



Updated August, 2011

MATERIAL SUPPORTING THE NOTICE, BUT NOT PART OF THE NOTICE.

INFORMATION CONCERNING WILDLIFE HABITAT FOR THE SURVIVAL OF SPECIES AT RISK IN THE NORTH ISLAND - CENTRAL COAST RESOURCE DISTRICT

This document provides background information and support to the legal framework of the Notice¹ of indicators of the amount, distribution and attributes of wildlife habitat required for the survival of species at risk in the North Island - Central Coast Resource District² (hereafter referred to as the District). For an overview map of the District access the following link:

[pdf map](#)
[shp file](#)

This document is not part of the legal Notice, rather it provides additional information for consideration by delegated decision makers and by those persons required to prepare and/or implement results and strategies consistent with section 7(1) of *the Forest Planning and Practices Regulation* or in a manner consistent with section 9(3) of the *Woodlot Licence Planning and Practices Regulation*. This background document is an update on the previous background document established on March 2, 2006. The present version references the most up-to-date habitat information on relevant species.

For any questions related to this document, please contact Volker Michelfelder, Ecosystems Biologist FLNRO, Bella Coola.

1. BACKGROUND INFORMATION

The 1% impact budget associated with the Identified Wildlife Management Strategy (1% IWMS budget) identified in this document is directed at the short-term timber supply. For the purpose of the Notice the short-term timber supply impact budget represents up to 1% of the total mature timber harvesting land base (THLB) in age classes older than 60 years at the time of TSR2. Within the District the short-term timber supply impact budget is equal to 4123 ha. Current to March 9, 2011, all approved wildlife habitat areas account for an impact of 2338.3 ha to the mature THLB. Therefore, the remaining available budget for the short term timber impact is

¹ Established March 2, 2006. Hereafter referred to as the Notice.

² Before 2011, the North Island – Central Coast Resource District was known as the North Island – Central Coast Forest District. The District is comprised of both the former Port McNeill Forest District and the former Mid Coast Forest District (as depicted on the map accessible through the link above) and includes numerous Tree Farm Licences, the Mid Coast Timber Supply Area, the Kingcome Timber Supply Area, the Pacific Coast Timber Supply Area, Woodlots and Community Forest Agreements.



1784.7 ha. Up to 1000-1200 ha of this budget may be spent on the Mid Coast portion of the District. Consult the following webpage for approved WHAs within the District and associated up-to-date impacts on the mature THLB.

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

The Chief Forester considered the 1% IWMS budget in the applicable recent Timber Supply Reviews (TSR), namely the Mid Coast and Kingcome TSRs. Consult the following webpage, for details on Mid Coast and Kingcome TSR 3 respectively:

[Mid Coast TSR: http://www.for.gov.bc.ca/hts/tsa/tsa19/tsr3/19tsra11.pdf](http://www.for.gov.bc.ca/hts/tsa/tsa19/tsr3/19tsra11.pdf)
[Kingcome TSR: http://www.for.gov.bc.ca/hts/tsa/tsa33/tsr3/33ts10ra.pdf](http://www.for.gov.bc.ca/hts/tsa/tsa33/tsr3/33ts10ra.pdf)

Operability mapping related to the Mid Coast and Kingcome TSRs can be accessed through the following link:

[Operability mapping](#)

Indicators of amount, distribution and attributes included in the Notice are based on existing data, current knowledge of species distribution, inventory efforts, and species biology, including territory size and intraspecific competition. In many cases, comprehensive inventories have not been completed. Where inventory work generates a greater number of known occurrences and suitable habitat, the Notice may be amended to reflect a greater number of anticipated wildlife habitat areas. Any amendment to the Notice will be consistent with the policy direction on timber supply impacts.

Species accounts for each of the species mentioned in the Notice can be obtained from the Identified Wildlife Management Strategy website:

<http://www.env.gov.bc.ca/wld/frpa/iwms/accounts.html>

The 1% impact budget is presently being evaluated to address recent land use decisions including Parks and Protected Areas. Once a decision on budget adjustments is forthcoming the amounts included in the Notice may be adjusted to reflect this decision.

The information in this document is intended to provide all available support information for the notice. Unfortunately, it is presently not possible to estimate exactly how many additional WHAs will likely need to be established in any particular portion of the North Island Central Coast Resource District because of the ongoing Strategic Landscape Reserve Design (SLRD) which will also result in habitat protection for various species. While WHAs may be identified and established at any time, WHAs established under the 1% IWMS budget may be placed to



protect essential habitats not protected through the SLRD if/when such gaps in protection become apparent. It is recommended that distribution of habitat protection in FSPs in response to the Section 7 notices should occur in such gap areas first where these are/become obvious.

1) Coastal Tailed Frog (*Ascaphus truei*)

Amount:

The amount of the notice was originally based on 181 ha (for approximately 9 WHAs) and 1368 ha (for approximately 24 WHAs) in the former Port McNeill and Mid Coast Districts respectively. However, due to the ongoing SLRD planning in the mainland portion of the NICC, we presently are not able to predict the exact number of potential future WHAs for the District. (see details in background information above).

Consult the following webpage for approved Tailed Frog WHAs within the District and associated up-to-date impacts on the mature THLB

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

Distribution:

Results and strategies are not necessary for management units which do not contain habitat polygons as apparent in the GIS information for tailed frog referenced below.

For the entire District, field verified sites and modelled frog streams may be used in prescribing and/or implementing results and strategies that may satisfy the Section 7 notice requirements. Certainty about suitable habitat conditions and frog presence is highest for the field verified tailed frog streams and lowest for modelled streams. For meeting the Notice requirements, it is recommended that results and strategies consider those habitat polygons with higher certainty before those with lower certainty. Consult Table 1 below for an overview of available spatial information related to Tailed Frog.



Table 1: Overview of Tailed Frog habitat data (accessible through the section 7 ftp site – see links in document below) that may be used to satisfy notice requirements

Name of data source (date of creation)	Type of data	Data quality	Available for old Port McNeill Forest District?	Available for old Mid Coast Forest District?
TAFR_proposedWHA_Mid Coast (2010)	ESRI shp file	field verified (proposed Tier1)	no	yes
TAFR Report	Pdf report document associated with proposed Tier 1 data	n/a	no	yes
TF_NCMC_streams_habitat_potential_only (2009)	ESRI shp file	modelled habitat	no	yes
TF_habitat_buffered (2009)	ESRI shp file	modelled habitat	yes(mainland only)	no
McNeill.2002.Fig1.pdf (2002)	pdf	partially field verified	yes (mainland only)	no
TAFR_observationData_PM (2002)	ESRI shp file (point data)	field verified (observation data-complements McNeill.2002.Fig1.pdf)	yes (mainland only)	no

Follow the link below to the section 7 ftp site to access the shp files and an associated report for field verified (Tier1) polygons in the former Mid Coast Forest District.

[Section 7 ftp: report](#)

[Section 7 ftp: shp files](#)



For the mainland portion of the former Port McNeill Forest District, additional sites (see “McNeill.2002.Fig1.pdf” at the link to the section 7 ftp site below) may also be used to prescribe and/or implement results and strategies that may satisfy the Notice. The figure “McNeill.2002.Fig1.pdf” provides an overview of sites with confirmed tailed frog presence and possible locations of potential WHAs (in addition to those established February 10, 2005) in the former Port McNeil Forest District. Sites 2, 3, 4, 7, 8, 10, 16, 17, 21, 26, 27, 28, 29, 30, 31, and 32 represents the possible locations of the future WHAs. However, habitat suitability related to these sites has not been verified in the field yet. Also, follow the link below for GIS observational site information complementing the “McNeill.2002.Fig1.pdf”.

[Section 7 ftp: pdf](#)

[Section 7 ftp: shp files](#)

For best management practices related to tailed frog streams including recommended stream buffers and basin management consult Daust *et al.* 2010.

2) Great Blue Heron (*Ardea herodias fannini*)

No substantial new information became available for this species since the previous update of this document.

Amount:

The amount in the Notice is based on the anticipated need for 3 future wildlife habitat areas for Great Blue Heron in the Mid Coast TSA/TFL 39/Pacific TSA. Estimates of mature timber supply impacts are based on estimates provided in the “Estimated Impact of the Identified Wildlife Management Strategy (Version 2004) on Provincial Timber Supply”. Due to data sensitivity concerns, heron nest sites are not spatially depicted. For information on the location of heron nest sites and future wildlife habitat areas please contact Volker Michelfelder, FLNRO, Bella Coola.

A total of 400 ha (60 THLB), intended to address 5 WHAs, has been identified as a long-term projection for this species. This amount has not been included in the Notice and does not trigger a planning requirement under Section 7(1) of the FPPR.

Consult the following webpage for approved WHAs within the District and associated up-to-date impacts on the mature THLB. Note that Great Blue Heron are not specifically referenced on the



webpage as this data is sensitive, please contact Volker Michelfelder, Ecosystems Biologist, FLNRO Bella Coola, for up-to-date impacts on the mature THLB related to this species.

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

3) Marbled Murrelet (*Brachyramphus marmoratus*)

Landscape Unit planning has not been completed within the Vancouver Island portion of the District. Forest tenure holders should identify old growth management areas (OGMAs) that overlap suitable Marbled Murrelet nesting habitat consistent with the Landscape Unit Planning Guidelines and Marbled Murrelet habitat requirements outlined in the species account for Marbled Murrelet in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).

Amount:

Suitable Marbled Murrelet nesting habitat within the non-contributing landbase should be identified and conserved as per the Marbled Murrelet account in the Identified Wildlife Management Strategy.

The Marbled Murrelet Letter of Clarification (dated December 1, 2005) outlines current policy for the management of Marbled Murrelet nesting habitat; establishment of Old Growth Management Areas, the available portion of the district 1% budget and the non-contributing landbase. Amounts included in the Notice for Marbled Murrelet are considered additive to one another. Follow the link below to access the letter of clarification:

[Letter of clarification](#)

Due to the ongoing SLRD planning in the mainland portion and OGMA planning in the Vancouver Island portion of the NICC, we presently are not able to predict the exact number of potential future WHAs for the District.

Distribution:

Field verified polygons/potential WHAs, airphoto interpretation, low level aerial assessments, and MMRT³ modelled polygons may be used to satisfy notice requirements. Certainty about habitat quality is highest for field verified - and lowest for modelled polygons. For prescribing and/or implementing results and strategies to meet the Notice requirements, it is thus recommended to use field verified polygons with higher certainty before using (modelled)

³ MMRT = Marbled Murrelet Recover Team



polygons with lower certainty. From the airphoto interpretation, outputs of very high, high, and moderate (classes 1-3 respectively) may be used to satisfy notice requirements. Consult table 2 below for an overview of available information on Marbled Murrelet.

Table 2: Overview of Marbled Murrelet nesting habitat data (available through section 7 ftp site unless otherwise noted in table) that may be used to satisfy notice requirements

Name of data source (date)	Data type	Data quality/habitat type	Available for old Port McNeill Forest District?	Available for old Mid Coast Forest District?
MAMU_proposedTier1 (2009)	ESRI shp file	field verified (proposed Tier1)	no	yes
WHA1_397_to_418_Feb17_10 (2010)	ESRI shp file	field verified (proposed WHA)	yes (mainland)	no
WHA1_419_to_426_Mar31_10 (2010)	ESRI shp file	field verified (proposed WHA)	yes (mainland)	no
MC_mamu_airphoto (2009)	ESRI shp file	airphoto interpretation	yes	yes
SCC_mamu_airphoto (2009)	ESRI shp file	airphoto interpretation	yes (mainland)	yes
Aerial surveys public (not available through ftp – see link in text below for access)	“Mash up” (no GIS file available)	low level aerial assessment	Yes (Vancouver Island)	yes
MMRT (2008)	ESRI shp file	Modelled	yes	yes



A total of 35 proposed WHAs/ Tier 1 polygons have been proposed for the former Mid Coast Forest District. A total of 26 WHAs have been proposed in the former Port McNeill Forest District. From the airphoto interpretation and/or low level aerial assessments, outputs of very high, high, and moderate (classes 1-3 respectively) may be used to satisfy notice requirements. Follow the link below to shp files for the Tier 1 polygons and proposed WHAs.

[proposed WHAs and Tier 1 polygons](#)

Air-photo interpretation is available for the area of the District covered by the Central and North Coast Order and the South Central Coast Order. The spatial information can be accessed here:

[Mid Coast airphoto interpretation](#)

[South Coast airphoto interpretation](#)

(Air-photo interpretation should be used before MMRT modelled polygons.)

Low level aerial assessment polygons are available for parts of North Vancouver Island. The link below leads to a “mash up” for these assessments.

<http://littleearth.ca/moe/mamu/>

The MMRT model has been developed and field verified with the support of the Marbled Murrelet Recovery Team to identify potential suitable Marbled Murrelet nesting habitat at a coarse scale. This model serves as a useful tool for identifying potential habitat at a coarse scale, but should not be used to identify individual habitat polygons at an operational scale. The model should be used where field verified polygons (including low level aerial assessments) and airphoto interpretation are not available. Follow the link below to access the MMRT shp file:

[MMRT model](#)

Consult the following webpage for approved Marbled Murrelet WHAs within the District and associated up-to-date impacts on the mature THLB

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

4) Coastal Northern Goshawk (formerly Queen Charlotte Goshawk) (*Accipiter gentilis laingi*)

Amount:

Due to the ongoing SLRD planning in the mainland portion and OGMA planning in the Vancouver Island portion of the NICC, we presently are not able to predict the exact number of potential future WHAs for the District

Distribution:

Information on field verified and modelled habitat polygons may be used to satisfy notice requirements. Certainty about habitat quality is highest for field verified polygons and lowest for modelled polygons. For prescribing and/or implementing results and strategies to meet notice requirements please use habitat polygons with higher certainty before those with lower certainty. Of the modelled outputs, both moderate and high polygons may be used to satisfy notice requirements. Consult table 3 for an overview of available data for this species.

Table 3: Overview of nesting habitat data for Coastal Northern Goshawk available through section 7 ftp site – see links in text below table). This data may be used to satisfy Notice requirements

Name of data source (date)	Data type	Data quality	Available for old Port McNeill Forest District?	Available for old Mid Coast Forest District?
NOGO_Tier1 (2009)	ESRI shp file	Field verified (proposed Tier1)	no	yes
cc_nhsi (2009)	ESRI raster file	modelled	yes (mainland)	yes
cc_nhsi_nont (2009)	ESRI raster file	modelled	yes (island)	no

Seven field verified nest patches/(proposed Tier 1 polygons) are located in the former Mid Coast Forest District. Follow the link below to access information on field verified next patches:



Proposed Tier1

Information on modelled nesting habitat for the mainland portion of the NICC Resource District is available through the following link:

[NOGO model \(mainland\):ESRI raster file](#)

Information on modelled nesting habitat for the island portion of the NICC Resource District is available through the following link:

[NOGO model \(Island\): ESRI raster file](#)

5) Grizzly Bear (*Ursus arctos*)

No further amount of the 1 % IWMS will be used to establish WHAs for Grizzly Bear habitat. In addition to existing WHAs, Class 1 habitat has been captured through the CLUD in the Central and North Coast Order and the South Central Coast Order. Also, 50% Class 2 habitat has been captured in the Central and North Coast Order.

Consult the following webpage for approved Grizzly Bear WHAs within the District and associated up-to-date impacts on the mature THLB

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

6) Northern Caribou (*Rangifer tarandus caribou*)

Presently, there is no intent to establish WHAs for Northern Caribou in the NICC resource district.

7) Red-legged Frog (*Rana aurora*)

An amount for Red-legged frog, a species listed under the IWMS, has not been included in the Notice. Because this species is listed under the IWMS, THLB impacts would contribute towards the 1% IWMS budget. Limited inventory has occurred within the district on the Mainland Coast and on Vancouver Island, but related inventory information was not yet available when this document was released. Please contact Volker Michelfelder, Ecosystems Biologist, FLNRO about available inventory information.

A total of 27 ha (18 THLB), intended to address 3 WHAs, has been identified as a long-term projection for this species in this district. This amount has not been included in the Notice and does not trigger a planning requirement under Section 7(1) of the FPPR.



Consult the following webpage for approved red-legged frog WHAs within the District and associated up-to-date impacts on the mature THLB

http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=forest_region&forest=North+Island+-+Central+Coast&submit2=Search

8) Keen's Long-eared Myotis (*Myotis keenii*)

An amount for Keen's Long-eared Myotis, a species listed under the IWMS, has not been included in the Notice. Because this species is listed under the IWMS, THLB impacts would contribute towards the 1% IWMS budget. This species is known to occur in the district, but there is only limited information that would allow an amount, distribution and attributes to be identified. Where inventory work generates known occurrences and suitable habitat, the Notice may be amended to include indicators of the amount, distribution and attributes for this species. A total of 80 ha (60 THLB), intended to address 2 future WHAs, has been identified as a long-term projection for this species in this district. This amount has not been included in the Notice and does not trigger a planning requirement under Section 7(1) of the FPPR.

Literature cited

Daust, D., L. Kremsater, C. Apps, K. Brunt, A. Burger, F. Doyle, K. Dunsworth, L. Dupuis, P. Friele, G. MacHutchon, T. Mahon, E. McClaren, V. Michelfelder, B. Pollard, D. Seip, J.D. Steventon, L. Waterhouse. 2010. Focal Species Risk Thresholds for BC's North and Central Coast. Report to the Joint Coastal Land and Resource Forum Technical Liaison Committee. Integrated Land Management Bureau, Nanaimo, B.C.

Michelfelder, V., R. van der Marel, K. Dunsworth. 2008. Proposed Wildlife Habitat Areas for the Coastal Tailed Frog (*Ascaphus truei*) on the Central Coast of British Columbia. Draft Report. Ministry of Environment, Environmental Stewardship and Protected Area Division. Hagensborg, BC.

Follow the link below to access additional support literature:

[Support literature](#)