



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

INFORMATION CONCERNING WILDLIFE HABITAT FOR THE SURVIVAL OF SPECIES AT RISK IN THE CHILLIWACK FOREST DISTRICT

This document is intended to provide background information and support to the legal framework of the Notice of indicators for the amount, distribution and attributes of wildlife habitat required for the survival of species at risk in the Chilliwack Forest District. This document is not part of the legal Notice. Its purpose is to provide additional information for consideration by delegated decision makers and by those persons required to prepare results and strategies consistent with section 7(1) of the *Forest Planning and Practices Regulation* or act in a manner consistent with section 9(3) of the *Woodlot Licence Planning and Practices Regulation*.

1. BACKGROUND INFORMATION

The 1% impact budget associated with the Identified Wildlife Management Strategy (IWMS) is directed at the short-term timber supply. For the purpose of this Notice the short-term timber supply budget represents the total mature timber harvesting land base (THLB) in age classes older than 60 years. Within the Chilliwack Forest District the short-term timber supply budget is equal to 1125 ha. Current to December 1, 2004, there is one approved wildlife habitat area in the forest district although it has no mature THLB impact. Therefore, the remaining available budget is 1125 ha. Table 1 summarizes the amount of area included in the Notice as well as the amount of area in approved WHAs and their respective impacts to the mature THLB.

Indicators of amount, distribution and attributes included in the Notice are based on existing data, current knowledge of species distribution, current and future 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 different 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://wlapwww.gov.bc.ca/wld/identified/iwms2004_index.htm

Table 1. Summary of mature THLB impacts for amounts included in the Notice and approved WHAs in the Chilliwack Forest District.

Species	Total Area (ha)	Estimated Mature THLB (ha)	Percent of 1% District Budget
Amounts in Notice			
Coastal Giant Salamander	850.0	550.0	48.9
Grizzly Bear	unknown	445.0	39.5
Pacific Water Shrew	50.0	25.0	2.2
Tall Bugbane	200.0	75.0	6.7
Coastal Tailed Frog	60.0	30.0	2.7
Spotted Owl	unknown	unknown	0
Subtotal	1160.0	1,125.0	100.0
Approved Wildlife Habitat Areas			
Mountain Beaver	78.5	0.0	0.0
Total	1238.5	1,125.0	100.0

Figures and spatial information (shapefiles) to support the amount and distribution statements for species included in the Notices are included in the folders titled “Figures” and “Spatial Data” on the following ftp site:

ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc_data/Approved_FRPR_sec7_WLPPR_sec9_Notices_and_Supporting_Info/Species_at_Risk/Chilliwack_FD/Supporting_info/

Inclusion of draft and proposed Wildlife Habitat Area boundaries in the supporting information does not prejudice the review and comment that may be ongoing around these Wildlife Habitat Areas. Where Wildlife Habitat Areas have not been through the full review and comment process, MWLAP will continue to work with affected parties to address the Wildlife Habitat Area boundaries.

The following section is intended to clarify the amount, distribution and attribute statements in the legal Notice.

1) Coastal Giant Salamander (*Dicamptodon tenebrosus*)

Amount:

The amount in the Notice is based on conserving approximately 80 linear kilometres of stream channel as well as some isolated forested areas between occupied streams (i.e., 80 streams within 15 watersheds) in the Chilliwack and Fraser Valley South Landscape Units where there are known occurrences of Coastal Giant Salamander based on previous inventory. An additional 72 linear kilometres of stream channel are currently known to support Coastal Giant Salamander, but are not presently included in this Notice due to: 1) insufficient timber supply impact budget within the Chilliwack Forest District to manage for this species; and 2) some of the remaining occurrences are within protected areas. Species inventory is ongoing, if new inventory information shows other high priority conservation areas then the Notice may have to be amended. Total habitat included in the 80 kilometres of stream channel (at 50 m wide on each side of the stream) and areas between occupied streams is approximately 850 ha with an estimated impact on mature timber supply of 550 ha. Information is available from the Ministry

of Water, Land and Air Protection. Estimates of mature timber supply impacts are based on preliminary habitat mapping completed by the Ministry of Water, Land and Air Protection.

Distribution:

Figure 1 shows the locations of occupied streams for Coastal Giant Salamander in the Chilliwack Forest District. Forest tenure holders should work closely with the Coastal Giant Salamander Recovery Team to help prioritize streams for protection.

2) Grizzly Bear (*Ursus arctos*)

Amount:

The amount in the Notice is based on the anticipated mature THLB impacts associated with 31 proposed wildlife habitat areas for Grizzly Bear. The total area of these proposed WHAs is 6399 ha. These habitat areas are located in the threatened North Cascades and Stein-Nahatlatch Grizzly Bear population units where there is known use of high value foraging and security habitats for Grizzly Bear, or suitable habitat where Grizzly Bear use is expected to occur. Information is available from the Ministry of Water, Land and Air Protection and from the North Cascades Grizzly Bear Recovery Team. Estimates of mature timber supply impacts are based on preliminary habitat mapping completed by the Ministry of Water, Land and Air Protection.

There are approximately 15 other high priority Grizzly Bear habitat areas in the Stein-Nahatlatch and Garibaldi-Pitt threatened population units in the Chilliwack Forest District that warrant protection and are not included in this Notice due to incomplete mapping and insufficient timber supply impact budget within the Chilliwack Forest District to manage for this species. The Notice may have to be amended if new inventory information indicates other high priority conservation areas.

Distribution:

Figure 1 shows the current locations of habitat areas for Grizzly Bear in the Chilliwack Forest District.

3) Pacific Water Shrew (*Sorex bendirii*)

Amount:

The amount in the Notice is based on the anticipated need for 3 future wildlife habitat areas for Pacific Water Shrew in the Chilliwack Forest District. Total habitat area covered in these areas is approximately 50 ha with an estimated mature timber supply impact of 25 ha. Information is available from the Ministry of Water, Land and Air Protection and inventory is ongoing through fall 2004. Estimates of mature timber supply impacts are based primarily on information provided in the “Estimated Impact of the Identified Wildlife Management Strategy (Version 2004) on Provincial Timber Supply”.

Distribution:

For information on the location of these future WHAs please contact Ross Vennessland, MWLAP, Surrey (Recovery Team Chair).

4) Tall Bugbane (*Actaea elata*)

Amount:

The amount in the Notice is based on the anticipated need for 5 wildlife habitat areas at each of the 5 known occurrences of Tall Bugbane in the Chilliwack Forest District. Total habitat area covered in these areas is approximately 200 ha with an estimated mature timber supply impact of 75 ha. Information is available from the Ministry of Water, Land and Air Protection. Estimates of mature timber supply impacts are based on information provided in the “Estimated Impact of the Identified Wildlife Management Strategy (Version 2004) on Provincial Timber Supply”.

Distribution:

Figure 1 shows the known point locations and potential wildlife habitat areas for Tall Bugbane in the Chilliwack Forest District. Forest tenure holders should work closely with the Tall Bugbane Recovery Team to locate the habitat areas.

5) Coastal Tailed Frog (*Ascaphus truei*)

The amount in the Notice is based on the anticipated need for 3-4 future wildlife habitat areas to be located in the Chilliwack Forest District. Each future WHA is expected to be approximately 15-20 ha in size with an estimated mature timber supply impact of 8-10 ha each. Although this species is known to occur in the Chilliwack Forest District, current occurrence data is incomplete. Perennial small streams in the drier biogeoclimatic variants of the Fraser canyon (e.g., Interior Douglas-fir, wet warm - IDFww) are thought to be important habitat areas. Estimates of WHA size and mature timber supply impacts are based primarily on information provided in the “Estimated Impact of the Identified Wildlife Management Strategy (Version 2004) on Provincial Timber Supply” and the IWMS species account for Coastal Tailed Frog.

Information is available from the Ministry of Water, Land and Air Protection, Greg George.

6) Spotted Owl (*Strix occidentalis*)

The amount, distribution and attributes included in the Notice are based on existing provisions within the 1997 *Spotted Owl Management Plan* and 1999 *Spotted Owl Management Plan – Resource Management Plans*. These two documents represent current Government policy for management of Spotted Owl habitat. Should this policy direction change either through a revision to the Spotted Owl Management Plan or a refinement of Long Term Activity Centre boundaries or attributes, the Notice will be revised to reflect these changes.

Spotted Owl will continue to be managed separately from the IWMS 1% budget. This species is known to occur in the Chilliwack Forest District; however, nest areas and forage areas cover large expanses and are outside the scope of the 1% timber impact for IWMS.

Refer to the 1997 *Spotted Owl Management Plan* and 1999 *Spotted Owl Management Plan – Resource Management Plans* for spatial boundaries to support the amount and distribution in the Notice.

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

No amount for Red-legged frog has been included in the Notice as there is insufficient occurrence information and insufficient timber supply impact budget within the Chilliwack Forest District to manage for this species. This species is expected to occur in the Chilliwack Forest District; however, currently there are no confirmed occurrences on Crown forest land. If new inventory information becomes available, the Notice may have to be amended to include an amount for Red-legged frog.

Forests with abundant coarse woody debris adjacent to standing water or other riparian features at low slope gradient and low elevation are thought to be important habitat areas.

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

No amount for Great Blue Heron has been included in the Notice as there is insufficient occurrence information. This species is expected to occur in the Chilliwack Forest District; however, currently there are no confirmed occurrences on Crown forest land. If new inventory information becomes available, the Notice may have to be amended to include an amount for Great Blue Heron.

Mixed conifer and deciduous forest stand types in or around riparian features are thought to be important nesting habitat areas.

9) Lewis's Woodpecker (*Melanerpes lewis*)

No amount for Lewis's Woodpecker has been included in the Notice as there is insufficient occurrence information. This species is expected to occur in the Chilliwack Forest District; however, currently there are no confirmed occurrences on Crown forest land and breeding status is unknown. If new inventory information becomes available, the Notice may have to be amended to include an amount for Lewis's Woodpecker.

Open mature or old growth Douglas-fir forests with large diameter dead or live snags OR mature deciduous stands (paper birch, trembling aspen and black cottonwood) with large trees and variable canopy closure are thought to be important habitat areas. The proximity of habitat areas to recent burns or partially logged areas for foraging is also believed important.

10) Badger (*Taxidea taxus*)

No amount for Badger has been included in the Notice as there is insufficient occurrence information. This species is known to occur in the eastern portion of the Chilliwack Forest District; however, currently there are no confirmed occurrences on Crown forest land and breeding status is unclear. If new inventory information becomes available, the Notice may have to be amended to include an amount for Badger.

Generally open grassland or sparsely treed areas with high prey densities are thought to be important habitats.

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

No amount for Keen's Long-eared Myotis has been included in the Notice as there is insufficient occurrence information. This species is expected to occur in the Chilliwack Forest District; however, currently there are no confirmed occurrences. If new inventory information becomes available, the Notice may have to be amended to include an amount for Keen's Long-eared Myotis.

Generally, protection of maternity colonies, hibernacula and roosting sites is important. Keen's Long-eared Myotis appear to be associated with cool wet coastal montane forests and karst features. Caves >100 m in length and above 500 m elevation with stable temperatures and 100% relative humidity were important winter hibernation sites for myotis bats on northern Vancouver Island.

11) Marbled Murrelet (*Brachyramphus marmoratus*)

No amount for Marbled Murrelet has been included in the Notice.