

# WOODLOT LICENCE # W0042

## WOODLOT LICENCE PLAN

**First Term**  
**January 1, 2009 to December 31, 2019**

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Signature

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**Prepared by:**

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**Ron Mecredy RFT, ATE**

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Date:

## DISCLAIMER

- Recognizing the special nature of management on a woodlot licence, this disclaimer forms part of the Woodlot Licence Plan (WLP) for Woodlot Licence Number W0042 and advises that:
  - The decision to operate under the Default Performance Requirements identified in this plan and provided in the Woodlot Licence Planning and Practices Regulation (WLPPR) is the sole responsibility of the woodlot licence holder, and involved no detailed oversight or advice from the prescribing Registered Professional Forester. This disclaimer is signed on the explicit understanding and information provided by government that, the use and achievement of a Default Performance Requirement, meets the expectations of government with respect to the management of woodlot licences;
  - The undersigned Registered Professional Forester has been retained to provide advice on the practice of professional forestry with regard to items such as alternative performance requirements, applicable results and strategies and other required measures that do not have a default performance requirement provided in the WLPPR. The only alternative performance requirement in this plan is identified in section 22.0 of this plan and in legislation under WLPPR S.54(1)(a) – Course Woody Debris.

I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals.

Signed Original Signed by D. Ratson RPF

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# 1. WOODLOT LICENCE PLAN DESCRIPTION

Woodlot Licence W0042 is licenced to FOREVER WOOD LTD. and has been operating since 1988. Forest management operations on the woodlot have been active since 1989 with development of a road access network and a combination of large and small clearcuts and group selection harvesting. The first Forest Development plan submitted in 1989 was effective until December 1993. FDP #2 was approved for operations for 1994 to 1999 and covered the inception and implementation of the Forest Practices code. FDP #3 approved harvest operations from 1999 to 2004 and has been extended until January 1, 2008. This woodlot will be managed within the guiding principles and management strategies of the Management and Working Plans as approved by the CRFD District Manager from time to time. This plan is submitted and approved under M&WP #4 (2008-2013). Both the Management and Working Plan and Woodlot Plan have been submitted simultaneously with the intent of approval of both concurrently.

The woodlot area was significantly increased in 1999 by the addition of the "Top up-1" area located between Sutil road and Cape Mudge road (lots 185 to 187 and 680 to 686). This area designated for forest management operations includes a permanent reserve area of 36.4 hectares. Operations within the 'Top-up-1 area' commenced in 2000 and are generally limited to small clearcut or group selection cuttings.

In 2007 'Top up-2' was added in the Saltwater lagoon area (lot 165). Road access through this area was constructed by Timberwest in 2006. Woodlot operations are planned to commence in this area in 2008..

The Woodlot Licence is held by Forever Wood Ltd., Owned by Mrs. Maude Whittington- 50%, Mr. Richard Whittington- 25% and Mrs. Dorothy Whittington - 25%. The private land within Woodlot 042 is owned by the principles in Forever Wood Ltd. and leased to the company for fifteen years. The land ownership's are as follows:

PROPERTY	AREA	OWNERSHIP
Lot 126	63.4 ha	Mrs. M. Whittington
Lot 125 A-1	14.3 ha	Mrs. Dorothy Whittington
Lot 125B	28.3 ha	Mr. R. Whittington and Whitland Holdings

Preparation and administration of the woodlot planning and development requirements has been competed under contract to Mecredy Cruising and Forest Consulting Ltd. since the award of the woodlot licence in 1988. Mecredy Cruising and Forest Consulting Ltd. has prepared all Management and Working plans, Forest Development plans and cutting permits since inception of the woodlot licence. The plans and fieldwork have been completed or supervised by Ron Mecredy Registered Forest Technologist.

## 2. GOVERNMENT OBJECTIVES AND STRATEGIES

The broad objectives for this woodlot as set by government are found in Section 9 of the Woodlot Licence Planning and Practices Regulation (WLPPR) effective July 24, 2007. Additional land use objectives, as well as other potentially applicable objectives are listed in Section 10. Land use objectives that were established in Legislation, other Regulations and higher level plans under the Forest Practices Code, continue in force. Other objectives established under the Forest Practices Code are continued under FRPA. In addition, new objectives or designations may be established under the Government Actions Regulation, under FRPA.

Section 9 and 10 of the WLPPR are included below as a quick reference and to provide reference within this plan.

### Established objectives

- 9 (1) For the purpose of section 13 (1) (b) (i) [*content of woodlot licence plan*] of the Act, the objectives set by government are as follows:
- (a) maintaining or enhancing an economically valuable supply of commercial timber from the woodlot licence area;
  - (b) conserving the productivity and the hydrologic function of soils;
  - (c) conserving within riparian areas, at the landscape level, water quality, fish habitat, wildlife habitat and biodiversity;
  - (d) conserving and protecting cultural heritage resources that are
    - (i) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and
    - (ii) not regulated under the *Heritage Conservation Act*;
  - (e) subject to section 52 (1) [*wildlife tree retention*], any land use objective.
- (2) For the purpose of section 13 (1) (b) (ii) of the Act, the following objectives apply:
- (a) any fisheries sensitive watershed objective or water quality objective established for a watershed within which the woodlot licence area is located;
  - (b) subject to subsection (3), conserving sufficient wildlife habitat in terms of amount of area and distribution of areas, and attributes of those areas for
    - (i) the winter survival of specified ungulate species,
    - (ii) the survival of a species at risk, and
    - (iii) the survival of a species of regionally important wildlife.
- (3) A woodlot licence holder required to prepare a woodlot licence plan must act in a manner consistent with the objective stated under subsection (2) (b) only if the minister responsible for the *Wildlife Act* notifies the holder of the applicable
- (a) species referred to in subsection (2) (b), and
  - (b) indicators of the amount, distribution and attributes of necessary wildlife habitat described in subsection (2) (b).
- (4) On or after December 31, 2004, a notice described in subsection (3) must be given at least 4 months before the woodlot licence plan is submitted for approval.

### **Results or strategies not required**

**10** For the purpose of section 13 (1) (b) [*content of woodlot licence plan*] of the Act, a woodlot licence holder is not required to specify a result or strategy in relation to the following:

- (a) Any objective listed in section 9 (1) or (2) [*established objectives*], except that described in section 9 (1) (d);
- (b) An objective for an interpretive forest site, recreation site or recreation trail;
- (c) A wildlife habitat area objective;
- (d) An ungulate winter range objective;
- (e) a lakeshore management zone objective;
- (f) a visual quality objective.

### 3. PLAN AREA

☒ This plan covers the entire Woodlot Licence area.

The woodlot Plan maps are included as Appendix X. The Woodlot Plan includes two maps, Map 1 of 2 **Cape Mudge Block** covers the original woodlot area, the private land portions and Top-up #1, Map 2 of 2 **Saltwater Block** covers Top-up #2 Saltwater Lagoon.

☐ This plan covers a portion of the Woodlot Licence area.

This Woodlot plan covers the entire area of Woodlot W0042 located on the southern portion of Quadra Island within the Campbell River Forest District. The Cape Mudge block is comprised of private lots 125 A-1, 125B and 126 and crown lots 185, 186, 187, 675, 676, 681, 682, 683, 686, 687 located on the southern end of Quadra Island between Cape Mudge Road and Sutil Channel. The Saltwater Lagoon Block is comprised of a portion of crown Lot 165.

The total Woodlot area is 556.8 ha; 106.0 ha private land and 450.8 ha crown land (including 142.3 ha of new Top Up area). Access to the Cape Mudge Block of the woodlot is via Cape Mudge road on the west, Quadra Loop road on the north, and Sutil road on the south. The Saltwater Lagoon block is accessed via West Road to Bay Road, Walcan road and the Timberwest Q Mainline.

**Table 1 – Area Summary**

Ownership	Description	Area (hectares)	Map Reference
Schedule A Land (Private)	Lots 125 A-1, 125B, 126,	106.0	92k003
Schedule B (Crown)	Original Woodlot	145.1	92k003
Schedule B (Crown)	Top up-1 area	161.5	92k003
Schedule B (Crown)	Top up-2 area	142.3	92K014
Schedule B (Crown)	Crown Total	450.8	
Total Woodlot		556.8	



## 4.0 MAP AND INFORMATION

The Woodlot plan includes a set of 2 maps indicating the features and resources identified and discussed in the plan found as Appendix IX. The woodlot is comprised of two mapsheets, map 1 of 2 forms the Cape Mudge Block and map 2 of 2 forms the Saltwater Lagoon Block. The two maps are presented at different scales to facilitate a reasonable level of detail. Map 1 of 2 (large mapsheet) is presented at a scale of 1:5000. The area identified on this mapsheet is the original woodlot area and has the greatest amount of detail required for the Woodlot Plan. mapsheet 2 of 2 is presented at a scale of 1:7500 to facilitate printing on 11X17 paper. This mapsheet covers the Saltwater Lagoon block which has minimal developmental information at this point in time. The following table indicates some of the features identified on the map and if there is accompanying text with further explanation (identified by WLP section).

Information Item	Map	Text	N/A
Forest cover	X	4.1	
Topography; (unless exempted by DM)	X	4.2	
Location of streams, wetlands and lakes as shown on forest cover maps, terrain resource inventory maps and fish and fish habitat inventory maps.	X	4.3	
Riparian classification of streams, wetlands and lakes <u>if shown on maps</u>	X	4.3	
Identification of fish streams	X	4.3	
Biogeoclimatic zones and subzones (unless exempted by DM)		4.4	
Public utilities (transmission lines, gas & oil pipelines, and railways)	X	4.5	
Existing roads	X		
<b><i>Special Situations that may not Apply to the WL area</i></b>			
Resource Management Zones, Landscape Units or Sensitive Areas		4.7	
Wildlife Habitat Areas (unless exempted by DM)		4.8	
Visual Quality Objectives and Scenic Areas		4.10	
Ungulate Winter Ranges		4.8	
Community Watersheds		4.9	
Fisheries Sensitive Watersheds		4.8	
Community and domestic water supply intakes that are licensed under the Water Act and any related water supply infrastructures		4.9	
Contiguous areas of sensitive soils		4.12	X
Temporary or permanent barricades to restrict vehicle access		4.13	
Private property within or adjacent to the woodlot licence area	X	4.6	
<i>Resource features other than wildlife habitat features and archaeological sites (unless the location of the resource feature is not to be disclosed)</i>			

### 4.1 FOREST COVER

The accompanying forest cover maps (Appendix IX) provide a detailed description of the vegetative cover found within the woodlot. Each polygon (uniquely identified area) is labelled with a forest cover description that identifies the dominant forest cover type within the polygon. The map also identifies non forested areas, creeks and classification, wetland areas and classification, roads and any other information relevant to the woodlot plan.

## **4.2 TOPOGRAPHY**

### **4.2.1 Cape Mudge Block**

The topography of this area is generally flat to gently rolling. The Cape Mudge Block is located on the crest and eastern slopes of Quadra Island. Soils are generally medium to deep glacial deposits. The area slopes gently towards the east until it reaches the eastern side of Quadra Island. Along the eastern edge of the woodlot the terrain drops steeply for about 100-150 meters before a brief flat bench immediately before the coastal shoreline.

### **4.2.2 Saltwater Lagoon Block**

This area is generally moderate to gentle sloping terrain with a southerly aspect. The western side has a number of rocky outcrops and knobs with moderate to shallow soils. Soils in the remainder of the area are moderate to deep glacial deposits. The center portion of the Saltwater block (polygon 1007) consists of lowland with very wet soils and a high water table during portions of the year. The area is forested however, supports very low quality timber stands, numerous small wetlands and ephemeral creeks. As forest management activities progress within the Saltwater block this area will be identified and mapped in greater detail. Over time the intention is to consider harvesting small openings within and adjacent to this area while recognizing and maintaining the sensitive nature of the site.

## **4.3 RIPARIAN CLASSIFICATION OF STREAMS AND WETLANDS**

### **4.3.1 Cape Mudge Block**

Several small swamps and creeks drain the area towards the east. None of the creeks contain fish habitat or fish populations and are all identified as stream class 6. The steep slopes along the eastern side of the woodlot present a barrier to fish movement preventing movement upstream into the upstream areas.

### **4.3.2 Saltwater Lagoon Block**

Four classified streams flow southerly through the area. Other smaller unclassified streams can be found draining smaller portions of the property. The classified streams are all identified as Stream class 3 creeks with fish and fish habitat present. Creeks 1 and 2 are shallow slow flowing streams draining low slope flatter areas. Creeks 3 and 4 are located in moderate to deep gullies with strong stream flows. Creek 3 drains from Morte Lake while creek 4 drains a wetland area immediately east of the woodlot boundary.

## **4.4 BIOGEOCLIMATIC ZONES AND SUBZONES**

The Entire Woodlot area falls entirely within the Coastal Western Hemlock- XM 1 Biogeoclimatic zone and Subzone see (Appendix IX).

#### **4.5 PUBLIC UTILITIES**

A BC Hydro powerline passes through the southern portion of the Saltwater Lagoon block. The powerline is an above ground line supported on single wooden poles located within a cleared right of way approximately 25m wide.

#### **4.6 RESIDENTIAL AND PRIVATE PROPERTY**

Residential properties and private land can be found adjacent to most of the woodlot. The Cape Mudge Block is bordered on the north, west and southern boundaries by many private land holders and the Saltwater Block is bordered on the south with a private land holder of lot 165. A 'good neighbour' policy has been maintained over the previous years of forest management activities and will be maintained in the future. Where proposed development of harvesting activities may impact on private land holders the plans will be reviewed with the affected parties prior to completion of operational plans. Harvesting activities will be designed to minimize impacts to adjacent landowners.

##### **Heath Property**

The southern border of the Saltwater Lagoon Block borders with the remainder of lot 165 owned by Mr. and Mrs. Heath. The Heaths operate a fish farm on the ocean adjacent to the property and temporary residence on the property. The Heaths have expressed concerns over water quality and volumes within the aquifer used to draw water for use on their property. As noted in section 4.10 of this plan, there is no water license issued and while difficult to quantify without historical or present data the licensee will endeavour to work with the Heaths to monitor water quality within the aquifer. It is anticipated that the default stream protection standards (sec 6.2) will minimize effects to water quality within and adjacent to streams. Dialogue with the Heath's will continue throughout the term of this plan and if it appears that significant changes in water quality within the aquifer may be attributable to the management activities on the woodlot alternative strategies will be developed in cooperation with the Heaths.

The Heaths hold Licence of Occupation #1401826 over the access road to their portion of Lot 165. Access to the woodlot portion of Lot 165 will require the use of a portion of this road from Walcan road to the start of Branch Q80. The licensee will develop a road use agreement with the Heaths for use of the road for operations on the woodlot.

## **4.7 HIGHER LEVEL PLANS, RESOURCE MANAGEMENT ZONES, LANDSCAPE UNITS OR SENSITIVE AREAS**

### **4.7.1 Vancouver Island Land Use Plan**

The woodlot licence area is located within the Vancouver Island Land Use Plan (VILUP) which was declared a Higher level Plan effective December 1, 2000 and is administered by the Ministry of Forests and Range in consultation with other government ministries. Portions of Quadra Island are contained within Resource Management Zone (SMZ) 19 which include the Saltwater Lagoon Block of the woodlot. The objectives and requirements of the VILUP will be followed within Woodlot W0042. Appendix I identifies the requirements of the Vancouver Island Summary Land Use Plan specific to SMZ 19.

### **4.7.2 Quadra Island Official Community Plan**

Woodlot W0042 falls within the Regional District of Comox-Strathcona, Quadra Island Official Community Plan, OCP Bylaw 1996 (#1840) as amended to November 14, 2007 (Appendix II). The plan identifies the Regional Districts objectives and desires for crown forestlands and private Managed Forest land on Quadra Island. Operations within the Woodlot will be conducted in accordance with the OCP and objectives.

- Section 3.7 of the OCP, Forests / Silviculture includes specific recommendations pertaining to Forest management activities on Quadra Island

### **4.7.3 Quadra-Saltwater Lagoon Sensitive Area**

- A portion of the western side of the Saltwater Block lies within the Quadra– Saltwater Lagoon Sensitive area. This area was designated by Order on November 21, 2003 by the Ministry of Forests and Range. (Appendix III)
- Operations within the Saltwater Lagoon block will be conducted in accordance with the sensitive area plan and objectives.

#### **4.8 FISH AND WILDLIFE FEATURES**

- At the date this Woodlot Plan was prepared no approved or planned Wildlife Habitat Areas (WHA) or Ungulate Winter Ranges (UWR) have been identified within or adjacent to the woodlot.
- At the date this Woodlot Plan was prepared no Fisheries Sensitive Watersheds have been identified within or adjacent to the woodlot.

#### **4.9 GREAT BLUE HERON**

Great Blue Heron nesting sites have been identified by other forest licencees operating near Woodlot W0042 however, as of the date this plan was prepared no nesting sites have been found within the woodlot.

- Great Blue Herons are a common bird found on the coast of BC. Heron colonies are dynamic, especially in areas of high disturbance. Some colonies are used for many years but most colonies, especially those under 50 nests, are relocated more frequently. Across British Columbia, it is not clear how frequently the same individuals return to the same nest site however, Studies<sup>1</sup> have indicated that 40% of the breeding herons in one year did not return to the same nesting area the following year. Once a colony has been abandoned for more than 1 year, re-colonization occurs infrequently. Both subspecies of the Great Blue Heron are on the provincial *Blue List* in British Columbia, the subspecies *A. herodias fannini* are located on the Pacific coast of BC.
- Strategies for the protection of Great Blue Heron nest sites have been identified in section 12.3 of this plan

#### **4.10 Community Watersheds and domestic water supply**

- At the date this Woodlot Plan was prepared no Community watersheds or Licenced Domestic water supplies have been identified within or adjacent to the woodlot see Appendix IX.

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<sup>1</sup> Ministry of Environment, Environmental Stewardship Division, Accounts and Measures for Managing Wildlife – Accounts V. 2004. Website <http://www.env.gov.bc.ca/wld/frpa/iwms/accounts.html>

## **4.11 RECREATION, VISUAL QUALITY OBJECTIVES AND SCENIC AREAS**

On December 14, 2005 the District Manager of the Ministry of Forests and Range, Campbell River Forest District established Scenic Areas (SA) and Visual Quality Objectives (VQO) for the Campbell River Forest District. The Scenic Areas and Visual Quality Objectives apply to all Crown and Private lands in the Campbell River Forest District that form part of a *Forest Act Tenure*. Maps or portions thereof that form part of the SA and VQO strategy within Woodlot W0042 are included as Appendix IV. The maps identify the category of Visually Altered Forest Landscape that exist within the woodlot lands. The Licencee Commits to managing these areas in accordance with the applicable requirements.

### **4.11.1 Cape Mudge Block**

Two portions of the Cape Mudge Block have been identified as falling within a Scenic Area and a 'Partial Retention' VQO. The steep, east facing slopes along Sutil Channel, and the road corridor along Cape Mudge and Sutil Roads at the southern end of the woodlot.

### **4.11.2 Saltwater Lagoon Block**

Four VQO polygons have been identified within this portion of the woodlot.

- 'Preservation' - The western portion of the block located within the Saltwater Lagoon Sensitive Area. No harvesting will be conducted within this area.
- 'Retention' - The most southerly and lower slopes of the block. These areas are partially visible from Discovery passage by recreational boaters and cruise ships. Harvesting operations will occur within these areas with openings of 1.0-3.0 hectares in size.
- 'Modification' The central portion of the block with generally flat terrain. Harvesting operations will be planned with minimal constraints for recreational values
- 'Unclassified' the remainder of the block with little to no identified recreational values. Forest harvest operations will be conducted with no constraints for Visual Quality objectives.

**4.11.3** Section 10 of the WLPPR results and strategies are not required as part of a woodlot plan for Scenic Areas and Visual Quality Objectives.

### **4.11.4 CATEGORIES OF VISUALLY ALTERED FOREST LANDSCAPE**

The categories of Visually Altered Landscapes as identified in 4.11.1 and 4.11.2 above have been excerpted from the Forest Practices and Planning Regulation. These regulations do not directly apply to the woodlot however the intent of the following categories will be applied to the woodlot lands.

(a) *Preservation*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is (i) very small in scale, and (ii) not easily distinguishable from the pre-harvest landscape;

(b) *Retention*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is (i) difficult to see, (ii) small in scale, and (iii) natural in appearance;

(c) *Partial retention*: consisting of an altered forest landscape in which the alteration, when assessed from a significant viewpoint, is (i) easy to see, (ii) small to medium in scale, and (iii) natural and not rectilinear or geometric in shape;

(d) *modification*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, (i) is very easy to see, and (ii) is (A) large in scale and natural in its appearance, or (B) small to medium in scale but with some angular characteristics;

(e) *Maximum modification*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, (i) is very easy to see, and (ii) is (A) very large in scale, (B) rectilinear and geometric in shape, or (C) both.

#### **4.12 RECREATIONAL TRAILS**

Three well developed trails and most roads are used as trails within the woodlot area. Use of the crown land roads within the woodlot is permitted and encouraged. All known trails are identified on the Woodlot Plan maps

**4.12.1** The Kay Dubois trail is located within Res. 1 of the Cape Mudge Block following the shoreline of Sutil Channel from Quadra Loop road on the north to Sutil Road in the south. The trail is also connected through the woodlot to the Fox main.

**4.12.2** A foot / horse trail extends from the end of Sutil road westerly through the woodlot connecting with the road in private Lot 126.

**4.12.3** A foot / ATV trail is located through the western side of the Saltwater Block.

#### **4.13 TEMPORARY OR PERMANENT BARRICADES TO RESTRICT VEHICLE ACCESS**

- Over the previous 20 years of management of Woodlot W0042 considerable problems have been encountered with garbage dumping and vandalism. In 1997 permanent gates were constructed at the end of Cedar and Fox Road on the northern boundary of the woodlot and on the Rocky Ridge Main where it joins Cape Mudge Road. A Temporary gate is also located at the boundary of Lot 126 and the 'hook-up road'.
- It is the intention of the licensee to maintain these gates to prevent equipment vandalism and garbage dumping within the woodlot while maintaining and encouraging foot access. Additional gates will be constructed on a temporary or permanent basis as required over time.

#### **4.14 CULTURAL HERITAGE RESOURCES AND ARCHAEOLOGICAL SITES**

One archaeological site exists within the boundaries of the woodlot, the location of which will not be revealed to protect the features within it. Harvesting operations will not be taking place near this site as it falls within a permanent reserve area.



## 5.0 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED

A WLP **must** describe where timber harvesting will be avoided to protect resource features, address interests of private property owners or aboriginal peoples, manage resource values and satisfy applicable objectives for Resource Management Zones, Landscape Units, Sensitive Areas, wildlife habitat areas, scenic areas, ungulate winter ranges, community watersheds or fisheries sensitive watersheds. A WLP can be approved without showing areas where harvesting will be avoided if there are no areas where it is necessary to avoid harvesting.

A Woodlot Plan is required to describe where timber harvesting will be avoided to protect resource features, address interests of private property owners or aboriginal peoples, manage resource values and satisfy applicable objectives for Resource Management Zones, Landscape Units, Sensitive Areas, wildlife habitat areas, scenic areas, ungulate winter ranges, community watersheds or fisheries sensitive watersheds. Riparian reserve zones and wildlife tree retention areas do not need to be identified as areas where harvesting will be avoided since the WLPPR restricts but does not prohibit harvesting in these areas.

Seven areas within Woodlot W0042 have been identified as permanent reserves where no harvesting will occur. The areas have been identified as 'Res 1 -7' as described in the following table and on the Woodlot plan maps. The total area reserved from harvesting operations is 79.4 hectares or 14.3% of the woodlot area.

**Table 2 Reserve areas**

Reserve number	Reserve Name	Area (hectares)	Location or description	Forest Cover Description	Intended Function
Res 1	Sutil Channel	26.2	Eastern side of WL along Sutil channel	MbD 45G, F44M	Protection of steep unstable slopes and VQO
Res 2	Residence #1	1.80	Lot 125B Mill site and residence	F 44M	Protection of maturing forest and residence
Res 3	Residence #2	1.60	Lot 126 Residence and Farm	F 44M	Protection of maturing forest and residence
Res 4	Campsite	1.12	Lot 126 Private recreation	F 44M	Protection of maturing forest and private recreation facility
Res 5	Junction	4.12	Junction Cape Mudge rd / Sutil Road	F45G, swamp/wetland	Protection of maturing forest and wetland
Res 6	Sutil RD	36.4	Southeast corner - Sutil Rd	DMb 34M and F45G	Protection of deciduous leading stands
Res 7	Saltwater	8.2	Saltwater Sensitive area	F 42M and rocky openings	South facing winter range and habitat
Total Reserve		79.44			

### **5.1 Reserve Descriptions:**

- Reserve 1 Sutil Channel – The eastern side of the woodlot bordering Sutil Channel. The steep slope along Sutil channel has been designated as a permanent reserve. The reserve area is a very steep unstable slope with some evidence of slope instability in the past. The Kay Dubois trail is located within this reserve as well. No harvesting operations will take place on this slope or within 100m of the upper edge. Two cutblocks harvested prior to establishment of this reserve are located within its boundaries.
- Reserve 2 – Residence – A private residence and mill site within the woodlot
- Reserve 3 – Residence - A private residence and Farm equipment storage
- Reserve 4 – Campsite – A private recreational campsite
- Reserve 5 – Junction – A reserve jointly designated by the Ministry of Forests and the now defunct Quadra Island Forest Resources Committee (QIFRC). The reserve protects a wetland area and surrounding forest cover.
- Reserve 6 – Sutil Road - A reserve jointly designated by the Ministry of Forests and the (QIFRC). The reserve protects Deciduous forest stands on the southern end of Quadra Island.
- Reserve 7- Saltwater – The portion of the Saltwater Lagoon Sensitive Area within the Saltwater block of the woodlot. The reserve protects Old Growth values, raptor, Heron nesting habitat, and recreational opportunities in the area.

The reserve areas are designated as permanent reserves with no harvesting of trees permitted. From time to time unforeseen events occur which may require removal of one or more trees. Within the reserve areas harvesting or removal of trees will only be permitted under the following circumstances.

- a) MOFR request – At the direction or request of the MOFR.
- b) In the event of catastrophic or imminent catastrophic damage.
- c) Fire protection or fire hazard abatement
- d) Updated mapping information– The location and boundary of the reserve is changed or requires amendment due to updated information or a higher level need. In the event boundaries are altered the original reserve area and intent will be maintained by amending the boundary in another location.

## **6.0 AREAS WHERE TIMBER HARVESTING WILL BE MODIFIED**

### **6.1 VQO polygons**

Where proposed cutblocks are located within established VQO polygons of 'Retention' or 'Partial Retention' visual concerns will be addressed in the following ways:

- Cutblocks size will be minimized to reduce the visual impact and will not exceed 1.0ha.
- Cutblocks will be designed to minimize the visual impact by using irregular shapes that blend with the local topography.
- Buffers of windfirm standing trees will be considered to minimize the visual impact of cutblocks.
- Cutblocks with Retention harvesting systems will be considered.

### **6.2 Woodlot Areas Bordering other Land owners and users**

Portions of the woodlot share borders with other private land owners and forest tenure holders. Where forest management activities are planned adjacent to other private land the planned activities will be reviewed with the other land owner or holder. Modifications to forest management activities will be considered and implemented where necessary. Timber Harvesting modification may include but not be limited to commercial thinning, thinning of cutblock edges and tree crown modification for prevention of windthrow and other forms of harvest as deemed necessary to protect other values.

### **6.3 Streamside Management and Reserve Zones**

- Areas where timber harvesting will be modified to manage and protect riparian resource values are denoted on the map. Table 3 identifies the streamside and wetland prescription criteria that will be utilized on the woodlot. The default WLPPR regulations sec 39.1 will apply when determining RRZ and SMZ width and prescriptions.
- A minimum five (5) meter Machine free zone will be maintained along all S4 streams and W4 wetlands.
- Unless exempted by the District Manager, or the harvesting of a road clearing width is required, the woodlot licence holder is committed to retaining the following post harvest stand structure in riparian management zones:

**Table 3 Modification of harvesting in RMZs by riparian classification.**

RIPARIAN CLASS	RMA		INTENT OF RMZ MANAGEMENT	SPECIES TO RETAIN	RMZ RETENTION LEVEL POST HARVEST (% BASAL AREA)
	RRZ WIDTH (m)	RMZ WIDTH (m)			
S2 (Fish bearing >5.0m-20m wide)	30	20	<ul style="list-style-type: none"> <li>• Maintain and protect the integrity of the RRZ</li> <li>• Assist in maintaining wildlife attributes within the RMA, such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul>	Fd, Hw, Cw, Ss, Pw, Dr, and Mb	25 – 100%
S3 (Fish bearing 1.5 - 5.0m wide)	20	20	<ul style="list-style-type: none"> <li>• Maintain and protect the integrity of the RRZ</li> <li>• Assist in maintaining wildlife attributes within the RMA, such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul>		25 – 100%
S4 (Fish bearing up to 1.5m wide)	0	30	<ul style="list-style-type: none"> <li>• Maintain stream bank integrity and retain all shrubs and non-merch trees that provide shading cover, LWD and litter</li> </ul>		>10 – 100%
S6 (non-fish ≤3m wide)	0	20	<ul style="list-style-type: none"> <li>• Minimize debris transport to lower reaches of stream Retain understory Cw, and other understory trees and vegetation as much as possible</li> </ul>		0 - 100%
W4 (Wetland 0.5-1ha)	0	30	<ul style="list-style-type: none"> <li>• Assist in maintaining wildlife attributes within the RMZ such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul>		0 - 100%

## **6.4 GREAT BLUE HERON**

Where active Heron nesting sites as identified under section 6.1 of the plan are identified special management practices will be implemented. The following RESULTS AND STRATEGIES are derived from the ***Identified Wildlife Management Strategy – 2004, Accounts and Measures for Managing Identified Wildlife*** obtained from the Ministry of Environment, Environmental Stewardship Division

### **6.4.1 Results and Strategies**

#### **6.4.2 GOALS**

Minimize disturbance during the breeding season (February 15 to August 31) and between November 1 and March 31 for colonies that occupy areas year round.

**6.4.2.1** Maintain important structural elements for nesting and foraging (i.e., suitable nest trees, non-fragmented forest around nest trees, wetland characteristics for foraging if applicable, roost trees, and ground barriers to exclude mammalian predators).

#### **6.4.3 MEASURES**

##### **6.4.3.1.1 Design**

For existing developed sites in areas of high human use, a minimum naturally vegetated strip around all breeding colonies of at least 50 m is recommended by the best management practices guidelines produced by the Ministry of Water, Land and Air Protection in Region 1

##### **6.4.3.2 Access**

- Do not develop roads or trails within the core area. Road and trail construction or blasting in the management zone should not occur between February 15 and August 31.
- Limit access on existing roads and trails between February 15 and August 31. Types and levels of use must not exceed levels that customarily occur during the breeding period.
- Harvesting and Silviculture
  - Do not harvest within the management zone between February 15 and August 31.
  - No silvicultural activities, except restoration or enhancement activities, should occur within the core area. In the management zone, no mechanized activities that exceed noise or disturbance levels (including distance from colony) previously experienced during this period should occur between February 15 and August 31.
- Within a management zone that has few trees other than the nest trees, restocking and/or silvicultural techniques can be applied to enhance rapid development and protection of the stand.

#### **6.4.4 STRATEGIES**

Where Nesting sites are identified they will be further investigated to determine the use and activity level. Where a nesting site is determined to be active or has been within the previous 1 year modified harvesting practices will be employed as identified above. A no harvest reserve zone will be created extending 50m in all directions from the nest site. The no harvest zone will remain in effect until the nest becomes inactive and for 1 years after the last known period of activity.

- Nesting sites and reserve zones will be identified on harvest plan maps identified as temporary reserve areas.
- In the event a nest site becomes inactive for more than 1 year the reserve designations will be removed from the operational maps.

## **7.0 CONSERVING AND PROTECTING CULTURAL HERITAGE RESOURCES**

The Forest Act defines a "cultural heritage resource" to mean an object, a site or the location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an aboriginal people. This Woodlot Plan contains strategies that will be implemented to conserve and protect cultural heritage resources that are the focus of a traditional use by an aboriginal people and of continuing importance to them. These strategies do not include identified archaeological sites or pre-1846 features regulated under the Heritage Conservation Act as identified under section 10 of this plan.

W0042 is located within the traditional territories of several First Nations. All identified First Nations (and other interested parties) will be welcome to review the planned developments upon their own initiative during the term of this plan. The woodlot plan has been forwarded for review and comment to all First Nations with traditional territories covering the woodlot. Documentation of all information sharing with affected First Nations is included in Appendix V of this plan. The First Nations with identified traditional territories encompassing Woodlot W0042 are:

- Campbell River Band
- Cape Mudge Band
- Comox Band
- Homolco First Nation
- Klahoose First Nation
- ❖ The Campbell River and Cape Mudge bands are represented by the Hamatla Treaty Society.

At the time of writing there are no known areas of traditional uses of cultural heritage resources within the Woodlot. Two Archaeological Overview Assessments (AOA)<sup>2</sup> have been completed since 1996. These assessments identified the potential of past use of certain areas of the woodlot. The AOA's will be reviewed as part of the planning procedures for forest management activities on the woodlot.

During the course of forest management activities on the woodlot any cultural heritage resources found will be identified and the District Manager and appropriate First Nation will be contacted. The woodlot licensee commits to maintaining an on-going discussion with First Nations with respect to the conservation and protection of cultural heritage resources if new information on cultural heritage resources becomes available during the term of the Woodlot Plan. Any future assessments completed by the MOFR or the licensee from time to time will be incorporated as part of this woodlot plan and forest management planning.

The following results and strategies for managing cultural heritage values will be applied to forest management activities on woodlot W0042. These are based on known cultural heritage issues of interest to First Nations in the Campbell River Forest District. The licensee commits to participating in the Campbell River Forest District 'Cedar Strategy' as it is developed and implemented.

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<sup>2</sup> Millennia Research Limited – 2007 (available at Campbell River Forest District Office) and Arcas, Ministry of Forests-1996

## **7.1 RESULTS AND STRATEGIES FOR KNOWN CULTURAL HERITAGE RESOURCES**

### **7.1.1 Cedar Bark:**

#### **7.1.1.1 Result:**

- To enhance production of and enable continued access to red cedar by First Nation's for traditional uses.

*Note: There is currently very little cedar present on the woodlot other than what has been planted since 1988. There are no known monumental cedar and very few mature cedar trees.*

#### **7.1.1.2 Strategies:**

- Based on availability of stock and ecological suitability, a component of Cedar will continue to be planted in the woodlot to ensure a long-term supply.
- Naturally occurring cedar trees (including poles) will be retained where windfirm and operationally feasible.
- The licensee agrees to participate in the MOFR District of Campbell River Cedar Strategy as and when it is developed.

### **7.1.2 Traditionally Used Plants:**

#### **7.1.2.1 Result:**

- First Nation's People will have continued access to traditionally used plants.

#### **7.1.2.2 Strategies:**

- First Nation's that identify traditionally used plants will be given full opportunity to use or harvest the plants as required.

### **7.1.3 Cultural Heritage Resources:**

#### **7.1.3.1 Result:**

- Harvest plans will consider identified cultural heritage resources.

#### **7.1.3.2 Strategies:**

- The Licensee will share information with First Nations upon request and be available for field reviews as required.



## 8.0 WILDLIFE TREE RETENTION STRATEGY

Note: the proportion of the Woodlot Licence area that is occupied by wildlife tree retention areas is specified in the “PERFORMANCE REQUIREMENTS” section 18 of this plan.

The Wildlife tree retention strategy for Woodlot W0042 has been developed to maintain or enhance existing features while maintaining a productive land base for forest management activities. The WLPPR section 11 requires a woodlot licence holder to specify in the woodlot plan a wildlife tree retention strategy that describes

- a) the species and characteristics of individual wildlife trees,
- b) the forest cover attributes of wildlife tree retention areas,
- c) the conditions under which individual wildlife trees may be removed,
- d) the conditions under which trees may be removed from within a wildlife tree retention area, and
- e) how trees removed under subparagraphs (c) and (d) will be replaced.
- f) Maintaining the minimum area of Wildlife tree retention within a woodlot as required under the WLPPR as 8% of the woodlot area or as prescribed within the approved Woodlot Plan.

Over the past 20 years of forest management a number of permanent wildlife tree retention areas have been identified within the woodlot. These permanent reserves identified as reserves 1-7 in Table 3 and on the plan maps have been designated to create permanent wildlife tree retention areas, wildlife habitat, visual quality protection and slope stability protection. Reserves 2, 3 & 4 have been designated as permanent reserves however, will not be considered as WTP as they have been created as permanent reserves to protect residential properties, the remaining permanent reserves are dispersed over the woodlot land base providing diverse forms of ecosystems and biodiversity found within the woodlot and on southern Quadra Island.

To enhance the permanent wildlife tree retention areas temporary retention areas have also been identified throughout the woodlot. The temporary reserves are generally <1.0ha in size and have been created around a unique wildlife or forest cover attribute. Over time the temporary reserves will be reviewed and may be altered or removed as the surrounding forest advances through the stages of seral development. In the event a temporary WTP is moved or altered a new WTP will be created that maintains the size and intent of the original WTP. Potential candidates for new WTPs or trees will be continually maintained through the life of the plan. Both the permanent and temporary wildlife retention areas are identified in mottled green on the woodlot plan maps.

Streamside and wetland reserves required as part of the Riparian Management Strategy will also form part of the Wildlife Tree Retention Strategy. Streamside retention areas are a combination of Riparian Reserve Zones (RRZ) and Riparian Management Zones (RMZ). Wildlife Tree Retention within RRZs is 100% and varied within RMZ areas depending on site specific criteria and the information contained in Table 3.

## **8.1 INDIVIDUAL WILDLIFE TREES**

### **8.1.1 Species and Characteristics:**

Wildlife trees to be retained on the woodlot will be considered on an individual tree basis. In general, trees to be retained will exhibit ecological attributes that contribute to stand level biodiversity. Wildlife trees to be reserved from cutting will be identified as live or dead trees that exhibit old growth characteristics and/or have existing or potential for wildlife habitat. Old growth characteristics will be defined as trees over 150 years old and some or all of the following: misshapen crowns, broken tops, heavy branching contained in the upper third of the tree, scarring and other pathological defects, burn marks and thick bark. Trees exhibiting existing habitat will include bear or cougar rubbing and scarring, bird nests, feeding and nesting cavities. Should a Wildlife tree be identified within or adjacent to an operational area it will be reviewed by a Certified Wildlife Danger Tree assessor and the appropriate treatment for the tree determined in accordance with current danger tree assessment guidelines.

### **8.1.2 Conditions Under Which Individual Wildlife Trees May Be Removed:**

Once a wildlife tree has been established the protection and retention of the tree will be given a high priority. Wildlife trees may only be removed for safety, or where their location seriously impedes operational harvesting requirements. In the event a tree is found to impede an operational requirement other options will be considered prior to removal of the tree. Once a Wildlife tree has been identified a 'No Work Zone' will be established around the tree as required to protect the tree from damage as a result of forest harvesting activities.

### **8.1.3 Replacement of Individual Wildlife Trees:**

When a Wildlife tree must be removed for safety or operational requirements an alternate tree will be considered to replace it. Alternate wildlife trees will be chosen that exhibit similar characteristics as the original tree. Damaged or diseased trees will be reviewed as potential sources for recruitment of wildlife trees. Trees with infectious disease will not generally be considered unless the disease can be prevented from spreading to other healthy trees over time.

## **8.2 WILDLIFE TREE RETENTION AREAS**

### **8.2.1 FOREST COVER ATTRIBUTES:**

Woodlot W0042 is primarily second growth forests harvested about 90 years ago. Stands of old growth timber do not exist within the woodlot area and only occasional old growth trees can be found. The Wildlife Tree Retention strategy has been designed to protect any existing old growth tree (trees greater than 150 years old) while attempting to create new wildlife trees through preservation of small and large areas of second growth timber over long periods of time. Wildlife tree retention areas will include all stands within designated reserve areas, stands or patches of trees of age class 7 or higher, stands with deciduous leading species, inoperable or wet ground, very shallow soils and rocky outcroppings.

### **8.2.2 CONDITIONS UNDER WHICH TREES MAY BE REMOVED FROM WILDLIFE TREE RETENTION AREAS:**

Trees may be removed from a Wildlife Retention Area for the following reasons

- Safety, or where there location impedes operational harvesting requirements.
- Trees damaged as a result of windthrow, disease, fire or are in imminent danger of damage from these factors may be removed as approved by the District Manager.
- Trees within a designated RMZ may be removed as part of the prescription for that RMZ.
- Trees within a road right of way that must pass through the Wildlife Tree Retention area.

### **8.2.3 REPLACEMENT OF TREES REMOVED FROM WILDLIFE TREE RETENTION AREAS:**

From time to time trees may need to be removed from retention areas. When trees are removed the purpose and intent of the wildlife tree area will be reviewed. If the original intent of the area has been compromised or the area has been removed an alternative Wildlife tree areas will be identified. Where possible, alternate areas will exhibit similar characteristics as the original area and the Wildlife Tree Retention area strategy.

## 9.0 MEASURES TO PREVENT INTRODUCTION OR SPREAD OF INVASIVE PLANTS

The introduction or spread of invasive plants within and adjacent to the woodlot and within coastal forests is a constant concern addressed by forest managers. Invasive plants are difficult to control once established, can create long term delays in establishment of new forests and can change the ecological balance within a forest ecosystem. Invasive plants are identified under the 'INVASIVE PLANTS REGULATION' (*B.C. Reg 18/2004*) and are shown below in table 4. In order to prevent the introduction and or minimize or control the spread of Invasive Plants the licensee will undertake the following practices on the woodlot.

- Minimize soil disturbance;
- Seed disturbed areas as soon as practicable with an appropriate mix of fast, growing species of grasses and legumes (only grasses from local native stock will be used);
- Minimize the transport of invasive plant seed by removing burrs from clothing and equipment, and by checking the undercarriage of vehicles and removing invasive plants before leaving an infested area;
- Learn to identify invasive plants and recognize early stages of invasive plant development;
- Establish well stocked stands of trees that will eventually suppress invasive plants;
- Annually monitor invasive plants and maintain a record of where they are growing.

### 9.1 SCOTCH BROOM

At the date this plan was submitted the Invasive plant 'Scotch Broom' (*Cytisus scoparius*) is found within portions of the woodlot. Scotch Broom is a very common introduced plant in coastal BC. The plant spreads very rapidly by seed, animals, humans and machinery and is very difficult to control. Scotch Broom on Quadra Island is usually a plant 1-2 meters tall covering roadsides and other exposed soil. Existing control methods include chemical treatment with *Roundup*, sheep and goat grazing and physical damage or removal by pulling plants out of the ground. Once coniferous trees reach a height where they overtop the broom plants the trees will continue to grow unimpeded and will eventually create too much shade for the broom to persist.

Within Woodlot W0042 Scotch Broom will be managed by minimizing exposed soils to prevent seeding, prompt reforestation and physically removing broom plants until the regenerated stands reached a height where they can dominate over the broom. Machinery will be inspected on a regular basis for presence of broom plants or seed.

**Table 4 Invasive Plants**

<b>Weed Species</b>		<b>Scientific name</b>
Anchusa		<i>Anchusa officinalis</i>
Baby's breath		<i>Gypsophila paniculata</i>
Black knapweed		<i>Centaurea nigra</i>
Blueweed		<i>Echium vulgare</i>
Brown knapweed		<i>Centaurea jacea</i>
Bull Thistle		<i>Cirsium vulgare</i>
Canada Thistle		<i>Cirsium arvense</i>
Common Burdock		<i>Arctium minus</i>
Common Tansy		<i>Tanacetum vulgare</i>
Dalmatian Toadflax		<i>Linaria dalmatica</i>
Diffuse Knapweed		<i>Centaurea diffusa</i>
Field Scabious		<i>Knautia arvensis</i>
Giant Knotweed		<i>Polygonum sachalinense</i>
Gorse		<i>Ulex europaeus</i>
Hoary Alyssum		<i>Berteroa incana</i>
Hoary Cress		<i>Cardaria draba</i>
Hound's-tongue		<i>Cynoglossum officinale</i>
Japanese Knotweed		<i>Polygonum cuspidatum</i>
Leafy spurge		<i>Euphorbia esula</i>
Marsh Thistle		<i>Cirsium palustre</i>
Meadow Hawkweed		<i>Hieracium pilosella</i>
Meadow Knapweed		<i>Centaurea pratensis</i>
Nodding Thistle		<i>Carduus nutans</i>
Orange Hawkweed		<i>Hieracium aurantiacum</i>
Oxeye Daisy		<i>Chrysanthemum leucanthemem</i>
Perennial pepperweed		<i>Lepidium latifolium</i>
Plumeless Thistle		<i>Carduus acanthoides</i>
Puncture vine		<i>Tribulus terrestris</i>
Purple Loosestrife		<i>Lythrum salicaria</i>
Rush Skeletonweed		<i>Chondrilla juncea</i>
Russian Knapweed		<i>Acroptilon repens</i>
Scentless Chamomile		<i>Matricaria maritima</i>
Scotch broom		<i>Cytisus scoparius</i>
Scotch Thistle		<i>Onopordum acanthium</i>
Spotted Knapweed		<i>Centaurea maculosa</i>
St. John's-wort		<i>Hypericum perforatum</i>
Sulphur Cinquefoil		<i>Potentilla recta</i>
Tansy ragwort		<i>Senecio jacobaea</i>
Teasel		<i>Dipsacus fullonum</i>
Yellow Iris		<i>Iris pseudacorus</i>
Yellow starthistle		<i>Centaurea solstitialis</i>
Yellow toadflax		<i>Linaria vulgaris</i>

## 10.0 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS

☒ Exempted

No Range tenures exist over the woodlot area.

## 11.0 STOCKING INFORMATION FOR SPECIFIED AREAS

[http://www.for.gov.bc.ca/hfp/forsite/stocking\\_std.htm](http://www.for.gov.bc.ca/hfp/forsite/stocking_std.htm)

Unless exempted by the district manager, the stocking standards indicated below apply to areas where the establishment of a free growing stand is not required and harvesting is limited to commercial thinning, removal of individual trees, or a similar type of intermediate cutting, and for harvesting special forest products.

☒ For the purposes of section 12 and 34(3) of the WLPPR the Uneven-aged Stocking standards for single-tree selection, as found in the MoF publication “Reference Guide for FDP Stocking Standards”, are adopted. A copy of these stocking standards are included in Appendix VI.

## 12.0 PERFORMANCE REQUIREMENTS

In accordance with S 13(1), the licensee has a choice of accepting the default performance requirements in the WLPPR or he can propose alternative performance requirements which must be approved by the District Manager. The performance requirements in the WLPPR are listed below with the licensee's choice to accept the default requirements or present an alternative.

### 12.1 SOIL DISTURBANCE LIMITS

☒ Default WLPPR s.24(1)(b):

- 8% of Net Area to be Reforested

☐ Alternative WLPPR s.24(1)(a):

### 12.2 PERMANENT ACCESS STRUCTURES

☒ Default: WLPPR s.25:

The maximum area occupied by permanent access structures is as follows:

1. For Cutblocks  $\geq 5$  ha – 7% of the total cutblock area
2. For Cutblocks  $< 5$  ha – 10% of the total cutblock area
3. For the Total Woodlot Licence Area – 7% of the total Woodlot Licence area

☐ Alternative WLPPR s.25:

### **12.3 STOCKING STANDARDS**

☒ Default: WLPPR s.35(1)(b): The Licencee will adopt the stocking standards, regeneration dates and free growing dates described in the MoF publication “Reference Guide for Forest Development Plan Stocking Standards”, as amended from time to time, that are in place on the commencement date for the area. The Standards and pertinent sections (including footnotes) in place at the time this plan was prepared are included are shown in Appendix VII.

See [http://www.for.gov.bc.ca/hfp/forsite/stocking\\_stds.htm](http://www.for.gov.bc.ca/hfp/forsite/stocking_stds.htm)

☐ Option: WLPPR s. 35(1)(a): The current stocking standards, regeneration dates and free growing dates described in the MoF publication “Reference Guide for Forest Development Plan Stocking Standards”, will be adopted on Woodlot W0042.

☐ Alternative WLPPR s. 35(1)(a): The stocking standards, regeneration dates and free growing dates are indicated in Appendix IIA.

### **12.4 USE OF SEED**

☒ Default - WLPPR s.32:

Adoption of Chief Forester’s Standards for Seed Use.

### **12.5 WIDTH OF STREAM RIPARIAN AREAS**

☒ Default WLPPR s.36(4)(b):

The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.36(4)(b).

☐ Alternative WLPPR s.36(4)(a):

### **12.6 WIDTH OF WETLAND RIPARIAN AREAS**

☒ Default: WLPPR s.37(3)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.37(3)(b).

☐ Alternative WLPPR s.37(3)(a):

### **12.7 WIDTH OF LAKE RIPARIAN AREAS**

☒ Default: WLPPR s.38(2)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.38(2)(b).

☐ Alternative WLPPR s.38(2)(a):

## **12.8 RESTRICTIONS IN A RIPARIAN RESERVE ZONE**

☒ Default: WLPPR s.39(1) Cutting, modifying or removing trees in a riparian reserve zone is limited to the purposes described in Section 39(1) of the WLPPR.

☐ Alternative WLPPR s.39(1): Additional purposes for cutting, modifying or removing trees in a riparian reserve zone.  
[Enter Details]

☒ WLPPR s.39(2.1): The following road construction already exists or is proposed in a riparian reserve zone:

1. Branch Q80 has been constructed through the RRZ designated along Creek #3 (Morte Creek) near the Northeast corner of the Saltwater Lagoon Block. The road was built by Timberwest Forest Ltd. under road permit R06701.

## **12.9 RESTRICTIONS IN A RIPARIAN MANAGEMENT ZONE**

☒ Default: WLPPR s.40(1)(b)(c) or (d) Construction of a road in a riparian management zone is limited to the conditions described in Section 40(1) of the WLPPR without additional conditions to allow road construction being provided in the woodlot licence plan.

☐ Alternative WLPPR s.40(1)(a): Propose the construction of a road in a riparian management zone which does not appear to satisfy the criteria listed in WLPPR s.40(1)(b)(c) or (d).

## **13.0 WILDLIFE TREE RETENTION**

Unless exempted by the district manager, the proportion of the Woodlot Licence area that will be occupied by wildlife tree retention is no less than the least of the following:

☐ Default WLPPR s.52(1)(a): [Enter Details] % specified for the area in a land use objective,

☒ Default WLPPR s.52(1)(c): 8 % of the woodlot licence area

☐ Alternative WLPPR s.52(1)(b): [Enter Details] % of the total Woodlot Licence area



## 14.0 COARSE WOODY DEBRIS

Unless exempted by the district manager or the WLPPR, the minimum amount of coarse woody debris to be left on areas where there is a requirement to establish a free growing stand is

☐ Default: WLPPR s.54(1)(b)

16. Area on Coast – minimum retention of 4 logs per ha  $\geq 5$  m in length and  $\geq 30$  cm in diameter at one end.

☐ Default: WLPPR s.54(1)(b)

17. Area in Interior – minimum retention of 4 logs per ha  $\geq 2$  m in length and  $\geq 7.5$  cm in diameter at one end.

☒ Alternative WLPPR s.54(1)(a):

- 1) The ‘benchmark limits’ as defined in the Provincial Waste procedure manual’ in effect at the time this plan was approved (10m<sup>3</sup>/ha) will not apply to Woodlot W0042. The benchmark limit will be set to 0m<sup>3</sup>/ha.
- 2) Grade U logs from dead trees, all X grade logs from live and dead trees and Y grade logs from live trees will be exempt from waste billing and classified as unavoidable waste.
- 3) All existing ‘OLD’ coarse woody debris on the site regardless of size or grade will be retained and will be exempt from waste billing.

### 14.1 Rational

- 1) Section 54. (1) of the WLPPR-CWD, is based on FPPR Section 68(1). which states that 4 logs per hectare, >5m long and >30cm diameter must be retained. This definition of CWD will generate an estimated volume of 1.4m<sup>3</sup>/ha and was developed to assist with the biodiversity requirements within a management plan. The regulation is also designed to replace the current waste survey benchmark limits as defined in the Provincial Logging Residue and Waste Measurement Procedures Manual. The existing waste benchmarks, FPPR CWD requirements and biodiversity requirements are currently under review by the MOFR. The guidelines may change pending a decision on their applicability with respect to cutting specifications within a harvest licence, cutting permit and biodiversity requirements for CWD. The primary strategy of CWD management is to retain logs and pieces of woody material of medium and large size for recruitment of CWD within second growth and small wood stands.
- 2) Over the past 20 years of management on the woodlot licence large and small logs have been found to exist throughout the stands on the woodlot. These logs are generally unmarketable due to their low grade. It is our belief that retention of the lowest grade dead logs will meet or exceed the CWD and biodiversity needs required of the WLPPR.
- 3) Specific strategies and levels for CWD retention within Biogeoclimatic Zone and forest cover type have not as yet been defined within government policy.
- 4) The objective of the alternative strategy is to leave higher volumes and more pieces of lower quality and value logs for CWD than that of the default strategy. The strategy will also enhance full recovery of the higher quality and value logs.
- 5) The strategy will provide for a quantifiable volume of CWD from low grade logs that are evenly distributed in the stands comprising this woodlot that will meet or exceed the present CWD objective related to log size and numbers
- 6) The proposed strategy will provide for retention of CWD material that will assist in meeting the biodiversity requirements of the WLPPR. Grade U and X logs can be both small diameter top logs as well as large diameter logs with heavy knots and or significant decay. Large diameter dead trees are generally graded as U or X grade logs. The proposed CWD strategy will provide for retention of these low grade, larger diameter logs from dead trees.
- 7) All logs and waste volumes will be scaled and measured as part of a waste survey and charged to the license allowable cut. Logs and other waste identified under the alternative strategy will be recorded as ‘unavoidable’ for purposes of waste survey classification.

- 8) 'OLD' CWD is defined as logs and portions of logs found on the forest floor originating prior to the establishment of the existing second growth stands. This material is usually comprised of large logs and stumps exhibiting significant stages of decomposition, typically classified as CWD decay class 3, 4, or 5.

## 15.0 RESOURCE FEATURES

Unless exempted by the district manager, the woodlot licence holder will

☒ Default WLPPR s.56(1)(b): Ensure that forest practices do not damage or render ineffective a resource feature.

☐ Alternative WLPPR s.56(1)(a):

[Enter Details]

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**Note: Only the performance requirements in Part 3 (Practice Requirements) of the WLPPR for which an alternative can be proposed, are shown in this Woodlot Licence Plan. The remaining performance requirements in Part 3 are not shown, nor are the performance requirements in Part 4 (Roads).**

# APPENDIX I: VANCOUVER ISLAND SUMMARY LAND USE PLAN – (EXCERPT)

## Special Management Zone -19 - Quadra

This section presents a description of resource values, as well as management objectives and strategies for SMZ-19: Quadra Island.

The following excerpt from the Vancouver Island Summary Land Use Plan (VISLUP) <sup>3</sup> identifies the objectives and strategies assigned to each resource value in the SMZ unit. The information is presented in abbreviated form, i.e. as the pertinent regime titles (e.g. special recreation management), without repeating the detailed wording of each objective and strategy presented in the VISLUP. For complete wording of the general management regimes, refer to section 4.3.2 of the VISLUP. Where applicable, and based on available regional scale information, additional management strategies are provided for particular resource values, to clarify management advice in a given unit.

Total area figures given for the units are based on regional scale data, and may include parcels of private land. The objectives and strategies presented in this report, however, apply only to Crown land and private forest land within the woodlot area.

### SMZ-19: Quadra Island

**Location:** comprises all provincial Crown forest on Quadra Island outside of protected areas, excluding the northern portion (north of Small Inlet), as well as the southern, mostly private portion.

**Total Area:** approximately 15,800 ha

### **Primary Values (see LIARC report)**

1. Ecosection biodiversity/ representation
2. Coastal and shorelands wildlife values
3. Visual qualities, esp. in association with marine recreation and major road corridors

**Overall Management Guidance:** focus should be on biodiversity conservation at the intermediate level of significance with active replacement of old seral forest attributes and ages in CWH xm forests; maintenance of scenery/recreation and tourism values associated with shoreline, major road corridors and high recreation use areas, as well as maintenance of coastal wildlife habitats

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<sup>3</sup> Website: <http://ilmbwww.gov.bc.ca/ilmb/lup/lrmp/coast/vanisle/index.html>

## Primary Objectives

### **Biodiversity:**

Description: this zone comprises the majority of the Quadra draft landscape unit, which also comprises portions of the Quadra-Cortes RMZ (#32), as well as protected areas; the zone is dominated by the CWHxm2 variant; while old forests are rare in this variant, a significant amount of mid-seral/mature second growth forests are protected in the Main Lakes Chain protected area

Objective: ***General Biodiversity Conservation Management***

Strategies: to the extent that old seral forest retention will be required within the contributing land base portions<sup>4</sup> of the landscape unit, such retention should be concentrated<sup>5</sup> within the SMZ-portion of the landscape unit; maintain existing old forest in the zone, as well as second growth with high portion of veteran trees; manage to replace old forest in the long term (>150 years) in accordance with old seral targets for intermediate BEO; focus old seral replacement in CWHxm2, concentrated along riparian areas and, where possible, adjacent to existing old seral forest; recruit old seral habitat blocks with higher priority on forest interior conditions than on old seral connectors; maintain harvest opportunity in second growth by identifying some old growth recruitment areas in early seral forest; recruit mature forest in the mid (>50 years) term, building gradually towards a mature seral target of 25%; actively create mature and old seral forest attributes through suitable management strategies, such as variable density thinning or partial cutting silvicultural systems

### **Visual Resources:**

Description: primary visually sensitive areas along coastline and major road corridors, secondary values surrounding lakes and along hiking routes

Objective: ***Special Visual Resource Management***

### **Recreation Resources:**

Description: recreational use and values in Wyatt Bay/Small Inlet (heritage trail, portage), trails in Mount Seymour and Chinese Mts., as well as Morte and Nugedzi Lake areas; shoreline

Objective: ***Special Recreation Resource Management*** in above areas; ***General Recreation Resource Management*** in other less frequented/significant areas

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<sup>4</sup> contributing land base: this is the timber harvesting land base (THLB) which contributes to the allowable annual cut (AAC), as defined in the Timber Supply Review for a timber supply area or tree farm licence;

<sup>5</sup> 'concentrated': the intent is to retain old seral forest required for the LU to a greater degree within the SMZ, and to a lesser degree within the RMZ portion of the LU.

**Tourism Resources:**

Description: kayaking and boating along shoreline, scenic values and hiking opportunities

Objective: *Special Tourism Management* with focus on above mentioned values and activities

**Wildlife:**

Description: high values for marine/coastal species (eagles, waterfowl); moderate upland/interior forest habitat values (capability for marbled murrelet, northern goshawk)

Objective: *Special Wildlife Management* with emphasis on coastal species and habitats;

Strategies: develop habitat management strategies for coastal species

**Fish:**

Description: high values, particularly associated with lakes

Objective: *General Fish Management*

**Water:**

Description: generally stable terrain, low equivalent clearcut area

Objective: *General Watershed Management*

**Secondary Objectives****Timber:**

Description: overall moderate productivity, almost entirely in second growth forests

Objective: *Special Timber Resource Management*

**Cultural Heritage Resources:**

Objective: *General Cultural Heritage Resource Management*

**Cave/Karst:**

Objective: *General Cave/Karst Management*

**Access:**

Objective: *General Access Management*

**Non-Forest Resource Descriptions****Aquaculture:**

Description: some moderate to good potential for finfish culture and shellfish culture and some existing operations

## **APPENDIX II: QUADRA ISLAND OFFICIAL COMMUNITY PLAN**

**Bylaw 1996, # 1840, of the Regional District of Comox-Strathcona – as amended November 14, 2007<sup>6</sup>**

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<sup>6</sup> Website: [http://www.rdc.bc.ca/section\\_complan/content.asp?id=283&collection=14](http://www.rdc.bc.ca/section_complan/content.asp?id=283&collection=14)

## APPENDIX III: QUADRA-SALTWATER LAGOON SENSITIVE AREA

File: 12550-20/Sensitive Areas

### ORDER TO ESTABLISH A SENSITIVE AREA AND OBJECTIVES

#### QUADRA-SALTWATER LAGOON SENSITIVE AREA

Pursuant to Section 5 of the *Forest Practices Code of British Columbia Act*, I hereby establish the Quadra-Saltwater Lagoon Sensitive Area, located on Quadra Island, within the Campbell River Forest District, effective November 21, 2003. The boundaries of the Quadra-Saltwater Lagoon Sensitive Area are shown on the attached map, dated November 21, 2003.

Effective November 21, 2003, I hereby establish the following objectives for the Quadra-Saltwater Lagoon Sensitive Area:

1. Retain all remaining old growth values in order to manage for biodiversity conservation purposes.
2. Protect raptor and heron nesting habitat.
3. Maintain the visual quality of known scenic areas in accordance with the recommended visual quality classes in the visual landscape inventory, until the district manager establishes visual quality objectives for this area.
4. Provide for public recreational opportunities within this area along developed trails as well as dispersed recreational use within forest and marine foreshore areas.

ORIGINAL SIGNED BY

November 21, 2003

\_\_\_\_\_  
**Rory Annett**  
**District Manager**  
**Campbell River Forest District**

\_\_\_\_\_  
**Date**

Attachment: The woodlot map, Saltwater block identifies the portion of the woodlot affected by the Saltwater Lagoon Sensitive area.



## **APPENDIX IV: RECREATION INFORMATION**

1. Scenic areas and Visual Quality Objective maps
2. Cape Mudge Block Recreation (Visual Sensitivity Class)
3. Saltwater Lagoon Visual Sensitivity
4. Saltwater Lagoon Visual Quality Objectives

## APPENDIX V: 1ST NATIONS INFORMATION SHARING

W0042 is located within the traditional territories of five First Nations. All identified First Nations (and other interested parties) will be welcome to review the planned developments upon their own initiative during the term of this plan. The woodlot plan has been forwarded for review and comment to all First Nations with traditional territories covering the woodlot. The following table summarizes the First Nation information sharing completed as part of this woodlot plan. The First Nations with identified traditional territories encompassing Woodlot W0042 are:

- Campbell River Band
- Cape Mudge Band
- Comox Band
- Homolco First Nation
- Klahoose First Nation
- The Campbell River and Cape Mudge bands are represented by the Hamatla Treaty Society.

Date	First Nation			
	Hamatla	Komoks	Klahoose	Homalco
Oct 16, 2007	Plan sent to 1 <sup>st</sup> nation	Plan sent to 1 <sup>st</sup> nation	Plan sent to 1 <sup>st</sup> nation	Plan sent to 1 <sup>st</sup> nation
Oct 18, 2007	Receipt of plan confirmed	Receipt of plan confirmed	Receipt of plan confirmed	
Oct 22, 2007				Receipt of plan confirmed
Nov 14, 2007		Referred to Shelterwood - Ron Frank	Attempted phone call – no answer	
Nov 29, 2007				Emailed copy of plan to Corby Lamb, will likely defer to Cape Mudge band
Dec 2, 2007		Emailed plan to Jenny Millar		
Dec 4, 2007	Telephone conversation with Rick Everson		Attempted phone call – no answer	
Dec 11, 08		call from Shelterwood, No comments, letter to follow		
Feb 15, 2008	Telephone conversation – will get comments out soon	Shelterwood will review plan and respond		Attempted contact with Corby Lamb – on Holiday
Feb 27, 2008				Received invoice for comments
Jan 7, 2007		Letter received from Ernie Hardy		
Mar 31, 2008				Ltr sent to Band – unable to pay invoice
June 27, 2008				Ltr from band – will not agree the WL plan activity.
Sept 3, 2008	No further contact	No further contact	No further contact	No further contact

# APPENDIX VI: REFERENCE GUIDE FOR FOREST DEVELOPMENT PLAN STOCKING STANDARDS, UNEVEN-AGED STOCKING

## STANDARDS\* -- SINGLE-TREE SELECTION ONLY

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Target	Layer**	Stocking***			Target	Layer**	Stocking***		
		Target pa	MIN pa	MIN p			Target pa	MIN pa	MIN p
(stems/ha)		(well-spaced/ha)			(stems/ha)		(well-spaced/ha)		
<b>1200</b>	1	600	300	250	800	1	300	150	150
<b>ID 86000 (all layers)</b>	2	800	400	300	<b>ID 86003 (all layers)</b>	2	400	200	200
	3	1000	500	400		3	600	300	300
	4	1200	700	600		4	800	400	400
<b>1000</b>	1	400	200	200	600	1	300	150	150
<b>ID 86001 (all layers)</b>	2	600	300	250	<b>ID 86004 (all layers)</b>	2	400	200	200
	3	800	400	300		3	500	300	300
	4	1000	500	400		4	600	400	400
<b>900</b>	1	400	200	200	400	1	200	100	100
<b>ID 86002 (all layers)</b>	2	500	300	250	<b>ID 86005 (all layers)</b>	2	300	125	125
	3	700	400	300		3	300	150	150
	4	900	500	400		4	400	200	200

\*\*Stand Layer

Definition

Layer 1	Mature
Layer 2	Pole
Layer 3	Sapling
Layer 4	Regeneration

\*\*\* pa - preferred and acceptable species      p - preferred species

Preferred and acceptable species are specified by biogeoclimatic ecosystem classification (BEC) site

\* Maximum regeneration delay is seven years. For a seven-year regeneration delay, the early free growing is 12 years and the late free growing is 15 years. Regeneration delay can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, earliest free growing date is 12 months after completion of harvest and the latest date is 24 months after completion of harvest.

**APPENDIX VII: REFERENCE GUIDE FOR FOREST DEVELOPMENT PLAN STOCKING STANDARDS, STOCKING STANDARDS, REGENERATION DATES AND FREE GROWING DATES FOR FREE GROWING STANDS**

			Regeneration Guide								Free Growing Guide	
BGC Classification			Species		Stocking			Regen Delay	Assessment		Min. Height	
Zone/SZ	Series		Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht
			Preferred (p)	Acceptable (a)				(well-spaced/ha)				
CWHxm	01	84182	Fd	Hw <sup>24</sup> Cw Pw <sup>31</sup>	900	500	400	3	8	11	Fd	3.00
											Pw	2.50
											Hw	2.00
											Cw, Lw	1.50
	02*	84183	Pl Fd		400	200	200	3	8	11	Pw	2.50
											Fd	2.00
											Lw, Ss	1.50
											Pl	1.25
											Cw	1.00
	03	84184	Fd Pl <sup>6</sup>	Cw	800	400	400	3	8	11	Pw	2.50
											Fd	2.00
											Lw, Ss	1.50
											Hw, Pl	1.25
											Cw	1.00
	04	84185	Fd	Cw Pw <sup>31</sup>	900	500	400	3	8	11	Fd	3.00
											Pw	2.50
											Hw	2.00
											Cw, Lw	1.50
	05	84186	Cw Fd	Pw <sup>31</sup>	900	500	400	3	8	11	Fd	4.00
											Bg	3.50
											Pw	2.50
											Cw	2.00
											Hw	1.75
	06	84187	Cw Hw Fd <sup>18</sup>		900	500	400	6	11	14	Bg, Fd	3.00
											Pw	2.50
											Hw	2.00
											Cw, Lw	1.50
	07	84188	Cw Fd	Bg	900	500	400	3	8	11	Fd	4.00
											Bg	3.50
											Pw	2.50
										Cw	2.00	
										Hw	1.75	
08	84189	Cw Ss <sup>35</sup>	Bg	900	500	400	3	8	11	Fd, Ss	4.00	
										Bg	3.50	
										Pw	2.50	
										Cw	2.00	
09	84190	Cw <sup>1</sup>	Bg <sup>1</sup>	900	500	400	3	8	11	Fd	4.00	
										Bg	3.50	
										Pw	2.50	
										Cw	2.00	
10	-	no conifers		-	-	-	-	-	-			
11*	84191	Pl <sup>1</sup>	Cw <sup>1</sup>	400	200	200	3	8	11	Pw	2.50	
										Fd	2.00	
										Lw, Ss	1.50	
										Pl	1.25	
										Cw	1.00	
12	84192	Cw <sup>1</sup>	Hw <sup>1</sup> Pw <sup>31</sup>	800	400	400	3	8	11	Pw	2.50	
										Fd	2.00	
										Lw, Ss	1.50	
										Pl	1.25	
										Hw	1.25	
										Cw	1.00	
13	84193	Cw Bg Fd		900	500	400	3	8	11	Fd	4.00	
										Bg	3.50	
										Pw	2.50	
										Cw	2.00	
14	84194	Bg <sup>1</sup> Cw <sup>1</sup>		900	500	400	3	8	11	Fd	4.00	
										Bg	3.50	
										Pw	2.50	
										Cw	2.00	
15	84195	Cw <sup>1</sup>		800	400	400	3	8	11	Fd	4.00	
										Bg	3.50	
										Pw	2.50	
										Cw	2.00	
											3.00	

## APPENDIX VIII: SUPPLEMENTAL INFORMATION TO SUPPORT THE PROPOSED WOODLOT LICENCE PLAN

### 1. REVIEW AND COMMENT

#### A. Advertising

- a. Campbell River Mirror Jan 18, 2008
- b. Quadra Island Discovery Islander February 1<sup>st</sup>, 2008

#### B. Copy of Written Comments Received

- a. Quadra Island Conservancy & Stewardship Society
- b. Quadra Island Forest Watch
- c. Min. of Forests and Range

### 2. REVISIONS MADE AS A RESULT OF WRITTEN COMMENTS RECEIVED

The following table indicates a brief summary of changes made to the plan after receipt of written comments.

Received from	Section / Topic	Change
MOFR	All	Licence number
MOFR & QIFW	4.10 VQO	Added Landscape categories
	7.0 1 <sup>st</sup> Nations	2 <sup>nd</sup> Par Wording change- Info Sharing
		Comox FN not Hamatla
	7.1 Cultural Strategies	Licencee agrees to DCR Cw Strategy
MOFR & QIFW	8.0 WTR patch	Information added to table 2
	10.0 Range	Remove reference to range exemption
	12.3 Stocking standards	Change to default selection
QI Forest Watch	6.0 Morte Lk Cons.	Added 50m SMZ
	6.2 Wetland SMZ	Added to maps
	6.2 Creek RRZ/SMZ	Added to maps
		Added reference to WLPPR
	VQO cutblocks	Added commitment to minimize impacts of cutblock size within VQO polygons.
	RMZ retention Levels	Increase to Min >10% on S4 streams
	Machine free Zones	Added MFZ on S4 streams and W4 wetlands.
	8.0 smaller WTP areas	Added commitment to maintain size and integrity if moved.
	8.0	reserves 2, 3 & 4 have been removed from WTP designation
	8.1 Wildlife trees	Added commitment to identify and protect.
	9.0 Invasive plants	Change grass source to: 'only grasses from local native stock will be used'
	13.0 Wildlife tree retention	Added wording to mirror WLPPR
	14.0 CWD	Minor wording and formatting

## **APPENDIX IX: Woodlot Plan maps**

1. 1:20000 scale Exhibit 'A'
2. 1:100000 Overview
3. 1:5000 Forest Cover Map 1 of 2 Cape Mudge block
4. 1:7500 Forest Cover Map 2 of 2 Saltwater Lagoon
5. BCG Subzone map
6. Wildlife and Ungulate Areas
7. Community watersheds/Water Licences
8. BC Watershed Atlas