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File:	123221283	Date:	October 31, 2019

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**Reference: Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan:  
'Crosswalk' Table**

## INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by Integral Ecology Group (IEG) to provide inputs to the Site-wide End Land Use and Post Closure Ecosystem Development Plan (the Development Plan) for the Myra Falls Mine (the Site). The Site is located in the Myra Creek drainage within Strathcona-Westmin Provincial Park, approximately 90 kilometres (km) southwest of Campbell River, British Columbia (BC) on central Vancouver Island. The mine is a polymetallic zinc, copper, silver and gold mine operated by Nyrstar Myra Falls Ltd. (Nyrstar). Four First Nations Groups occupy this region: Wei Wai Kum, We Wai Kai, K'ómoks, and Mowachaht/Muchalaht First Nations.

The Development Plan will inform site-specific reclamation prescriptions as part of a larger Reclamation Program for the Myra Falls Mine to be submitted to the British Columbia Ministry of Energy, Mines, and Petroleum Resources. The Development Plan will also inform reclamation research activities for the Site, including a reclamation methodology evaluation research program and a reclamation monitoring program.

The purpose of this memorandum is to provide inputs to the Development Plan in the form of a 'crosswalk' table (CWT) that identifies the linkages between predicted post-closure ecosystems and the end land uses designated in *Mines Act* Permit M-26. Specifically, the CWT can be used to address requirements of Permit M-26 Approving Price Plan and Security (2018) – E. Reclamation and Closure Program, 2 Land Use, which says:

- “ (a) The land surface shall be reclaimed with the intent of re-establishing average premining capability to the following end land use objectives: wildlife habitat, particularly for Columbian black-tailed deer, Roosevelt Elk, black bears, wolves, cougars, American marten, red squirrel, deer mice, and bats, provincial park wilderness and recreational values, and opportunities for traditional use of the land by the Wei Wai Kum, We Wai Kai, K'ómoks, and Mowachaht/Muchalaht First Nations.
- (b) Ecosystem type old growth forest that is predicted to be lost as a direct result of mining activities shall be mitigated in a manner acceptable to the Chief Inspector. A plan for mitigating losses to old growth forest capability incurred within the mine disturbance shall be submitted by June 30, 2019.
- (c) Borrow pits and quarries belonging to the mine development and operations, shall be reclaimed to the approved end land use once no longer required.”

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The CWT can also be used to address the requirements of Permit M-26 Approving Work System and Reclamation Program (1998) - Section 3 Land Use (page 5), which states:

“The surface of the land and watercourses shall be reclaimed to end uses to enhance Park values for recreation and conservation including:

- a) reintegration of disturbed land into the surrounding landscape and park,
- b) re-establishment of native forest
- c) reduction of erosion through development of maintenance-free indigenous vegetation covers, and the development of self-sustaining, erosion-resistant watercourses. “

The CWT is provided in Attachment A of this memorandum. The content of the CWT is based on the information sources available to Stantec as of October 18, 2019.

## **COMPONENTS OF CROSSWALK TABLE**

The following sections describe the components of the CWT.

### **MINE FEATURE (COLUMN A)**

The mine features identified in Column A are the same as those identified in Figure 3-1 of Wood (2019a).

### **PREDICTED POST-CLOSURE ECOSYSTEM UNIT (COLUMN B)**

The line items (hereafter ‘reclamation treatment units’) in Column B are the product of the intersection of the mine features spatial data layer (obtained from Wood) with the post-closure ecosystem spatial data layer. The post-closure ecosystem spatial data layer was developed from the Scenario 2 post-closure ecosystems modelled by IEG combined with the following enhancements:

- Addition of information on post-closure treatment for specific mine features (i.e., whether a feature would be maintained in early seral condition)
- More specific attribution of some IEG polygons (e.g., quarry wall vs. disturbed area)
- Expanded permanent road area, based on IEG mapping combined with Wood ‘road’ feature
- Expanded waterbody spatial data layer and identification of mine impacted water and non-contact water features. In brief, the methods and assumptions to achieve this were:
  - The stream network applied to the post-closure mapping was based on available data from the Freshwater Atlas (BC MFLNRORD 2019) in combination with current engineering drawings for site, both provided by Wood.
  - As a long-term watercourse decommissioning and reclamation plan is not developed yet, it was assumed watercourses will remain in place (to support water treatment).
- Addition of riparian buffers (see Column C description below)

A figure presenting the post-closure ecosystems is provided in Attachment B.

**Reference: Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

The following predicted post-closure units appear in Column B of the crosswalk table:

- Post-closure ecosystem units predicted for IEG Scenario 2; specifically:
  - CWHmm1-02/03 (Submontane Moist Maritime Coastal Western Hemlock Variant – Douglas-fir/Western hemlock–Salal [02]; Western hemlock/Western redcedar–Salal [03] site series)
  - CWHmm1-01/03 (Submontane Moist Maritime Coastal Western Hemlock Variant – Western hemlock/Balsam Fir–Pipecleaner moss [01]; Western hemlock/Western redcedar–Salal [03] site series)
  - CWHxm2-01/03 (Submontane Very Dry Maritime Coastal Western Hemlock Variant – Western hemlock/Douglas-fir–Kindbergia [01]; Douglas-fir/Western hemlock–Salal [03] site series)<sup>1</sup>
  - CWHxm2-02/03 (Submontane Very Dry Maritime Coastal Western Hemlock Variant – Douglas-fir/Lodgepole pine–Cladina [02]; Douglas-fir/Western hemlock–Salal [03] site series)
  - CWHmm1-06/07/11/12 (Submontane Moist Maritime Coastal Western Hemlock Variant–Western hemlock/Amabilis fir–Deer fern; Amabilis fir/Western redcedar–Foamflower; Lodgepole pine-Sphagnum; Western redcedar/Sitka spruce–Skunk cabbage site series). Identified within the riparian buffers applied to non-contact water features (see Column C).
  - CWHxm2-06/07/11/12 (Submontane Very Dry Maritime Coastal Western Hemlock Variant – Western hemlock/Western redcedar–Deer fern; Western redcedar–Foamflower; Lodgepole pine-Sphagnum; Western redcedar/Sitka spruce–Skunk cabbage site series). Identified within the riparian buffers applied to non-contact water features (see Column C).
- Other predicted post-closure units, not specifically identified as ecosystems:
  - Rip rap (old spillway channel)
  - Quarry wall
  - Maintained as grass
  - Maintained as grass/shrub
  - Road
  - Non-contact watercourse
  - Mine impacted water

The 'potential intact ecosystem' areas identified in IEG Scenario 2 were assumed to be undisturbed by mining activity, so not requiring reclamation; as such, these areas were not included in the CWT.

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<sup>1</sup> In the area around the polishing ponds, where Wood's more detailed mapping of these mine features was incorporated, this ecosystem unit has been assumed from the adjacent IEG mapping; it is identified as 'CWHmm1-01/03 (assumed)' in the CWT and on the figure

Reference: Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table

### **WITHIN RIPARIAN BUFFER (COLUMN C)**

Column C identifies which reclamation treatment units are within riparian buffers. Riparian buffers were applied to non-contact water features in order to identify areas within the Site that are predicted to support riparian habitat at post-closure. Slope class was also determined for areas within riparian buffers (see Column D). With the exception of Myra Creek, widths of stream and diversion ditches were not available; streams were conservatively assigned a stream width of 3 m to facilitate spatial analysis. The riparian buffers follow the riparian setback widths in Table 4.2 of the *Handbook for Mineral and Coal Exploration in British Columbia* (BC MEMPR 2009). Myra Creek was assigned a riparian setback of 50 m (for watercourses >20 m wide). Other streams and ditches were conservatively assigned a riparian setback of 20 m (for watercourses >1.5m and ≤ 5m wide).

### **SLOPE CLASS (FLOWING WATER ONLY) (COLUMN D)**

Column D provides the slope class for areas within the riparian buffers. Slope class was used to inform the determination of Predicted End Land Use for Water Features (Column I). Two slope classes were identified:

- >20 percent
- 0–20 percent

Analysis of slope was limited to the bounds (approximately 4 km x 2.3 km) of the LiDAR provided by Wood. A continuous raster-based slope map was created using 9.3 m x 9.3 m cell size derived from provided 2 m contour lines.

### **HABITAT SUBTYPE (COLUMN E)**

In Column E, a habitat subtype is assigned to the predicted post-closure ecosystem units according to Wood 2019b. The habitat subtypes identified for the CWT are:

- Conifer Forest – Dry
- Conifer Forest – Mesic/Dry
- Riparian Forest

Other predicted post-closure units, not specifically identified as ecosystems, are listed as not applicable.

### **PROVINCIAL CONSERVATION STATUS (ECOSYSTEMS) (COLUMN F)**

Column F provides the provincial conservation status of the predicted ecosystems (per BC Conservation Data Centre Species and Ecosystems Explorer). The conservation status definitions are:

- Blue List – ecosystems of special concern
- Red List – ecosystems at risk of being lost (extirpated, endangered or threatened)

### **AREA (COLUMN G)**

Column G is the area in hectares of each reclamation treatment unit in the CWT.

**Reference:**      **Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

## **NOTES (COLUMN H)**

Column H provides additional information on the predicted post-closure ecosystem units in Column B, specifically:

- Flagging reclamation treatment units that are less than 0.1 ha in area
- Identifying the origin of road spatial data
- Providing the rationale for maintenance of certain mine features in an early seral condition

## **PREDICTED END LAND USE FOR WATER FEATURES (COLUMN I)**

The CWT identifies which of the mine features will be maintained or developed into water bodies, streams and channels and which of these features may provide fish habitat or require water treatment. Field assessments will be required to determine the potential for reclamation of these water features to fish habitat, especially in regard to Myra Creek.

The habitat loss mitigation plan (Wood 2019a) states 14.4 ha of modified stream channel is situated within the Site. A small, local population of cutthroat trout is known to be resident in Myra Creek upstream of Lower Myra Falls and downstream of Upper Myra Falls in the mine area. The falls are assumed to be a barrier to upstream fish migration; therefore, this population is considered self-sustaining and isolated from downstream populations. The habitat in the modified stream channels in the Myra Falls mine area upstream of the falls will be enhanced to restore the pre-mine capacity of this stream to support resident cutthroat trout.

Restored aquatic habitat will include:

- Lynx Closure Spillway will be enhanced as off-channel habitat for flood refuge
- Arnica Creek (lower sections) to enhance the off-channel habitat for high flows
- Lower Lynx Diversion Ditch will be enhanced as off channel high flow refuge
- The quarry floor may be modified to create artificial side channels for spawning/rearing/high-flow refuge.
- Myra Creek will be widened to Probable Maximum Flood return and configure the channel profile to allow planting in the creek channel closer to the stream itself (i.e., armoured benches that are designed to grow trees factored into the flood levels) and adding enough channel width to allow for purposeful placement of soils and planting of riparian vegetation (e.g., trees and shrubs) in the rip-rap outside the normal flood levels on the creek to enhance shading on the creek.
- Myra Creek habitat enhancement will include adding coarse woody debris, artificial snags, boulders and gravel to protect and enhance fish habitat.

Restored fish habitat will meet the following minimum criteria:

- Contiguous stream reaches above Myra Falls will have gradients suitable for fish passage. Note that a stream channel gradient of 18% is limiting for most fish species and a stream gradient of >20% is considered non-fish bearing when applying the Simple Assessment methodology (MFLNRORD, 2005). However, cutthroat trout may be able to access habitat above 20% slope if the stream has a suitable stepped-pool morphology and adequate flow volumes.

**Reference: Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

- Variable channel morphology and habitat structure to meet the life history requirements of each fish life stage. This will include elements to support spawning (i.e., gravel beds situated where hydrology is suitable for washing eggs and larvae such as above riffles and downstream portions of pools); rearing habitat (e.g., rough textured bed substrates such as large cobbles where juveniles can feed while protected from flow velocities); cover and feeding habitat (e.g., around boulders, banks and snags); overwintering habitat (pools with adequate hyporheic flow).

Myra Creek appears to be an oligotrophic system (i.e., based on low productivity [benthic invertebrate densities] per Nautilus Environmental 2017). Benthic invertebrates are expected to colonize restored stream reaches due to downstream larval invertebrate drift/movement and upstream migration of adults prior to reproduction (i.e., mating and laying eggs). Restoration activities that replicate natural channel features (e.g., flow regime and bed substrates similar to upstream and downstream reaches) are expected to support a sustainable benthic invertebrate community.

Myra Creek has the potential to support resident cutthroat trout populations in areas where resident fish can access the watercourse (i.e., stream reaches not blocked by a channel gradient of greater than 20%). Areas where stream reaches are greater than 20% may support resident cutthroat trout if suitable step-pool habitat is available. A site visit and habitat assessment is recommended to further assess the potential for fish habitat in Myra Creek, tributaries and created off-stream habitat. The fish habitat assessment results are needed to understand site specific hydrology and geomorphology and determine relevant habitat reclamation and enhancement options appropriate for site conditions.

## **PREDICTED END LAND USE OF TERRESTRIAL FEATURES (COLUMNS J TO N)**

The predicted end land uses of the terrestrial features are presented by structural stage (based on BC MOF and BC MELP 1998). The structural stages are:

- Structural Stage 1-3 (Column J) – Sparse vegetation, herb, and shrub – Early successional plant communities that are either sparsely vegetated or dominated by herbs or shrubs.
- Structural Stage 4 (Column K) – Pole/sapling – Pole/sapling forest stands are typically densely stocked and have overtopped the shrub and herb layer. Younger vigorous stands are usually less than 10 to 15 years while older stagnated stands are up to 100 years old. Self-thinning and vertical structure are not yet evident in the canopy.
- Structural Stage 5 (Column L) – Young forest – Young forest stands are those where self-thinning has become evident and the forest canopy has begun to differentiate into distinct layers. Young forests generally develop 40 to 80 years after disturbance.
- Structural Stage 6 (Column M) – Mature forest – Mature forest stands are those where a second cycle of shade-tolerant trees have become established and understories have become well developed as the canopy opens up. Mature forests in the Coastal Western Hemlock (CWH) biogeoclimatic zone generally develop 80 to 250 years after disturbance.
- Structural Stage 7 (Column N) – Old growth forest – Old growth forest stands are structurally complex and are composed of mainly shade-tolerant and regenerating tree species. Older seral and long-lived trees may still dominate the upper canopy and snags and coarse woody debris are in various stages of decomposition. Old growth forests in the CWH biogeoclimatic zone are older than 250 years.

**Reference:      Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

The approach to determining the wildlife end land use and traditional land use attributions for each structural stage are described in the following sections.

### **Wildlife End Land Use**

Wildlife end land use objectives were assigned to the habitat subtypes identified for each predicted post-closure unit in the CWT (see Column E) that was assumed to be habitat for terrestrial wildlife (i.e., road and water were excluded). The association of wildlife species with habitat subtypes aligns with the approach used in the pre-mining assessment and habitat loss mitigation plans developed for the Site (Wood 2019a, 2019b). The species-habitat subtype associations provided in Appendix A of Wood (2019b) were the basis for the two species assemblages identified for each wildlife end land use objectives: 1) associated species identified in *Mines Act* Permit M-26 Amendment; and 2) other associated species (e.g., species of conservation and management concern not mentioned specifically in the permit). The wildlife end land use objectives include the key life requisites supported by the predicted post-closure unit for each of the associated species.

The assignment of wildlife end land use objectives to the structural stages was based on professional judgement and relevant literature (i.e., BC MFLNRO 2014; Environment Canada 2016; Environment and Climate Change Canada 2016; Madrone 2016; BC CDC 2019) and a general understanding of the characteristics of each structural stage. For predicted post-closure units without a habitat subtype (e.g., maintained as grass, rip rap [old spillway channel]), wildlife end land use objectives were assigned based on assumptions made regarding the physical and vegetation characteristics of the unit.

### **Traditional Land Use**

Six tree species, nine shrub species and seven herb species that occur within the Coastal Western Hemlock and Mountain Hemlock subzones of the mine permit area were identified by Wood (2019b) as potential pre-mine traditional land use (TLU) plants for local Indigenous groups. The TLU plants identified by Wood (2019b) that commonly occur in the predicted post-closure ecosystems identified in the CWT (per BC Ministry of Forests 1994; IEG 2019) were used to assign TLU end land uses to the structural stages. The presence and abundance of these TLU plants will depend on developing reclamation prescriptions that can support establishment of these species on reclaimed sites through the projected successional pathways.

Further, understanding how waterways were used prior to mining provides importance guidance to development of reclamation prescriptions for aquatic habitats. Nyrstar is leading the engagement process with Indigenous groups as part of their reclamation program. Inputs from Indigenous groups will be incorporated into the CWT and reclamation research activities at the Site.

### **Recreational Use**

The Strathcona-Westmin Provincial Park Plan states that the ultimate goal is to return the Myra Falls Operations to Strathcona Provincial and to restore disturbed areas, in a manner that recognizes the Park's wilderness and recreational qualities (British Columbia Parks 1995). The predicted end land uses for water and terrestrial features described in the CWT have the capability to support a variety of recreational activities such as wildlife viewing, hiking, camping and fishing. Access via trails and existing roads to the reclaimed mine landscape would have to be further discussed and planned in consultation with park authorities and Indigenous groups.

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**Reference:**      **Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

## **CLOSING**

The information presented in the CWT is intended to be an input to the Development Plan and inform the development of site-specific reclamation prescriptions and reclamation research activities. The end land use objectives identified in the CWT will be considered in reclamation prescriptions and the development of reclamation research programs at the Site. Engagement activities with Indigenous groups may provide further inputs to the end land use for the Site and will need to be incorporated once available. The CWT has been informed by information and assumptions provided by other parties (i.e., IEG 2019 and Wood 2019a). TLU information was incorporated from secondary sources. The CWT is intended to be a 'living tool' and it is assumed that the CWT will be updated after Nyrstar has engaged with Indigenous groups on the reclamation activities and proposed reclamation prescriptions. In addition, as gaps identified in IEG 2019 are addressed, the CWT can be updated and maintained as a planning tool.

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Attachments:      Crosswalk Table (Attachment A); Post-Closure Ecosystem Figure (Attachment B)



Reference: Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table

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- Nautilus Environmental. 2017. Nyrstar Myra Falls Operation Cycle 5 Environmental Effects Monitoring Program. June 5, 2017. Submitted to Nyrstar Myra Falls Ltd., Campbell River, BC.

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**Reference:**      **Inputs to Site-wide End Land Use and Post-Closure Ecosystem Development Plan: 'Crosswalk' Table**

Wood. 2019a. Nyrstar Myra Falls Mine – Habitat Loss Mitigation Plan – draft. July 29, 2019. Report prepared for Nyrstar Myra Falls Ltd., Campbell River, BC.

Wood. 2019b. Nyrstar Myra Falls Mine – Pre-Mining Habitat Assessment. May 29, 2019. Report prepared for Nyrstar Myra Falls Ltd., Campbell River, BC.

## **Attachment A: Crosswalk Table**

Mine Feature	Predicted Post-Closure Ecosystem Unit	Within Riparian Buffer?	Slope Class (Flowing Water Only)	Habitat Subtype	Provincial Conservation Status (Ecosystems)	Area (ha)	Notes	Predicted End Land Use for Water Features	Predicted End Land Use for Terrestrial Features Through Succession				
									Structural Stage 1 - 3	Structural Stage 4	Structural Stage 5	Structural Stage 6	Structural Stage 7
									(Sparse - Shrub/Herb)	(Pole Sapling)	(Young Forest)	(Mature Forest)	(Old Growth Forest)
Alder Reach Diversion Deactivation Area	Non-contact watercourse	N/A	>20%	N/A	N/A	0.0	less than 0.1 ha	No potential due to no habitat	N/A	N/A	N/A	N/A	N/A
	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
Amalgamated Paste Area	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	11.2		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.9		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
	Rip rap (old spillway channel)	N/A	--	N/A	N/A	0.1		N/A	Wildlife End Land Use J	N/A	N/A	N/A	N/A
APA Berm	Maintained as grass	No	--	N/A	N/A	3.9	maintained as grass for geotechnical inspection	N/A	Wildlife End Land Use K	N/A	N/A	N/A	N/A
	Rip rap (old spillway channel)	N/A	--	N/A	N/A	0.3		N/A	Wildlife End Land Use J	N/A	N/A	N/A	N/A
Arnica Diversion Ditch	Non-contact watercourse	N/A	>20%	N/A	N/A	0.2		Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
Backfill Plant	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Road	N/A	--	N/A	N/A	0.0	from IEG mapping; less than 0.1 ha	N/A	N/A	N/A	N/A	N/A	N/A
Borrow Pit	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.5		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Camp	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.2		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	1.7		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Non-contact watercourse	N/A	0-20%	N/A	N/A	0.0	less than 0.1 ha	Small area but potential for habitat where fish can access reaches	N/A	N/A	N/A	N/A	N/A
Cascade Debris Flow Basin	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.4		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.2		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	Non-contact watercourse	N/A	>20%	N/A	N/A	0.0	less than 0.1 ha	Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
Clean Rock Quarry	CWHxm2-06/07/11/12	Yes	--	Riparian Forest	Red/Blue/Blue/Blue	0.4		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHxm2-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Blue	3.0		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use E; Traditional Land Use D	Wildlife End Land Use E; Traditional Land Use D
	Quarry wall	N/A	--	N/A	N/A	1.2		N/A	Wildlife End Land Use L	N/A	N/A	N/A	N/A
Cookhouse Borrow Area	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	2.8		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Core Racks Area	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	1.5		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Road	N/A	--	N/A	N/A	0.0	from IEG mapping; less than 0.1 ha	N/A	N/A	N/A	N/A	N/A	N/A
Core Racks Area Borrow	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	5.0		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
	Road	N/A	--	N/A	N/A	0.1	from IEG mapping	N/A	N/A	N/A	N/A	N/A	N/A
Disturbed Area	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	1.9		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	2.8		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Road	N/A	--	N/A	N/A	0.3	from IEG mapping	N/A	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse	N/A	>20%	N/A	N/A	0.0	less than 0.1 ha	Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	0-20%	N/A	N/A	0.0	less than 0.1 ha	Small area but potential for habitat where fish can access reaches	N/A	N/A	N/A	N/A	N/A
East Strip	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	1.2		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.6		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
	Rip rap (old spillway channel)	N/A	--	N/A	N/A	0.1		N/A	Wildlife End Land Use J	N/A	N/A	N/A	N/A
Emergency Tailings Area Deactivation Area	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.7		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Fuel Pumps Area	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.2		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
HW Complex	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	4.2		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Knappet Laydown	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.9		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Lime Silos	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	1.7		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F

Mine Feature	Predicted Post-Closure Ecosystem Unit	Within Riparian Buffer?	Slope Class (Flowing Water Only)	Habitat Subtype	Provincial Conservation Status (Ecosystems)	Area (ha)	Notes	Predicted End Land Use for Water Features	Predicted End Land Use for Terrestrial Features Through Succession				
									Structural Stage 1 - 3	Structural Stage 4	Structural Stage 5	Structural Stage 6	Structural Stage 7
									(Sparse - Shrub/Herb)	(Pole Sapling)	(Young Forest)	(Mature Forest)	(Old Growth Forest)
LLDD	CWHmm1-02/03	No	--	Conifer Forest - Dry	Blue/Red	0.3		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-06/07/11/12	Yes	--	Riparian Forest	Red/Blue/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	Non-contact watercourse - Myra Creek	N/A	0-20%	N/A	N/A	0.0	less than 0.1 ha	Require site assessment to determine fish suitability	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	>20%	N/A	N/A	0.0	less than 0.1 ha	Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse	N/A	>20%	N/A	N/A	0.2		Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
Lower Lynx Pit	CWHmm1-02/03	No	--	Conifer Forest - Dry	Blue/Red	2.9		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Lynx Crusher	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Lynx Mine Complex	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	1.3		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.3		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Lynx TDF Berm	Maintained as grass/low shrub	No	--	N/A	N/A	5.9	maintained as grass/shrub for geotechnical inspection	N/A	Wildlife End Land Use A	N/A	N/A	N/A	N/A
Lynx TDF Impoundment	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	6.0		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Lynx TDF Panels Area	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	2.4		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	2.0		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	Mine-impacted water (Superpond)	N/A	N/A	N/A	N/A	0.0	less than 0.1 ha	Not considered habitat	N/A	N/A	N/A	N/A	N/A
Lynx Upper Pit	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	3.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Mill	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use A	Wildlife End Land Use G; Traditional Land Use B	Wildlife End Land Use H; Traditional Land Use B	Wildlife End Land Use I; Traditional Land Use B	Wildlife End Land Use I; Traditional Land Use B
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.8		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Mill Infrastructure Area	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	1.8		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Blue/Red	0.5		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Myra Creek	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	3.5		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHxm2-06/07/11/12	Yes	--	Riparian Forest	Red/Blue/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	Road	N/A	--	N/A	N/A	0.2	from IEG mapping	N/A	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	0-20%	N/A	N/A	1.0		Potential for habitat where fish can assess reaches	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	>20%	N/A	N/A	0.2		Require site assessment to determine fish suitability	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse	N/A	0-20%	N/A	N/A	0.0	less than 0.1 ha	Small area but potential for habitat where fish can access reaches	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse	N/A	>20%	N/A	N/A	0.0	less than 0.1 ha	Require site assessment to determine fish suitability	N/A	N/A	N/A	N/A	N/A
Myra Open Pit	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
OEB/Seismic Upgrade Berm	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.6		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	6.7		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	8.6		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	CWHxm2-06/07/11/12	Yes	--	Riparian Forest	Red/Blue/Blue/Blue	0.7		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	2.1		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
	Rip rap (old spillway channel)	N/A	--	N/A	N/A	1.1		N/A	Wildlife End Land Use J	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	0-20%	N/A	N/A	0.2		Require site assessment to determine fish suitability	N/A	N/A	N/A	N/A	N/A
	Non-contact watercourse - Myra Creek	N/A	>20%	N/A	N/A	0.6		Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
Old TDF Operation Spillway	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	Rip rap (old spillway channel)	N/A	--	N/A	N/A	0.2		N/A	Wildlife End Land Use J	N/A	N/A	N/A	N/A

Mine Feature	Predicted Post-Closure Ecosystem Unit	Within Riparian Buffer?	Slope Class (Flowing Water Only)	Habitat Subtype	Provincial Conservation Status (Ecosystems)	Area (ha)	Notes	Predicted End Land Use for Water Features	Predicted End Land Use for Terrestrial Features Through Succession				
									Structural Stage 1 - 3	Structural Stage 4	Structural Stage 5	Structural Stage 6	Structural Stage 7
									(Sparse - Shrub/Herb)	(Pole Sapling)	(Young Forest)	(Mature Forest)	(Old Growth Forest)
Ore Stockpile	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.3		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Paste Plant and Laydown	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	1.6		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Polishing Pond	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	1.0		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	1.2		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CHWmm1-01/03 (assumed)	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.9		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Mine-impacted water (Polishing Pond)	N/A	N/A	N/A	N/A	4.1		Not considered habitat	N/A	N/A	N/A	N/A	N/A
Price Loadout	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.8		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Price Waste Dump	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.5		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Projects Building	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.1		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
Road	Road	N/A	--	N/A	N/A	13.3	from Wood mapping	N/A	N/A	N/A	N/A	N/A	N/A
Superpond	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.4		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	Mine-impacted water (Superpond)	N/A	N/A	N/A	N/A	0.6		Not considered habitat	N/A	N/A	N/A	N/A	N/A
Surge Pond	CWHmm1-01/03	No	--	Conifer Forest - Mesic/Dry	Red/Red	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B	Wildlife End Land Use E; Traditional Land Use B
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	1.8		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
Thelwood Penstock	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Thelwood Powerhouse	CWHxm2-02/03	No	--	Conifer Forest - Dry	Red/Blue	0.1		N/A	Wildlife End Land Use A; Traditional Land Use C	Wildlife End Land Use B; Traditional Land Use D	Wildlife End Land Use C; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D	Wildlife End Land Use D; Traditional Land Use D
Upper Lynx Diversion Ditch	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.1		N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Blue/Red	0.0	less than 0.1 ha	N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	Non-contact water course	N/A	>20%	N/A	N/A	0.3		Low potential due to gradient	N/A	N/A	N/A	N/A	N/A
West Strip	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	1.7		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
WRD 1	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	5.4		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
WRD 2	CWHmm1-06/07/11/12	Yes	--	Riparian Forest	Red/Red/Blue/Blue	0.0	less than 0.1 ha	N/A	Wildlife End Land Use F; Traditional Land Use E	Wildlife End Land Use G; Traditional Land Use F	Wildlife End Land Use H; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F	Wildlife End Land Use I; Traditional Land Use F
	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	13.3		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
WRD 3	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	3.0		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
WRD 4	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	0.3		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B
	Road	N/A	--	N/A	N/A	0.3	from IEG mapping	N/A	N/A	N/A	N/A	N/A	N/A
WRD 6	CWHmm1-02/03	No	--	Conifer Forest - Dry	Red/Red	2.9		N/A	Wildlife End Land Use A; Traditional Land Use A	Wildlife End Land Use B; Traditional Land Use B	Wildlife End Land Use C; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B	Wildlife End Land Use D; Traditional Land Use B

**TABLE NOTES:**

**Wildlife End Land Use A:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (foraging), Columbian black-tailed deer (foraging), wolf (living), deer mouse (living), Roosevelt elk (foraging); 2) Other Associated Species: Birds – barn swallow (foraging), common nighthawk (nesting); Amphibians – western toad (overwintering)

**Wildlife End Land Use B:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Columbian black-tailed deer (shelter), deer mouse (living), Roosevelt elk (shelter); 2) Other Associated Species: Mammals – beaver (foraging, dam material); Amphibians – western toad (overwintering)

**Wildlife End Land Use C:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (foraging), Columbian black-tailed deer (living), wolf (living), deer mouse (living), Roosevelt elk (shelter); 2) Other Associated Species: Mammals – ermine (living), Amphibians – western toad (overwintering)

**Wildlife End Land Use D:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (living), marten (living), Columbian black-tailed deer (living), cougar (living), wolf (living), deer mouse (living), red squirrel (living), Roosevelt elk (living); 2) Other Associated Species: Mammals – wolverine (living), ermine (living), bats (roosting) (little brown myotis, Townsend's big-eared bat, big brown bat, California myotis, long-legged myotis, silver-haired bat, western long-eared myotis, Yuma myotis); Birds – bald eagle (nesting), northern goshawk (nesting), northern pygmy-owl (nesting), western screech-owl (nesting); Amphibians – western toad (overwintering)

**Wildlife End Land Use E:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (living), marten (living), Columbian black-tailed deer (living), cougar (living), wolf (living), deer mouse (living), red squirrel (living), Roosevelt elk (living); 2) Other Associated Species: Mammals – wolverine (living), ermine (living), bats (roosting) (little brown myotis, Townsend's big-eared bat, big brown bat, California myotis, Keen's long-eared myotis, long-legged myotis, silver-haired bat, western long-eared myotis, Yuma myotis); Birds – olive-sided flycatcher (nesting), band-tailed pigeon (nesting), bald eagle (nesting), northern goshawk (nesting), northern pygmy-owl (nesting), western screech-owl (nesting), marbled murrelet (nesting); Amphibians – western toad (overwintering)

**Wildlife End Land Use F:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (foraging), Columbian black-tailed deer (foraging), wolf (living), deer mouse (living), Roosevelt elk (foraging); 2) Other Associated Species: Birds – barn swallow (foraging); Amphibians – western toad (overwintering), northern red-legged frog (foraging)

**Wildlife End Land Use G:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Columbian black-tailed deer (shelter), deer mouse (living), Roosevelt elk (shelter); 2) Other Associated Species: Mammals – beaver (foraging, dam material); Amphibians – western toad (overwintering), northern red-legged frog (foraging)

**Wildlife End Land Use H:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (foraging), Columbian black-tailed deer (living), wolf (living), deer mouse (living), Roosevelt elk (living); 2) Other Associated Species: Mammals – ermine (living), American water shrew (living); Amphibians – western toad (living), northern red-legged frog (foraging), wandering salamander (living)

**Wildlife End Land Use I:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Black bear (living), marten (living), Columbian black-tailed deer (living), cougar (living), wolf (living), deer mouse (living), red squirrel (living), Roosevelt elk (living); 2) Other Associated Species: Mammals – ermine (living), American water shrew (living), bats (roosting) (little brown myotis, Townsend's big-eared bat, big brown bat, California myotis, hoary bat, Keen's long-eared myotis, silver-haired bat, western long-eared myotis, Yuma myotis); Birds – olive-sided flycatcher (nesting), band-tailed pigeon (nesting), bald eagle (nesting), northern goshawk (nesting), northern pygmy-owl (nesting), western screech-owl (nesting), marbled murrelet (nesting); Amphibians – western toad (living), northern red-legged frog (foraging), wandering salamander (living)

**Wildlife End Land Use J:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: None 2) Other Associated Species: Vancouver Island marmot (living); bats (roosting) (little brown myotis, Townsend's big-eared bat, big brown bat, California myotis, Keen's long-eared myotis, long-legged myotis, western long-eared myotis, Yuma myotis)

**Wildlife End Land Use K:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: Roosevelt elk (foraging); 2) Other Associated Species: Birds – barn swallow (foraging), common nighthawk (nesting); Amphibians – western toad (overwintering)

**Wildlife End Land Use L:** 1) Associated Species Identified in Mines Act Permit M-26 Amendment: None 2) Other Associated Species: bats (roosting) (little brown myotis, Townsend's big-eared bat, big brown bat, California myotis, Keen's long-eared myotis, long-legged myotis, western long-eared myotis, Yuma myotis)

**Traditional Land Use A:** 1) Species Identified in Wood Report: *Vaccinium* spp., salal

**Traditional Land Use B:** 1) Species Identified in Wood Report: Western hemlock, red alder, *Vaccinium* spp., salal, Oregon grape, fine leaf bramble, Canadian bunchberry

**Traditional Land Use C:** 1) Species Identified in Wood Report: *Vaccinium parviflorum*, salal, bald hip rose, bracken fern

**Traditional Land Use D:** 1) Species Identified in Wood Report: Western hemlock, red alder, *Vaccinium parviflorum*, salal, Oregon grape, bald hip rose, sword fern, bracken fern, Canadian bunchberry

**Traditional Land Use E:** 1) Species Identified in Wood Report: *Vaccinium* spp, salal, salmonberry

**Traditional Land Use F:** 1) Species Identified in Wood Report: Western hemlock, Sitka spruce, big leaf maple, red alder, *Vaccinium* spp, salal, Oregon grape, salmonberry, sword fern, bracken fern, lady fern, Canadian bunchberry

## **Attachment B: Post-Closure Ecosystem Figure**



