35	10	9361	06 5-20% Moist UP-MID	MH9399m	WetL_LT05	50	20	9312	
MH9361u	Wet	25	10	9361		MH9310o	Organic	99	21	9310	10 Forested ORGANICS
MH9361u	SlopeLT20	15	10	9361		MH9388s	Hi_Seep	90	22	9388	08 Non-Frosty Seepage
MH9361u	SlopeGT05	5	10	9361		MH9388s	Med2Fine	10	22	9388	
MH9361u	Medium	10	10	9361		MH9385t	Mid2Toe	35	23	9385	06 <20% Moist Mid-Toe
MH9361u	Deep	10	10	9361		MH9385t	Wet	25	23	9385	
MH9368u	Up2Mid	35	11	9368	08 5-20% Wet UP-MID	MH9385t	SlopeLT20	20	23	9385	
MH9368u	Wet2V_Wet	25	11	9368		MH9385t	Medium	10	23	9385	
MH9368u	SlopeLT20	15	11	9368		MH9385t	Deep	10	23	9385	
MH9368u	SlopeGT05	5	11	9368							
MH9368u	Medium	10	11	9368							
MH9368u	Deep	10	11	9368							

**PEM Entity Descriptions for: SBS mw**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9301	SBS mw	01	SF	j	d	9301 was mapped ONLY in areas of MEDIUM TEXTURED materials. 9301 areas occur on all gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP soils. The ecological key indicated that the 01 Site Series was quite common and occupied most upper convex, shedding landform positions. Gentle slope; deep, medium - textured soil
9302	SBS mw	02	DH	s	r	9302 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 9302 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9302 can occur in areas of any texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow soils over bedrock
9303	SBS mw	03	LV	c	j	9303 was mapped ONLY in areas of COURSE TEXTURED materials that were NOT mapped as FROST ZONES. 9303 occupies all gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP COARSE TEXTURED soils. An effort was made to capture this concept by classifying all portions of broad upper crests with deep SANDY soils as 9303. gentle slope to level; deep, coarse - textured soil
9304	SBS mw	04	SK	k	x	9304 was mapped ONLY in areas of MEDIUM TEXTURED materials. 9304 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
9305	SBS mw	08	SD	j	y	9305 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 9305 occupies moist frosty toe slopes with slopes greater than 5% and less than 20%. 9305 areas tend to not extend into depressions, hollows or draws but to occur on slopes > 5% just at the edges of depressions, hollows and draws. Gentle lower slope, receiving position; deep, medium - textured soil
9306	SBS mw	06	SO	c	y	9306 was mapped ONLY in areas of COARSE TEXTURED MATERIALS and NOT MAPPED as occurring in a FROST ZONE. 9306 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 9306 is the most common and extensive wetter than mesic site series in COARSE areas. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables in coarse areas. (could be 08 if there is sufficient seepage) Lower slope, receiving moisture; deep, coarse - textured soils.
9307	SBS mw	07	ST	j	y	9307 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9307 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions. 9307 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions or stream channels. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 07 Site Series. 9307 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series.
9308	SBS mw	08	SD	j	y	9308 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9308 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 9308 is the most common and extensive wetter than mesic site series. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9309	SBS mw	09	SH	j	y	9309 areas were mapped in the bottoms of very gently sloping to level valleys across ALL TEXTURES. The bottoms of FLAT VALLEYS are assumed to receive and accumulate both seepage and cold air and to be affected by permanently high water tables and frosty conditions. 9309 areas are predicted to be occupied by gleysols and organics of the 09 Site Series.
9310	SBS mw	10	BS	p	y	9310 areas were mapped in all locations mapped as FORESTED ORGANICS. 9310 areas are predicted to be forested wetlands occupied by the 10 Site Series. Organic bog wetland
9311	SBS mw	01	SF	j	d	9311 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 9311 occupies upper shedding portions of the landscape except for upper crests. 9311 areas occur where normal mesic 01 would normally occur, except that frost accumulation may affect these upper slope areas to produce a proportion of frosty, mesic 11 site series where one might normally expect to find only the normal mesic 01 site series.
9312	SBS mw	12	00	j	y	9312 areas were mapped in the bottoms of very gently sloping to level valleys in VERY COLD FROSTY REGIONS across ALL TEXTURES. 9312 areas were also mapped around the low-lying MARGINS of wetlands and open water. The bottoms of FLAT VALLEYS in COLD FROSTY REGIONS are assumed to receive and accumulate both seepage and cold air and to be affected by permanently high water tables and frosty conditions. 9312 areas are predicted to be occupied by gleysols and organics of the 12 Site Series.
9313	SBS mw	01	SF	c	j	9313 areas were mapped ONLY in areas of COARSE TEXTURED MATERIALS. 9313 areas occur topographically below areas of 9331 and occupy mid to lower slope positions just above lower to toe slope positions. 9313 areas may be slightly concave and may receive slightly more seepage than typical convex, shedding landform positions dominated by coarse, dry 03 Site Series. Still, 9313 areas are predicted to be dominated by the slightly moister 01 Site Series.
9314	SBS mw	01	SF	j	d	9314 areas were mapped ONLY in areas of MEDIUM TEXTURED materials. 9314 areas occur on the slightly drier crests of broad low ridges and low knolls with deep soils. 9314 areas are predicted to be dominated by normal mesic 01 Site Series but were mapped to allow for the possibility of recognizing a slightly drier than mesic 04 Site Series in these broad crest positions. Gentle slope, deep, medium-textured soils
9315	SBS mw	01	SF	j	d	9315 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED materials. 9315 occupies a transition area between upper and lower shedding portions of the landscape. 9315 areas are mostly occupied by the normal mesic 01 Site Series along with a large proportion of frosty, mesic 11 site series. 9315 areas may also contain some frosty moist 05 site series.
9316	SBS mw	01	SF	j	d	9316 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 9316 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. 9316 occupies somewhat lower slope positions than typically modeled for a normal mesic 01 Site Series. 9316 areas represent the mid to lower slope component of areas predicted to be dominated by the 01 Site Series. Gentle slope; deep, medium - textured soil
9323	SBS mw	04	SK	c	s	9323 was mapped ONLY in areas of COARSE TEXTURED materials. 9323 areas occur on GENTLY SLOPING, SHALLOW UPPER SLOPES with EITHER a COOL NE ASPECT OR a WARM SW ASPECT. Slope gradient must be less than 30%. This unit was defined because the key indicates that 04 Site Series can occur on gentle upper slopes if they are somewhat shallow. Gentle slope, of cool aspects; shallow, coarse - textured soils



LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9324	SBS mw	04	SK	s	j	9324 was mapped ONLY in areas of MEDIUM TEXTURED. 9324 areas occur on GENTLY SLOPING, SHALLOW UPPER SLOPES with EITHER a COOL NE ASPECT OR a WARM SW ASPECT. Slope gradient must be less than 30%. This unit was defined because the key indicates that 04 Site Series can occur on gentle upper slopes if they are somewhat shallow. Gentle slope, of cool aspects; shallow, medium - textured soils
9330	SBS mw	03	LV	c	k	9330 was mapped ONLY in areas of COURSE TEXTURED materials. 9330 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. This is a classic STEEP NE unit. The key indicates that 03 Site Series occurs on all freely drained upper slopes in areas of coarse textured materials. 9330 was mapped in order to permit recognition and labeling of areas with steep NE aspects and coarse textures. Significant slope, of cool aspects; deep, medium - textured soils
9331	SBS mw	03	LV	c	j	9331 was mapped ONLY in areas of COURSE TEXTURED materials that were NOT FROSTY. 9331 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. 9331 occupies somewhat lower slope positions that typically modeled for upper slope 03 Site Series. 9331 areas are still convex and water shedding and are predicted to consist mainly of the dry sandy 03 Site Series. Gentle slope; deep, coarse - textured soil
9332	SBS mw	03	LV	c	d	9332 was mapped ONLY in areas of COURSE TEXTURED materials that were NOT FROSTY. 9332 areas occur on gently sloping upper to crest landform positions in areas that were NOT mapped as SHALLOW to BEDROCK. 9332 occurs on the coarse, drier than normal crest positions of high ridges that are NOT shallow to bedrock. 9332 areas are predicted to contain a mixture of coarse dry 03 Site Series on slightly deeper crest positions along with some shallow, dry 04 Site Series. Gentle slope; crest positions; moderately deep sandy soils.
9333	SBS mw	03	LV	c	d	9333 was mapped ONLY in FROSTY areas of COARSE TEXTURED materials. 9333 occupies crest positions with deep coarse textured soils. Even in FROSTY AREAS, the crests of low ridges rise above the influence of FROST and are predicted to contain non-frosty coarse 03 site series.
9334	SBS mw	03	LV	c	d	9334 areas were mapped on the slightly drier crests of broad low ridges and low knolls with deep sandy soils that were NOT mapped as FROST ZONES. 9334 areas were mapped to allow for the possibility of recognizing a slightly drier Site Series in these broad crest positions. Gentle slope, deep, coarse-textured soils
9335	SBS mw	01	SF	c	y	9335 was mapped ONLY in FROSTY areas of COARSE TEXTURED MATERIALS. 9335 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage that typical convex mid to upper slopes dominated by the 03 Site Series but they do not develop permanently high water tables. 9335 areas are transition areas that predicted to be dominated by a mixture of normal mesic 01, sandy FROSTY mesic 11 Site series and slightly moister than mesic frosty 05 Site Series. SLOPING UPPER DRAWS AND HOLLOWES in COARSE FROSTY areas. Mid to lower slope, receiving moisture; deep, coarse - textured soils
9336	SBS mw	06	SO	c	y	9336 was mapped ONLY in areas of COARSE TEXTURED MATERIALS that were NOT mapped as FROST ZONES. 9336 areas occur in relatively level lower to toe slopes, often adjacent to wetlands or depressions. 9336 areas occupy about the same landform positions as 9306 and 9338 areas but 9336 areas have slightly steeper slopes than 9338 areas and slightly gentler slopes than 9306 areas. 9336 areas were meant to capture the concept of shallow depressions adjacent to wetlands that is used to describe the typical location of the moist, frosty 06 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9337	SBS mw	07	ST	c	y	9337 was mapped ONLY in areas of COARSE TEXTURED MATERIALS that were NOT mapped as FROST ZONES. 9337 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions in areas of COARSE TEXTURED materials. 9337 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 07 and 12 Site Series. 9337 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series.
9338	SBS mw	07	ST	c	y	9338 was mapped ONLY in areas of COARSE TEXTURED MATERIALS that were NOT mapped as FROST ZONES. 9338 occurs on the more gently sloping portions of lower to toe slope landform positions. 9338 areas occupy the same relative landform positions as 9337 except that the slopes tend to be gentler. 9338 areas are predicted to be slightly moister and to have a slightly higher susceptibility to frost than 9337 areas. 9338 areas are meant to capture the concept of a toe slope seepage area with slope gradients gentle enough that both seepage moisture and frost accumulate. Predicted Site Series include 07 and 06. Lower slope, receiving moisture and cold air; deep, coarse - textured soils
9341	SBS mw	01	SF	k	y	9341 was mapped ONLY in areas of MEDIUM TEXTURED materials. 9341 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. This is a classic STEEP NE unit. The key indicates that 01 Site Series can occur on somewhat shallow steep NE facing upper slopes. Significant slope, of cool aspects; deep, medium - textured soils
9342	SBS mw	04	SK	d	r	9342 was mapped ONLY in areas of MEDIUM TEXTURED materials that were NOT mapped as FROST ZONES. 9342 areas occur on gently sloping upper to crest landform positions in areas that were NOT mapped as SHALLOW to BEDROCK. 9342 occurs on the slightly drier than normal crest positions of high ridges that are NOT shallow to bedrock and NOT FROSTY. 9342 areas are predicted to contain a mixture of somewhat dry 04 Site Series on slightly deeper crest positions along with normal 01 and some very shallow 02 Site Series. Gentle slope; crest positions; moderately deep soils.
9343	SBS mw	04	SK	c	w	9343 was mapped ONLY in areas of COARSE TEXTURED materials that were NOT mapped as FROST ZONES. 9343 occupies STEEP UPPER SLOPES with a WARM SW ASPECT in COARSE NON-FROSTY areas. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
9344	SBS mw	04	SK	d	r	9344 was mapped ONLY in areas of MEDIUM TEXTURED materials that were ALSO mapped as FROST ZONES. 9344 areas occur on gently sloping upper to crest landform positions in FROSTY areas that were NOT mapped as SHALLOW to BEDROCK. 9344 occurs on the slightly drier than normal crest positions of high ridges that are NOT shallow to bedrock and are in FROSTY areas. 9344 areas are predicted to contain a mixture of somewhat dry 04 Site Series on slightly deeper crest positions along with frosty mesic 11 and some very shallow 02 Site Series. Gentle slope; crest positions; moderately deep soils.
9345	SBS mw	03	LV	c	d	9345 was mapped ONLY in areas of COURSE TEXTURED materials ALSO mapped as being FROST ZONES. 9345 occupies all gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP COARSE TEXTURED soils in FROSTY AREAS. An effort was made to capture this concept by classifying all portions of broad upper crests with deep SANDY soils as 9345. gentle slope to level; deep, coarse - textured soil

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9346	SBS mw	03	LV	c	d	9346 was mapped ONLY in areas of COURSE TEXTURED materials that were ALSO mapped as being FROST ZONES. 9346 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. 9346 occupies somewhat lower slope positions that typically modeled for upper slope 03 Site Series. 9346 areas are still convex and water shedding and are predicted to consist mainly of the dry sandy 03 Site Series. Gentle slope; deep, coarse - textured soil
9350	SBS mw	07	ST	j	y	9350 was mapped ONLY in FROST ZONES and on ALL TEXTURES. 9350 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions in FROST ZONE areas. 9350 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 07 and 12 Site Series. 9350 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series.
9351	SBS mw	06	SO	d	y	9351 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED MATERIALS. 9351 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage than typical convex mid to upper slopes dominated by the frosty, mesic 11 Site Series but they do not develop permanently high water tables. 9351 areas are transition areas that predicted to be dominated by a mixture of moist 06 and moist, frosty 05 and 07 Site Series along with some frosty mesic 11 Site Series. SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured frosty soils
9353	SBS mw	01	SF	c	j	9353 was mapped ONLY in FROSTY areas of COARSE TEXTURED MATERIALS. 9353 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 9353 occupies lower slope seepage positions in areas of HIGH FROST occurrence. 9353 is meant to capture the concept of a toe slope seepage area in FROSTY regions with slope gradients steep enough to prevent development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured frosty soils
9355	SBS mw	07	ST	j	y	9355 was mapped ONLY in FROSTY areas of MEDIUM TEXTURED MATERIALS. 9355 occurs in the lowest and wettest but still sloping portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. These areas are considered likely to be occupied by the frosty, wet 07 Site Series along with some frosty 05 and 12 Site Series. Lowest portions of SLOPING UPPER DRAWS AND HOLLOWES in FROSTY AREAS. Mid to lower slope, receiving moisture; deep, frosty medium - textured soils
9356	SBS mw	06	SO	d	y	9356 areas were mapped ONLY in FROSTY areas of MEDIUM TEXTURED MATERIALS. 9356 areas occur topographically below areas of 9315 and occupy mid to lower slope positions just above lower to toe slope positions. 9356 areas may be slightly concave and may receive slightly more seepage than typical convex, shedding landform positions dominated by frosty 11 Site Series. 9356 areas are predicted to be dominated by the slightly moister than mesic, non-frosty 06 and frosty 05 Site Series with some inclusions of frosty mesic 11 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9357	SBS mw	07	ST	j	y	9357 was mapped ONLY in FROSTY areas and on ALL TEXTURES. 9357 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions. 9357 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions or stream channels. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 07 Site Series. 9357 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series.
9358	SBS mw	08	SD	d	y	9358 areas were mapped in all FROSTY areas with recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of mesic 01 or mesic frosty 11 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, cold, non-frosty 08 and frosty 05 and 11 Site Series to areas mapped as 9358..
9359	SBS mw	12	00	j	y	9359 areas were mapped around the low-lying MARGINS of wetlands and open water in VERY COLD FROSTY REGIONS across ALL TEXTURES. These are assumed to receive and accumulate both seepage and cold air and to be affected by permanently high water tables and frosty conditions. 9359 areas are predicted to be occupied by gleysols and organics of the 12 Site Series.
9361	SBS mw	06	SO	j	d	9361 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9361 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage that typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. 9361 areas are transition areas that predicted to be dominated by a mixture of moister than normal 06 or 08 Site series and normal mesic 01 Site Series. SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils
9363	SBS mw	01	SF	c	y	9363 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 9363 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage than typical convex mid to upper slopes dominated by the 03 Site Series but they do not develop permanently high water tables. 9363 areas are transition areas that predicted to be dominated by a mixture of sandy mesic 01 Site series and slightly moister than mesic 06 Site Series. SLOPING UPPER DRAWS AND HOLLOWES in COARSE areas. Mid to lower slope, receiving moisture; deep, coarse - textured soils
9365	SBS mw	07	ST	j	y	9365 was mapped ONLY in FROSTY areas and ONLY on MEDIUM TEXTURED MATERIALS. 9365 areas occur in relatively level lower to toe slopes often adjacent to wetlands or depressions. 9365 areas occupy about the same landform positions as 9305 and 9357 areas but 9365 areas have slightly steeper slopes than 9305 areas and slightly gentler slopes than 9357 areas. 9365 areas were meant to capture the concept of shallow depressions adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series grading into flat moist, frosty 10 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9367	SBS mw	07	ST	j	y	9367 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9367 occurs in the lowest, wettest and flattest (<5% slope) portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. These areas are considered to match the concept of moist cold air drainages adjacent to stream channels that is used to describe the 07 Site Series. 9367 areas are transition areas that predicted to be dominated by the moister than normal, slightly frosty 07 Site Series. Lowest and flattest portions of SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils
9368	SBS mw	08	SD	j	y	9368 was mapped ONLY in NON-FROSTY areas of MEDIUM TEXTURED MATERIALS. 9368 occurs in the lowest and wettest but still sloping portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. These areas are considered to match the concept of moist rich drainages adjacent to stream channels that is used to describe the 08 Site Series. 9368 areas are transition areas that predicted to be dominated by a mixture of moister than normal 08 Site series and moist but not frosty 06 Site Series. Lowest portions of SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, non-frosty medium - textured soils
9373	SBS mw	06	SO	c	y	9373 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 9373 occurs in the lowest and wettest portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. 9373 areas are transition areas that predicted to be dominated by a mixture of slightly moister than normal coarse 06 Site series and mesic 01 Site Series. Lowest portions of SLOPING UPPER DRAWS AND HOLLOWES in COARSE areas. Mid to lower slope, receiving moisture; deep, coarse - textured soils
9375	SBS mw	13	00	j	y	9375 areas were mapped in the bottoms of gently to moderately sloping valleys ONLY in FROSTY AREAS and ONLY on MEDIUM TEXTURED materials. The bottoms of SLOPING VALLEYS are assumed to receive and accumulate moisture from seepage in these FROSTY areas. 9375 areas are predicted to be occupied by the moist rich 13 and the moist, frosty 07 and 11 Site Series.
9377	SBS mw	13		j	y	9377 areas were mapped in the bottoms of gently to moderately sloping valleys ONLY in FROSTY AREAS and ONLY on COARSE TEXTURED materials. The bottoms of SLOPING VALLEYS are assumed to receive and accumulate moisture from seepage in these FROSTY areas. 9377 areas are predicted to be occupied by the rich, moist 13 Site Series and the moist, frosty 07 and 11 Site Series.
9378	SBS mw	07	ST	j	y	9378 was mapped ONLY in NON-FROSTY areas of MEDIUM TEXTURED MATERIALS. 9378 occurs on the more gently sloping portions of lower to toe slope landform positions. 9378 areas occupy the same relative landform positions as 9308 except that the slopes tend to be gentler and slightly lower in the landscape. 9378 areas are predicted to be slightly moister and to have a slightly higher susceptibility to frost than 9308 areas. 9378 areas are meant to capture the concept of a toe slope seepage area with slope gradients gentle enough that both seepage moisture and frost accumulate. 9378 areas are predicted to be occupied by a mixture of moist, frosty 07 Site Series and moist, not-frosty 08 Site Series. Lower slope, receiving moisture and cold air; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9379	SBS mw	13		d	y	9379 areas were mapped in the bottoms of gently to moderately sloping valleys in NON-FROSTY areas across ALL TEXTURES. The bottoms of SLOPING VALLEYS are assumed to receive and accumulate moisture from seepage. They are also assumed not to trap or accumulate cold air but rather to act as conduits or drainages along which cold air may drain without accumulating. The Regional Ecologist indicated that these sloping valleys would be dominated by a newly defined rich, wet 13 Site Series that occurs in areas with permanently high water tables but rich moving subsurface flow.
9383	SBS mw	06	SO	c	y	9383 was mapped ONLY in FROSTY areas of COARSE TEXTURED MATERIALS. 9383 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions in FROSTY areas of COARSE TEXTURED materials. 9383 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 06, 07 and 12 Site Series. 9383 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 06, 07 and 12 Site Series.
9385	SBS mw	06	SO	d	y	9385 was mapped ONLY in NON-FROSTY areas of MEDIUM TEXTURED MATERIALS. 9385 occurs in narrow to broad concavities and draws that cut through or pass through lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage that typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. 9385 areas are transition areas that predicted to be dominated by a mixture of moister than normal 06 or 08 Site series and normal mesic 01 Site Series. SLOPING LOWER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils
9386	SBS mw	06	SO	d	y	9386 areas were mapped ONLY in NON-FROSTY areas of MEDIUM TEXTURED MATERIALS. 9386 areas occur topographically below areas of 9316 and occupy mid to lower slope positions just above lower to toe slope positions. 9386 areas may be slightly concave and may receive slightly more seepage that typical convex, shedding landform positions dominated by 01 Site Series. 9386 areas are predicted to be dominated by the slightly moister than mesic 06 Site Series with some inclusions of normal mesic 01 Site Series.
9387	SBS mw	07	ST	d	y	9387 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9387 areas occur in relatively level lower to toe slopes often adjacent to wetlands or depressions. 9387 areas occupy about the same landform positions as 9308 and 9307 areas but 9387 areas have slightly steeper slopes than 9307 areas and slightly gentler slopes than 9308 areas. 9387 areas were meant to capture the concept of shallow depressions adjacent to wetlands that is used to describe the typical location of the moist, frosty 07 Site Series.
9388	SBS mw	08	SD	d	y	9388 areas were mapped in all NON-FROSTY areas with recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 08 Site Series and moist, cold, frosty 07 Site Series to areas mapped as 9388..
9390	SBS mw	00	GB			Gravel bar.
9391	SBS mw	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9392	SBS mw	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9393	SBS mw	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9394	SBS mw	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9395	SBS mw	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9396	SBS mw	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
9397	SBS mw	00	RO			These areas consist of all areas manually digitized by J interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
9398	SBS mw	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
9399	SBS mw	09	SH	d	y	9399 areas were mapped in level to depressional low-lying areas around the margins of non-forested wetlands, lakes and ponds. 9399 areas most probably consist of a sequence of wetter than normal Site Series that grade from 10 and 09 nearest the wetland through 07 and then 08 as one progresses upslope away from the wetland. Forested swamp, poorly drained ; level to depressional; organic veneer or blanket

**PEM Entity Extended Legend with Proportions of Site Series for: SBS mw**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9301	9301	01	SBS mw	8	01	SF	j	d	2	08	SD			
9302	9302	02	SBS mw	8	02	DH	s	r	2	01	SF			
9303	9303	03	SBS mw	9	03	LV	c	j	1	01	SF			
9304	9304	04	SBS mw	8	04	SK	k	x	1	01	SF	1	02	DH
9305	9308	08	SBS mw	5	08	SD	j	y	4	05	SP	1	07	ST
9306	9306	06	SBS mw	7	06	SO	c	y	2	08	SD	1	01	SF
9307	9307	07	SBS mw	7	07	ST	j	y	2	05	SP	1	08	SD
9308	9308	08	SBS mw	7	08	SD	j	y	2	01	SF	1	05	SP
9309	9309	09	SBS mw	7	09	SH	j	y	2	12		1	07	ST
9310	9310	10	SBS mw	9	10	BS	p	y	1	12				
9311	9311	01	SBS mw	6	01	SF	j	d	4	11				
9312	9312	12	SBS mw	7	12	00	j	y	2	09	SH	1	07	ST
9313	9313	01	SBS mw	6	01	SF	c	j	4	03	LV			
9314	9301	01	SBS mw	8	01	SF	j	d	2	04	SK			
9315	9311	01	SBS mw	5	01	SF	j	d	4	11		1	05	SP
9316	9316	01	SBS mw	8	01	SF	j	d	1	05	SP	1	07	ST
9323	9323	04	SBS mw	6	04	SK	c	s	4	03	LV			
9324	9324	04	SBS mw	6	04	SK	s	j	4	01	SF			
9330	9330	03	SBS mw	9	03	LV	c	k	1	01	SF			
9331	9331	03	SBS mw	8	03	LV	c	j	1	01	SF	1	11	
9332	9332	03	SBS mw	8	03	LV	c	d	2	04	SK			
9333	9345	03	SBS mw	9	03	LV	c	d	1	11				
9334	9303	03	SBS mw	9	03	LV	c	d	1	04	SK			
9335	9335	01	SBS mw	5	01	SF	c	y	4	11		1	05	SP
9336	9306	06	SBS mw	6	06	SO	c	y	2	05	SP	2	07	ST
9337	9337	07	SBS mw	6	07	ST	c	y	2	12		2	05	SP
9338	9337	07	SBS mw	7	07	ST	c	y	2	06	SO	1	05	SP
9341	9341	01	SBS mw	10	01	SF	k	y						
9342	9342	04	SBS mw	7	04	SK	d	r	2	01	SF	1	02	DH
9343	9343	04	SBS mw	9	04	SK	c	w	1	02	DH			
9344	9344	04	SBS mw	7	04	SK	d	r	2	11		1	02	DH
9345	9345	03	SBS mw	9	03	LV	c	d	1	11				
9346	9345	03	SBS mw	7	03	LV	c	d	3	11				
9350	9357	07	SBS mw	6	07	ST	j	y	2	12		2	05	SP
9351	9356	06	SBS mw	5	06	SO	d	y	3	07	ST	2	11	
9353	9335	01	SBS mw	5	01	SF	c	j	3	07	ST	2	11	
9355	9357	07	SBS mw	6	07	ST	j	y	2	10	BS	2	11	
9356	9356	06	SBS mw	5	06	SO	d	y	3	05	SP	2	11	
9357	9357	07	SBS mw	5	07	ST	j	y	3	12		2	05	SP
9358	9358	08	SBS mw	5	08	SD	d	y	3	05	SP	2	11	
9359	9359	12	SBS mw	7	12	00	j	y	2	09	SH	1	07	ST
9361	9361	06	SBS mw	6	06	SO	j	d	2	08	SD	2	01	SF
9363	9363	01	SBS mw	6	01	SF	c	y	2	03	LV	2	06	SO
9365	9357	07	SBS mw	6	07	ST	j	y	2	10	BS	2	11	
9367	9378	07	SBS mw	6	07	ST	j	y	2	10	BS	2	11	
9368	9308	08	SBS mw	6	08	SD	j	y	2	06	SO	2	01	SF
9373	9306	06	SBS mw	7	06	SO	c	y	2	01	SF	1	08	SD
9375	9375	13	SBS mw	5	13	00	j	y	3	07	ST	2	11	
9377	9377	13	SBS mw	5	13		j	y	3	07	ST	2	11	
9378	9378	07	SBS mw	7	07	ST	j	y	2	08	SD	1	05	SP
9379	9379	13	SBS mw	8	13		d	y	2	08	SD	0		
9383	9383	06	SBS mw	5	06	SO	c	y	3	07	ST	2	12	
9385	9361	06	SBS mw	6	06	SO	d	y	2	08	SD	2	01	SF
9386	9361	06	SBS mw	6	06	SO	d	y	2	01	SF	2	08	SD
9387	9378	07	SBS mw	6	07	ST	d	y	2	08	SD	2	01	SF
9388	9388	08	SBS mw	6	08	SD	d	y	2	07	ST	2	01	SF



LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9390	9390	GB	SBS mw	10	00	GB								
9391	9391	OW	SBS mw	10	00	OW								
9392	9392	WE	SBS mw	10	00	WE	d	y						
9393	9393	ME	SBS mw	10	00	ME								
9394	9394	PA	SBS mw	10	00	PA								
9395	9395	BR	SBS mw	10	00	BR								
9396	9396	DL	SBS mw	10	00	DL								
9397	9397	RO	SBS mw	10	00	RO								
9398	9398	AV	SBS mw	10	00	AV								
9399	9399	09	SBS mw	7	09	SH	d	y	2	07	ST	1	08	SD

**BGC Unit: SBS wk1****LMES Zone ID: 95****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	125,621.0	6.05%
Williams Lake TSA	13,181.1	0.27%
100 Mile House TSA	0.0	0.00%
Cariboo Region	138,802.1	1.68%

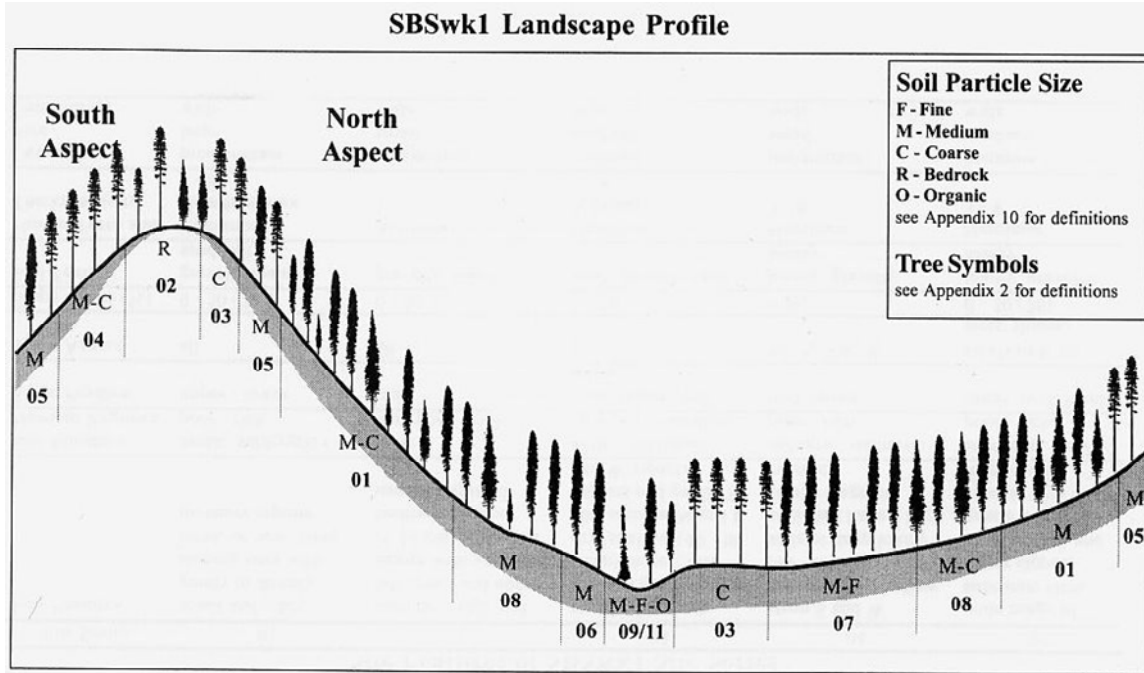
**List of Site Series Codes Defined for use in SBS wk1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	SO	Sxw - Oak fern	mesic	All MEDIUM, Non_Frosty, Upper to Lower Shedding, Slopes < 30%
02	LH	PI - Huckleberry - Cladina	very xeric - xeric	SHALLOW Crests, Thin, Dry Soils - MEDIUM & COARSE
03	LV	PI - Huckleberry - Velvet-leaved blueberry	subxeric	COARSE TEXTURED, Restricted to Flat, Frosty Terraces and Benches
04	DK	SxwFd - Knight's plume	subxeric - submesic	Steep SW - Dry Warm Upper Slopes (includes COARSE).
05	SC	Sxw - Huckleberry - Highbush-cranberry	submesic	COARSE TEXTURED, All Non-Frosty Upper Shedding, COARSE < 30%. ALSO MEDIUM areas of Steep NE, SHALLOW soils or DEEP Dry Ridges
06	SS	Sxw - Pink spirea - Oak fern	subhygric	Moist, Frosty, Low, Flat, Wet Frosty TOE - MEDIUM and COARSE
07	ST	Sxw - Twinberry - Oak fern	subhygric	Moist, Frosty LOW-TOE, LUMPED with 08 as single LUMPED ENTITY
08	SD	Sxw - Devil's club	subhygric	Moist, Non-Frosty, Gentle Sloping TOE, WT > 50 cm LUMPED with 07
09	SH	Sxw - Horsetail (Ws07 - Sxw - Common horsetail - Leafy moss)	hygric	Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm
10	SL	Sxw - Devil's club - Lady fern	subhygric - hygric	Moist, Non-Frosty, Rich Moist Sloping Valleys, WT > 50 cm
11	BB	SbSxw - Scrub birch - Sedge (Wb05 - Sb-Water sedge - Peat-moss)	subhydric	Forested ORGANICS, Flat, Wet, Frosty Depressions
12	BF	SbPI - Feathermoss	submesic - mesic	Not Modeled and Nor Predicted
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Steen and Coupé, 1997 and Mapcode\_Mar18\_06.mdb.

**Landscape Profile Diagram: SBS wk1**



**Example Attribute Class Rule File for SBS wk1 (arule9530)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	1	80.00	80.00	80.00	70.00	90.00	10
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	50.00	70.00	10
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
7	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Drier	1	7.50	6.50	8.50	6.50	8.50	1
13	formfile	LNQAREA	Less_dry	1	9.00	8.50	8.50	8.50	9.50	0.5
14	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
15	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
16	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
17	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
18	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
21	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
22	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
23	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
24	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
31	geofile	TEXTURE	Med2Crs	4	45.00	40.00	40.00	40.00	100.00	10
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	L2Wet	WetL_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
39	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for SBS wk1 (crule9530)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9502r	Crest	35	1	9502	02 Shallow Crest	MH9517u	Up2Mid	35	12	9517	07/08 5-20% Wet UP-MID
MH9502r	Dry_WI	25	1	9502		MH9517u	Wet2V_Wet	25	12	9517	
MH9502r	Hi_Ridge	20	1	9502		MH9517u	SlopeLT20	15	12	9517	
MH9502r	Shallow	40	1	9502		MH9517u	SlopeGT05	5	12	9517	
MH9502r	Med2CrS	10	1	9502		MH9517u	Medium	10	12	9517	
MH9552r	Crest	35	2	9552	05 Deep Dry High Ridge	MH9517u	Deep	10	12	9517	
MH9552r	Dry_WI	25	2	9552		MH9581L	Mid2Toe	35	13	9581	01 < 30% Drier Mid-Toe
MH9552r	Hi_Ridge	20	2	9552		MH9581L	Med2Sl_Wet	25	13	9581	
MH9552r	Deep	10	2	9552		MH9581L	SlopeLT30	20	13	9581	
MH9552r	Med2CrS	10	2	9552		MH9581L	Medium	10	13	9581	
MH9551k	Crest	35	3	9551	01 Deep Mesic Low Knoll	MH9581L	Deep	10	13	9581	
MH9551k	Dry_WI	25	3	9551		MH9508s	Toe	35	14	9508	07/08 5-20% Moist Toe
MH9551k	Low_Knoll	20	3	9551		MH9508s	Sl_Wet2Wet	25	14	9508	
MH9551k	Deep	10	3	9551		MH9508s	SlopeLT20	15	14	9508	
MH9551k	Med2CrS	10	3	9551		MH9508s	SlopeGT05	5	14	9508	
MH9553n	Crest2Mid	35	4	9553	05 Steep NE Upper	MH9508s	Med2CrS	10	14	9508	
MH9553n	Dry2Med_WI	25	4	9553		MH9508s	Deep	10	14	9508	
MH9553n	Steep_NE	20	4	9553		MH9578s	Toe	35	15	9578	07/08 < 5% Flat, Wet Toe
MH9553n	Med2CrS	10	4	9553		MH9578s	Sl_Wet2Wet	25	15	9578	
MH9553n	Deep	10	4	9553		MH9578s	SlopeLT10	15	15	9578	
MH9504s	Crest2Mid	35	5	9504	04 Steep SW Dry Upper	MH9578s	SlopeLT05	5	15	9578	
MH9504s	Dry2Med_WI	25	5	9504		MH9578s	Med2CrS	10	15	9578	
MH9504s	Steep_SW	20	5	9504		MH9578s	Deep	10	15	9578	
MH9504s	Med2CrS	10	5	9504		MH9507t	Toe2Valley	35	16	9507	06 5-10% Frosty, Wet Toe
MH9504s	Deep	10	5	9504		MH9507t	Wet	25	16	9507	
MH9523n	Crest2Mid	35	6	9523	05 Gentle SHALLOW NE	MH9507t	SlopeLT10	15	16	9507	
MH9523n	Dry2Med_WI	25	6	9523		MH9507t	SlopeLT05	5	16	9507	
MH9523n	Gentle_NE	20	6	9523		MH9507t	Med2Fine	10	16	9507	
MH9523n	Med2CrS	10	6	9523		MH9507t	Deep	10	16	9507	
MH9523n	Shallow	10	6	9523		MH9569t	Toe2Valley	35	17	9569	07/08 5-10% Wet Toe Slope
MH9524s	Crest2Mid	35	7	9524	05 Gentle SHALLOW SW	MH9569t	Wet	25	17	9569	
MH9524s	Dry2Med_WI	25	7	9524		MH9569t	SlopeLT10	15	17	9569	
MH9524s	Gentle_SW	20	7	9524		MH9569t	SlopeGT05	5	17	9569	
MH9524s	Med2CrS	10	7	9524		MH9569t	Med2Fine	10	17	9569	
MH9524s	Shallow	10	7	9524		MH9569t	Deep	10	17	9569	
MH9555u	Crest2Mid	30	8	9555	05 <30% Drier CREST-MID	MH9579v	Valley	35	18	9579	10 > 5% Sloping Valley
MH9555u	Dry2Med_WI	20	8	9555		MH9579v	Wet2V_Wet	25	18	9579	
MH9555u	Drier	5	8	9555		MH9579v	SlopeGT05	20	18	9579	
MH9555u	SlopeLT30	20	8	9555		MH9579v	Med2Fine	10	18	9579	
MH9555u	Medium	10	8	9555		MH9579v	Deep	10	18	9579	
MH9555u	Deep	40	8	9555		MH9509v	Valley	35	19	9509	09 < 5% Flat, Wet Valley
MH9515u	Crest2Mid	30	9	9515	01 < 30% Mesic CREST-MID	MH9509v	Wet2V_Wet	25	19	9509	
MH9515u	Dry2Med_WI	20	9	9515		MH9509v	SlopeLT05	20	19	9509	
MH9515u	Less_dry	5	9	9515		MH9509v	Med2Fine	10	19	9509	
MH9515u	SlopeLT30	20	9	9515		MH9509v	Deep	10	19	9509	
MH9515u	Medium	10	9	9515		MH9599m	WetL_LT200	50	20	9599	09 Wet MEDIUM Margins
MH9515u	Deep	40	9	9515		MH9599m	WetL_LT05	50	20	9599	
MH9501m	Up2Mid	35	10	9501	01 < 30% DEEP UP-MID	MH9511o	Organic	99	21	9511	11 Forested ORGANICS
MH9501m	Sl_Dry2Med	25	10	9501		MH9588s	Hi_Seep	90	22	9588	07/08 All Seepage Areas
MH9501m	SlopeLT30	20	10	9501		MH9588s	Med2Fine	10	22	9588	
MH9501m	Medium	10	10	9501		MH9587t	Mid2Toe	35	23	9587	07/08 <20% Moist Mid-Toe
MH9501m	Deep	10	10	9501		MH9587t	Wet	25	23	9587	
MH9501m	Hi_Ridge	10	10	9501		MH9587t	SlopeLT20	20	23	9587	
MH9518u	Up2Mid	35	11	9518	07/08 5-20% Moist UP-MID	MH9587t	Medium	10	23	9587	
MH9518u	Wet	25	11	9518		MH9587t	Deep	10	23	9587	
MH9518u	SlopeLT20	15	11	9518							
MH9518u	SlopeGT05	5	11	9518							
MH9518u	Medium	10	11	9518							
MH9518u	Deep	10	11	9518							

**PEM Entity Descriptions for: SBS wk1**

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9501	SBS wk1	01	SO	d	j	9501 was mapped ONLY on MEDIUM TEXTURES. 9501 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes. 9501 occupies somewhat lower slope positions than typically modeled for a normal mesic 01 Site Series since upper slope positions are mainly classified as the slightly drier 05 Site Series associated with 9555 areas or as 9515 areas. This is the predominant site series in the BEC variant. Gentle slope; deep, medium - textured soil
9502	SBS wk1	02	LH	s	r	9502 was mapped ONLY in areas that were mapped as SHALLOW to BEDROCK. 9502 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9502 can occur in areas of any texture as long as the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow soils over bedrock
9503	SBS wk1	05	SC	c	x	9503 was mapped ONLY in areas mapped as COARSE. 9503 was mapped on all gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP soils in areas of COARSE TEXTURES. It was thought that these areas would represent the coarse dry 03 Site Series but the Regional Ecologist indicated that 03 only occurred on coarse benches and terraces and suggested that these areas be classified as the 05 Site Series.
9504	SBS wk1	04	DK	w	x	9504 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 9504 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
9507	SBS wk1	06	SS	d	y	9507 was mapped ONLY in areas of MEDIUM TEXTURE. 9507 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions. 9507 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions typical of those described for the 06 Site Series. 9507 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands that is used to describe the typical location of the moist, frosty 06 Site Series. NOTE: Changed from 07 to 06 at suggestion of Regional Ecologist.
9508	SBS wk1	0708	ST/SD	d	y	9508 was mapped ONLY in areas of MEDIUM TEXTURE. 9508 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 9508 is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9509	SBS wk1	09	SH	d	y	9509 areas were mapped in the bottoms of very gently sloping to level valleys across ALL TEXTURES. The bottoms of FLAT VALLEYS are assumed to receive and accumulate both seepage and cold air and to be affected by permanently high water tables and frosty conditions. 9509 areas are predicted to be occupied by gleysols and organics of the 09 Site Series.
9511	SBS wk1	11	BB			9511 areas were mapped in all locations mapped as FORESTED ORGANICS. 9511 areas are predicted to be forested wetlands occupied by the 11 Site Series.

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9513	SBS wk1	01	SO	c	d	9513 areas were mapped ONLY in areas of COARSE TEXTURE. 9513 areas occur topographically below areas of 9531 and occupy mid to lower slope positions just above lower to toe slope positions. 9513 areas may be slightly concave and may receive slightly more seepage that typical convex, shedding landform positions dominated by 05 Site Series. 9531 areas are predicted to be dominated by the normal mesic 01 Site Series with some inclusions of slightly moister 08 or 07 Site Series.
9515	SBS wk1	01	SO	d	j	9515 was mapped on the lower portions of gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP soils. 9515 was added to reduce the extent of the slightly drier upper 9555 mapping entity at the request of the Regional Ecologist. It was suggested that the initial rules predicted too much slightly drier 9555 over too large an extent and that the bottom half of the initial 9555 be split out and mapped as typical 01 site series. .
9517	SBS wk1	0708	ST/SD	d	y	9517 was mapped ONLY in areas of MEDIUM TEXTURE. 9517 occurs in the lowest and wettest portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. These areas are considered to match the concept of moist cold air drainages adjacent to stream channels that is used to describe the 07 Site Series. Lowest portions of SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9518	SBS wk1	0708	ST/SD	d	j	9518 was mapped ONLY in areas of MEDIUM TEXTURE. 9518 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage than typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. SLOPING UPPER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9523	SBS wk1	05	SC	s	k	9523 was mapped on GENTLY SLOPING, SHALLOW UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be less than 30% and the aspect must be from 315 to 135. Gentle slope, of cool aspects; shallow, medium - textured soils
9524	SBS wk1	05	SC	s	w	9524 was mapped on GENTLY SLOPING, SHALLOW UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be less than 30% and the aspect must be from 135 to 315. This unit was defined because the key indicates that 05 Site Series can occur on gentle SW facing upper slopes if they are somewhat shallow. Gentle slope, of warm aspects; shallow, medium - textured soils
9531	SBS wk1	05	SC	c	d	9531 was mapped ONLY in areas mapped as COARSE. 9531 occurs across a wide range of upper to lower convex or shedding landform positions from upper slopes and crests to lower to toe slopes in COARSE TEXTURED areas.
9532	SBS wk1	05	SC	c	d	9532 was mapped ONLY in areas mapped as COARSE. 9532 areas occupy the tops of gently sloping upper to crest landform positions in areas that were NOT mapped as SHALLOW to BEDROCK. Gentle slope; crest positions; deep coarse soils.

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9533	SBS wk1	03	LV	c	j	9533 areas were mapped ONLY in areas mapped as COARSE. 9533 areas occupy relatively level benches and terraces in COARSE areas (slopes < 8%). The Regional Ecologist indicated that these level benches and terraces were the only locations where the COARSE FROSTY 03 Site Series was observed to occur within the SBS wk1. 9533 areas were defined as a last minute addition to the rules in order to restrict prediction of coarse 03 Site Series to just these COARSE LEVEL TERRACE locations.
9534	SBS wk1	04	DK	c	w	9534 was mapped ONLY in areas mapped as COARSE. 9534 areas occupy STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SE unit on COARSE materials. The Regional Ecologist indicated that these steep SW sites will be dominated by drier than mesic 04 Site Series. Significant slope, of warm aspects; deep coarse soils.
9535	SBS wk1	05	SC	k	c	9535 was mapped ONLY in areas mapped as COARSE. 9535 areas occupy STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. This is a classic STEEP NE unit. The Regional Ecologist indicated that these steep NE sites will be dominated by slightly drier than mesic 05 Site Series. Significant slope, of cool aspects; deep coarse soils.
9537	SBS wk1	0708	ST/SD	c	y	9537 was mapped ONLY in areas of COARSE TEXTURE. 9537 occurs in the lowest and wettest portions of narrow concavities and draws in upper to mid slope landform positions and in some wetter toe-slope landform positions. These areas are considered to match the concept of moist cold air drainages adjacent to stream channels. Lowest portions of SLOPING UPPER DRAWS AND HOLLOWES in COARSE areas. Mid to lower slope, receiving moisture; deep, coarse - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as being occupied by either the 07 or the 08 Site Series.
9538	SBS wk1	0708	ST/SD	c	y	9538 was mapped ONLY in areas of COARSE TEXTURE. 9538 occurs in narrow to broad concavities and draws in upper to mid slope landform positions and in some lower slope to toe landform positions. These areas may receive slightly greater amounts of seepage that typical convex mid to upper slopes but they do not develop permanently high water tables. SLOPING UPPER DRAWS AND HOLLOWES in COARSE areas. Mid to lower slope, receiving moisture; deep, coarse - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9539	SBS wk1	0708	ST/SD	c	y	9539 was mapped ONLY in areas of COARSE TEXTURE. 9539 areas occur in relatively level lower to toe slopes, often adjacent to wetlands or depressions. 9539 areas occupy about the same landform positions as 9583 and 9573 areas but 9539 areas have slightly steeper slopes than 9573 areas and slightly gentler slopes than 9583 areas. 9539 areas were meant to capture the concept of shallow depressions adjacent to wetlands. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9551	SBS wk1	01	SO	d	x	9551 areas were mapped on the slightly drier crests of broad low ridges and low knolls with deep soils in areas of MEDIUM TEXTURE. 9551 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these broad crest positions. Gentle slope, deep, medium-textured soils
9552	SBS wk1	05	SC	d	x	9552 was mapped on gently sloping upper to crest landform positions in areas that were NOT mapped as SHALLOW to BEDROCK. 9552 occurs on the slightly drier than normal crest positions of high ridges that are NOT shallow to bedrock. 9552 ONLY occurs in areas of MEDIUM TEXTURE. Gentle slope; crest positions; deep soils.
9553	SBS wk1	05	SC	k	x	9553 was mapped ONLY on MEDIUM TEXTURED MATERIALS. 9553 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. This is a classic STEEP NE unit. The Regional Ecologist indicated that these steep NE sites will be dominated by slightly drier than mesic 05 Site Series. Significant slope, of cool aspects; deep, medium - textured soils
9555	SBS wk1	05	SC	d	x	9555 was mapped on all gentle to moderate UPPER SLOPES on broad crests or knolls with DEEP soils. The ecological key indicated that the 05 Site Series was quite common and occupied broad rounded hill crests. An effort was made to capture this concept by classifying all portions of broad upper crests with deep soils as 9555.
9569	SBS wk1	0708	ST/SD	d	y	9569 was mapped ONLY in areas of MEDIUM TEXTURE. 9569 areas occur in relatively level lower to toe slopes, often adjacent to wetlands or depressions. 9569 areas occupy about the same landform positions as 9508 and 9578 areas but 9569 areas have slightly steeper slopes than 9578 areas and slightly gentler slopes than 9508 areas. 9569 areas were meant to capture the concept of shallow depressions adjacent to wetlands. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.



LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9573	SBS wk1	0708	ST/SD	c	y	9573 was mapped ONLY in areas of COARSE TEXTURE. 9573 occurs on the more gently sloping portions of lower to toe slope landform positions. 9573 areas occupy the same relative landform positions as 9583 except that the slopes tend to be gentler. 9573 areas are predicted to be slightly moister and to have a slightly higher susceptibility to frost than 9583 areas. 9573 areas are meant to capture the concept of a toe slope seepage area with slope gradients gentle enough that both seepage moisture and frost accumulate. Lower slope, receiving moisture and cold air; deep, coarse - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9577	SBS wk1	0708	ST/SD	c	y	9577 was mapped ONLY in areas of COARSE TEXTURE. 9577 areas occur in level to very gently sloping toe slopes, often adjacent to wetlands or depressions. 9577 areas occupy the lowest and flattest portions of the landscape that are not actually part of depressions. These low, flat areas at the base of slopes are subject to accumulation of both seepage and cold air leading to very wet, frosty conditions. 9577 areas were meant to capture the concept of level to very gentle toe slopes adjacent to wetlands. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9578	SBS wk1	0708	ST/SD	d	y	9578 was mapped ONLY in areas of MEDIUM TEXTURE. 9578 occurs on the more gently sloping portions of lower to toe slope landform positions. 9578 areas occupy the same relative landform positions as 9508 except that the slopes tend to be gentler. 9578 areas are predicted to be slightly moister and to have a slightly higher susceptibility to frost than 9508 areas. 9578 areas are meant to capture the concept of a toe slope seepage area with slope gradients gentle enough that both seepage moisture and frost accumulate. Lower slope, receiving moisture and cold air; deep, medium - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9579	SBS wk1	10	SL	d	y	9579 areas were mapped in the bottoms of gently to moderately sloping valleys across ALL TEXTURES. The bottoms of SLOPING VALLEYS are assumed to receive and accumulate moisture from seepage. They are also assumed not to trap or accumulate cold air but rather to act as conduits or drainages along which cold air may drain without accumulating. 9579 areas may be dominated by the very rich moist 10 Site Series.
9581	SBS wk1	01	SO	d	j	9581 areas were mapped ONLY in areas of MEDIUM TEXTURE. 9581 areas occur topographically below areas of 9501 and occupy mid to lower slope positions just above lower to toe slope positions. 9581 areas may be slightly concave and may receive slightly more seepage than typical convex, shedding landform positions dominated by 01 Site Series. Still, 9581 areas are predicted to be dominated by the normal mesic 01 Site Series with some inclusions of slightly moister 08 Site Series.

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9583	SBS wk1	0708	ST/SD	c	y	9583 was mapped ONLY in areas of COARSE TEXTURE. 9583 occurs on gently sloping lower to toe slope landform positions that receive seepage but that do not develop permanently high water tables. 9583 is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, coarse - textured soils. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9587	SBS wk1	0708	ST/SD	d	y	9587 was mapped ONLY in areas of MEDIUM TEXTURE. 9587 occurs in narrow to broad concavities and draws in mid to lower slope landform positions. These areas receive slightly greater amounts of seepage than typical convex mid to upper slopes dominated by the 01 Site Series but they do not develop permanently high water tables. SLOPING LOWER DRAWS AND HOLLOWES. Mid to lower slope, receiving moisture; deep, medium - textured soils. 9587 are extensions of the 9518 sloping upper hollows into lower landform positions. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9588	SBS wk1	0708	ST/SD	d	y	9588 areas were mapped in all areas of recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, non-frosty 08 and moist frosty 07 Site Series to areas mapped as 9588. In this Variant (SBS wk1), it did not prove possible to consistently and correctly differentiate the 07 (Twinberry) and 08 (Devil's Club) Site Series, either in the field or in the PEM modeling. Consequently, these two Site Series have been lumped for mapping purposes and all gently to moderately sloping receiving areas are described as possibly being occupied by either the 07 or the 08 Site Series.
9590	SBS wk1	00	GB			Gravel bar.
9591	SBS wk1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets by and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9592	SBS wk1	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9593	SBS wk1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9594	SBS wk1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9595	SBS wk1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9596	SBS wk1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.

LM Code ID #	Variant	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9598	SBS wk1	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.
9599	SBS wk1	09	SH	d	y	9599 areas were mapped in level to depressional low-lying areas around the margins of non-forested wetlands, lakes and ponds. 9599 areas most probably consist of a sequence of wetter than normal Site Series that grade from 09 nearest the wetland through 06 and then 07 as one progresses upslope away from the wetland. Forested swamp, poorly drained ; level to depressional; organic veneer or blanket

## PEM Entity Extended Legend with Proportions of Site Series for: SBS wk1

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9501	9501	01	SBS wk1	9	01	SO	d	j	1	08	SD			
9502	9502	02	SBS wk1	9	02	LH	s	r	1	01	SO			
9503	9531	05	SBS wk1	9	05	SC	c	x	1	01	SO			
9504	9504	04	SBS wk1	9	04	DK	w	x	1	01	SO			
9507	9507	06	SBS wk1	8	06	SS	d	y	2	07	ST			
9508	9508	0708	SBS wk1	10	0708	ST/SD	d	y						
9509	9509	09	SBS wk1	9	09	SH	d	y	1	06	SS			
9511	9511	11	SBS wk1	10	11	BB								
9513	9513	01	SBS wk1	7	01	SO	c	d	2	05	SC	1	08	SD
9515	9501	01	SBS wk1	8	01	SO	d	j	2	05	SC			
9517	9578	0708	SBS wk1	10	0708	ST/SD	d	y						
9518	9508	0708	SBS wk1	10	0708	ST/SD	d	j						
9523	9523	05	SBS wk1	7	05	SC	s	k	3	01	SO			
9524	9524	05	SBS wk1	7	05	SC	s	w	3	01	SO			
9531	9531	05	SBS wk1	9	05	SC	c	d	1	01	SO			
9532	9532	05	SBS wk1	9	05	SC	c	d	1	01	SO			
9533	9533	03	SBS wk1	8	03	LV	c	j	2	05	SC			
9534	9534	04	SBS wk1	6	04	DK	c	w	4	05	SC			
9535	9535	05	SBS wk1	8	05	SC	k	c	2	01	SO			
9537	9538	0708	SBS wk1	10	0708	ST/SD	c	y						
9538	9538	0708	SBS wk1	10	0708	ST/SD	c	y						
9539	9538	0708	SBS wk1	10	0708	ST/SD	c	y						
9551	9501	01	SBS wk1	6	01	SO	d	x	4	05	SC			
9552	9552	05	SBS wk1	6	05	SC	d	x	4	01	SO			
9553	9553	05	SBS wk1	6	05	SC	k	x	4	01	SO			
9555	9555	05	SBS wk1	7	05	SC	d	x	3	01	SO			
9569	9578	0708	SBS wk1	10	0708	ST/SD	d	y						
9573	9538	0708	SBS wk1	10	0708	ST/SD	c	y						
9577	9538	0708	SBS wk1	10	0708	ST/SD	c	y						
9578	9578	0708	SBS wk1	10	0708	ST/SD	d	y						
9579	9579	10	SBS wk1	7	10	SL	d	y	2	08	SD	1	01	SO
9581	9581	01	SBS wk1	8	01	SO	d	j	2	08	SD	0		
9583	9538	0708	SBS wk1	10	0708	ST/SD	c	y	0			0		
9587	9508	0708	SBS wk1	10	0708	ST/SD	d	y	0			0		
9588	9588	0708	SBS wk1	10	0708	ST/SD	d	y	0			0		
9590	9590	GB	SBS wk1	10	00	GB			0			0		
9591	9591	OW	SBS wk1	10	00	OW			0			0		
9592	9592	WE	SBS wk1	10	00	WE	d	y	0			0		
9593	9593	ME	SBS wk1	10	00	ME			0			0		
9594	9594	PA	SBS wk1	10	00	PA			0			0		
9595	9595	BR	SBS wk1	10	00	BR			0			0		
9596	9596	DL	SBS wk1	10	00	DL			0			0		
9598	9598	AV	SBS wk1	10	00	AV			0			0		
9599	9599	09	SBS wk1	6	09	SH	d	y	2	06	SS	2	07	ST



**BGC Unit: CWH ms1****LMES Zone ID: 96****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	16,892.0	0.34%
100 Mile House TSA	0.0	0.00%
Cariboo Region	16,892.0	0.20%

**List of Site Series Codes Defined for use in CWH ms1**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	AM	HwBa - Step moss	mesic	All Non_Frosty, Upper to Lower Shedding, Slopes < 30%, MED & CRS
02	DK	FdPI - Kinnikinnick	very xeric	SHALLOW Crests, Thin, Dry Soils - MEDIUM & COARSE
03	DF	FdHw - Falsebox	xeric - subxeric	MEDIUM and COARSE, Steep SW and Steep NE, Drier than Mesic
04	AO	BaCw - Oak fern	submesic - mesic	Richer Mesic, Steep SW and NE in Low to Toe Positions
05	HQ	HwBa - Queen's cup	subhygric - hygric	MEDIUM and COARSE - Moist, Poor; Low, Gentle, Wet TOE to Flat Valley
06	AD	BaCw - Devil's club	subhygric - hygric	Moist, Non-Frosty, Rich Sloping Swale to Toe, WT > 50 cm, MED & CRS
07	SS	Ss - Salmonberry	subhygric - hygric	High Bench
08	CD	Act - Red-osier dogwood	subhygric - hygric	Medium Bench
09	CW	Act - Willow (F150 - Sitka willow - False lily-of-the-valley)	subhygric - hygric	Low Bench
10	LS	PI - Sphagnum	subhydric	Forested ORGANICS, Flat, Wet, Frosty Depressions
11	RC	CwSs - Skunk cabbage (Ws54 - CwHw - Skunk cabbage)	subhydric	MEDIUM and COARSE; Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm; ALSO Cold Wetland Margins
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock		
00	AV	Non-forested Avalanche Tracks		
00	RU	Rubble		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #28, "A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

## Landscape Profile Diagram: CWH ms1

No Landscape Profile diagram available

### Example Attribute Class Rule File for CWH ms1 (arule9630)

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	20.00	50.00	10.00	50.00	20
5	relzfile	PCTZ2ST	Low2Toe	1	18.00	18.00	18.00	5.00	31.00	13
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	2.00	10.00	4
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	5.80	5.80	5.80	0.00	6.00	0.2
10	formfile	QWETI	VDry2SIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.80	6.80	6.80	6.00	7.60	0.8
12	formfile	QWETI	Dry2SIDry	1	7.00	6.50	7.50	6.00	8.00	1
13	formfile	QWETI	SI_Dry	1	9.00	9.00	9.00	8.50	9.50	0.5
14	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
15	formfile	QWETI	Med_WI	1	8.50	8.50	8.50	7.50	9.50	1
16	formfile	QWETI	SI_Wet	1	9.50	9.50	9.50	8.50	10.50	1
17	formfile	QWETI	SLWet2Wet	1	10.60	10.60	10.60	10.10	11.10	0.5
18	formfile	QWETI	Wet	1	11.00	11.00	11.00	10.50	11.50	0.5
19	formfile	QWETI	Wet2V_Wet	4	12.50	12.50	12.50	12.00	50.00	0.5
20	formfile	SLOPE	Steep	4	30.00	30.00	100.00	30.00	100.00	2
21	formfile	SLOPE	SlopeLT05	5	5.00	0.00	5.00	0.00	5.00	1
22	formfile	SLOPE	SlopeLT10	5	10.00	0.00	10.00	0.00	10.00	1
23	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
24	formfile	SLOPE	SlopeLT30	5	30.00	0.00	30.00	0.00	30.00	1
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	5.00	100.00	1
26	formfile	SLOPE	SlopeGT10	4	10.00	10.00	100.00	10.00	100.00	1
27	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
28	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
29	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
30	geofile	DEPTH	Shallow	5	49.00	49.00	49.00	0.00	50.00	1
31	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
34	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
35	geofile	L2Wet	Wett_LT200	5	100.00	100.00	100.00	0.00	150.00	50
36	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	geofile	N2Wet	Sand_Fringe	5	3.00	3.00	3.00	2.00	4.00	1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

### Example Fuzzy Ecological Class Rule File for CWH ms1 (crule9630)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9602r	Crest	30	1	9602	02 Shallow Crest	MH9643s	Mid2Low	30	14	9643	01 10-30% MID-LOW SW
MH9602r	VDry	30	1	9602		MH9643s	Dry2SIDry	30	14	9643	
MH9602r	SlopeLT30	10	1	9602		MH9643s	SlopeLT30	20	14	9643	
MH9602r	Med2CrS	10	1	9602		MH9643s	SlopeGT10	10	14	9643	
MH9602r	Shallow	40	1	9602		MH9643s	SW_Aspect	10	14	9643	
MH9602r	Hi_Ridge	10	1	9602		MH96315n	Mid2Low	30	15	9615	01 10-30% MID-LOW NE
MH9621c	Crest	30	2	9621	01 Deep Dry High Ridge	MH96315n	Dry2SIDry	30	15	9615	
MH9621c	VDry	30	2	9621		MH96315n	SlopeLT30	20	15	9615	
MH9621c	SlopeLT30	10	2	9621		MH96315n	SlopeGT10	10	15	9615	
MH9621c	Med2CrS	10	2	9621		MH96315n	NE_Aspect	10	15	9615	
MH9621c	Deep	10	2	9621		MH9613L	Mid2Low	30	16	9613	01 < 10% MID-LOW SW
MH9621c	Hi_Ridge	10	2	9621		MH9613L	Dry2SIDry	30	16	9613	
MH9612k	Crest	30	3	9612	01 Deep Mesic Low Knoll	MH9613L	SlopeLT10	30	16	9613	
MH9612k	VDry	30	3	9612		MH9613L	SW_Aspect	10	16	9613	
MH9612k	SlopeLT30	10	3	9612		MH96314L	Mid2Low	30	17	9614	01 < 10% MID-LOW NE
MH9612k	Med2CrS	10	3	9612		MH96314L	Dry2SIDry	30	17	9614	
MH9612k	Deep	10	3	9612		MH96314L	SlopeLT10	30	17	9614	
MH9612k	Low_Knoll	10	3	9612		MH96314L	NE_Aspect	10	17	9614	
MH9603s	Crest2Mid	30	4	9603	03 Steep SW Dry Upper	MH96363L	Mid2Low	30	18	9663	06 10-30% Moist Swale
MH9603s	VDry2SIDry	30	4	9603		MH96363L	Wet	30	18	9663	
MH9603s	Steep_SW	20	4	9603		MH96363L	SlopeLT30	20	18	9663	
MH9603s	Med2CrS	10	4	9603		MH96363L	SlopeGT10	10	18	9663	
MH9603s	Deep	10	4	9603		MH96363L	Deep	10	18	9663	
MH9654n	Crest2Mid	30	5	9654	03 Steep NE Upper	MH96464L	Mid2Low	30	19	9664	05 < 10% Wet, MID-LOW
MH9654n	VDry2SIDry	30	5	9654		MH96464L	Wet	30	19	9664	
MH9654n	Steep_NE	20	5	9654		MH96464L	SlopeLT10	30	19	9664	
MH9654n	Med2CrS	10	5	9654		MH96464L	Deep	10	19	9664	
MH9654n	Deep	10	5	9654		MH9630t	Low2Toe	30	20	9630	04 Sl. Moist LOW-TOE SW
MH9634s	Crest2Mid	30	6	9634	01 10-30% SW UP	MH9630t	Sl_Wet	30	20	9630	
MH9634s	Dry	30	6	9634		MH9630t	Steep	20	20	9630	
MH9634s	SlopeLT30	20	6	9634		MH9630t	SW_Aspect	10	20	9630	
MH9634s	SlopeGT10	10	6	9634		MH9640t	Low2Toe	30	21	9640	04 Sl. Moist LOW-TOE NE
MH9634s	SW_Aspect	10	6	9634		MH9640t	Sl_Wet	30	21	9640	
MH96341n	Crest2Mid	30	7	9641	01 10-30% NE UP	MH9640t	Steep	20	21	9640	
MH96341n	Dry	30	7	9641		MH9640t	NE_Aspect	10	21	9640	
MH96341n	SlopeLT30	20	7	9641		MH9611t	Low2Toe	30	22	9611	06 10-30% Moist LOW-TOE
MH96341n	SlopeGT10	10	7	9641		MH9611t	Sl_Wet	30	22	9611	
MH96341n	NE_Aspect	10	7	9641		MH9611t	SlopeLT30	20	22	9611	
MH9613s	Crest2Mid	30	8	9613	01 < 10% SW UP	MH9611t	SlopeGT10	10	22	9611	
MH9613s	Dry	30	8	9613		MH9611t	Deep	10	22	9611	
MH9613s	SlopeLT10	30	8	9613		MH9617t	Low2Toe	30	23	9617	05 < 10% Wet, LOW-TOE
MH9613s	SW_Aspect	10	8	9613		MH9617t	Wet	30	23	9617	
MH96314n	Crest2Mid	30	9	9614	01 < 10% NE UP	MH9617t	SlopeLT10	30	23	9617	
MH96314n	Dry	30	9	9614		MH9617t	Deep	10	23	9617	
MH96314n	SlopeLT10	30	9	9614		MH9618t	Toe	30	24	9618	06 10-30% Moist TOE
MH96314n	NE_Aspect	10	9	9614		MH9618t	Sl_Wet	30	24	9618	
MH9636u	Crest2Mid	30	10	9636	06 10-30% Upper Swale	MH9618t	SlopeLT30	20	24	9618	
MH9636u	Wet	30	10	9636		MH9618t	SlopeGT10	10	24	9618	
MH9636u	SlopeLT30	20	10	9636		MH9618t	Deep	10	24	9618	
MH9636u	SlopeGT10	10	10	9636		MH9608t	Toe	30	25	9608	05 < 10% Wet, TOE
MH9636u	Deep	10	10	9636		MH9608t	Wet	30	25	9608	
MH9646u	Crest2Mid	30	11	9646	05 < 10% Flat, Wet Swale	MH9608t	SlopeLT10	30	25	9608	
MH9646u	Wet	30	11	9646		MH9608t	Deep	10	25	9608	
MH9646u	SlopeLT10	30	11	9646		MH9680v	Valley	30	26	9680	06 > 5% Sloping Valley
MH9646u	Deep	10	11	9646		MH9680v	Wet2V_Wet	30	26	9680	
MH9633s	Mid2Low	30	12	9633	03 Steep SW Dry MID-LOW	MH9680v	SlopeGT05	20	26	9680	
MH9633s	VDry2SIDry	30	12	9633		MH9680v	Medium	10	26	9680	
MH9633s	Steep_SW	20	12	9633		MH9680v	Deep	10	26	9680	
MH9633s	Med2CrS	10	12	9633		MH9688v	Valley	30	27	9688	11 < 5% Flat, Wet Valley
MH9633s	Deep	10	12	9633		MH9688v	Wet2V_Wet	30	27	9688	
MH9645n	Mid2Low	30	13	9645	01 Steep NE MID-LOW	MH9688v	SlopeLT05	20	27	9688	
MH9645n	VDry2SIDry	30	13	9645		MH9688v	Medium	10	27	9688	
MH9645n	Steep_NE	20	13	9645		MH9688v	Deep	10	27	9688	
MH9645n	Med2CrS	10	13	9645		MH9689m	Wet2_LT05	50	28	9689	11 Wet MEDIUM Margins
MH9645n	Deep	10	13	9645		MH9689m	Wet2_LT200	50	28	9689	
						MH9666s	Hi_Seep	80	29	9666	06 Moist Seepage Areas
						MH9666s	Med2CrS	20	29	9666	
						MH9609o	Organic	99	30	9609	10 Forested ORGANICS



**PEM Entity Descriptions for: CWH ms1**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9602	CWH ms1	02	DK	s	r	9602 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 9602 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9602 in medium textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow medium textured soils over bedrock
9603	CWH ms1	03	DF	w	x	9603 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9603 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils
9608	CWH ms1	05	HQ	d	y	9608 areas were mapped in lowest, flattest and wettest portions of LOWER TOE SLOPES in areas of MEDIUM TEXTURED materials. 9608 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9608 areas are predicted to be occupied by the relatively nutrient poor, moist 05 site series along with some rich moist seepage 06 site series. Gentle slope, deep, medium-textured soils.
9609	CWH ms1	10	LS	p	d	9609 areas were mapped in all locations of manually recognized ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the very wet 10 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
9610	CWH ms1	01	AM	d	x	9610 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 9610 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 Site Series along with some slightly drier 03 site series. Gentle slope, deep, medium-textured soils.
9611	CWH ms1	06	AD	d		9611 areas were mapped in moist swales, hollows and concavities in areas of MEDIUM TEXTURED materials in LOWER to TOE LANDFORM positions. 9611 areas were mapped to permit recognition of considerably moister conditions in swales in lower to toe landform positions. 9611 areas are predicted to be occupied by the moist, rich 06 site series as well as some rich, less moist 04 Site Series. Gentle slope, deep, medium-textured soils.
9612	CWH ms1	01	AM	d	x	9612 areas were mapped ONLY in areas of MEDIUM TEXTURE. 9612 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 9612 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier sub-mesic site series (03) and perhaps some shallow 02 site series in areas not mapped as shallow along with typical 01.
9613	CWH ms1	01	AM	d	j	9613 areas were defined to occur on gentle (<10%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 9613 areas are predicted to be occupied by the normal mesic 01 site series as well as some richer mesic 04 Site Series. Gentle slope, warm aspect, deep, medium-textured soils.
9614	CWH ms1	01	AM	d	j	9614 areas were defined to occur on gentle (<10%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER to LOWER landform positions. 9614 areas are predicted to be occupied by the normal mesic 01 site series as well as some richer mesic 04 Site Series. Gentle slope, cool aspect, deep, medium-textured soils.
9615	CWH ms1	01	AM	d	j	9615 areas were defined to occur on moderate (10-30%) NE-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 9615 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9617	CWH ms1	05	HQ	d	y	9617 areas were mapped in lowest, flattest and wettest portions of swales, hollows and concavities in areas of MEDIUM TEXTURED materials in LOWER to TOE LANDFORM positions. 9617 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in lower to toe landform positions. 9617 areas are predicted to be occupied by the relatively nutrient poor, moist 05 site series along with some rich moist seepage 06 site series. Gentle slope, deep, medium-textured soils.
9618	CWH ms1	06	AD	d		9618 areas were mapped on moderately sloping (10-30%) TOE slopes in areas of MEDIUM TEXTURED materials. 9618 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9618 areas are predicted to be occupied by the moist, rich 06 site series as well as some rich, less moist 04 Site Series. Gentle slope, deep, medium-textured soils.
9620	CWH ms1	01	AM	c	x	9620 areas were mapped ONLY in areas of COARSE TEXTURE. 9620 areas occur on the tops of dry crests of high ridges or low knolls with deep soils that WERE NOT mapped as shallow. 9620 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of a slightly drier sub-mesic site series (03) and perhaps some shallow 02 site series in areas not mapped as shallow along with typical 01.
9621	CWH ms1	01	AM	c	x	9621 was mapped ONLY in areas of COARSE TEXTURE. 9621 occupies all convex, shedding slopes in UPPER to LOWER landform positions with SLOPE < 30% that are not affected by conspicuous seepage. Slope gradient must be less than 30% and drainage regime mesic or drier. 9621 areas occur across a wide range of landform positions that are not influenced by seepage and are not steeper than 30% or shallow to bedrock. The Regional Ecologist indicated that the normal mesic 01 Site Series could dominate on all upper to lower portions of moderate to gentle slopes in COARSE areas. Gentle to moderate slope; deep, coarse - textured soils
9622	CWH ms1	02	DK	s	r	9622 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK by TFIC. 9622 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9622 in coarse textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow coarse soils over bedrock
9623	CWH ms1	03	DF	w	c	9623 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 9603 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, coarse - textured soils
9624	CWH ms1	03	DF	w	c	9624 was mapped ONLY in areas of COARSE TEXTURED MATERIALS. 9624 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by the dry, nutrient poor 03 Site Series and not by the richer, slightly dry 04 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, coarse - textured soils
9625	CWH ms1	05	HQ	c	j	9625 areas were mapped in lowest, flattest and wettest portions of toe slopes, swales, hollows and concavities in areas of COARSE TEXTURED materials in UPPER to LOWER LANDFORM positions. 9625 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales, toe slopes and hollows in all landform positions in areas of coarse textured materials. 9625 areas are predicted to be occupied by the relatively nutrient poor, moist 05 site series along with some rich moist seepage 06 site series. Gentle slope, deep, coarse-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9626	CWH ms1	06	AD	c	y	9626 areas were mapped in slightly moist upper swales, hollows and concavities in areas of COARSE TEXTURED materials in UPPER to LOWER LANDFORM positions. 9626 areas were mapped to permit recognition of slightly moister conditions in hollows, toe slopes and swales in areas of coarse textured materials. 9626 areas are predicted to be occupied by the moist, rich 06 site series. Gentle slope, deep, coarse-textured soils.
9627	CWH ms1	06	AD	c	y	9627 areas were mapped in sloping valley bottoms with slope gradients greater than 5% in areas mapped as COARSE TEXTURED. 9627 areas represent sloping valleys in areas of coarse textured materials. These areas are predicted to be occupied by the rich, moist 06 site series as well as some rich, mesic 04 Site Series. Toe slope to depression, deep, coarse - textured soils; high water table
9628	CWH ms1	11	RC	c	j	9628 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas mapped as COARSE TEXTURED. 9628 areas were predicted to be characterized by high levels of moisture and high water tables and to be relatively nutrient poor. Areas mapped as 9628 are expected to be occupied by moist, nutrient poor 11 Site Series. Toe slope to depression, deep, coarse - textured soils; high water table
9629	CWH ms1	11	RC	c	y	9629 areas were mapped ONLY in areas mapped as COARSE TEXTURED. 9629 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of moisture. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, coarse - textured soils
9630	CWH ms1	04	AO	w	x	9630 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9630 occupies STEEP SLOPES in LOWER to TOE landform positions with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the lower to toe slope portion of a classic STEEP SW unit. The Regional Ecologist indicated that these lower to toe portions of steep SW slopes are dominated by the richer mesic 04 Site Series. Significant slope, of warm aspects; deep, medium - textured soils
9633	CWH ms1	01	AM	w	x	9633 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9633 occupies STEEP SLOPES in MID to LOWER landform positions with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is the mid to lower slope portion of a classic STEEP SW unit. The Regional Ecologist indicated that the normal mesic 01 Site Series could dominate on the mid to lower portions of steep SW slopes. Significant slope, of warm aspects; deep, medium - textured soils
9634	CWH ms1	01	AM	d	j	9634 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 9634 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
9636	CWH ms1	06	AD	d		9636 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 9636 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 9636 areas are predicted to be occupied by the moist, rich 06 site series. Gentle slope, deep, medium-textured soils.
9640	CWH ms1	04	AO	k	s	9640 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9640 occupies STEEP SLOPES in LOWER to TOE landform positions with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these lower to toe portions of steep NE slopes are dominated by the richer mesic 04 Site Series. This is a classic STEEP NE unit but is classified as a slightly richer mesic 04. Significant slope, of cool aspects; deep, medium - textured soils

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9641	CWH ms1	01	AM	d	j	9641 areas were defined to occur on moderate (10-30%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER landform positions. 9641 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.
9643	CWH ms1	01	AM	d	j	9643 areas were defined to occur on moderate (10-30%) SW-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 9643 areas were created to recognize the normal mesic 01 site series on moderately sloping MID to LOWER SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
9645	CWH ms1	01	AM	w	x	9645 was mapped on ONLY in areas of MEDIUM TEXTURED MATERIALS. 9645 occupies STEEP SLOPES in MID to LOWER landform positions with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites in mid to lower landform positions will be dominated by the normal mesic 01 Site Series. This is a classic STEEP NE unit but is classified as a normal mesic 01. Significant slope, of cool aspects; deep, medium - textured soils
9646	CWH ms1	05	HQ	d	y	9646 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 9646 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 9646 areas are predicted to be occupied by the relatively nutrient poor, moist 05 site series along with some rich moist seepage 06 site series. Gentle slope, deep, medium-textured soils.
9654	CWH ms1	03	DF	w	x	9654 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9654 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by the dry, nutrient poor 03 Site Series and not by the richer, slightly dry 04 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils
9663	CWH ms1	06	AD	d		9663 areas were mapped in slightly moist upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in LOWER to TOE LANDFORM positions. 9663 areas were mapped to permit recognition of slightly moister conditions in swales in lower to toe landform positions. 9663 areas are predicted to be occupied by the moist, rich 06 site series as well as some rich, less moist 04 Site Series. Gentle slope, deep, medium-textured soils.
9664	CWH ms1	05	HQ	d	y	9664 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities in areas of MEDIUM TEXTURED materials in LOWER to TOE LANDFORM positions. 9664 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in lower to toe landform positions. 9664 areas are predicted to be occupied by the relatively nutrient poor, moist 05 site series along with some rich moist seepage 06 site series. Gentle slope, deep, medium-textured soils.
9666	CWH ms1	06	AD	d		9666 areas were mapped ONLY in areas of MEDIUM TEXTURED MATERIALS with recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, rich 06 Site Series and the slightly moist, rich 04 Site Series to areas mapped as 9666.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9667	CWH ms1	06	AD	c	y	9667 areas were mapped ONLY in areas of COARSE TEXTURED MATERIALS with recognized SEEPAGE. The intent of the SEEPAGE class was to recognize areas that were wetter than expected with respect to their landform position and/or texture. In most cases, these would be areas that would be normally expected to consist of 01 site series but that were, for some reason, wetter than mesic. We arbitrarily assign a mixture of moist, rich 06 Site Series and the slightly moist, rich 04 Site Series to areas mapped as 9667.
9671	CWH ms1	09	CW	c	d	9671 areas represent LOW BENCH units. LOW BENCHES were defined to include all areas that were located within 1 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. LOW BENCHES were considered to be occupied mainly by the 09 Site Series in CWH ms1.
9672	CWH ms1	08	CD	d	j	9672 areas represent MEDIUM BENCH units. MEDIUM BENCHES were defined to include all areas that were located within 3 m elevation and within 500 m horizontal distance of the base of a major river channel and that WERE NOT classified as NON-VEGETATED land cover type. MEDIUM BENCHES were considered to be occupied mainly by the 08 Site Series in CWH ms1.
9673	CWH ms1	07	SS	d	j	9673 areas represent High BENCH units. HIGH BENCHES were defined to include all areas that were located more than 3 m elevation above the base of a major river channel, within 500 m horizontal distance of the channel, with a slope gradient of less than 10% and that WERE NOT classified as NON-VEGETATED land cover type. HIGH BENCHES were considered to be occupied mainly by the 07 Site Series in CWH ms1.
9680	CWH ms1	06	AD	d		9680 areas were mapped in sloping valley bottoms with slope gradients greater than 5% in areas mapped as MEDIUM TEXTURED. 9680 areas represent sloping valleys in areas of medium textured materials. These areas are predicted to be occupied by the rich, moist 06 site series as well as some rich, mesic 04 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
9681	CWH ms1	00	RU	v	x	9681 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
9682	CWH ms1	00	RU	v	x	9682 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
9683	CWH ms1	00	CU	v		9683 areas are NON-FORESTED areas dominated by a land cover of emerging vegetation along with bare rock and rubble.
9684	CWH ms1	00	RU	v		9684 areas are NON-FORESTED areas dominated by a land cover of bare rock, snow and ice. Many such areas are located immediately adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
9685	CWH ms1	00	GL			9685 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with glacier tongues that protrude into lower valley bottom locations.
9688	CWH ms1	11	RC	d	y	9688 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas mapped as MEDIUM TEXTURED. 9688 areas were predicted to be characterized by high levels of moisture and high water tables and to be relatively nutrient poor. Areas mapped as 9688 are expected to be occupied by moist, nutrient poor 11 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
9689	CWH ms1	11	RC	d	y	9689 areas were mapped ONLY in areas mapped as MEDIUM TEXTURED. 9689 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of moisture. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils

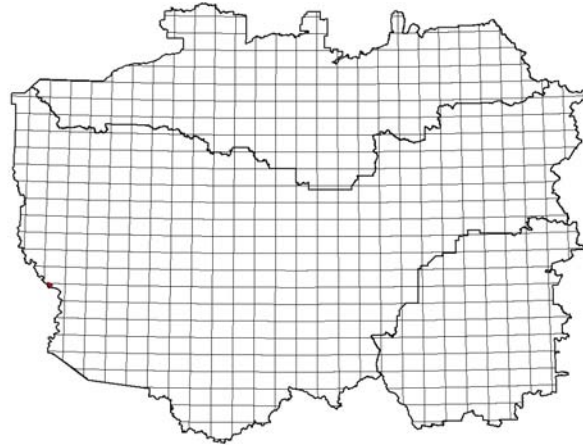
LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9691	CWH ms1	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9692	CWH ms1	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9693	CWH ms1	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9694	CWH ms1	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9695	CWH ms1	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9696	CWH ms1	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.
9697	CWH ms1	00	RO			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
9698	CWH ms1	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: CWH ms1**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9602	9654	02	CWH ms1	9	02	DK	s	r	1	01	AM			
9603	9603	03	CWH ms1	8	03	DF	w	x	2	02	DK			
9608	9617	05	CWH ms1	7	05	HQ	d	y	3	06	AD			
9609	9609	10	CWH ms1	6	10	LS	p	d	4	11	RC			
9610	9612	01	CWH ms1	8	01	AM	d	x	2	03	DF			
9611	9680	06	CWH ms1	3	06	AD	d		6	04	AO	1	01	AM
9612	9612	01	CWH ms1	6	01	AM	d	x	3	02	DK	1	03	DF
9613	9613	01	CWH ms1	7	01	AM	d	j	3	04	AO			
9614	9614	01	CWH ms1	7	01	AM	d	j	3	04	AO			
9615	9641	01	CWH ms1	7	01	AM	d	j	3	04	AO			
9617	9617	05	CWH ms1	7	05	HQ	d	y	3	06	AD			
9618	9618	06	CWH ms1	6	06	AD	d		3	04	AO	1	01	AM
9620	9620	01	CWH ms1	6	01	AM	c	x	3	02	DK	1	03	DF
9621	9621	01	CWH ms1	5	01	AM	c	x	4	03	DF	1	04	AO
9622	9622	02	CWH ms1	9	02	DK	s	r	1	01	AM			
9623	9603	03	CWH ms1	8	03	DF	w	c	2	02	DK			
9624	9623	03	CWH ms1	6	03	DF	w	c	2	04	AO	2	02	DK
9625	9625	05	CWH ms1	7	05	HQ	c	j	3	06	AD			
9626	9627	06	CWH ms1	7	06	AD	c	y	2	05	HQ	1	01	AM
9627	9627	06	CWH ms1	6	06	AD	c	y	3	04	AO	1	01	AM
9628	9628	11	CWH ms1	7	11	RC	c	j	3	05	HQ			
9629	9629	11	CWH ms1	6	11	RC	c	y	4	05	HQ			
9630	9630	04	CWH ms1	5	04	AO	w	x	4	01	AM	1	03	DF
9633	9633	01	CWH ms1	5	01	AM	w	x	4	03	DF	1	04	AO
9634	9634	01	CWH ms1	6	01	AM	d	j	3	03	DF	1	02	DK
9636	9680	06	CWH ms1	7	06	AD	d		2	05	HQ	1	01	AM
9640	9640	04	CWH ms1	6	04	AO	k	s	3	01	AM	1	03	DF
9641	9641	01	CWH ms1	6	01	AM	d	j	3	03	DF	1	02	DK
9643	9634	01	CWH ms1	7	01	AM	d	j	3	04	AO			
9645	9645	01	CWH ms1	5	01	AM	w	x	3	03	DF	2	04	AO
9646	9617	05	CWH ms1	7	05	HQ	d	y	3	06	AD			
9654	9624	03	CWH ms1	6	03	DF	w	x	2	04	AO	2	02	DK
9663	9680	06	CWH ms1	6	06	AD	d		3	04	AO	1	01	AM
9664	9617	05	CWH ms1	7	05	HQ	d	y	3	06	AD			
9666	9666	06	CWH ms1	6	06	AD	d		4	04	AO			
9667	9667	06	CWH ms1	6	06	AD	c	y	4	04	AO			
9671	9671	09	CWH ms1	10	09	CW	c	d						
9672	9672	08	CWH ms1	10	08	CD	d	j						
9673	9673	07	CWH ms1	10	07	SS	d	j						
9680	9680	06	CWH ms1	6	06	AD	d		3	04	AO	1	01	AM
9681	9681	RU	CWH ms1	8	00	RU	v	x	2	02				
9682	9682	RU	CWH ms1	6	00	RU	v	x	4	02				
9683	9683	CU	CWH ms1	5	00	CU	v		5	00	RU			
9684	9684	RU	CWH ms1	5	00	RU	v		5	00	PN			
9685	9685	GL	CWH ms1	10	00	GL								
9688	9688	11	CWH ms1	7	11	RC	d	y	3	05	HQ			
9689	9689	11	CWH ms1	6	11	RC	d	y	4	05	HQ			
9691	9691	OW	CWH ms1	10	00	OW								
9692	9692	WE	CWH ms1	10	00	WE	d	y						
9693	9693	ME	CWH ms1	10	00	ME								
9694	9694	PA	CWH ms1	10	00	PA								
9695	9695	BR	CWH ms1	10	00	BR								
9696	9696	DL	CWH ms1	10	00	DL								
9697	9697	RO	CWH ms1	10	00	RO								
9698	9698	AV	CWH ms1	10	00	AV								

**BGC Unit: IDF ww****LMES Zone ID: 97****Extent and Location within each TSA**

<b>TSA or Region</b>	<b>(ha)</b>	<b>(%)</b>
Quesnel TSA	0.0	0.00%
Williams Lake TSA	817.3	0.02%
100 Mile House TSA	0.0	0.00%
Cariboo Region	817.3	0.01%

**List of Site Series Codes Defined for use in IDF ww**

<b>SS #</b>	<b>Code</b>	<b>Site Series Name</b>	<b>Typical SMR</b>	<b>Typical Landscape Setting Where Unit is Modelled</b>
01	DH	FdCw - Hazelnut	submesic - mesic	All MEDIUM upper to lower water shedding < 30%. Also Steep NE, SW
02	DP	FdPI - Peltigera	very xeric	SHALLOW Crests, Thin, Dry Soils - MEDIUM & COARSE, DEEP MED Crests
03	DF	Fd - Falsebox - Feathermoss	xeric - subxeric	ALL COARSE TEXTURED, All Upper Shedding < 30%. ALSO Steep NE, SW
04	DD	Fd - Douglas maple - Fairybells	submesic - mesic	Never Predicted as Dominant, Included in Steep SW MEDIUM.
05	RM	CwFd - Vine maple	subhygric	Never Predicted as Dominant, rich slightly moist seepage
06	RD	Cw - Devil's club - Lady fern	hygric	Moist, Non-Frosty, Rich Sloping Swale to Toe, WT > 50 cm, MED & CRS
07	RC	CwSxw - Skunk cabbage	subhydric	MEDIUM and COARSE; Wet, Flat (< 5%) Frosty Valleys and depressions, WT < 50 cm ; ALSO Cold Wetland Margins , ALSO Organics
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock		
00	AV	Non-forested Avalanche Tracks		

**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #28, "A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.



**Landscape Profile Diagram: IDF ww**

No Landscape Profile diagram available

**Example Attribute Class Rule File for IDF ww (arule9730)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.50	7.50	7.50	0.00	8.00	0.5
2	relzfile	PCTZ2ST	Crest2Low	1	60.00	60.00	60.00	20.00	100.00	40
3	relzfile	PCTZ2ST	Up2Low	1	50.00	20.00	80.00	20.00	80.00	30
4	relzfile	PCTZ2ST	Mid2Low	1	30.00	30.00	30.00	20.00	40.00	10
5	relzfile	PCTZ2ST	Low2Toe	1	14.00	4.00	24.00	2.00	26.00	12
6	relzfile	PCTZ2ST	Toe	1	6.00	3.00	9.00	1.00	11.00	5
7	relzfile	PCTZ2ST	Toe2Valley	1	4.00	2.00	6.00	2.00	6.00	2
8	formfile	LNQAREA	Valley	4	13.00	13.00	13.00	12.50	50.00	0.5
9	formfile	QWETI	VDry	5	6.00	6.00	6.00	0.00	6.20	0.2
10	formfile	QWETI	VDry2SIIDry	5	7.80	7.80	7.80	0.00	8.00	0.2
11	formfile	QWETI	Dry	1	6.50	6.50	6.50	5.50	7.50	1
12	formfile	QWETI	Dry2SIWet	1	7.50	5.50	9.50	5.50	9.50	2
13	formfile	QWETI	Dry2Med	1	7.50	6.50	8.50	6.00	9.00	1.5
14	formfile	QWETI	Med_WI	1	8.90	8.90	8.90	7.90	9.90	1
15	formfile	QWETI	SI_Wet	1	9.70	8.80	10.60	8.80	10.60	0.9
16	formfile	QWETI	SIWet2Wet	1	11.25	112.50	11.25	10.25	12.25	1
17	formfile	QWETI	Wet	1	11.50	11.50	11.50	10.50	12.50	1
18	formfile	QWETI	Wet2V_Wet	4	12.00	12.00	12.00	11.50	50.00	0.5
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	30.00	100.00	2
20	formfile	SLOPE	SlopeLT05	5	2.00	0.00	2.00	0.00	5.00	3
21	formfile	SLOPE	SlopeLT15	5	15.00	0.00	10.00	0.00	15.00	1
22	formfile	SLOPE	SlopeLT20	5	20.00	0.00	20.00	0.00	20.00	1
23	formfile	SLOPE	SlopeLT30	5	30.00	30.00	30.00	0.00	30.00	1
24	formfile	SLOPE	SlopeLT45	5	40.00	0.00	40.00	0.00	45.00	5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	100.00	2.00	100.00	3
26	formfile	SLOPE	SlopeGT15	4	15.00	10.00	10.00	15.00	100.00	1
27	formfile	SLOPE	SlopeGT20	4	25.00	25.00	25.00	20.00	100.00	5
28	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
29	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
30	geofile	DEPTH	Deep	4	95.00	95.00	95.00	90.00	900.00	5
31	geofile	DEPTH	Shallow	5	60.00	60.00	60.00	0.00	60.00	1
32	geofile	TEXTURE	Med2Crs	4	40.00	40.00	40.00	40.00	100.00	5
33	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
34	geofile	TEXTURE	Fine	5	31.00	31.00	31.00	0.00	30.00	1
35	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
36	geofile	L2Wet	WetL_LT200	5	100.00	100.00	100.00	0.00	150.00	50
37	geofile	Z2wet	WetZ_LT05	5	1.00	1.00	1.00	0.00	1.50	0.5
38	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
39	relzfile	Z2St	Hi_Ridge	4	40.00	40.00	40.00	35.00	999.00	5
40	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

## Example Fuzzy Ecological Class Rule File for IDF ww (crule9730)

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9702r	Crest	30	1	9702	02 Shallow Crest	MH9769n	Low2Toe	30	11	9769	06 < 15% Moist Low-Toe NE
MH9702r	VDry	30	1	9702		MH9769n	SLWet2Wet	30	11	9769	
MH9702r	SlopeLT30	10	1	9702		MH9769n	SlopeLT15	10	11	9769	
MH9702r	Med2Crs	10	1	9702		MH9769n	NE_Aspect	10	11	9769	
MH9702r	Shallow	40	1	9702		MH9769n	Med2Crs	5	11	9769	
MH9702r	Hi_Ridge	10	1	9702		MH9769n	Deep	5	11	9769	
MH9724r	Crest	30	2	9724	02 Deep Dry High Ridge	MH9759s	Low2Toe	30	12	9759	06 < 15% Moist Low-Toe SW
MH9724r	VDry	30	2	9724		MH9759s	SLWet2Wet	30	12	9759	
MH9724r	SlopeLT30	10	2	9724		MH9759s	SlopeLT15	10	12	9759	
MH9724r	Med2Crs	10	2	9724		MH9759s	SW_Aspect	10	12	9759	
MH9724r	Deep	20	2	9724		MH9759s	Med2Crs	5	12	9759	
MH9724r	Hi_Ridge	10	2	9724		MH9759s	Deep	5	12	9759	
MH9721k	Crest	30	3	9721	01 Deep Mesic Low Knoll	MH9701t	Low2Toe	30	13	9701	01 > 15% Drier Low-Toe
MH9721k	VDry	30	3	9721		MH9701t	Sl_Wet	30	13	9701	
MH9721k	SlopeLT30	10	3	9721		MH9701t	SlopeGT15	20	13	9701	
MH9721k	Med2Crs	10	3	9721		MH9701t	Med2Crs	10	13	9701	
MH9721k	Deep	20	3	9721		MH9701t	Deep	10	13	9701	
MH9721k	Low_Knoll	10	3	9721		MH9708n	Toe	30	14	9718	06 < 15% Moist Toe NE
MH9704s	Crest2Low	30	4	9704	01 Steep Dry Upper SW	MH9708n	Wet	30	14	9718	
MH9704s	Dry2SIWet	30	4	9704		MH9708n	SlopeLT15	10	14	9718	
MH9704s	Steep_SW	20	4	9704		MH9708n	NE_Aspect	10	14	9718	
MH9704s	Med2Crs	10	4	9704		MH9708n	Med2Crs	5	14	9718	
MH9704s	Deep	10	4	9704		MH9708n	Deep	5	14	9718	
MH9705s	Crest2Low	30	5	9705	05 15-30% Upper SW	MH9780s	Toe	30	15	9781	06 < 15% Moist Toe SW
MH9705s	Dry2SIWet	30	5	9705		MH9780s	Wet	30	15	9781	
MH9705s	SW_Aspect	10	5	9705		MH9780s	SlopeLT15	10	15	9781	
MH9705s	SlopeLT30	10	5	9705		MH9780s	SW_Aspect	10	15	9781	
MH9705s	SlopeGT15	10	5	9705		MH9780s	Med2Crs	5	15	9781	
MH9705s	Med2Crs	5	5	9705		MH9780s	Deep	5	15	9781	
MH9705s	Deep	5	5	9705		MH9709v	Valley	30	16	9709	06 > 5% Sloping Valley
MH9715s	Crest2Low	30	6	9751	01 < 15% Upper SW	MH9709v	Wet2V_Wet	30	16	9709	
MH9715s	Dry2SIWet	30	6	9751		MH9709v	SlopeGT05	20	16	9709	
MH9715s	SW_Aspect	10	6	9751		MH9709v	Med2Crs	10	16	9709	
MH9715s	SlopeLT15	20	6	9751		MH9709v	Deep	10	16	9709	
MH9715s	Med2Crs	5	6	9751		MH9710f	Valley	30	17	9710	07 < 5% Flat, Wet Valley
MH9715s	Deep	5	6	9751		MH9710f	Wet2V_Wet	30	17	9710	
MH9706n	Crest2Low	30	7	9706	01 Steep Dry Upper NE	MH9710f	SlopeLT05	20	17	9710	
MH9706n	Dry2SIWet	30	7	9706		MH9710f	Medium	10	17	9710	
MH9706n	Steep_NE	20	7	9706		MH9710f	Deep	10	17	9710	
MH9706n	Med2Crs	10	7	9706		MH9788m	WetZ_LT05	45	18	9788	06 Drier Sloping Margins
MH9706n	Deep	10	7	9706		MH9788m	WetL_LT200	45	18	9788	
MH9761n	Crest2Low	30	8	9761	01 15-30% Upper NE	MH9788m	SlopeGT05	10	18	9788	
MH9761n	Dry2SIWet	30	8	9761		MH9789m	WetZ_LT05	45	19	9789	07 Flatter Wetter Margins
MH9761n	NE_Aspect	10	8	9761		MH9789m	WetL_LT200	45	19	9789	
MH9761n	SlopeLT30	10	8	9761		MH9789m	SlopeGT05	10	19	9789	
MH9761n	SlopeGT15	10	8	9761		MH9782ds	Hi_Seep	80	20	9782	06 Drier Seepage Areas
MH9761n	Med2Crs	5	8	9761		MH9782ds	Dry2SIWet	20	20	9782	
MH9761n	Deep	5	8	9761		MH9783ws	Hi_Seep	80	21	9783	07 Wetter Seepage Areas
MH9716n	Crest2Low	30	9	9716	01 < 15% Upper NE	MH9783ws	Wet	20	21	9783	
MH9716n	Dry2SIWet	30	9	9716		MH9710o	Organic	99	22	9700	07 Forested Organics
MH9716n	NE_Aspect	10	9	9716		MH9758s	Crest2Low	30	23	9758	06 < 15% Moist Swale SW
MH9716n	SlopeLT15	20	9	9716		MH9758s	Wet	30	23	9758	
MH9716n	Med2Crs	5	9	9716		MH9758s	SW_Aspect	10	23	9758	
MH9716n	Deep	5	9	9716		MH9758s	SlopeLT15	20	23	9758	
MH9701m	Up2Low	35	10	9711	01 < 15% Drier UP-LOW	MH9758s	Med2Crs	5	23	9758	
MH9701m	Dry2Med	25	10	9711		MH9758s	Deep	5	23	9758	
MH9701m	SlopeLT15	20	10	9711		MH9768n	Crest2Low	30	24	9768	06 < 15% Moist Swale NE
MH9701m	Med2Crs	10	10	9711		MH9768n	Wet	30	24	9768	
MH9701m	Deep	10	10	9711		MH9768n	NE_Aspect	10	24	9768	
						MH9768n	SlopeLT15	20	24	9768	
						MH9768n	Med2Crs	5	24	9768	
						MH9768n	Deep	5	24	9768	

**PEM Entity Descriptions for: IDF ww**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9700	IDF ww	07	RC	p	d	9700 areas were mapped in all locations of ORGANIC MATERIALS. These areas of FORESTED ORGANICS are predicted to be dominated by the wet, poor 07 site series. Hygric toe, level or depressions. Deep, organic-textured soil.
9701	IDF ww	01	DH	d	j	9701 areas were mapped ONLY in areas of MEDIUM TEXTURE. 9701 areas occur across all LOWER to TOE SLOPE landform portions that are moderately sloping (> 15%). 9701 areas permit recognition of the normal mesic 01 Site Series on all LOWER to TOE slopes that are NOT GENTLY SLOPING. Moderate slope, all aspects, deep, medium-textured soils.
9702	IDF ww	02	DP	s	r	9702 was mapped ONLY in areas that were mapped as MEDIUM TEXTURED and SHALLOW to BEDROCK. 9702 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9702 occurs in medium textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow medium textured soils over bedrock
9704	IDF ww	01	DH	w	x	9704 was mapped ONLY in areas of MEDIUM TEXTURED MATERIALS. 9704 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, medium - textured soils.
9705	IDF ww	06	RD	d	j	9705 areas were defined to occur on moderate (15-30%) SW-facing slopes and on MEDIUM TEXTURED materials in MID to LOWER landform positions. 9705 areas were created to recognize the normal rich, seepage 06 site series on moderately sloping MID to LOWER SW slopes. Moderate slope, warm aspect, deep, medium-textured soils.
9706	IDF ww	01	DH	w	x	9706 was mapped ONLY in areas of MEDIUM TEXTURE. 9706 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by the normal, mesic 01 Site Series and not by the richer, seepage 06 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, medium - textured soils
9709	IDF ww	06	AD	c	y	9709 areas were mapped in sloping valley bottoms with slope gradients greater than 5% in areas mapped as MEDIUM TEXTURED. 9709 areas represent sloping valleys in areas of medium textured materials. These areas are predicted to be occupied by the rich, moist 06 site series as well as some rich, less moist 05 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
9710	IDF ww	07	RC	d	y	9710 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas mapped as MEDIUM TEXTURED. 9710 areas were predicted to be characterized by high levels of moisture and high water tables and to be relatively nutrient poor. Areas mapped as 9710 are expected to be occupied by moist, nutrient poor 07 Site Series. Toe slope to depression, deep, medium - textured soils; high water table
9711	IDF ww	01	DH	d	j	9711 areas were mapped ONLY in areas of MEDIUM TEXTURE. 9711 areas occur across the upper to mid portions of upper shedding landform positions that are gently sloping (< 15%). 9711 was added to permit recognition of the normal mesic 01 Site Series on all gentler upper slopes.
9715	IDF ww	01	DH	d	j	9715 areas were defined to occur on gentle (<15%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER to MID landform positions in areas of VERY LOW RELIEF. 9715 areas are predicted to be occupied by the normal mesic 01 site series as well as some richer mesic 04 Site Series. Gentle slope, warm aspect, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9716	IDF ww	01	DH	d	j	9716 areas were defined to occur on gentle (<15%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER to MID landform positions. 9716 areas are predicted to be occupied by the normal mesic 01 site series as well as some slightly richer 04 Site Series. Gentle slope, cool aspect, deep, medium-textured soils.
9718	IDF ww	06	RD	d	y	9718 areas were mapped in lowest, flattest and wettest portions of LOWER TOE SLOPES with NE ASPECTS in areas of MEDIUM TEXTURE. 9718 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9718 areas are predicted to be occupied by the relatively rich, moist seepage 06 site series along with less rich, less moist 05 site series. Gentle slope, deep, medium-textured soils.
9721	IDF ww	01	DH	d	x	9721 areas were mapped on the slightly drier crests of low knolls with deep MEDIUM TEXTURED soils. 9721 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal mesic 01 Site Series along with some slightly drier 03 and 04 site series. Gentle slope, deep, medium-textured soils.
9724	IDF ww	02	DP	r	x	9724 areas were mapped ONLY in areas of MEDIUM TEXTURE. 9724 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 9724 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of the very dry 02 site series and perhaps some less dry 04 site series in areas not mapped as shallow along with typical 01.
9730	IDF ww	03	DF	c	j	9730 areas were mapped ONLY in areas of COARSE TEXTURE. 9730 areas occur across the upper to mid portions of upper shedding landform positions that are gently sloping (< 15%). 9730 was added to permit recognition of the main coarse, dry 03 Site Series on all gentler upper slopes in coarse areas.
9731	IDF ww	01	DH	d	j	9731 areas were mapped ONLY in areas of COARSE TEXTURE. 9731 areas occur across all LOWER to TOE SLOPE landform portions that are moderately sloping (> 15%). 9731 areas permit recognition of the normal mesic 01 Site Series on all LOWER to TOE slopes that are NOT gently sloping. Moderate slope, all aspects, deep, medium-textured soils.
9732	IDF ww	02	DP	s	r	9732 was mapped ONLY in areas that were mapped as COARSE TEXTURED and SHALLOW to BEDROCK. 9732 occurs on the driest crest positions of high ridges that are shallow to bedrock. 9732 occurs in coarse textured areas where the depth to bedrock is indicated as less than 50 cm and the landscape position is a dry shedding upper slope or crest. Gentle slope; crest positions; shallow coarse textured soils over bedrock
9737	IDF ww	06	AD	c	y	9737 areas were mapped in sloping valley bottoms with slope gradients greater than 5% in areas mapped as COARSE TEXTURED. 9737 areas represent sloping valleys in areas of coarse textured materials. These areas are predicted to be occupied by the rich, moist 06 site series as well as some rich, less moist 05 Site Series. Toe slope to depression, deep, coarse - textured soils; high water table
9738	IDF ww	06	RD	d	y	9738 areas were mapped in lowest, flattest and wettest portions of LOWER TOE SLOPES with SW ASPECTS in areas of MEDIUM TEXTURED materials. 9738 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9738 areas are predicted to be occupied by the relatively rich, moist seepage 06 site series along with less rich, less moist 05 site series. Gentle slope, deep, coarse-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9739	IDF ww	01	DH	c	y	9739 was mapped ONLY in areas of COARSE TEXTURE. 9739 occurs on gently sloping (< 15%) lower to toe slope landform positions with NE aspects that receive seepage but that do not develop permanently high water tables. 9739 areas are occupied by some slightly wetter than mesic site series (04/05). It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, coarse - textured soils
9741	IDF ww	03	DF	c	x	9741 areas were mapped on the slightly drier crests of low knolls with deep COARSE TEXTURED soils. 9741 areas were mapped to differentiate deep crests on low knolls from deep crests on high ridges. The Regional Ecologist indicated that these low knoll positions would be occupied by the normal drier 03 Site Series along with normal mesic 01 site series. Gentle slope, deep, coarse-textured soils.
9742	IDF ww	02	DP	c	r	9742 areas were mapped ONLY in areas of COARSE TEXTURE. 9742 areas occur on the tops of dry crests of high ridges with deep soils that WERE NOT mapped as shallow. 9742 areas were defined to permit the possibility of recognizing areas that might contain a significant proportion of the very dry 02 site series and perhaps some less dry 04 site series in areas not mapped as shallow along with typical 01.
9744	IDF ww	03	DF	c	w	9744 was mapped ONLY in areas of COARSE TEXTURE. 9744 occupies STEEP UPPER SLOPES with a WARM SW ASPECT. Slope gradient must be greater than 30% and the aspect must be from 135 to 315. This is a classic STEEP SW unit. Significant slope, of warm aspects; deep, coarse - textured soils.
9745	IDF ww	03	DF	c	j	9745 areas were defined to occur on gentle (<15%) SW-facing slopes and on COARSE TEXTURED materials in UPPER to MID landform positions. 9745 areas are predicted to be occupied by the main coarse, dry 03 site series as well as some richer mesic 04 Site Series. Gentle slope, warm aspect, deep, coarse-textured soils.
9748	IDF ww	06	RD	d	y	9748 areas were mapped in lowest, flattest and wettest portions of LOWER TOE SLOPES with NE ASPECTS in areas of COARSE TEXTURE. 9748 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9748 areas are predicted to be occupied by the relatively rich, moist seepage 06 site series along with less rich, less moist 05 site series. Gentle slope, deep, coarse-textured soils.
9749	IDF ww	01	DH	c	y	9749 was mapped ONLY in areas of COARSE TEXTURE. 9749 occurs on gently sloping (< 15%) lower to toe slope landform positions with SW aspects that receive seepage but that do not develop permanently high water tables. 9749 areas are occupied by some slightly wetter than mesic site series (04/05). It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, coarse - textured soils
9751	IDF ww	01	DH	d	j	9751 areas were defined to occur on gentle (<15%) SW-facing slopes and on MEDIUM TEXTURED materials in UPPER to MID landform positions. 9751 areas are predicted to be occupied by the normal mesic 01 site series as well as some richer mesic 04 Site Series. Gentle slope, warm aspect, deep, medium-textured soils.
9755	IDF ww	03	DF	c	d	9755 areas were defined to occur on moderate (15-30%) SW-facing slopes and on COARSE TEXTURED materials in UPPER to MID landform positions. 9755 areas were created to recognize the main coarse, dry 03 site series on moderately sloping UPPER to LOWER SW slopes. Moderate slope, warm aspect, deep, coarse-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9758	IDF ww	06	AD	d	j	9758 areas were mapped in moist swales, hollows and concavities with NE ASPECTS in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 9758 areas were mapped to permit recognition of considerably moister conditions in swales in upper to lower landform positions. 9758 areas are predicted to be occupied by the moist, rich 06 site series as well as some rich, less moist 05 Site Series. Gentle slope, deep, medium-textured soils.
9759	IDF ww	06	RD	d	y	9759 was mapped ONLY in areas of MEDIUM TEXTURE. 9759 occurs on gently sloping (< 15%) lower to toe slope landform positions with SW aspects that receive seepage but that do not develop permanently high water tables. 9759 areas are occupied by the most common and extensive wetter than mesic site series. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured soils
9761	IDF ww	01	DH	d	j	9761 areas were defined to occur on moderate (15-30%) NE-facing slopes and on MEDIUM TEXTURED materials in UPPER to MID landform positions. 9761 areas were created to recognize the normal mesic 01 site series on moderately sloping UPPER to MID NE slopes. Moderate slope, cool aspect, deep, medium-textured soils.
9764	IDF ww	03	DF	c	d	9764 areas were defined to occur on moderate (15-30%) NE-facing slopes and on COARSE TEXTURED materials in UPPER to MID landform positions. 9764 areas were created to recognize the normal main coarse, dry 03 site series on moderately sloping UPPER to MID NE slopes. Moderate slope, cool aspect, deep, coarse-textured soils.
9765	IDF ww	03	DF	c	j	9765 areas were defined to occur on gentle (<15%) NE-facing slopes and on COARSE TEXTURED materials in UPPER to MID landform positions. 9765 areas are predicted to be occupied by the main coarse, dry 03 site series as well as some slightly richer 04 Site Series. Gentle slope, cool aspect, deep, medium-textured soils.
9766	IDF ww	03	DF	c	k	9766 was mapped ONLY in areas of COARSE TEXTURE. 9766 occupies STEEP UPPER SLOPES with a COOL NE ASPECT. Slope gradient must be greater than 30% and the aspect must be from 315 to 135. The Regional Ecologist indicated that these steep NE sites will be dominated by the main coarse, dry 03 Site Series along with some normal mesic 01 Site Series. This is a classic STEEP NE unit. Significant slope, of cool aspects; deep, coarse - textured soils
9768	IDF ww	06	AD	d	j	9768 areas were mapped in moist swales, hollows and concavities with SW ASPECTS in areas of MEDIUM TEXTURED materials in UPPER to LOWER LANDFORM positions. 9768 areas were mapped to permit recognition of considerably moister conditions in swales in upper to lower landform positions. 9768 areas are predicted to be occupied by the moist, rich 06 site series as well as some rich, less moist 05 Site Series. Gentle slope, deep, medium-textured soils.
9769	IDF ww	06	RD	d	y	9769 was mapped ONLY in areas of MEDIUM TEXTURE. 9769 occurs on gently sloping (< 15%) lower to toe slope landform positions with NE aspects that receive seepage but that do not develop permanently high water tables. 9769 areas are occupied by the most common and extensive wetter than mesic site series. It is meant to capture the concept of a toe slope seepage area with slope gradients steep enough to prevent accumulation of frost or development of permanently high water tables. Lower slope, receiving moisture; deep, medium - textured soils
9773	IDF ww	07	RC	d	y	9773 areas were mapped in flat valley bottoms with slope gradients less than 5% in areas mapped as COARSE TEXTURED. 9773 areas were predicted to be characterized by high levels of moisture and high water tables and to be relatively nutrient poor. Areas mapped as 9773 are expected to be occupied by moist, nutrient poor 07 Site Series. Toe slope to depression, deep, coarse - textured soils; high water table

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9776	IDF ww	06	AD	d	y	9776 areas occur on slopes GREATER THAN 5% in areas of noticeable SEEPAGE and COARSE TEXTURE. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the most common rich, wet 06 seepage entity.
9777	IDF ww	07	RC	j	y	9777 areas occur on slopes LESS THAN 5% in areas of noticeable SEEPAGE and COARSE TEXTURES. The regional ecologist recommended predicting that these relatively level seepage areas be described as being occupied by the wetter, poorer 07 site series.
9778	IDF ww	06	AD	j	y	9778 areas were mapped only in areas mapped as COARSE. 9778 areas occur on slopes GREATER THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 9778 areas are predicted to consist of a mixture of wetter Site Series including 06 and 05.
9779	IDF ww	07	RC	j	y	9779 areas were mapped only in areas mapped as COARSE. 9779 areas occur on slopes LESS THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 9779 areas are predicted to be dominated by the very wet 07 site series.
9781	IDF ww	06	RD	d	y	9781 areas were mapped in lowest, flattest and wettest portions of LOWER TOE SLOPES with SW ASPECTS in areas of MEDIUM TEXTURED materials. 9781 areas were mapped to permit recognition of considerably moister conditions in lower toe slope landform positions. 9781 areas are predicted to be occupied by the relatively rich, moist seepage 06 site series along with less rich, less moist 05 site series. Gentle slope, deep, medium-textured soils.
9782	IDF ww	06	AD	d	y	9782 areas occur on slopes GREATER THAN 5% in areas of noticeable SEEPAGE and MEDIUM TEXTURE. The regional ecologist recommended predicting that these somewhat sloping manually mapped seepage areas be described as being occupied by the most common rich, wet 06 seepage entity.
9783	IDF ww	07	RC	j	y	9783 areas occur on slopes LESS THAN 5% in areas of noticeable SEEPAGE and MEDIUM TEXTURE. The regional ecologist recommended predicting that these relatively level seepage areas be described as being occupied by the wetter, poorer 07 site series.
9788	IDF ww	06	AD	j	y	9788 areas were mapped only in areas mapped as MEDIUM. 9788 areas occur on slopes GREATER THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 9788 areas are predicted to consist of a mixture of wetter Site Series including 06 and 05.
9789	IDF ww	07	RC	j	y	9789 areas were mapped only in areas mapped as MEDIUM TEXTURED. 9789 areas occur on slopes LESS THAN 5% in the low-lying margins surrounding wetlands and open water bodies. 9789 areas are predicted to be dominated by the very wet 07 site series.
9791	IDF ww	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9792	IDF ww	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9793	IDF ww	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows.
9794	IDF ww	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9795	IDF ww	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9796	IDF ww	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer be considered to be natural sites capable of being classified as an ecological site series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9797	IDF ww	00	RO			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of undifferentiated rock, snow and ice at high elevations.
9798	IDF ww	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.



**PEM Entity Extended Legend with Proportions of Site Series for: IDF ww**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9700	9700	07	IDF ww	6	07	RC	p	d	4	05	RM			
9701	9701	01	IDF ww	8	01	DH	d	j	2	04	DD			
9702	9702	02	IDF ww	9	02	DP	s	r	1	04	DD			
9704	9704	01	IDF ww	6	01	DH	w	x	4	03	DF			
9705	9705	06	IDF ww	5	06	RD	d	j	3	05	RM	2	01	DH
9706	9706	01	IDF ww	6	01	DH	w	x	2	06	RD	2	04	DD
9709	9709	06	IDF ww	6	06	AD	c	y	3	05	RM	1	01	DH
9710	9710	07	IDF ww	7	07	RC	d	y	3	05	RM			
9711	9711	01	IDF ww	8	01	DH	d	j	2	06	RD			
9715	9711	01	IDF ww	7	01	DH	d	j	3	04	DD			
9716	9711	01	IDF ww	7	01	DH	d	j	2	04	DD	1	06	RD
9718	9769	06	IDF ww	7	06	RD	d	y	3	05	RM			
9721	9711	01	IDF ww	6	01	DH	d	x	2	03	DF	2	04	DD
9724	9724	02	IDF ww	6	02	DP	r	x	2	04	DD	2	01	DH
9730	9730	03	IDF ww	8	03	DF	c	j	2	04	DD			
9731	9731	01	IDF ww	8	01	DH	d	j	2	06	RD			
9732	9732	02	IDF ww	9	02	DP	s	r	1	04	DD			
9737	9737	06	IDF ww	6	06	AD	c	y	3	05	RM	1	01	DH
9738	9759	06	IDF ww	7	06	RD	d	y	3	05	RM			
9739	9739	01	IDF ww	7	01	DH	c	y	3	04	DD			
9741	9730	03	IDF ww	6	03	DF	c	x	2	01	DH	2	04	DD
9742	9742	02	IDF ww	6	02	DP	c	r	2	04	DD	2	01	DH
9744	9744	03	IDF ww	8	03	DF	c	w	2	01	DH			
9745	9730	03	IDF ww	7	03	DF	c	j	3	01	DH			
9748	9748	06	IDF ww	7	06	RD	d	y	3	05	RM			
9749	9749	01	IDF ww	7	01	DH	c	y	3	04	DD			
9751	9711	01	IDF ww	7	01	DH	d	j	3	04	DD			
9755	9755	03	IDF ww	8	03	DF	c	d	2	01	DH			
9758	9709	06	IDF ww	6	06	AD	d	j	3	05	RM	1	01	DH
9759	9759	06	IDF ww	8	06	RD	d	y	2	01	DH			
9761	9761	01	IDF ww	7	01	DH	d	j	2	04	DD	1	06	RD
9764	9764	03	IDF ww	7	03	DF	c	d	2	04	DD	1	06	RD
9765	9730	03	IDF ww	7	03	DF	c	j	2	04	DD	1	06	RD
9766	9766	03	IDF ww	6	03	DF	c	k	2	04	DD	2	01	DH
9768	9709	06	IDF ww	6	06	AD	d	j	3	05	RM	1	01	DH
9769	9769	06	IDF ww	8	06	RD	d	y	2	01	DH			
9773	9773	07	IDF ww	7	07	RC	d	y	3	05	RM			
9776	9776	06	IDF ww	8	06	AD	d	y	2	05	RM			
9777	9777	07	IDF ww	8	07	RC	j	y	2	05	RM			
9778	9778	06	IDF ww	6	06	AD	j	y	4	05	RM			
9779	9779	07	IDF ww	8	07	RC	j	y	2	05	RM			
9781	9759	06	IDF ww	7	06	RD	d	y	3	05	RM			
9782	9782	06	IDF ww	8	06	AD	d	y	2	05	RM			
9783	9783	07	IDF ww	8	07	RC	j	y	2	05	RM			
9788	9788	06	IDF ww	6	06	AD	j	y	4	05	RM			
9789	9789	07	IDF ww	8	07	RC	j	y	2	05	RM			
9791	9791	OW	IDF ww	10	00	OW								
9792	9792	WE	IDF ww	10	00	WE	d	y						
9793	9793	ME	IDF ww	10	00	ME								
9794	9794	PA	IDF ww	10	00	PA								
9795	9795	BR	IDF ww	10	00	BR								
9796	9796	DL	IDF ww	10	00	DL								
9797	9797	RO	IDF ww	10	00	RO								
9798	9798	AV	IDF ww	10	00	AV								

**BGC Unit: MH mm2****LMES Zone ID: 98****Extent and Location within each TSA**

TSA or Region	(ha)	(%)
Quesnel TSA	0.0	0.00%
Williams Lake TSA	19,537.9	0.40%
100 Mile House TSA	0.0	0.00%
Cariboo Region	19,537.9	0.24%

**List of Site Series Codes Defined for use in MH mm2**

SS #	Code	Site Series Name	Typical SMR	Typical Landscape Setting Where Unit is Modelled
01	MB	HmBa - Blueberry	mesic	All Textures, upper to lower water shedding < 30%. Also Steep NE, SW
02	MM	HmBa - Mountain-heather	very xeric - xeric	ALL SHALLOW, MEDIUM to COARSE, Crests, Upper Slopes, Thin, Dry Soils
03	MO	BaHm - Oak fern	subxeric - mesic	Slightly Moist - MEDIUM and COARSE, Upper Swales and SEEPAGE Slopes
04	AB	HmBa - Bramble	subhygric	Slightly Moist Seepage, Gentle LOW-TOE, Never mapped as Dominant
05	MT	BaHm - Twistedstalk	subhygric	Moist, Non-Frosty, Rich Sloping Swale to Toe, WT > 50 cm, MED & CRS
06	MD	HmYc - Deer cabbage	hygric	MEDIUM and COARSE; Wet, Gentle Swales, Toe Slopes, Margins and Depressions, WT < 50 cm
07	YH	YcHm - Hellebore	hygric	Rich, Wet, Receiving, Sloping SEEPAGE areas.
08	YS	HmYc - Sphagnum	subhydric	Not Modelled, None Predicted
09	YC	YcHm - Skunk cabbage (Ws55 - YcHm - Skunkcabbage)	subhydric	MEDIUM and COARSE; Wet, Flat (< 5%) Frosty Valleys and depressions
00	OW	Open Water		
00	WE	Non-forested Wetland		
00	ME	Non-forested Meadow		
00	PA	Non-forested Pasture		
00	BR	Non-productive Brush		
00	DL	Non-forested Urban or Disturbed Land		
00	RO	Rock		
00	AV	Non-forested Avalanche Tracks		
00	RU	Rubble		
00	GL	Glacier Permanent Ice and Snow		

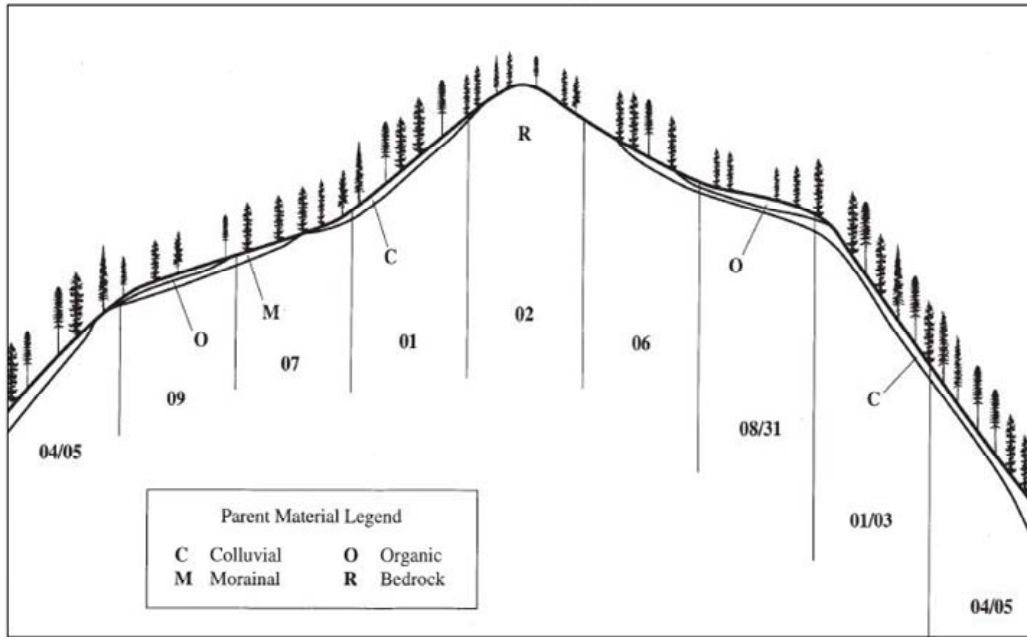
**Authority or Source for Defined Site Series**

Ray Coupé, personal communication, 2007 and Mapcode\_Mar18\_06.mdb.

Concepts and alpha codes for this BGC Unit were based on information presented in LMH #26, "A Field Guide for Site Identification and Interpretation for the Prince Rupert Region" as interpreted for the Cariboo PEM project by the Regional Ecologist.

**Landscape Profile Diagram: MH mm2**

**MHmm2 Landscape Profile<sup>a</sup>**



**Example Attribute Class Rule File for MH mm2 (arule9830)**

sortorder	file_in	attr_in	class_out	model_no	b	b_low	b_hi	b1	b2	d
1	formfile	LNQAREA	Crest	5	7.00	7.00	7.00	0.00	7.50	0.5
2	relzfile	PCTZ2ST	Crest2Mid	1	60.00	60.00	60.00	40.00	80.00	20
3	relzfile	PCTZ2ST	Upper_Cr	1	80.00	80.00	80.00	70.00	90.00	10
4	relzfile	PCTZ2ST	Lower_Cr	1	60.00	60.00	60.00	50.00	70.00	10
5	relzfile	PCTZ2ST	Up2Mid	1	50.00	30.00	75.00	20.00	80.00	30
6	relzfile	PCTZ2ST	Mid2Toe	1	35.00	35.00	35.00	20.00	50.00	15
7	relzfile	PCTZ2ST	Toe	1	18.00	18.00	18.00	8.00	28.00	10
8	relzfile	PCTZ2ST	Toe2Valley	1	8.00	8.00	8.00	3.00	13.00	5
9	formfile	LNQAREA	Valley	4	12.50	12.50	12.50	12.00	50.00	0.5
10	formfile	QWETI	Dry_WI	5	6.00	6.00	6.00	0.00	6.20	0.2
11	formfile	QWETI	Dry2Med_WI	5	7.30	7.30	7.30	0.00	7.80	0.5
12	formfile	LNQAREA	Drier	1	7.50	6.50	8.50	6.50	8.50	1
13	formfile	LNQAREA	Less_dry	1	9.00	8.50	8.50	8.50	9.50	0.5
14	formfile	QWETI	Sl_Dry2Med	1	7.00	7.00	7.00	5.50	8.50	1.5
15	formfile	QWETI	Med2Sl_Wet	1	9.20	9.20	9.20	8.00	10.40	1.2
16	formfile	QWETI	Sl_Wet2Wet	1	9.80	9.80	9.80	7.80	10.80	2
17	formfile	QWETI	Wet	1	10.70	10.70	10.70	9.20	12.30	1.5
18	formfile	QWETI	Wet2V_Wet	4	11.70	11.70	11.70	10.90	12.50	0.8
19	formfile	SLOPE	Steep	4	30.00	30.00	30.00	25.00	100.00	5
20	formfile	SLOPE	SlopeLT05	5	5.00	5.00	5.00	0.00	6.00	1
21	formfile	SLOPE	SlopeGT10	4	10.00	10.00	10.00	10.00	50.00	2
22	formfile	SLOPE	SlopeLT10	5	8.00	10.50	10.50	0.00	10.00	2
23	formfile	SLOPE	SlopeLT20	5	20.00	20.00	20.00	0.00	22.50	2.5
24	formfile	SLOPE	SlopeLT30	5	30.00	32.50	32.50	0.00	32.50	2.5
25	formfile	SLOPE	SlopeGT05	4	5.00	5.00	5.00	2.00	100.00	1
26	formfile	NEW_ASP	NE_Aspect	1	90.00	90.00	90.00	0.00	180.00	45
27	formfile	NEW_ASP	SW_Aspect	1	270.00	270.00	270.00	180.00	360.00	45
28	geofile	DEPTH	Deep	4	90.00	90.00	90.00	80.00	900.00	10
29	geofile	DEPTH	Shallow	5	50.00	50.00	50.00	0.00	60.00	10
30	geofile	TEXTURE	Coarse	4	55.00	55.00	55.00	50.00	100.00	5
31	geofile	TEXTURE	Med2CrS	4	45.00	40.00	40.00	40.00	100.00	10
32	geofile	TEXTURE	Medium	1	50.00	50.00	50.00	30.00	70.00	20
33	geofile	TEXTURE	Med2Fine	5	50.00	50.00	50.00	0.00	60.00	10
34	geofile	LZWet	Wet_LT200	5	150.00	150.00	150.00	0.00	200.00	50
35	geofile	Z2wet	WetZ_LT05	5	1.50	1.50	1.50	0.00	2.00	0.5
36	geofile	TEXTURE	Organic	1	1.00	1.00	1.00	0.90	1.10	0.01
37	geofile	SEEPAGE	Hi_Seep	4	0.90	0.90	0.90	0.90	10.00	0.1
38	relzfile	Z2St	Hi_Ridge	4	20.00	20.00	20.00	15.00	999.00	5
39	relzfile	Z2St	Low_Knoll	5	35.00	35.00	35.00	0.00	40.00	5

**Example Fuzzy Ecological Class Rule File for MH mm2 (crule9830)**

f_name	fuzattr	attrwt	facet_no	f_code	Predicts	f_name	fuzattr	attrwt	facet_no	f_code	Predicts
MH9802r	Crest	35	1	9802	02 Shallow Dry Crest	MH9801u	Up2Mid	35	16	9801	01 < 30% Upper Shedding
MH9802r	Dry_WI	25	1	9802		MH9801u	Sl_Dry2Med	25	16	9801	
MH9802r	Hi_Ridge	20	1	9802		MH9801u	SlopeLT30	20	16	9801	
MH9802r	Shallow	40	1	9802		MH9801u	Med2Crs	10	16	9801	
MH9802r	Med2Crs	10	1	9802		MH9801u	Deep	10	16	9801	
MH9822r	Crest	35	2	9820	02 Deep Dry High Ridge	MH9801u	Hi_Ridge	10	16	9801	
MH9822r	Dry_WI	25	2	9820		MH9831u	Up2Mid	35	17	9831	
MH9822r	Hi_Ridge	20	2	9820		MH9831u	Wet	25	17	9831	03 5-20% Moist Upper Swale
MH9822r	Deep	10	2	9820		MH9831u	SlopeLT20	15	17	9831	
MH9822r	Med2Crs	10	2	9820		MH9831u	SlopeGT05	5	17	9831	
MH9810k	Crest	35	3	9810	01 Deep Low Knoll	MH9831u	Med2Crs	10	17	9831	
MH9810k	Dry_WI	25	3	9810		MH9831u	Deep	10	17	9831	
MH9810k	Low_Knoll	20	3	9810		MH9836u	Up2Mid	35	18	9836	
MH9810k	Deep	10	3	9810		MH9836u	Wet2V_Wet	25	18	9836	06 5-20% Wet Lower Swale
MH9810k	Med2Crs	10	3	9810		MH9836u	SlopeLT20	15	18	9836	
MH9811n	Crest2Mid	35	4	9811	01 Steep, Deep Upper NE	MH9836u	SlopeGT05	5	18	9836	
MH9811n	Dry2Med_WI	25	4	9811		MH9836u	Med2Crs	10	18	9836	
MH9811n	Steep_NE	20	4	9811		MH9836u	Deep	10	18	9836	
MH9811n	Med2Crs	10	4	9811		MH9813s	Mid2Toe	35	19	9813	01 MID-TOE Transition SW
MH9811n	Deep	10	4	9811		MH9813s	Med2Sl_Wet	25	19	9813	
MH9812s	Crest2Mid	35	5	9812	01 Steep, Deep Upper SW	MH9813s	SlopeLT30	20	19	9813	
MH9812s	Dry2Med_WI	25	5	9812		MH9813s	SW_Aspect	10	19	9813	
MH9812s	Steep_SW	20	5	9812		MH9813s	Deep	10	19	9813	
MH9812s	Med2Crs	10	5	9812		MH9813n	Mid2Toe	35	20	9813	01 MID-TOE Transition NE
MH9812s	Deep	10	5	9812		MH9813n	Med2Sl_Wet	25	20	9813	
MH9821n	Crest2Mid	35	6	9821	02 Steep, Thin Upper NE	MH9813n	SlopeLT30	20	20	9813	
MH9821n	Dry2Med_WI	25	6	9821		MH9813n	NE_Aspect	10	20	9813	
MH9821n	Steep_NE	20	6	9821		MH9813n	Deep	10	20	9813	
MH9821n	Med2Crs	10	6	9821		MH9835s	Toe	35	21	9835	05 5-20% Moist Toe SW
MH9821n	Shallow	40	6	9821		MH9835s	Sl_Wet2Wet	25	21	9835	
MH9822s	Crest2Mid	35	7	9822	02 Steep, Thin Upper NE	MH9835s	SlopeLT20	15	21	9835	
MH9822s	Dry2Med_WI	25	7	9822		MH9835s	SlopeGT05	5	21	9835	
MH9822s	Steep_SW	20	7	9822		MH9835s	Med2Crs	10	21	9835	
MH9822s	Med2Crs	10	7	9822		MH9835s	SW_Aspect	10	21	9835	
MH9822s	Shallow	40	7	9822		MH9835n	Toe	35	22	9835	05 5-20% Moist Toe NE
MH9814L	Up2Mid	35	8	9814	01 Steep, Deep Lower NE	MH9835n	Sl_Wet2Wet	25	22	9835	
MH9814L	Sl_Dry2Med	25	8	9814		MH9835n	SlopeLT20	15	22	9835	
MH9814L	Steep_NE	20	8	9814		MH9835n	SlopeGT05	5	22	9835	
MH9814L	Med2Crs	10	8	9814		MH9835n	Med2Crs	10	22	9835	
MH9814L	Deep	10	8	9814		MH9835n	NE_Aspect	10	22	9835	
MH9815L	Up2Mid	35	9	9815	01 Steep, Deep Lower SW	MH9857t	Toe	35	23	9857	
MH9815L	Sl_Dry2Med	25	9	9815		MH9857t	Sl_Wet2Wet	25	23	9857	
MH9815L	Steep_SW	20	9	9815		MH9857t	SlopeLT10	15	23	9857	
MH9815L	Med2Crs	10	9	9815		MH9857t	SlopeLT05	5	23	9857	
MH9815L	Deep	10	9	9815		MH9857t	Med2Crs	10	23	9857	
MH9826n	Crest2Mid	35	10	9826	02 Gentle Shallow UP NE	MH9857t	Deep	10	23	9857	
MH9826n	Dry2Med_WI	25	10	9826		MH9867	Toe2Valley	35	24	9867	06 < 5% Flat Wet Cold Toe
MH9826n	Gentle_NE	20	10	9826		MH9867	Wet	25	24	9867	
MH9826n	Med2Crs	10	10	9826		MH9867	SlopeLT10	15	24	9867	
MH9826n	Shallow	10	10	9826		MH9867	SlopeLT05	5	24	9867	
MH9826s	Crest2Mid	35	11	9826	02 Gentle Shallow UP SW	MH9867	Med2Crs	10	24	9867	
MH9826s	Dry2Med_WI	25	11	9826		MH9867	Deep	10	24	9867	
MH9826s	Gentle_SW	20	11	9826		MH9876t	Toe2Valley	35	25	9876	07 5-10% Wet, Sloping Toe
MH9826s	Med2Crs	10	11	9826		MH9876t	Wet	25	25	9876	
MH9826s	Shallow	10	11	9826		MH9876t	SlopeLT10	15	25	9876	
MH9816n	Crest2Mid	30	12	9816	01 Gentle Deep Dry UP NE	MH9876t	SlopeGT05	5	25	9876	
MH9816n	Dry2Med_WI	20	12	9816		MH9876t	Med2Crs	10	25	9876	
MH9816n	Drier	5	12	9816		MH9876t	Deep	10	25	9876	
MH9816n	SlopeLT30	20	12	9816		MH9855v	Valley	35	26	9855	05 > 5% Rich Sloping Valley
MH9816n	NE_Aspect	10	12	9816		MH9855v	Wet2V_Wet	25	26	9855	
MH9816n	Deep	40	12	9816		MH9855v	SlopeGT05	20	26	9855	
MH9816s	Crest2Mid	30	13	9816	01 Gentle Deep Dry UP SW	MH9855v	Med2Crs	10	26	9855	
MH9816s	Dry2Med_WI	20	13	9816		MH9855v	Deep	10	26	9855	
MH9816s	Drier	5	13	9816		MH9809v	Valley	35	27	9809	09 < 5% Flat Wet, Poor Valley
MH9816s	SlopeLT30	20	13	9816		MH9809v	Wet2V_Wet	25	27	9809	
MH9816s	SW_Aspect	10	13	9816		MH9809v	SlopeLT05	20	27	9809	
MH9816s	Deep	40	13	9816		MH9809v	Med2Crs	10	27	9809	
MH9814n	Crest2Mid	30	14	9826	01 Gentle Deep Dry UP NE	MH9809v	Deep	10	27	9809	
MH9814n	Dry2Med_WI	20	14	9826		MH9869m	WetL_LT200	50	28	9869	06 Margins to wetlands
MH9814n	Less_dry	5	14	9826		MH9869m	WetZ_LT05	50	28	9869	
MH9814n	SlopeLT30	20	14	9826		MH9878s	Hi_Seep	90	29	9833	03 All Seepage Areas
MH9814n	NE_Aspect	10	14	9826		MH9878s	Med2Crs	10	29	9833	
MH9814n	Deep	40	14	9826		MH9853t	Mid2Toe	35	30	9853	05 < 20% Toe Breakthrough
MH9841s	Crest2Mid	30	15	9826	01 Gentle Deep Dry UP SW	MH9853t	Wet	25	30	9853	
MH9841s	Dry2Med_WI	20	15	9826		MH9853t	SlopeLT20	20	30	9853	
MH9841s	Less_dry	5	15	9826		MH9853t	Med2Crs	10	30	9853	
MH9841s	SlopeLT30	20	15	9826		MH9853t	Deep	10	30	9853	
MH9841s	SW_Aspect	10	15	9826							
MH9841s	Deep	40	15	9826							

**PEM Entity Descriptions for: MH mm2**

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9801	MH mm2	01	MB	d	j	9801 areas were mapped on ALL ASPECTS and ALL TEXTURES of materials on gentle to moderate slopes (<30%) in all convex or water shedding upper to lower landform positions. Gentle slope, deep, medium-textured soils.
9802	MH mm2	02	MM	s	r	9802 areas mapped ONLY on dry crests with SHALLOW soils on ALL TEXTURES. Moderate slopes on crests, medium to coarse textured shallow soils over bedrock.
9809	MH mm2	09	YC	j	y	9809 areas were mapped in level to flat wet valleys with slopes < 5% on ALL TEXTURES. 9809 areas occur in flat, non-draining depressions where the water table is often above 50 cm. Gentle slope or depressional areas with deep, fine-textured soils. The regional ecologist indicated that these flat, wet valleys would be dominated by the very wet 09 and 06 site series.
9810	MH mm2	01	MB	r	d	9810 areas were mapped on the slightly drier tops of low knolls on ALL TEXTURES. 9810 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the normal mesic 01 site series along with some drier 02 Site Series. Gentle slope, deep, medium-textured soils.
9811	MH mm2	01	MB	k	d	9811 areas were defined to occur on steep (>30%) upper NE-facing cool aspects on ALL TEXTURES in UPPER to MID landform positions. 9811 areas are predicted to be dominated by the normal mesic 01site series, cool phase (01k). Significant slope, cool aspect with deep, medium-textured soils
9812	MH mm2	01	MB	w	d	9812 areas were defined to occur on steep (>30%) upper SW-facing warm aspects and on ALL TEXTURES. Significant slope, warm aspect, deep, medium-textured soils.
9813	MH mm2	01	MB	d	y	9813 areas were mapped on gentle to moderate (<35%) slopes on ALL ASPECTS in lower to toe landform positions of ALL TEXTURES. 9813 areas were initially thought to be transition areas that would be occupied by slightly moister seepage 04 and 05 site series. The regional ecologist indicated that all 9813 areas could be expected to be dominated by the normal 01 site series along with minor amounts of slightly moister, richer 03 Site Series.
9814	MH mm2	01	MB	k	d	9814 areas were defined to occur on steep (>30%) mid to lower NE-facing cool aspects on ALL TEXTURES of DEEP materials in MID to LOWER landform positions. 9814 areas are predicted to be dominated by the normal mesic 01site series, cool phase (01k). Significant slope, cool aspect with deep, medium-textured soils. The 9814 entity was added to ensure that steep NE-facing slopes lower in the landscape remained recognized as steep.
9815	MH mm2	01	MB	w	d	9815 areas were defined to occur on steep (>30%) mid to lower SW-facing warm aspects and on ALL TEXTURES of DEEP materials. Significant slope, warm aspect, deep, medium-textured soils. The 9815 entity was added to ensure that steep SW-facing slopes lower in the landscape remained recognized as steep.
9816	MH mm2	01	MB	d	j	9816 areas were defined to occur on gentle to moderate (<20%) slopes on ALL TEXTURES of DEEP materials in UPPER landform positions. 9816 areas were created to permit recognition of deep 01 Site Series on ALL ASPECTS in areas of DEEP materials. Moderate slope, all aspects, deep, medium-textured soils.
9820	MH mm2	02	MM	d	x	9820 areas were mapped on the slightly drier crests of high ridges on ALL TEXTURES. 9820 areas were mapped to allow for the possibility of recognizing a slightly drier than mesic Site Series in these crest positions. The Regional Ecologist indicated that these crest positions would be occupied by the drier 02 along with some normal mesic 01 Site Series. Gentle slope, deep, medium-textured soils.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9821	MH mm2	02	MM	k	s	9821 areas were defined to occur on steep (>30%) upper NE-facing cool aspects on ALL TEXTURES of SHALLOW materials in UPPER to MID landform positions. 9821 areas are predicted to be dominated by the dry shallow 02 site series. Significant slope, cool aspect with shallow, medium-textured soils
9822	MH mm2	02	MM	w	s	9822 areas were defined to occur on steep (>30%) upper SW-facing warm aspects and on ALL TEXTURES of SHALLOW materials. Significant slope, warm aspect, shallow, medium-textured soils.
9826	MH mm2	02	MM	s	x	9826 areas were defined to occur on gentle to moderate (<20%) slopes on ALL TEXTURES of SHALLOW materials in UPPER landform positions. 9826 areas were created to permit recognition of a shallow 02 Site Series on ALL ASPECTS in areas of SHALLOW materials. Moderate slope, all aspects, shallow, medium-textured soils.
9831	MH mm2	03	MO	d	j	9831 areas were mapped in slightly moist upper swales, hollows and concavities on ALL TEXTURES. 9831 areas were mapped to permit recognition of slightly moister conditions in swales in upper landform positions. 9831 areas are predicted to be occupied by the slightly moist 03 and 04 site series. Gentle slope, deep, medium-textured soils.
9833	MH mm2	03	MO	d	y	9833 areas were mapped in all locations where of manually recognized SEEPAGE and on ALL TEXTURES. These areas of unexpected SEEPAGE are predicted to be dominated by the slightly moister Site Series 03 and 05. Moist sites of lower slope receiving position, deep medium-textured soil.
9835	MH mm2	05	MT	j	y	9835 areas were mapped on ALL ASPECTS of gentle lower to toe slopes (< 15%) moistened by seepage and on ALL TEXTURES. Seepage water and cold air can continue to migrate down slope so these areas do not develop permanently high water tables or become frosty. This is the dominant rich, seepage entity for this area. Moist sites of lower slope receiving position, deep medium-textured soil.
9836	MH mm2	06	MD	d	j	9836 areas were mapped in lowest, flattest and wettest portions of upper swales, hollows and concavities on ALL TEXTURES. 9836 areas were mapped to permit recognition of considerably moister conditions in the bottoms of swales in upper landform positions. 9836 areas are predicted to be occupied by the gentle, receiving 06 site series along with some rich, wet, receiving 07 site series. Gentle slope, deep, medium-textured soils.
9853	MH mm2	05	MT	d	j	9853 areas were mapped in slightly moist lower to toe slope swales, hollows and concavities on ALL TEXTURES. 9853 areas were mapped to permit recognition of slightly moister conditions in swales in lower landform positions. 9853 areas are predicted to be occupied by the slightly moist and rich 05 and 06 site series. Gentle slope, deep, medium-textured soils.
9855	MH mm2	05	MT	d	j	9855 areas were mapped in moderately sloping valleys, swales, side slopes and depressions with gradients > 5% on ALL TEXTURES. 9855 areas are characterized by moving, aerated groundwater and rich, moist soils. 9855 areas are not as moist as 9809 areas due to the steeper slopes. Lower slope to depression, deep medium-textured soils. The regional ecologist indicated that these sloping valleys would most likely be dominated by the rich, seepage 05 Site Series along with some wetter 06 Site Series.
9857	MH mm2	05	MT	j	y	9857 areas were mapped on gentle toe slopes (5-10%) in areas of seasonally elevated moisture on ALL TEXTURES of DEEP materials. 9857 areas were defined to try to model the rich, moist 05 site series and the rich, wetter 07 Site Series. 9857 areas appear likely to be dominated by the rich, moist 05 and 07 Site Series.

LM Code ID #	Subzone	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	PEM Entity Description and Comments
9867	MH mm2	06	MD	j	y	9867 areas were mapped on very gentle toe slopes (< 5%) in areas of permanently high water tables on ALL TEXTURES. Seepage water and cold air can accumulate in these level toe slope areas and permanently high water tables can develop. Hygric toe, level or depressions. 9767 areas are wetter and flatter than all of the other seepage type map entities. 9767 areas typically occupy the bottoms of gentle hollows or draws and do not occur within major basins or depressions. 9867 areas are predicted to be dominated by colder and wetter 06 & 07 Site Series.
9869	MH mm2	06	MD	j	y	9869 areas were mapped on ALL TEXTURES. 9869 areas occupy low-lying areas around the margins of non-forested wetlands and bodies of open water. These low lying areas are predicted to accumulate and hold high levels of moisture. Water tables are frequently within 50 cm of the surface. Gentle slope or depressional areas with deep, medium - textured soils
9876	MH mm2	07	YH	j	y	9876 areas were mapped on gently to moderately sloping toe slopes (5-10%) in areas of elevated moisture on ALL TEXTURES of materials. 9876 areas were defined to try to model the richer, receiving 07 and 06 Site Series. 9876 areas are predicted to be dominated by the rich, moist 07 and 06 Site Series.
9881	MH mm2	00	RU	v	x	9881 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble. Many such areas consist of morainal debris adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
9882	MH mm2	00	RU	v	x	9882 areas are NON-FORESTED areas dominated by a land cover of bare rock and rubble with scattered emerging vegetation of colonizing species such as alder and willow.
9883	MH mm2	00	CU	v		9883 areas are NON-FORESTED areas dominated by a land cover of emerging vegetation along with bare rock and rubble.
9884	MH mm2	00	RU	v		9884 areas are NON-FORESTED areas dominated by a land cover of bare rock, snow and ice. Many such areas are located immediately adjacent to the ice and snow of glacier tongues that protrude into lower valley bottom locations.
9885	MH mm2	00	GL			9885 areas are NON-FORESTED areas dominated by a land cover of permanent snow and ice associated with remnants of glaciers.
9891	MH mm2	00	OW			These areas represent open water as extracted from the TRIM II digital data sets and provided as one of the layers of information in the map of materials and exception classes. All TRIM II water bodies are accepted exactly as obtained from the digital coverages.
9892	MH mm2	00	WE	d	y	These areas are meant to represent generic non-forested wetlands. These areas were interpreted visually by interpreters during compilation of the maps of material depth and texture. All areas interpreted to consist of non-forested wetlands were outlined by analysts without any further description or interpretation.
9893	MH mm2	00	ME			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of meadows. Fest alt meadow - varies from moist meadow with herbs and few lichens; to open clumps of Fest alt with well-developed lichen layer.
9894	MH mm2	00	PA			These areas consist of all areas manually digitized by interpreters as being non-forested upland consisting of improved pastures.
9895	MH mm2	00	BR			These areas were mapped visually by interpreters as areas of scrub brush.
9896	MH mm2	00	DL			These areas consist of all sites that have been disturbed by human activities in such a manner that they can no longer consider to be natural sites capable of being classified as an ecological site series.
9897	MH mm2	00	TA			These areas consist of all sites that were recognized as talus slopes by the manual interpretation process.
9898	MH mm2	00	AV			These areas consist of all sites that were recognized as avalanche tracks by the manual interpretation process.

**PEM Entity Extended Legend with Proportions of Site Series for: MH mm2**

LM Code ID #	Roll-Up Code	Map Label	BGC Unit	Sdec_1	Site_S1	SiteMC_S1	Site_M1a	Site_M1b	Sdec_2	Site_S2	SiteMC_S2	Sdec_3	Site_S3	SiteMC_S3
9801	9801	01	MH mm2	9	01	MB	d	j	1	04	AB			
9802	9802	02	MH mm2	8	02	MM	s	r	2	01	MB			
9809	9809	09	MH mm2	7	09	YC	j	y	3	06	MD			
9810	9801	01	MH mm2	6	01	MB	r	d	4	02	MM			
9811	9811	01	MH mm2	8	01	MB	k	d	2	02	MM			
9812	9812	01	MH mm2	8	01	MB	w	d	2	02	MM			
9813	9801	01	MH mm2	6	01	MB	d	y	4	03	MO			
9814	9811	01	MH mm2	8	01	MB	k	d	2	02	MM			
9815	9812	01	MH mm2	8	01	MB	w	d	2	02	MM			
9816	9801	01	MH mm2	8	01	MB	d	j	2	02	MM			
9820	9820	02	MH mm2	6	02	MM	d	x	4	01	MB			
9821	9821	02	MH mm2	8	02	MM	k	s	2	01	MB			
9822	9822	02	MH mm2	8	02	MM	w	s	2	01	MB			
9826	9802	02	MH mm2	7	02	MM	s	x	3	01	MB			
9831	9831	03	MH mm2	6	03	MO	d	j	4	01	MB			
9833	9833	03	MH mm2	7	03	MO	d	y	3	05	MT			
9835	9855	05	MH mm2	7	05	MT	j	y	2	03	MO	1	01	MB
9836	9867	06	MH mm2	6	06	MD	d	j	4	07	YH			
9853	9855	05	MH mm2	6	05	MT	d	j	4	06	MD			
9855	9855	05	MH mm2	6	05	MT	d	j	4	06	MD			
9857	9857	05	MH mm2	7	05	MT	j	y	3	07	YH			
9867	9867	06	MH mm2	6	06	MD	j	y	4	07	YH			
9869	9869	06	MH mm2	6	06	MD	j	y	4	07	YH			
9876	9876	07	MH mm2	6	07	YH	j	y	4	06	MD			
9881	9881	RU	MH mm2	8	00	RU	v	x	2	02				
9882	9882	RU	MH mm2	6	00	RU	v	x	4	02				
9883	9883	CU	MH mm2	5	00	CU	v		5	00	RU			
9884	9884	RU	MH mm2	5	00	RU	v		5	00	PN			
9885	9885	GL	MH mm2	10	00	GL								
9891	9891	OW	MH mm2	10	00	OW								
9892	9892	WE	MH mm2	10	00	WE	d	y						
9893	9893	ME	MH mm2	10	00	ME								
9894	9894	PA	MH mm2	10	00	PA								
9895	9895	BR	MH mm2	10	00	BR								
9896	9896	DL	MH mm2	10	00	DL								
9897	9897	TA	MH mm2	10	00	TA								
9898	9898	AV	MH mm2	10	00	AV								



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