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#### Codes and definitions for non-vegetated, sparsely vegetated, and anthropogenic units (Table 3.1)

#### **Modified From**

- 1. Resources Inventory Committee (RIC). 1998. Standard for Terrestrial Ecosystem Mapping in British Columbia. Prepared by the Ecosystems Working Groups Terrestrial Ecosystems Task Force, Resource Inventory Committee, British Columbia Ministry of Environment. Available from: <a href="https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/tem\_man.pdf">https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/tem\_man.pdf</a>
- 2. Table 3.1 Codes and definitions for non-vegetated, sparsely vegetated, and anthropogenic units. 2017 Update. Available from: <a href="http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/Docs/anthropogenic non-vegetated\_and\_sparsely\_vegetated\_ecosystem\_map\_codes\_2017\_update.pdf">http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/Docs/anthropogenic non-vegetated\_and\_sparsely\_vegetated\_ecosystem\_map\_codes\_2017\_update.pdf</a>

#### Citation

• Terrestrial Ecosystem Information Unit. 2020. Terrestrial Ecosystem Information (TEI): Coding Updates for Non-Vegetated, Sparsely Vegetated, and Anthropogenic Units. Version 1.1. Ministry of Environment and Climate Change Strategy, Knowledge Management Branch, Ecosystem Information Section.

The list has been updated to include Terrestrial Ecosystem Information (TEI) (BC Ministry of Environment and Climate Change Strategy - MoECCS) approved natural non-vegetated (Table 1) and anthropogenic map codes (Table 2). All sparsely vegetated codes have been replaced by equivalent units from the current Biogeoclimatic (BEC) Site Series – Attribute table (BEC Database v11 - 2019) available from: <a href="https://catalogue.data.gov.bc.ca/dataset/bec-site-series-attribute-catalogue">https://catalogue.data.gov.bc.ca/dataset/bec-site-series-attribute-catalogue</a> and the Biogeoclimatic Ecosystem Classification for non-forested Ecosystems (nBEC) in British Columbia (2012) available from: <a href="https://www.for.gov.bc.ca/hfd/pubs/Docs/Tr/Tr068.htm">https://www.for.gov.bc.ca/hfd/pubs/Docs/Tr/Tr068.htm</a>.



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nBEC codes, applied during ecosystem mapping to landscape level ecosystem polygons, may differ from the nBEC definitions provided in the above referenced sources, as the nBEC system was developed for site level classification. As such, the nBEC definitions should be used as a guide for appropriate implementation during ecosystem mapping. For example, at the landscape level, ecosystems can contain a mosaic of vegetated and non-vegetated components, due to a continuum of disturbance or other environmental factors. Therefore, there may be instances where nBEC codes are applied to non-vegetated ecosystems (ie. beaches, gravel bars, shallow water wetlands). nBEC subclasses (e.g. Aff, Scb) and associations (e.g. Ro01, Ws54) should also be applied where possible.

Tables 1 and 2 include the current TEI approved natural non-vegetated and anthropogenic map codes, respectively. Updates have been made to unit codes, names, definitions and typical structural stages. A generalized unit category and linkage to the nBEC Realm/Group/Class classification have been added. Table 3 lists retired TEI codes, with potential coding alternatives provided. Retired codes are not for use without TEI approval.



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#### Table 1: Codes, Definitions and nBEC Classification for Natural Non-Vegetated Units

	Ecosystom		Typical		nBEC Classif		cation	
Code	Ecosystem Unit Name	Definition/ Intended Use	Category	Structural Stage	Realm	Group	Class	
СВ	Cutbank	A part of a river course situated upslope of the river, which is created by erosion of the hillside.	Non- Vegetated Disclimax	1	Т	-	-	
ES	Exposed Soil	Any area of exposed soil that is not included in any of the other definitions and is non-anthropogenic (or uncertain) in origin. It can include areas of recent disturbance where vegetation cover is <5%.  Non- Vegetated Disclimax		Т	-	-		
GL	Glacier	A mass of perennial snow and ice with definite  lateral limits. It typically flows in a specific direction.  Cover		-	Т	-	-	
LA	Lake	A naturally occurring static body of water, 10 ha or greater in size and at least 2 m deep in some Water - portion.		0	-	-		
МО	Moraine	A non-vegetated landform consisting of unstratified glacial drift that is usually till and taking a variety of shapes, ranging from plains to mounds and ridges that are initial forms independent of underlying bedrock or older materials.	Non- Vegetated Disclimax	1	Т	-	-	



	Ecosystom		ТурісаІ		nBEC Classific		ation
Code	Ecosystem Unit Name	Definition/ intended use ( atenory )		Structural Stage	Realm	Group	Class
OC	Ocean	Oceanic aquatic salt water ecosystems.	Water -		М	-	-
PD	Pond	A small naturally occurring static body of water, less than 10 ha in size and at least 2 m deep in some portion. Not large enough to be classified as a lake but typically larger/ deeper than shallow water wetlands and are non-vegetated.		0	-	-	
PS	Permanent Snow	Snow or ice that is not part of a glacier but is found during summer months on the landscape. Review of historical/seasonally appropriate images  recommended to assist mapping these features.		Т	-	-	
RI	River	A watercourse formed when water flows between continuous, definable banks. The flow may be intermittent or perennial. An area that has an ephemeral flow and no channel with definable banks is not considered a river. Use Floodplain Active Channel (Fa) for smaller drainages and/or gravel bar features.		0	-	-	



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#### **Table 2: Codes, Definitions and nBEC Classification for Anthropogenic Units**

	Ecosystem			Typical	nBEC Classification		
Code	Unit Name Definition/ Intended Use Category		Structural Stage	Realm	Group	Class	
CA	Canal	An artificial watercourse created for transport, drainage, and/or irrigation purposes such as a canal or ditch.	. \\\/ = \L = \.		0	-	-
CF	Cultivated Field	A flat or gently rolling, non-forested, open area that is subject to human agricultural practices (including plowing, fertilization and non-native crop production) which often result in long-term soil and vegetation changes.	subject to human agricultural practices ding plowing, fertilization and non-native production) which often result in long-  Anthropogenic Agricultural  1, 2, 3		Т	Х	a
СО	Cultivated Orchard	An agricultural area composed of single or multiple tree species planted in rows and maintained as low bushy trees due to pruning.	nd Anthropogenic 3		Т	Х	a
CV	Cultivated Vineyard	Cultivated  An agricultural area composed of single or multiple species of grapes planted in rows  Anthropogenic		Т	X	a	



	Ecosystem		Typical	Typical	nBEC Classification		
Code	Unit Name Definition/ Intended Use Category		Category	Structural Stage	Realm	Group	Class
CX	Corridor/ Industry- Related Disturbance	Areas of recent human-made disturbance due to road rights-of-ways including temporary/ abandoned roads and associated right-of-ways, transmission lines, pipelines, seismic activity or other industry-related disturbance. These sites can be non or sparsely-vegetated but typically the vegetation cover is maintained in earlier seral stages.	Anthropogenic Disclimax	1, 2, 3	Т	Х	a
DZ	Dam	Hydroelectric dam actively used for power production.	Anthropogenic Land Cover	-	Т	Х	a
GC	Golf Course	Flat to gently rolling grass-covered throughways and open areas set out for the playing of golf. The fairways are usually separated by isolated rows or patches of trees, shrubs and small bodies of water. Forested areas and water bodies to be mapped as separate units where possible.	Anthropogenic Disclimax	2	Т	Х	a
GP	Gravel Pit	A non-vegetated area exposed through the removal of sand and gravel.	Anthropogenic Disclimax	1	Т	Х	a



	Ecosystem			Typical	nBEC Classification		ation
Code	Unit Name	Definition/ Intended Use	Category	Structural Stage	Realm	Group	Class
MI	Mine	A non-vegetated area used for the extraction of mineral ore and other materials. Use with all areas/activities associated with active mines except for mine spoils and tailings.  Anthropogenic Disclimax		Т	х	a	
MS	Mine Spoil	A non-vegetated area of discarded rubbly overburden or waste rock moved so that ore can be extracted in a mining operation.	burden or waste rock moved so that ore Anthropogenic		Т	X	a
RE	Reservoir	An artificial basin created by the impoundment of water behind a human-made structure such as a dam, berm, dyke, or wall. May have significant water draw down at certain times of the year. Can function similarly to a lake or pond.  Water  Anthropogenic		0	-	-	
RM	Reclaimed Mine	A reclaimed mined area that has plant communities composed of a mixture of agronomic or native grasses, forbs, and shrubs.  Anthropogenic Disclimax 2, 3		Т	Х	a	
RN	Railway Surface	A non-vegetated roadbed with fixed rails for possibly single or multiple rail lines. Use Corridor/ Industry-Related Disturbance (CX) for associated right-of-ways.	Anthropogenic Disclimax	1	Т	х	a



	Ecosystem	Typical		Typical	nBEC Classificat		ation
Code	Unit Name Definition/ Intended Use		Category	Structural Stage	Realm	Group	Class
RP	Road Permanent	maintained payed or gravel roads Use   Althropog		-	Т	Х	a
RR	Rural Residential	Any area in which residences and other human developments are scattered and intermingled with forest, range, farm land, and native vegetation or cultivated crops. Other units such as forested areas and cultivated fields should be mapped as separate units, where possible.	Anthropogenic Land Cover	-	Т	Х	a
TS	Mine Tailing  A non-vegetated area of solid waste materials directly produced in the milling or processing of ore.		Anthropogenic Disclimax	1	Т	Х	a



	Ecosystem			Typical	nBEC Classification		
Code	Unit Name	Definition/ Intended Use	Category	Structural Stage	Realm	Group	Class
UR	Urban/ Suburban	An area in which residences and other human developments form an almost continuous covering of the landscape (approximately ≥90% coverage). These areas include cities, towns, commercial and industrial parks, and similar developments. Other units such as forested areas should be mapped as separate units, where possible.	Anthropogenic Land Cover	-	Т	Х	a



**Table 3: Retired TEI Codes** (Not for Use Without TEI Approval)

Original Code	Original Ecosystem Unit Name	Example Potential nBEC/ Code Equivalent(s)
AL	Alkaline Pond	Ww (Shallow Water Wetland); PD (Pond)
BA	Barren	Ro (Rock Outcrop); ES (Exposed Soil); MO (Moraine)
BE	Beach	Bb (Beachland)
BF	Blockfields, Blockslopes, Blockstreams	Af (Alpine Fellfield); ES (Exposed Soil)
CL	Cliff	Rc (Cliff)
GB	Gravel Bar	Fa (Floodplain Active Channel)
LB	Lava Bed	RI (Lava Flow)
MU	Mudflat Sediment	Et (Estuary Tidal Flat)
OW	Shallow Open Water	Ww (Shallow Water Wetland)
PG	Patterned Ground	Af (Alpine Fellfield); At (Alpine Tundra); Wa (Alpine Wetland)
RG	Rock Glacier	Af (Alpine Fellfield); MO (Moraine)



Original Code	Original Ecosystem Unit Name	Example Potential nBEC/ Code Equivalent(s)
RO	Rock Outcrop	Ro (Rock Outcrop)
RU	Rubble	Af (Alpine Fellfield); Rt (Talus); ES (Exposed Soil)
TA	Talus	Rt (Talus)