

## SCHEDULE B

Attached to and forming part of the Covenant Agreement between the TRUST FUND BOARD, Covenant Holder, and the Owner, Fairfield Block Limited, dated as of the \_\_\_ day of \_\_\_\_\_, 2005.

### BASELINE DOCUMENTATION REPORT

#### 1.0 Acknowledgment

- 1.1 The Owner and Ryan Durand (Taara Environmental, 46054 King Avenue, Chilliwack BC V2B 3B5 - 604-795-4969) hereby acknowledge and agree that the following is an accurate description of the covenant area as of the reference date of this Agreement.

#### 2.0 Location and Description

- 2.1 The property is located on Salt Spring Island in the Mt. Maxwell Watershed. The property borders the south west quadrant of Maxwell Lake and is accessed off Mt. Maxwell Road, over a private road through adjoining properties. The property is approximately 1/2 hour's drive from Fulford Harbour, and 20 minutes drive from Ganges. Access in winter can be difficult, requiring a 4-wheeled drive vehicle, and is sometimes only accessible by foot when snowfall has been heavy.
- 2.2 The property is bordered on the north by land owned by the Salt Spring Island Water Preservation Society, on the West and South by BC Nature Trust lands, and on the East by North Salt Spring Waterworks property. The SE corner touches Mt. Maxwell Provincial Park.
- 2.3 "Covenant Area" means that part of the parcel of land legally described as: The South 1/2 of North West 1/4 of Section 83, South Salt Spring Island, Cowichan District. "Reference Plan" means the Reference Plan of Covenant, over part of the Fractional South 1/2 of NW 1/4 of Section 83 South Salt Spring Island, Cowichan District certified correct by Martin Harrichhausen, B.C.L.S. and dated August 30, 2005, and deposited in the Victoria Land Title Office under VIP \_\_\_\_\_ and a reduced copy which forms Schedule A to this agreement.
- 2.4 The Covenant Area includes 23.69ha of the 27.41ha property. Three exclusion areas from the covenant are identified on the Reference Plan as Area A, B and C. The areas are 1.11ha, 0.78ha and 1.83ha respectively. Due to the artificially raised water levels in Lake Maxwell, the actual surface area of the property is less then the registered size of 27.41ha.

#### 3.0 Site History

- 3.1 The owner of the property is the Fairfield Block Limited, a family group made up of the descendants of Harold Lineham. The property first came into the Lineham family in the early 1900's when purchased, along with adjoining tracts of land, by Arthur Lineham. A small cabin, located in the most easterly excluded zone (Area C), was built at that time for use as a hunting lodge.
- 3.2 Most of the land was logged in the early 1900's. Subsequent to that occasional trees were removed for firewood or to provide small clearings. There was no road access until the mid

1960's when the existing road was pushed through. Access was first by private boat from North Saanich to the foot of Mt Maxwell, then by foot over the ridge to the lake. With the advent of regular car ferries to Salt Spring Island, access was achieved by driving to Mt. Maxwell Road, walking in to the lake near the current dam, and then crossing the lake by boat.

#### **4.0 List of Buildings, Structures and other Improvements**

- 4.1 There are no structures in the covenant area itself. There are two small cabins and associated sheds, trails and docks located within two of the three covenant exclusion areas (Area A and C). The third excluded area (Area B) is sometimes occupied by a trailer or other temporary structure. Structures and other property improvements are shown on the Covenant Area map (Section 7.0).
- 4.2 A road enters the property from the north and runs roughly parallel to Maxwell Lake. The road runs through all three exclusion areas, ending at the Eastern-most cabin (Area C). The road is packed earth/gravel construction, approximately 3 metres wide, with 2 metre wide margins on either side. The road is maintained under a statutory right of way held by the North Salt Spring Waterworks District.
- 4.3 There are two trails on the property. One leads to the south from the road just west of the middle exclusion area. The second starts from the road at the eastern exclusion area and leads to the south east. Both of these trails were originally pushed through as logging roads and both continue onto adjacent property to the east and south.
- 4.4 Numerous overgrown and unused old logging roads occur throughout the property. Several of the old roads have partially buried lengths of metal cable that was used for logging.

#### **5.0 Significance of Land and Amenities**

- 5.1 The covenant area includes a large portion of mature riparian forest and wetland complexes adjacent to Maxwell Lake.
- 5.2 The entire covenant area has been mapped as sensitive under the Sensitive Ecosystems Inventory for East Vancouver Island and the Gulf Islands. The natural values of the covenant area fall under the following categories detailed in the NAPTEP Regulation:
  - Wetland Ecosystem, Section 2(a)
  - Terrestrial Herbaceous Ecosystem, Section 2(a)
  - Areas of key habitat for rare native plant species and plant communities, Section 2(b)
  - Areas critical for native animal species in relation to breeding, rearing, feeding or staging, Section 2(c)
- 5.3 The property is surrounded by lands that will remain natural including Mt Maxwell Provincial Park, lands owned by the Nature Trust of BC, lands owned by the Salt Spring Island Water Preservation Society, and lands owned by the North Salt Spring Waterworks District.
- 5.4 The area is significant to the quality of water that is provided by the North Salt Spring Waterworks District through approximately 1800 connections.

- 5.5 The property contains numerous Garry oak (*Quercus garryana*) ecosystems. Although small, their isolation has resulted in a limited number of invasive species and the notable absence of any Scotch broom (*Cytisus scoparius*), therefore, the ecosystems are in a more natural state than is normally seen.
- 5.6 The property contains several rare ecological communities as defined by the British Columbia Conservation Data Centre. The baseline survey was not comprehensive enough to determine if the identified rare communities are viable, only that the plant associations occur. Listed communities include:
- Red Listed
- Douglas-fir / sword fern (*Pseudotsuga menziesii* / *Polystichum munitum*)
  - Western Hemlock - Douglas-fir / Oregon Beaked-moss (*Tsuga heterophylla* - *Pseudotsuga menziesii* / *Eurhynchium oregonum*)
- Blue Listed
- Douglas-fir - Western Hemlock / Salal Dry Maritime (*Pseudotsuga menziesii* - *Tsuga heterophylla* / *Gaultheria shallon*)
  - Western Redcedar / Sword Fern Very Dry Maritime (*Thuja plicata* / *Polystichum munitum*)
- 5.7 The following rare species have been observed on the property in the past, or are likely to occur:
- Painted Turtle (*Chrysemys picta*)
  - Red-legged Frog (*Rana aurora*)
- 5.8 Rare subspecies, of the following species that have been observed on the property, may also occur:
- Great Blue Heron (*Ardea herodias*)
  - Peregrine Falcon (*Falco peregrinus*)

## 6.0 Inventory of Biological Features

- 6.1 An inventory of the biological features of the covenant area was conducted on August 30, 2005. Seven vegetation types are recognized (see Covenant Map in Section 7.0). All vegetation types were classified to the site series level of very dry maritime Coastal Western Hemlock (CWHxm) biogeoclimatic subzone. Established sample plots were not created and soil moisture and nutrient regimes were estimated from indicator species and environmental factors. Percent cover was estimated using cover class intervals with the cover class midpoints given in the below tables where 0.5% represents <1%; 3% represents a range of 1 to 5%; 15% represents a range of >5 to 25%; 37.5% represents a range of >25 to 50%; 62.5% represents a range of >50 to 75%; 87.5% represents a range of >75% to 100%.
- 6.2 Floral species listed in the below tables that do not contain percent cover were identified by the landowner and various naturalists over several years. This information is important to record as the August 30, 2005 survey was done when many floral species could not be identified.
- 6.3 All faunal species listed by vegetation type were observed by the landowner and various naturalists over several years.
- 6.4 It is recommended that further inventories be conducted to search for red and blue listed species, and spring inventories are conducted to create a more comprehensive species list.

6.5 **Vegetation Type 1: CWHxm02 Douglas-fir/Lodgepole Pine – Cladina to CWHxm03 Douglas-fir/Western Hemlock - Salal.** Mosaic of terrestrial herbaceous rocky outcrops interspersed with older second growth coniferous forest and rare mature Douglas-fir. Rocky outcrops were Garry oak ecosystems with a rich ground cover of moss and lichens. Rare wetland and ephemeral seepage areas occurred in lower depressions. Wildlife trees and large woody debris were common. Slopes ranged from 10 to 100 percent.

**FLORA**

<p>Main Canopy          Species &amp; percent cover          Age (estimated)          Height (estimated)          DBH (estimated)</p>	<p>Douglas-fir (<i>Pseudotsuga menziesii</i>) 15%          60 to 80          20 to 30m          40 to 70cm</p>
<p>Secondary Canopy          Species &amp; percent cover           Age (estimated)          Height (estimated)          DBH (estimated)</p>	<p>Arbutus (<i>Arbutus menziesii</i>) 3%          Big-leaf Maple (<i>Acer macrophyllum</i>) 3%          Garry Oak (<i>Quercus garryana</i>) 3%          60 to 80          15-20-12m          30-35-20cm</p>
<p>Total Canopy Cover</p>	<p>25%</p>
<p>Understory (species &amp; percent cover)          Shrubs, including trees &lt;10 m           Herbs, ferns, mosses, etc.</p>	<p>Dull Oregon-grape (<i>Mahonia nervosa</i>) 3%          Douglas-fir (<i>Pseudotsuga menziesii</i>) 3%          Ocean-spray (<i>Holodiscus discolor</i>) 3%          Salal (<i>Gaultheria shallon</i>) 15%           Bracken Fern (<i>Pteridium aquilinum</i>) 0.5%          Sword Fern (<i>Polystichum munitum</i>) 3%          Haircap moss (<i>Polytrichum</i> sp.) 0.5%          Oregon Beaked Moss (<i>Kindbergia oregana</i>) 3%          False Pixie Cup (<i>Cladonia chlorophaea</i>) 3%          Lipstick Cladonia (<i>Cladonia macilenta</i>) 3%          Indian Paintbrush (<i>Castilleja miniata</i>)          Satin Flower (<i>Olsynium douglasii</i>)          Death Camas (<i>Zygadenus venenosus</i>) – possible          Chocolate Lily (<i>Fritillaria lanceolata</i>)          Common Camas (<i>Camassia quamash</i>)          Nodding Onion (<i>Allium cernuum</i>)          Hooker’s Onion (<i>Allium acuminatum</i>), reported          Harvest Brodiaea (<i>Brodiaea coronaria</i>)          Shooting Star (<i>Dodecatheon</i> sp.)          Grass (<i>Bromus</i> sp.)          Grass (<i>Festuca</i> sp.)          Common Witch’s Hair (<i>Alectoria sarmentosa</i>)          Pimple Kidney (<i>Nephroma resupinatum</i>)          Ragbag (<i>Platismatia glauca</i>)          Frog Pelt (<i>Peltigera neopolydactyla</i>)          Freckle Pelt (<i>Peltigera britannica</i>)   <b>INVASIVE</b>          Common Foxglove (<i>Digitalis purpurea</i>) 3%          Common Mullein (<i>Verbascum thapsus</i>)</p>

Observed rare/threatened species & locally uncommon species	Poison oak ( <i>Rhus diversiloba</i> ) possible in area Other rare species likely
Special Features	Garry oak ecosystem
Expected Changes	Douglas-fir are likely to outgrow and shade out Arbutus and some Garry oak. Potential for additional invasive species.
Disturbance History	Logging, some abandoned logging cables. Used by local hikers. No recent disturbances.

## FAUNA

Wildlife Habitat / Features	Wildlife trees, snags, rotting logs
Observed Species	<p><b>MAMMALS</b>  Blacktail Deer (<i>Odocoileus hemionus</i>)  Deer Mouse (<i>Peromyscus maniculatus</i>)  Myotis Bat (<i>Myotis sp.</i>)  Cougar (<i>Felis concolor</i>) occasional</p> <p><b>BIRDS</b>  Peregrine Falcon (<i>Falco peregrinus</i>)  Turkey Vulture (<i>Cathartes aura</i>)  Red-tailed Hawk (<i>Buteo jamaicensis</i>)  Bald Eagle (<i>Haliaeetus leucocephalus</i>)  Barred Owl (<i>Strix varia</i>)  Pileated Woodpecker (<i>Dryocopus pileatus</i>)  Raven (<i>Corvus corax</i>)  American Robin (<i>Turdus migratorius</i>)  Orange-crowned Warbler (<i>Vermivora celata</i>)  Song Sparrow (<i>Melospiza melodia</i>)  Pacific-slope Flycatcher (<i>Empidonax difficilis</i>)  Red-breasted Nuthatch (<i>Sitta canadensis</i>)  Ruby-crowned Kinglet (<i>Regulus calendula</i>)  Violet-green Swallow (<i>Tachycineta thalassina</i>)</p> <p><b>REPTILES</b>  Common Garter Snake (<i>Thamnophis sirtalis</i>)</p>
Rare/threatened species & locally uncommon species	Suitable habitat for Sharp-tailed Snake ( <i>Contia tenuis</i> ) and Edith's Checkerspot butterfly ( <i>Euphydryas editha</i> )

- 6.6 **Vegetation Type 2:** Lake, emergent vegetation, and wetlands around the lake margin. Water levels artificially adjusted by the water district. Seasonally flooded up to 1032 ft level, with a variance of approx 1 metre noted to date in 2005. A portion of the lake borders the road. The community is re-establishing itself after the shore was cleared/logged to the 1032 ft level in 1993 and then flooded. The logging debris in shallow water is becoming established with communities of moss, shrub, grasses and sundew.

## FLORA

Main Canopy Species & percent cover	Red Alder ( <i>Alnus rubra</i> ) 3% Western Red Cedar ( <i>Thuja plicata</i> ) 3%
Age (estimated)	<60
Height (estimated)	10-20m
DBH (estimated)	15-30cm
Secondary Canopy	

Species & percent cover Age (estimated) Height (estimated) DBH (estimated)	Shore Pine ( <i>Pinus contorta</i> ) 0.5% <40 15m 20
Total Canopy Cover	5%
Understory (species & percent cover) Shrubs, including trees <10 m	Sitka Willow ( <i>Salix sitchensis</i> ) 3% Hardhack ( <i>Spiraea douglasii</i> ) 0.5% Red-flowering Currant ( <i>Ribes sanguineum</i> ) Black Gooseberry ( <i>Ribes lacustre</i> ) 0.5% Salal ( <i>Gaultheria shallon</i> ) 0.5% Willow ( <i>Salix</i> sp.) Salmonberry ( <i>Rubus spectabilis</i> )
Herbs, ferns, mosses, etc.	Small-flowered Forget-me-not ( <i>Myosotis laxa</i> ) 0.5% Lesser Spearwort ( <i>Ranunculus flammula</i> ) 3% Reed Canary Grass ( <i>Phalaris arundinacea</i> ) 0.5% Cattail ( <i>Typha latifolia</i> ) 15% Sitka Sedge ( <i>Carex sitchensis</i> ) 15% Common Rush ( <i>Juncus effusus</i> ) 15% Dagger-leaf Rush ( <i>Juncus ensifolius</i> ) 3% Horse-tail ( <i>Equisetum arvense</i> ) 0.5% Sweet Scented Bedstraw ( <i>Galium triflorum</i> ) 0.5% Lady Fern ( <i>Athyrium filix-femina</i> ) 0.5% Wild Carrot ( <i>Daucus carota</i> ) Skunk Cabbage ( <i>Lysichiton americanum</i> ) Yellow Pond-lily ( <i>Nuphar polysepalum</i> ) Tapered Rush ( <i>Juncus acuminatus</i> ) Sundew ( <i>Drosera rotundiflora</i> ) Tule ( <i>Scirpus lacustris</i> )
Observed rare/threatened species & locally uncommon species	Sundew ( <i>Drosera rotundiflora</i> )
Special Features	Wetlands and emergent vegetation along lake foreshore.
Expected Changes	Provided water level remains within current range, expect communities to reestablish and stabilize.
Disturbance History	Waterworks logged, cleared and burnt debris all around shore up to 1032 ft level in preparation for raising the lake level - 1993. Many trees/shrub dying due to raised water level.

## FAUNA

Wildlife Habitat / Features	
Observed Species	<p><b>MAMMALS</b> Blacktail Deer (<i>Odocoileus hemionus</i>) Mink (<i>Mustela vison</i>), probable</p> <p><b>BIRDS</b> Canada Goose (<i>Branta canadensis</i>), past years breeding Mallard (<i>Anas platyrhynchos</i>), breeding Red-breasted Merganser (<i>Mergus serrator</i>) Wood Duck (<i>Aix sponsa</i>) Bald Eagle (<i>Haliaeetus leucocephalus</i>) Great Blue Heron (<i>Ardea herodias</i>)</p>

	<p>Common Nighthawk (<i>Chordeiles minor</i>)  Belted Kingfisher (<i>Ceryle alcyon</i>)  American Robin (<i>Turdus migratorius</i>)  Violet-green Swallow (<i>Tachycineta thalassina</i>)  Song Sparrow (<i>Melospiza melodia</i>)  Red-winged Blackbird (<i>Agelaius phoeniceus</i>) breeding</p> <p><b>FISH</b>  Small stickleback-like (6-8 cm)  Rainbow Trout (<i>Onchorhynchus mykiss</i>), last stocked in 1980's; could be remnants</p> <p><b>REPTILES</b>  Common Garter Snake (<i>Thamnophis sirtalis</i>)</p> <p><b>AMPHIBIANS</b>  Rough-skinned Newt (<i>Taricha granulosa</i>)  Pacific Tree Frog (<i>Pseudacris regilla</i>)  Frog, unidentified, dark brown/gray</p>
Rare/threatened species & locally uncommon species	<p>Great Blue Heron (<i>Ardea herodias</i>) formerly breeding at lake, but since fish no longer stocked many fish-eating birds infrequent now.</p> <p>Red-legged Frog (<i>Rana aurora</i>) possible</p>

6.7 **Vegetation Type 3: CWHxm02 Douglas-fir/Lodgepole Pine – Cladina.** Second Growth even age coniferous stand dominated by Douglas-fir. Small homogenous area with sparse understory located in a depression between the rocky areas of Vegetation Type 1 and 5. Rare dead Arbutus in stand – likely shaded out - and Old Big-leaf Maple near the wetland to the north. The surface substrate was thick with woody debris, litter and some rock. Heavily disturbed from past logging.

**FLORA**

Main Canopy Species & percent cover	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 37.5 Big-leaf Maple ( <i>Acer macrophyllum</i> ) 3% Arbutus ( <i>Arbutus menziesii</i> ) 0.5% - dead
Age (estimated)	60-80
Height (estimated)	15-30m
DBH (estimated)	30-50cm
Secondary Canopy Species & percent cover	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3%
Age (estimated)	<40
Height (estimated)	10m
DBH (estimated)	15cm
Total Canopy Cover	50%
Understory (species & percent cover) Shrubs, including trees <10 m	Ocean-spray ( <i>Holodiscus discolor</i> ) 0.5% Dull Oregon Grape ( <i>Mahonia nervosa</i> ) 3% Salal ( <i>Gaultheria shallon</i> ) 3%
Herbs, ferns, mosses, etc.	Sword Fern ( <i>Polystichum munitum</i> ) 0.5% Rattlesnake Plantain ( <i>Goodyera oblongifolia</i> ) 0.5%

	Western Coralroot ( <i>Corallorhiza maculata</i> ) 0.5% Oregon Beaked Moss ( <i>Kindbergia oregana</i> ) 37.5% Step Moss ( <i>Hylocomium splendens</i> ) 3% Cat-tail Moss ( <i>Isotheicum myosuroides</i> ) Freckle Pelt ( <i>Peltigera britannica</i> )
Observed rare/threatened species & locally uncommon species	NA
Special Features	NA
Expected Changes	Some Douglas-fir will die out due to dense stand. Cedar and Hemlock may become established in shady understory.
Disturbance History	Historic logging and overgrown logging roads.

## FAUNA

Wildlife Habitat / Features	Wildlife trees
Observed Species	<p><b>MAMMALS</b> Blacktail Deer (<i>Odocoileus hemionus</i>) Red Squirrel (<i>Tamiasciurus hudsonicus</i>) Deer Mouse (<i>Peromyscus maniculatus</i>) Myotis Bat <i>Myotis</i> sp. Big Brown Bat (<i>Eptesicus fuscus</i>) Raccoon (<i>Procyon lotor</i>)</p> <p><b>BIRDS</b> Barred Owl (<i>Strix varia</i>) Northern Pygmy Owl (<i>Glaucidium gnoma</i>) Bald Eagle (<i>Haliaeetus leucocephalus</i>) Red-tailed Hawk (<i>Buteo jamaicensis</i>) Turkey Vulture (<i>Cathartes aura</i>) Blue Grouse (<i>Dendragapus obscurus</i>) Pileated Woodpecker (<i>Dryocopus pileatus</i>) Northern Flicker (<i>Colaptes auratus</i>) Downy Woodpecker (<i>Picoides pubescens</i>) Hairy Woodpecker (<i>Picoides villosus</i>) Raven (<i>Corvus corax</i>) Common Nighthawk (<i>Chordeiles minor</i>) Black-capped Chickadee (<i>Poecile atricapilla</i>) Red Crossbill (<i>Loxia curvirostra</i>) Pacific-slope Flycatcher (<i>Empidonax difficilis</i>) Bushtit (<i>Psaltriparus minimus</i>) Ruby Crowned Kinglet (<i>Regulus calendula</i>) Golden Crowned Kinglet (<i>Regulus satrapa</i>) American Robin (<i>Turdus migratorius</i>) Song Sparrow (<i>Melospiza melodia</i>) Dark-eyed Junco (<i>Junco hyemalis</i>) Orange-crowned Warbler (<i>Vermivora celata</i>)</p> <p><b>REPTILES</b> Common Garter Snake (<i>Thamnophis sirtalis</i>)</p> <p><b>INTRODUCED</b> Black Slug (<i>Arion ater</i>)</p>
Rare/threatened species & locally	NA

uncommon species	
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6.8 **Vegetation Type 4: CWHxm05 Western Red Cedar – Sword Fern to CWHxm07 Western Red Cedar – Foamflower.** Older Second Growth coniferous, Douglas-fir, Western Hemlock, Western Red Cedar. Lower slopes by lake are more diverse with some veteran Western Red Cedar and Douglas-fir. Upper slopes less diverse and dominated by Western Hemlock and Douglas-fir. Many windfalls, sparse salal on upper slopes, thick moss cover. Vegetation Type includes roadway, trail and overgrown old logging roads.

**FLORA**

Main Canopy Species & percent cover	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 15% Western Hemlock ( <i>Tsuga heterophylla</i> ) 15% Western Red Cedar ( <i>Thuja plicata</i> ) 3% Big-leaf Maple ( <i>Acer macrophyllum</i> ) 3% Western White Pine ( <i>Pinus monticola</i> ) 0.5% - single tree
Age (estimated)	60-100
Height (estimated)	20-30m
DBH (estimated)	45-100cm
Secondary Canopy Species & percent cover	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3% Shore Pine ( <i>Pinus contorta</i> ) 0.5% Arbutus ( <i>Arbutus menziesii</i> ) 0.5% Red Alder ( <i>Alnus rubra</i> ) 3% Grand Fir ( <i>Abies grandis</i> ) 3%
Age (estimated)	<60
Height (estimated)	10-15m
DBH (estimated)	15-25
Total Canopy Cover	30 to 40%
Understorey (species & percent cover) Shrubs, including trees <10 m	Grand Fir ( <i>Abies grandis</i> ) 3% Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3% Western Red Cedar ( <i>Thuja plicata</i> ) 3% Western Hemlock ( <i>Tsuga heterophylla</i> ) 3% Ocean-spray ( <i>Holodiscus discolor</i> ) 3% Dull Oregon Grape ( <i>Mahonia nervosa</i> ) 3% Salal ( <i>Gaultheria shallon</i> ) 15% Bald Hip Rose ( <i>Rosa gymnocarpa</i> ) 0.5% Red Huckleberry ( <i>Vaccinium parvifolium</i> ) 0.5% Red-flowering Currant ( <i>Ribes sanguineum</i> ) Trailing Blackberry ( <i>Rubus ursinus</i> ) Salmonberry ( <i>Rubus spectabilis</i> ) Saskatoon ( <i>Amelanchier alnifolia</i> ) Willow ( <i>Salix sp.</i> )
Herbs, ferns, mosses, etc.	Sword Fern ( <i>Polystichum munitum</i> ) 3% Sweet Scented Bedstraw ( <i>Galium triflorum</i> ) 0.5% Broad-leaved Starflower ( <i>Trientalis latifolia</i> ) 0.5% Oregon Beaked Moss ( <i>Kindbergia oregana</i> ) 37.5% Step Moss ( <i>Hylocomium splendens</i> ) 3% Coastal Leafy Moss ( <i>Plagiomnium insigne</i> ) 3%

	<p>Twin Flower (<i>Linnaea borealis</i>)  Vanilla Leaf (<i>Achlys triphylla</i>)  Rattlesnake Plantain (<i>Goodyera oblongifolia</i>)  Skunk Cabbage (<i>Lysichiton americanum</i>)  Horse-tail (<i>Equisetum arvense</i>)  Licorice Fern (<i>Polypodium glycyrrhiza</i>)  Deer Fern (<i>Blechnum spicant</i>)  Bracken Fern (<i>Pteridium aquilinum</i>)  Monkey Flower (<i>Mimulus guttatus</i>)  Fairyslipper (<i>Calypso bulbosa</i>)  White Fawn Lily (<i>Erythronium oregonum</i>)  Canada Thistle (<i>Cirsium arvense</i>)  Trailing Yellow Violet (<i>Viola sempervirens</i>)  Piggyback Plant (<i>Tolmiea menziesii</i>)  Western Coral Root (<i>Corallorhiza maculate</i>)  False Bugbane (<i>Trautvetteria caroliniensis</i>)  Leafy Moss (<i>Rhizomnium glabrescens</i>)</p> <p><b>INVASIVE</b>  Holly (<i>Ilex sp.</i>) 0.5%  Stinging Nettle (<i>Urtica dioica</i>) 0.5%  Common Foxglove (<i>Digitalis purpurea</i>) 0.5%  Wall Lettuce (<i>Lactuca muralis</i>) 0.5%  Scotch Broom (<i>Cytisus scoparius</i>)</p>
Observed rare/threatened species & locally uncommon species	Pacific Dogwood ( <i>Cornus nuttallii</i> ) had been present in the past – appear to have died out
Special Features	White Pine considered unusual for area.
Expected Changes	Deciduous tree species will be shaded out over time and replaced with Cedar Hemlock dominated forest.
Disturbance History	Historic logging, fire, and old overgrown logging roads. No recent disturbances.

## FAUNA

Wildlife Habitat / Features	Wildlife trees, snags, rotting logs
Observed Species	<p><b>MAMMALS</b>  Blacktail Deer (<i>Odocoileus hemionus</i>)  Red Squirrel (<i>Tamiasciurus hudsonicus</i>)  Raccoon (<i>Procyon lotor</i>)  Big Brown Bat (<i>Eptesicus fuscus</i>)  Silver-haired Bat (<i>Lasionycteris noctivagans</i>)  <i>Myotis sp.</i>  Deer Mouse (<i>Peromyscus maniculatus</i>)  Muskrat (<i>Ondatra zibethicus</i>) seen in past</p> <p><b>BIRDS</b>  Canada Goose (<i>Branta canadensis</i>)  Mallard (<i>Anas platyrhynchos</i>), breeding  Red-breasted Merganser (<i>Mergus serrator</i>)  Wood Duck (<i>Aix sponsa</i>)  Bald Eagle (<i>Haliaeetus leucocephalus</i>)  Great Blue Heron (<i>Ardea herodias</i>)  Turkey Vulture (<i>Cathartes aura</i>)  Barred Owl (<i>Strix varia</i>)</p>

	<p>Great Horned Owl (<i>Bubo virginianus</i>)  Northern Pygmy Owl (<i>Glaucidium gnoma</i>)  Blue Grouse (<i>Dendragapus obscurus</i>)  Pileated Woodpecker (<i>Dryocopus pileatus</i>)  Northern Flicker (<i>Colaptes auratus</i>)  Downy Woodpecker (<i>Picoides pubescens</i>)  Hairy Woodpecker (<i>Picoides villosus</i>)  Belted Kingfisher (<i>Ceryle alcyon</i>)  Raven (<i>Corvus corax</i>)  Rufous Hummingbird (<i>Selasphorus rufus</i>)  Violet-green Swallow (<i>Tachycineta thalassina</i>)  Brown Creeper (<i>Certhia americana</i>)  Winter Wren (<i>Troglodytes troglodytes</i>), breeding  Common Nighthawk (<i>Chordeiles minor</i>)  Black-capped Chickadee (<i>Poecile atricapilla</i>)  Red Crossbill (<i>Loxia curvirostra</i>)  Pacific-slope Flycatcher (<i>Empidonax difficilis</i>)  Bushtit (<i>Psaltriparus minimus</i>)  Ruby Crowned Kinglet (<i>Regulus calendula</i>)  Golden Crowned Kinglet (<i>Regulus satrapa</i>)  American Robin (<i>Turdus migratorius</i>)  Song Sparrow (<i>Melospiza melodia</i>)  Dark-eyed Junco (<i>Junco hyemalis</i>)  Orange-crowned Warbler (<i>Vermivora celata</i>)  Savannah Sparrow (<i>Passerculus sandwichensis</i>)  Red-winged Blackbird (<i>Agelaius phoeniceus</i>) breeding</p> <p><b>REPTILES</b>  Common Garter Snake (<i>Thamnophis sirtalis</i>)</p> <p><b>AMPHIBIANS</b>  Rough-skinned Newt (<i>Taricha granulosa</i>)  Tree Frog (<i>Pseudacris regilla</i>)</p> <p><b>INTRODUCED</b>  Black Slug (<i>Arion ater</i>)</p>
Rare/threatened species & locally uncommon species	Painted Turtle ( <i>Chrysemys picta</i> ) presented in past years

6.9 **Vegetation Type 5: CWHxm02 Douglas-fir/Lodgepole Pine – Cladina.** Older Second Growth coniferous, mixed with Terrestrial Herbaceous, rocky outcrops, Douglas-fir, Garry Oak, Arbutus woodland. It is a rich area of high biodiversity similar to Vegetation Type 1 but with more Douglas-fir and less rocky open areas. Ground cover thick moss and leaf litter. It has a varied wildlife habitat, with snags, wildlife trees, rotting logs. Rocky outcrops with wildflowers in spring, grasses. There are swamps and vernal pools in depressions throughout the area.

**FLORA**

Main Canopy Species & percent cover	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 37.5% Western Hemlock ( <i>Tsuga heterophylla</i> ) 0.5% Garry Oak ( <i>Quercus garryana</i> ) 3% Arbutus ( <i>Arbutus menziesii</i> ) 3%
Age (estimated)	60-80

Height (estimated) DBH (estimated)	10-25m 20-60cm
Secondary Canopy Species & percent cover  Age (estimated) Height (estimated) DBH (estimated)	Big-leaf Maple ( <i>Acer macrophyllum</i> ) 0.5% Western Red Cedar ( <i>Thuja plicata</i> ) 0.5% <60 15-20 20-45
Total Canopy Cover	30%
Understory (species & percent cover) Shrubs, including trees <10 m        Herbs, ferns, mosses, etc.	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 0.5% Ocean-spray ( <i>Holodiscus discolor</i> ) 3% Willow ( <i>Salix</i> sp.) 0.5% Salal ( <i>Gaultheria shallon</i> ) 3% Dull Oregon Grape ( <i>Mahonia nervosa</i> ) 0.5% Bald Hip Rose ( <i>Rosa gymnocarpa</i> ) 0.5% Rocky Mountain Juniper ( <i>Juniperus scopulorum</i> ) 0.5% Trailing Blackberry ( <i>Rubus ursinus</i> )  Sword Fern ( <i>Polystichum munitum</i> ) 3% Rattlesnake Plantain ( <i>Goodyera oblongifolia</i> ) 0.5% Yarrow ( <i>Achillea millefolium</i> ) 0.5% Oregon Beaked Moss ( <i>Kindbergia oregana</i> ) 0.5% Step Moss ( <i>Hylocomium splendens</i> ) 0.5% Electrified Cat's-tail Moss ( <i>Rhytidiadelphus triquetrus</i> ) 0.5% Sheep Sorrel ( <i>Rumex acetosella</i> ) 0.5% False Pixie Cup ( <i>Cladonia chlorophaea</i> ) 0.5% Lipstick Cladonia ( <i>Cladonia macilenta</i> ) 3% Indian Paintbrush ( <i>Castilleja miniata</i> ) Satin Flower ( <i>Olsynium douglasii</i> ) Death Camas ( <i>Zygadenus venenosus</i> ) Chocolate Lily ( <i>Fritillaria lanceolata</i> ) Blue Camas ( <i>Camassia quamash</i> ) Nodding Onion ( <i>Allium cernuum</i> ) Hooker's Onion ( <i>Allium acuminatum</i> ), reported <i>Allium</i> sp. Skunk Cabbage ( <i>Lysichiton americanum</i> ) Licorice Fern ( <i>Polypodium glycyrrhiza</i> ) Grass <i>Bromus</i> sp. Grass <i>Festuca</i> sp. Shooting Star ( <i>Dodecatheon</i> sp.) Harvest Brodiaea ( <i>Brodiaea coronaria</i> ) Common Witch's Hair ( <i>Alectoria sarmentosa</i> ) Pimple Kidney ( <i>Nephroma resupinatum</i> ) Ragbag ( <i>Platismatia glauca</i> ) Frog Pelt ( <i>Peltigera neopolydactyla</i> ) Freckle Pelt ( <i>Peltigera britannica</i> ) Moss ( <i>Oligotrichum</i> sp.) Moss ( <i>Polytrichum</i> sp.) Sword Fern ( <i>Polystichum munitum</i> ) Sweet Scented Bedstraw ( <i>Galium triflorum</i> ) Broad-leaved Starflower ( <i>Trientalis latifolia</i> )

	<b>INVASIVE</b> Common Foxglove ( <i>Digitalis purpurea</i> ) 3% Common Mullein ( <i>Verbascum thapsus</i> ) 0.5% Hairy Cat's-ear ( <i>Hypochaeris radicata</i> ) 0.5%
Observed rare/threatened species & locally uncommon species	Rocky Mountain Juniper ( <i>Juniperus scopulorum</i> ) Poison oak ( <i>Rhus diversiloba</i> ) possible
Special Features	Garry Oak ecosystem.
Expected Changes	Garry Oak ecosystems may be reduced from Douglas-fir encroachment.
Disturbance History	Historic logging. No recent disturbances.

## FAUNA

Wildlife Habitat / Features	Wildlife trees, snags, rotting logs
Observed Species	<p><b>MAMMALS</b> Blacktail Deer (<i>Odocoileus hemionus</i>) Red Squirrel (<i>Tamiasciurus hudsonicus</i>) Raccoon (<i>Procyon lotor</i>) Deer Mouse (<i>Peromyscus maniculatus</i>) Big Brown Bat (<i>Eptesicus fuscus</i>) Myotis Bat (<i>Myotis</i> sp.)</p> <p><b>BIRDS</b> Bald Eagle (<i>Haliaeetus leucocephalus</i>) Turkey Vulture (<i>Cathartes aura</i>) Peregrine Falcon (<i>Falco peregrinus</i>) Red-tailed Hawk (<i>Buteo jamaicensis</i>) Barred Owl (<i>Strix varia</i>) Northern Pygmy Owl (<i>Glaucidium gnoma</i>) Blue Grouse (<i>Dendragapus obscurus</i>) Pileated Woodpecker (<i>Dryocopus pileatus</i>) Northern Flicker (<i>Colaptes auratus</i>) Downy Woodpecker (<i>Picoides pubescens</i>) Hairy Woodpecker (<i>Picoides villosus</i>) Raven (<i>Corvus corax</i>) Violet-green Swallow (<i>Tachycineta thalassina</i>) Common Nighthawk (<i>Chordeiles minor</i>) Black-capped Chickadee (<i>Poecile atricapilla</i>) Red Crossbill (<i>Loxia curvirostra</i>) Pacific-slope Flycatcher (<i>Empidonax difficilis</i>) Bushtit (<i>Psaltriparus minimus</i>) Ruby Crowned Kinglet (<i>Regulus calendula</i>) Golden Crowned Kinglet (<i>Regulus satrapa</i>) American Robin (<i>Turdus migratorius</i>) Song Sparrow (<i>Melospiza melodia</i>) Dark-eyed Junco (<i>Junco hyemalis</i>) Orange-crowned Warbler (<i>Vermivora celata</i>) Savannah Sparrow (<i>Passerculus sandwichensis</i>)</p> <p><b>REPTILES</b> Common Garter Snake (<i>Thamnophis sirtalis</i>)</p> <p><b>AMPHIBIANS</b></p>

	Frog, unidentified, dark brown/gray  <b>INTRODUCED</b> Black Slug ( <i>Arion ater</i> )
Rare/threatened species & locally uncommon species	NA

6.10 **Vegetation type 6: CWHxm01 Western Hemlock / Douglas-fir – Kindbergia to CWHxm05 Western Red Cedar – Sword Fern.** Highly variable older Second Growth forest with mix of Douglas-fir, Western Red Cedar, Western Hemlock, Big Leaf Maple and Red Alder. Infrequent small open rocky areas with rare Garry Oak and Arbutus and thick moss and lichen are located on higher elevations. Frequent wetlands, ephemeral ponds and seepage sites are located throughout the Vegetation Type. Forest stands contain large stumps, old logging roads, and the main road. Red Alder and Douglas-fir blow down are common.

### FLORA

Main Canopy Species & percent cover  Age (estimated) Height (estimated) DBH (estimated)	Western Hemlock ( <i>Tsuga heterophylla</i> ) 15% Western Red Cedar ( <i>Thuja plicata</i> ) 15% Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 15% Big-leaf Maple ( <i>Acer macrophyllum</i> ) 3% 60-80 (rare older veteran Douglas-fir and Cedar) 20-30m 45-100cm
Secondary Canopy Species & percent cover  Age (estimated) Height (estimated) DBH (estimated)	Red Alder ( <i>Alnus rubra</i> ) 3% Garry Oak ( <i>Quercus garryana</i> ) 0.5% Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3% Grand Fir ( <i>Abies grandis</i> ) 3% Shore Pine ( <i>Pinus contorta</i> ) 0.5% Arbutus ( <i>Arbutus menziesii</i> ) 0.5% <60 15-25m 10-30cm
Total Canopy Cover	40%
Understory (species & percent cover) Shrubs, including trees <10 m	Shore Pine ( <i>Pinus contorta</i> ) 0.5% Grand Fir ( <i>Abies grandis</i> ) 0.5% Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3% Red Alder ( <i>Alnus rubra</i> ) 3% Big-leaf Maple ( <i>Acer macrophyllum</i> ) 0.5% Western Hemlock ( <i>Tsuga heterophylla</i> ) 3% Western Red Cedar ( <i>Thuja plicata</i> ) 0.5% Sitka Willow ( <i>Salix sitchensis</i> ) Pacific Willow ( <i>Salix lucida</i> ) 0.5% Willow ( <i>Salix sp.</i> ) 0.5% Salal ( <i>Gaultheria shallon</i> ) 3% Baldhip Rose ( <i>Rosa gymnocarpa</i> ) 0.5% Dull Oregon Grape ( <i>Mahonia nervosa</i> ) Huckleberry ( <i>Vaccinium sp.</i> ) 0.5% Ocean-spray ( <i>Holodiscus discolor</i> ) 15% Trailing Blackberry ( <i>Rubus ursinus</i> ) 0.5% Hymilayan Blackberry ( <i>Rubus discolor</i> ) 0.5%

Herbs, ferns, mosses, etc.	<p>Saskatoon (<i>Amelanchier alnifolia</i>) 0.5%  Hardhack (<i>Spiraea douglasii</i>)  Sweet Gale (<i>Myrica gale</i>) probable  Salmonberry (<i>Rubus spectabilis</i>)  Red-flowering Currant (<i>Ribes sanguineum</i>)</p> <p>Sword Fern (<i>Polystichum munitum</i>) 15%  Oregon Beaked Moss (<i>Kindbergia oregana</i>) 15%  Step Moss (<i>Hylocomium splendens</i>) 3%  Electrified Cat's-tail Moss (<i>Rhytidiadelphus triquetrus</i>) 3%  Sitka Sedge (<i>Carex sitchensis</i>) 0.5%  Common Rush (<i>Juncus effusus</i>) 0.5%  Self Heal (<i>Prunella vulgaris</i>) 0.5%  Bracken Fern (<i>Pteridium aquilinum</i>) 0.5%  Twin Flower (<i>Linnaea borealis</i>) 0.5%  Canada Thistle (<i>Cirsium arvense</i>) 0.5%  Rattlesnake Plantain (<i>Goodyera oblongifolia</i>) Monkey  Flower (<i>Mimulus guttatus</i>)  Vanilla Leaf (<i>Achlys triphylla</i>)  Skunk Cabbage (<i>Lysichiton americanum</i>)  Horse-tail (<i>Equisetum arvense</i>)  Duck Weed (<i>Callitriche</i> sp.)  Western Coralroot (<i>Corallorhiza maculata</i>)  Buttercup (<i>Ranunculus</i> sp.)  Water parsnip (<i>Sium suave</i>)  Western Coralroot (<i>Corallorhiza maculata</i>)  Fringecup (<i>Tellima grandiflora</i>)  Foamflower (<i>Tiarella trifoliata</i>)  Licorice Fern (<i>Polypodium glycyrrhiza</i>)  Deer Fern (<i>Blechnum spicant</i>)  Moss (<i>Bryum</i> sp.)  Siberian Miners Lettuce (<i>Claytonia siberica</i>)  Enchanters Nightshade (<i>Circaea alpina</i>) probable  Common Witch's Hair (<i>Alectoria sarmentosa</i>)</p> <p><b>INVASIVE</b>  Common Plantain (<i>Plantago major</i>) 0.5%  Lance-leaved Plantain (<i>Plantago lanceolata</i>) 0.5%  Red Clover (<i>Trifolium repens</i>) 0.5%  Common Foxglove (<i>Digitalis purpurea</i>) 3%  Common Mullein (<i>Verbascum thapsus</i>) 0.5%  Hairy Cat's-ear (<i>Hypochaeris radicata</i>) 0.5%  Scotch Broom (<i>Cytisus scoparius</i>) 0.5%  Stinging nettle (<i>Urtica dioica</i>) 0.5%  Wall Lettuce (<i>Lactuca muralis</i>) 0.5%  Rose Campion (<i>Lychnis coronaria</i>) 0.5%</p>
Observed rare/threatened species & locally uncommon species	
Special Features	Numerous wetlands – excellent wildlife habitat.
Expected Changes	Unknown changes possible by waterworks maintenance of road and future lake/water level alterations.
Disturbance History	Road runs through area, water district logged shoreline;

	water level raised affecting shore. Hiking trails through area. Historic logging and overgrown logging roads.
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## FAUNA

Wildlife Habitat / Features	Snags, wildlife trees, probable eagle's nest
Observed Species	<p><b>MAMMALS</b></p> <p>Blacktail Deer (<i>Odocoileus hemionus</i>)  Red Squirrel (<i>Tamiasciurus hudsonicus</i>)  Raccoon (<i>Procyon lotor</i>)  Big Brown Bat (<i>Eptesicus fuscus</i>)  Myotis Bat (<i>Myotis</i> sp.)  Silver-haired Bat (<i>Lasionycteris noctivagans</i>)  Deer Mouse (<i>Peromyscus maniculatus</i>)</p> <p><b>BIRDS</b></p> <p>Canada Goose (<i>Branta canadensis</i>)  Mallard (<i>Anas platyrhynchos</i>), nesting  Wood Duck (<i>Aix sponsa</i>), breeding  Red-breasted Merganser (<i>Mergus serrator</i>)  Bald Eagle (<i>Haliaeetus leucocephalus</i>), breeding  Turkey Vulture (<i>Cathartes aura</i>)  Red-tailed Hawk (<i>Buteo jamaicensis</i>)  Great Blue Heron (<i>Ardea herodias</i>)  Barred Owl (<i>Strix varia</i>), prob. breeding  Great Horned Owl (<i>Bubo virginianus</i>)  Northern Pygmy Owl (<i>Glaucidium gnoma</i>)  Pileated Woodpecker (<i>Dryocopus pileatus</i>)  Northern Flicker (<i>Colaptes auratus</i>)  Downy Woodpecker (<i>Picoides pubescens</i>)  Hairy Woodpecker (<i>Picoides villosus</i>)  Belted Kingfisher (<i>Ceryle alcyon</i>)  Raven (<i>Corvus corax</i>)  Blue Grouse (<i>Dendragapus obscurus</i>)  Rufous Hummingbird (<i>Selasphorus rufus</i>)  Violet-green Swallow (<i>Tachycineta thalassina</i>)  Brown Creeper (<i>Certhia americana</i>)  Winter Wren (<i>Troglodytes troglodytes</i>), breeding  Common Nighthawk (<i>Chordeiles minor</i>)  Black-capped Chickadee (<i>Poecile atricapilla</i>)  Red Crossbill (<i>Loxia curvirostra</i>)  Pacific-slope Flycatcher (<i>Empidonax difficilis</i>)  Bushtit (<i>Psaltriparus minimus</i>)  Ruby Crowned Kinglet (<i>Regulus calendula</i>)  Golden Crowned Kinglet (<i>Regulus satrapa</i>)  American Robin (<i>Turdus migratorius</i>)  Song Sparrow (<i>Melospiza melodia</i>)  Dark-eyed Junco (<i>Junco hyemalis</i>)  Orange-crowned Warbler (<i>Vermivora celata</i>)  Savannah Sparrow (<i>Passerculus sandwichensis</i>)  Red-winged Blackbird (<i>Agelaius phoeniceus</i>) breeding</p> <p><b>AMPHIBIANS</b></p> <p>Rough-skinned Newt (<i>Taricha granulosa</i>)</p>

	Pacific Tree Frog ( <i>Pseudacris regilla</i> )  <b>REPTILES</b> Common Garter Snake ( <i>Thamnophis sirtalis</i> )  <b>INTRODUCED</b> Black Slug ( <i>Arion ater</i> )
Rare/threatened species & locally uncommon species	NA

6.11 **Vegetation Type 7: CWHxm02 Douglas-fir/Lodgepole Pine – Cladina.** Older Second Growth mixed Douglas-fir, Big Leaf Maple, small area at SW corner adjacent to Vegetation Type 1 and 3 – located below steep cliffs of Vegetation Type 1. The understory is sparse (except in common canopy openings) with a rich moss layer on abundant woody debris. Vegetation Type steeply (50%) slopes to the southwest. Mapped area may be larger than actual Vegetation Type.

**FLORA**

Main Canopy Species & percent cover  Age (estimated) Height (estimated) DBH (estimated)	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 37.5% Big-leaf Maple ( <i>Acer macrophyllum</i> ) 15% 60-80 20m 35-60cm
Secondary Canopy Species & percent cover  Age (estimated) Height (estimated) DBH (estimated)	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 3% Arbutus ( <i>Arbutus menziesii</i> ) 3% <60 10-15m 20-50cm
Total Canopy Cover	40%
Understory (species & percent cover) Shrubs, including trees <10 m   Herbs, ferns, mosses, etc.	Douglas-fir ( <i>Pseudotsuga menziesii</i> ) 0.5% Ocean-spray ( <i>Holodiscus discolor</i> ) 15% Salal ( <i>Gaultheria shallon</i> ) 0.5% Dull Oregon Grape ( <i>Mahonia nervosa</i> ) 3% Baldhip Rose ( <i>Rosa gymnocarpa</i> ) 0.5%  Sword Fern ( <i>Polystichum munitum</i> ) 0.5% Oregon Beaked Moss ( <i>Kindbergia oregana</i> ) 15% Step Moss ( <i>Hylocomium splendens</i> ) 0.5% Electrified Cat's-tail Moss ( <i>Rhytidiadelphus triquetrus</i> ) 15% Cladonia sp. 0.5%  <b>INVASIVE</b> Common Foxglove ( <i>Digitalis purpurea</i> ) 0.5%
Observed rare/threatened species & locally uncommon species	NA
Special Features	NA
Expected Changes	Arbutus and Maple will likely be shaded out by conifers.
Disturbance History	Historic logging. No recent disturbances.

**FAUNA**

Wildlife Habitat / Features	Wildlife trees
Observed Species	<p><b>MAMMALS</b>            Blacktail Deer (<i>Odocoileus hemionus</i>)            Red Squirrel (<i>Tamiasciurus hudsonicus</i>)            Raccoon (<i>Procyon lotor</i>)            Big Brown Bat (<i>Eptesicus fuscus</i>)            Myotis Bat (<i>Myotis sp.</i>)            Deer Mouse (<i>Peromyscus maniculatus</i>)</p> <p><b>BIRDS</b>            Bald Eagle (<i>Haliaeetus leucocephalus</i>)            Red-tailed Hawk (<i>Buteo jamaicensis</i>)            Barred Owl (<i>Strix varia</i>)            Northern Pygmy Owl (<i>Glaucidium gnoma</i>)            Blue Grouse (<i>Dendragapus obscurus</i>)            Raven (<i>Corvus corax</i>)            Pileated Woodpecker (<i>Dryocopus pileatus</i>)            Northern Flicker (<i>Colaptes auratus</i>)            Downy Woodpecker (<i>Picoides pubescens</i>)            Black-capped Chickadee (<i>Poecile atricapilla</i>)            Red Crossbill (<i>Loxia curvirostra</i>)            Pacific-slope Flycatcher (<i>Empidonax difficilis</i>)            Bushtit (<i>Psaltriparus minimus</i>)            Ruby Crowned Kinglet (<i>Regulus calendula</i>)            Golden Crowned Kinglet (<i>Regulus satrapa</i>)            American Robin (<i>Turdus migratorius</i>)            Song Sparrow (<i>Melospiza melodia</i>)            Dark-eyed Junco (<i>Junco hyemalis</i>)</p> <p><b>REPTILES</b>            Common Garter Snake (<i>Thamnophis sirtalis</i>)</p>
Rare/threatened species & locally uncommon species	NA

6.12 Potential Risks to the Covenant Area

6.13 Invasive species

- Scotch Broom (*Cytisus scoparius*) Landowner actively working to control currently limited to roadside and excluded areas. None observed in Garry Oak ecosystems.
- Common Foxglove (*Digitalis purpurea*) – frequent in disturbed areas and Garry Oak ecosystems.
- Holly (*Ilex sp.*) – minor occurrences of single plants.
- Black Slug (*Arion ater*) – common throughout the property.
- Numerous other minor invasive species occur – primarily along the road.

6.14 Other

- Water level changes and vegetation removal along the lake foreshore by Salt Spring Waterworks – the waterworks has a statutory right of way along the foreshore of Lake Maxwell for this purpose.
- Unauthorized campers, hikers on the covenant land or adjoining lands; risk of fire from the same.

- Heavy browsing by Black-tailed Deer.

6.15 Adjacent land use

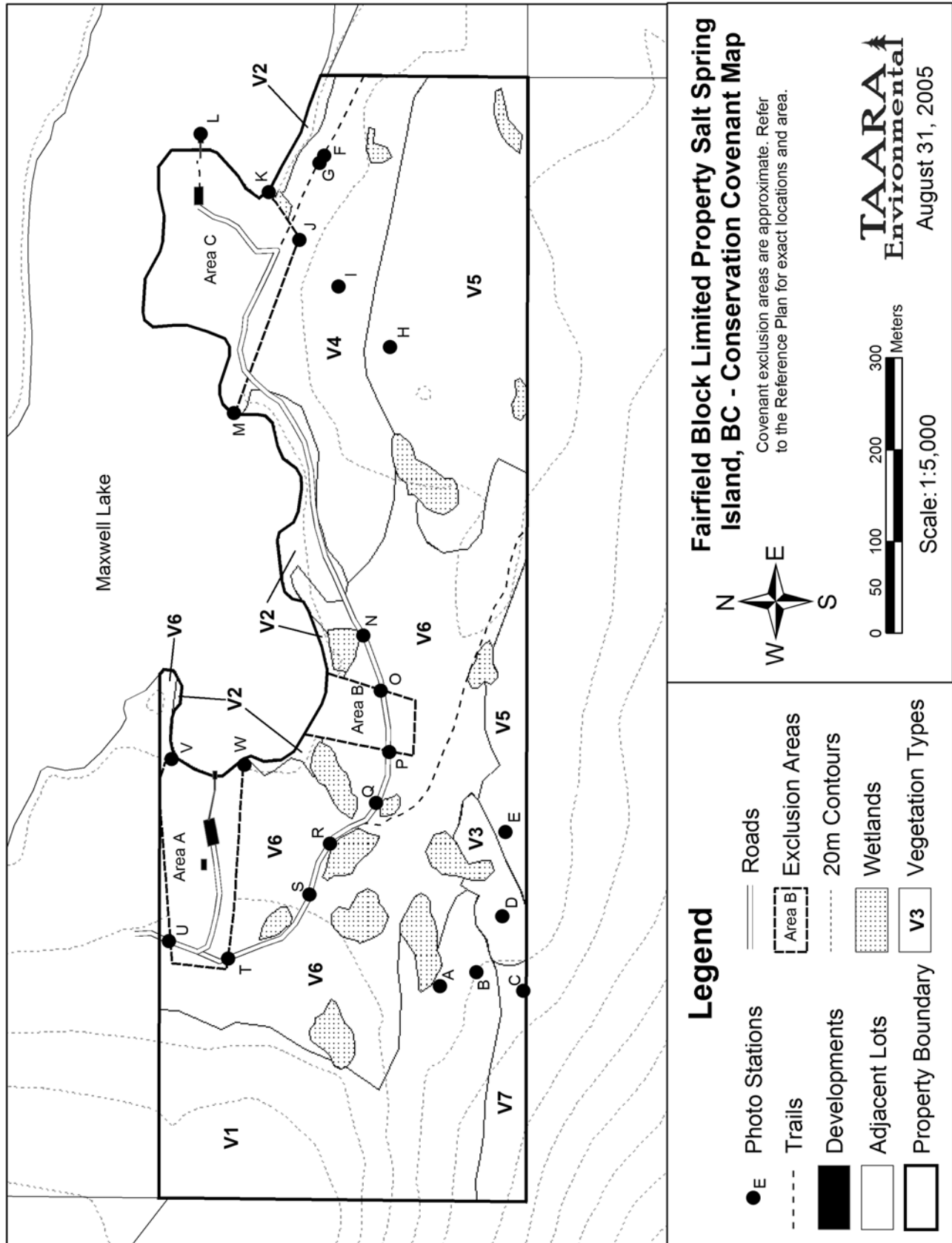
- Land on all sides is protected. To the South and West is BC Nature Trust land; to the East, Salt Spring Waterworks; to the North, Salt Spring Water Preservation Society

**7.0 List of Figures and Attachments**

7.1 Map of the Covenant Area: South 1/2 of NW 1/4 of Section 83 South Salt Spring Island Cowichan District.

7.2 Appendix 1: List of photographs taken of significant features and all vegetation types.

**Map of the Covenant Area: South 1/2 of NW 1/4 of Section 83 South Salt Spring Island Cowichan District.**



## Appendix 1: Photographic Documentation

All photographs were taken on Fuji 400 ASA film at a focal length of 28mm. All azimuths given in the below table were measured at a declination of 18°50'E. Locations given with lat/long coordinates were established with GPS.

PHOTO STATION	PHOTO STATION LOCATION	COMMENTS
NA	NA	First photo of roll was a Photo ID Sheet used to embed property name, and date of photographs on negatives for permanent records.
A	Wetland in Veg. Type 1. Photo taken at 30° from largest Douglas-fir at the SW end of the wetland. Marked with green flagging tape.	Example of wetlands that occur in depressions. About 30m N to NW of Station B.
B	Open rocky area with Garry oak and fir - Veg. Type 1. Photo taken at 290° from fir at edge of clearing. Located at 123° 33'3.04"W by 48°49'10.70"N. Marked with green flagging tape.	About 30m NW of Station D.
C	Mixed stand of Veg. Type 7 near or on southern property boundary. Photo taken at 255° at a location 10m at 30° from dead maple in middle of clearing. Located at 123° 33'3.74"W by 48°49'8.91"N. Marked with green flagging tape.	Located about 60m SW of Station D.
D	Conifer forest of Veg. Type 3. Station located about 100m SW from the established trail where it meets the wetland. On obvious deer trail. Marked with green flagging tape. Photo taken at 200°.	Station B is located to the NW up the obvious steep deer trail to open rock areas. Station C located down slope on deer trails to small opening in SW. Station E located upslope to the east towards rocky opening. Look for large Douglas-fir with two main stems from horizontal trunk.
E	Open rocky area of Veg. Type 5. Photo taken at 140° at a location 12m at 160° from two stemmed fir with green flagging tape.	Station located about 45m at 140° from Station D.
F	Trail and Veg. Type 4. Located SE of the Area C along trail. Marked with green flagging tape on south side of trail. Photo taken at 350°.	
G	Trail and Veg. Type 4. Located SE of the Area C along trail. Marked with green flagging tape on south side of trail. Photo taken at 150°. Several metres NW of Station G.	
H	Veg. Type 5. Two photos taken. Photo 1 at 215° of conifer dominated areas. Photo 2 at 300° of open rocky area. Station located at south edge of open rocky area and marked with green flagging tape. Located at 123° 32'41.02"W by 48°49'13.58"N.	Station located in large open rocky area 125m SW of the southern covenant IP (Station J) of Area C.
I	Veg. Type 4 – upper slope. Photo taken at 280°. Station located about 50m upslope of Station J beside veteran hemlock and dead alder. Marked with green flagging tape.	Shows difference of the upper slopes of Veg. Type 4 compared to lower slopes near lake which have more diversity and large cedar. White pine found near this station.

J	Veg. Type 4 and boundary of Area C. Two photos taken from southern IP of Area C. Photo 1 taken at 10°. Photo 2 taken at 300°.	IP in centre of both photos.
K	Area C and Veg. Type 2. Photo taken at 0° from eastern IP of Area C.	
L	Area C dock. Two photos taken of property. Photo 1 taken at 210° and Photo 2 at 160°.	Photos show lake foreshore and forested regions of Veg. Type 4 behind.
M	Edge of Area C and Veg. Type 2 and 4 along road. Two photos taken. Photo 1 taken at 120° and Photo 2 at 180°.	
N	Veg. Type 2/6 wetland looking towards lake. Photo taken from middle of road at 350°.	
O	Area B and Veg. Type 6. Two photos taken from middle of road. Photo 1 at 180° and Photo 2 at 10°.	Photos taken looking along boundary between exclusion area and covenant land.
P	Area B and Veg. Type 6. Two photos taken from middle of road. Photo 1 at 10° and Photo 2 at 180°.	Photos taken looking along boundary between exclusion area and covenant land.
Q	Veg. Type 6. Old cut logs and wetland. Photo taken at 0° from edge of road above culvert.	
R	Veg. Type 6 wetland. Photo taken at 230° from middle of road.	
S	Veg. Type 6. Old cut logs on side of road. Photo taken from middle of road at 80°.	
T	Area A and Veg. Type 6. Two photos taken from middle of road. Photo 1 at 100° and Photo 2 at 230°.	Photos taken looking along boundary between exclusion area and covenant land.
U	Area A and Veg. Type 6. Three photos taken from middle of road. Photo 1 at 70°, Photo 2 at 270°, Photo 3 at 20° (gate at property line).	Photos taken looking along boundary between exclusion area and covenant land.
V	Area A and Veg. Type 6. Two photos taken from NE IP of Area A. Photo 1 taken at 260°. Two photos taken and Photo 2 taken at 90°.	
W	Area A and Veg. Type 6. Three photos taken from SE IP of Area A. Photo 1 at 150°, Photo 2 at 90°, Photo 3 at 30°	Photo 2 and 3 taken showing lake foreshore and forest behind.