

WOODLOT LICENCE # 1897

Woodlot Licence Plan

First Term
Dec. 15, 2005 to Dec. 15, 2015

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1 MANDATORY CONTENT FOR A WOODLOT LICENCE PLAN

1.1 PLAN AREA

This plan covers the entire 400 ha area of Woodlot Licence 1897. The Licence was granted in 1999 and is located on Quadra Island immediately south of the Main Lakes Chain Provincial Park. The main access is Village Bay Road on the southern boundary and the Open Bay Mainline on the west boundary. Primary geographic features are the two fish bearing streams, Open Bay Creek on the west and Vic's Creek and Trib 5 (QISES-Caroline Heim Reports) on the eastern boundary).

1.2 GOVERNMENT OBJECTIVES

This Woodlot Licence 1897 Woodlot Plan #1 is consistent with the objectives established by government in land use plans. The broad objectives set by government are found in Section 9 of the WLPPR. Additional land use objectives, as well as any other objectives and designations which may apply to the woodlot licence area, are found in Section 10. In addition, the Campbell River Forest District (CRFD) has provided the Objectives Matrix that is used to determine relevant and current FRPA values and elements.

The VI LRUMP has enacted higher level plans that specifically identify Quadra Island as Special Management Zone (SMZ) 19 with associated regimes and strategies for key primary resource values. This Woodlot Plan continues with the former FDP#1 that has planned and implemented practices that are consistent with these objectives.

The District Manager (DM) of the CRFD has made known the scenic resources and the relevancy for planning on the woodlot landscape. This Woodlot Plan has taken the appropriate measures to accommodate the requirements of the visual quality objectives (VQO's) that have been disclosed. The addition of reserves that meet the specific geographical relief have enhanced the strategy developed to meet these visual objectives. Specific objectives for the scenic corridor adjacent to Village Bay Road have been addressed in the following sections on areas where harvesting will be avoided and modified and in the section on wildlife tree retention strategy.

The Ministry of Water, Land and Air Protection (WLAP) has issued a notice to Woodlot Licence 1897 that provides the indicators for the winter survival of ungulate species and also for the survival of species at risk. In discussion with WLAP officials Rod Davis and Dave Donald regarding the specific presence and vulnerability of the respective wildlife relevant to the Woodlot Licence area, the conclusion is that the current reserves and management objectives are sufficient in providing the habitat requirements in terms of amount of area and distribution of areas, and attributes of those areas. This includes any potential wildlife addressed in either notice or any regionally important wildlife.

The Woodlot Plan Schedule B (Crown) Map is located in Appendix I and the Schedule A (Private) Map is located in Appendix VI.

1.3 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED

Timber harvesting will be avoided in the designated areas of the woodlot as referred to on the Woodlot Licence 1897 Woodlot Plan #1 Map in Appendix I. In addition Table 1 on pages 6-7 in the Wildlife Tree Retention Strategy section provides a detailed table that identifies all of the dedicated reserves, the biodiversity function and the related resource values being protected. Reserves are implicitly off limits to timber harvesting except where identified in the Wildlife Tree Retention strategy. Reserve areas are set aside for the following objectives:

- Riparian reserves will have restricted harvesting except for the purposes stated in Section 39 (1) and Section 39(2) of the WLPPR. If additional streams requiring riparian reserves are discovered during operational planning they will be protected with similar harvest constraints.
- Biodiversity reserves are designated on the map and have been created to protect resource features such as the Fish and Wildlife Reserve that is located on the Moses Meadow and Vic's Creek area. This reserve extends from the Main Lakes Chain Provincial Park into both W1897 and 1898 and south to W1610 and Village Bay. Other reserves have been established for wildlife tree patches that contain valuable wildlife trees consisting of old growth veterans (see Wildlife Strategy).
- Karst features such as caves will have reserves established according to the Karst Management Handbook (e.g. two tree lengths around cave entrance). BC Registered Cave #80454 has been given a 90 m circular reserve with an adjoining Upper Karst Reserve that will function as a protection of the catchment area for the cave as well as other biodiversity functions and scenic values. Despite the findings of the MOF Karst Report (Appendix IV) written by Mike Doknjas that did not identify any features as being "significant" and was given a low karst vulnerability rating, the input from MOF recreation Officer Charlie Cornfield has been followed.

1.4 AREAS WHERE TIMBER HARVESTING WILL BE MODIFIED

Timber harvesting will be modified in the designated areas of the woodlot as referred to on the Woodlot Licence 1897 Woodlot Plan #1 Map in Appendix I. There are three main designations where harvesting will be modified to provide extra protection to the following identified resource values:

1.4.1 Riparian Management Zones (RMZ)

Riparian management zones as defined in WLPPR s36-38 will have modified harvesting that will be prescribed on a site specific basis determined by factors that will affect the protection of the stream, lake or wetland. Modifications to timber harvesting that will meet or exceed the regulations in WLPPR s39-46 in all classes of riparian management zones that will protect values include:

- a) assessing all streams for their fishery values and assigning a correct riparian classification to all streams, wetlands, lakes and other unclassified drainages or wetlands that will give the regulated management area width

- b) stream flow by controlling or rehabilitating debris inputs through proper engineering of road locations adjacent or through an RMA
- c) stream banks and channels that will be maintained by using a machine free zone of a minimum 5 meters from stream bank and greater if wet or soft
- d) stream ecosystem and channels by controlling siltation into streams through proper location of ditches and culverts and road runoff
- e) a minimum of 25% tree retention by basal area subject to windthrow hazard assessments and treatments to minimize risk
- f) valuable wildlife trees by identification and subsequent danger tree assessment and possible required 'no work zone' or 'no disturbance buffer'
- g) selection of tree species and sizes for retention that are representative of the profile that provide stand and soil stability
- h) retention will be based on both dispersed groups and individual trees where the specific values are best maintained
- i) water quality such as temperature and nutrient inflows by protecting the understory vegetation and the tree canopy
- j) temporary and permanent stream crossings will be located based on least risk to the stream and potential disturbance
- k) riparian ecosystem disturbance by performing treatments during seasonal opportunities of low rainfall

1.4.2 Village Bay Road Visual Corridor

The visual corridor adjacent to the southern woodlot boundary on Village Bay Road is labelled Visual Management Zone (VMZ) on the W1897 map in Appendix I. The entire road length is 3,424 m (Village Bay Road VQO - Appendix V), 16% of the distance is in reserves adjacent to the road, and another 10% are in riparian or Karst Management Area (KMA) and another 20% already has a history of intermediate cuts that will continue. The entire area will have a strategy for limiting the visual disturbance, based upon conducting harvesting operations or road developments on the following criteria:

- a) the use of natural topographical designs blended into the visual landscape for road access and harvest blocks
- b) where the stand is predominately conifer (27%) a selection or shelterwood silviculture system will be utilized that will develop the stand into an uneven aged or two aged multi layered canopy reflecting high visual aesthetics for old growth attributes
- c) where mixed conifer and broadleaf stands (65%) are present a modification of the selection silviculture system will maintain continuous forest cover and gradual modification to manage the separate life cycles of the tree species
- d) in the pure red alder or poplar stands (8%) that are immediately adjacent to the road, patch cut harvesting will be required for these shorter lived species, some of the red alder areas are past maturity and will need attention in the next operational plan
- e) the broadleaf harvest pattern will be in small openings or in patterns that reduce the visual entry into the stand

- f) in the broadleaf sections the retention of any conifer and understory brush will contribute to reducing the visual impacts

1.4.3 Karst Management Area

The Karst Management Area (KMA) identified on the Woodlot Licence 1897 Woodlot Plan #1 Map (Appendix I) and other areas of karst identified in the Karst Survey Report and Recommendations (Appendix IV) is the third area where the harvest methods will be modified to give added protection to this resource feature. In response to the findings of the recommendations there are no significant defined karst features. The Karst Management Handbook will be followed both in the KMA and in other areas of the woodlot where karst is located and the recommended results and strategies for managing this area are found in the best management practices. The specific karst features in the KMA identified as needing protection are sinkholes, grikes, karst springs and sinking or losing streams. These practices include modifications such as:

- a) when harvesting conduct a partial cutting system that retains trees that are near features and will provide stability
- b) install machine free zones adjacent to karst features
- c) eliminate cross stream yarding by using “fall away yard away” methods
- d) plan and engineer roads and skidtrails in areas where the karst is not exposed or immediately adjacent to karst features where permissible
- e) conduct windthrow hazard assessments to determine best treatment for minimizing potential disturbance to any features
- f) plan harvesting and road building to coincide with low rainfall seasonal opportunities to control silt entry into the underground karst system
- g) manage the entire karst catchment area to minimize potential disturbance and inputs into the natural drainage passages

1.5 PROTECTING AND CONSERVING CULTURAL HERITAGE RESOURCES

During the development of the FDP in 2000 the Cape Mudge, Campbell River, Klahoose and Homalko Bands were consulted and requested to identify any cultural heritage resources, features or traditional uses that have occurred on the Woodlot Licence area. The FDP consultation involved meetings with the Cape Mudge Band and the Hamatla Treaty Society to discuss the operations of the Woodlot Licence. The Homalko Band participated in consultations via email, phone and document review. The reported traditional use was hunting, fishing, and collecting non-timber forest products such as berries and mushrooms. In the six years since forestry operations commenced there have been no discoveries or evidence of culturally modified trees or aboriginal habitations.

In the course of the referral of this Woodlot Plan to the traditional First Nation's another request was submitted for input and comment relevant to any traditional use or cultural resource (Appendix X First Nation's Consultation Diary). Comments and concerns will be accepted asserted at any time during the referral period and also during the term of the Woodlot Licence. The said comments and dialog will be treated with respect and regard to the accepted rights and title that the First Nation's continue to hold on the crown lands while treaty negotiations continue toward settlement. If during field reconnaissance or during operations if any objects or areas are discovered that have either historical or spiritual values to a First Nation, consultation with the Bands will be completed prior to disturbance. If a First Nation identifies a cultural heritage resource within the Woodlot Licence boundaries, the Licensee will consult with the first Nation and attempt to resolve the issue.

The presence of large reserves well distributed on the woodlot area that are likely to contain both valuable plants for gathering and hunting opportunities has given a solid security of a cultural stewardship that will only improve as the forest matures over time. As a proactive measure the following results and strategies are outlined below for known cultural heritage uses and values:

1.5.1 Western Red Cedar Trees

Result: Maintain present and future availability of this tree that is used as a product to build ceremonial pieces such as clothing, carvings, totem poles and canoes.

Strategy: Western red cedar will be planted where acceptable on all harvested cutblocks thus ensuring a plentiful and well distributed value. Additionally red cedar is selected for retention when found as an old growth veteran, mature or understory tree.

1.5.2 Traditionally Used Plants

Result: First Nation's individuals will have continued free access to medicinal or ceremonial plants within the carrying capacity of the local ecosystem.

Strategy: If the Licensee or a First Nation's person identifies areas where rare and valuable plants are located the area will be protected by a management strategy that mitigates the danger to the area.

1.6 WILDLIFE TREE RETENTION STRATEGY

Wildlife tree patches (WTP) and individual wildlife trees (WT) are one of the most valuable components of the strategy for conserving and enhancing stand-level biodiversity on the woodlot. The management recommendations in the MOF website "Wildlife Tree Management at the Stand Level" will be followed on the woodlot with the consultation of the Ministry of Forests (MOF) and Ministry of Water, Land and Air Protection (WLAP). Identifiable wildlife are managed through the establishment of large reserves, small WTPs and individual WTs within the operational area. Selection of these areas is based on stand structure, age, species composition and other valuable indicators for wildlife habitat. A variety of ecosystems were included in the reserves representing all of the types present on the woodlot. The total area set aside in reserves is 107.6 ha (Table 1) and this represents 27% of the total woodlot area. In addition the riparian management areas have 17.9 ha and the Karst Management Area has 4.8 ha for a total of 22.7 ha or 6% of the total woodlot area. In these areas identification and protection of valuable wildlife habitat will contribute to the overall retention strategy.

Table 1 Wildlife Tree Retention Reserve Strategy

Reserve Name	Forest Cover Attributes	Biodiversity Function and Resource Values		Area (Ha)
Open Bay Creek Reserve	Fd(H) 5606-38 Fd(H) 5407-29 DrFd(H) 4405-29 NPBR- 3.9 ha brush/beaver pond	Riparian	High value fish rearing habitat	24.9
		Wildlife	Bird nesting and foraging, aquatic mammals and amphibians, bat foraging and roosting/nurseries	
		WTP	Mature Fd, Cw and Dr with beaver caused mortality, cavity nesters, perches and bat habitat	
		Visual	Visible from Village Bay Road	
Fish & Wildlife Reserve -Vic's Creek & Tribbs, Moses Meadow Wetland	FdDr(H) 4506-39 Fd(HDr) 5606-40 Fd(PIDr) 5504-30 Dr(Fd) 4408-27 FdDr 4405-33 Fd(Dr) 4505-37 FdDr(SsH) 4505-38 NPBR- 37 ha brush/grassland	Riparian	High value fish rearing habitat	67.4
		Wildlife	Bird nesting and foraging, aquatic mammals and amphibians, bat foraging and roosting/nurseries	
		WTP	Mature Fd, Dr with beaver mortality, cavity nesters, perches and bat habitat	
		Visual	Visible from Village Bay Road	
Raven Reserve	Fd 4305-24 Fd 5507-32 Dr(Fd) 4407-30 NP- Approx. 0.2 ha rock bluff	Wildlife	Raven nesting, cougar & deer winter range	3.7
		Visual	Forested peaks visible from Stramberg Lake and Village Bay Road	
		Riparian	Small remote wetland for amphibians and drinking water source	
		WTP	Old growth Fd, Cw & mature Dr, cavity nesters, perches and bat habitat	
Vulture Reserve	Fd 4303-22 NP- Approx. 0.5 ha rock bluff	Wildlife	Vulture, cougar & deer winter range	2.7
		Visual	Forested peaks visible from Village Bay Road	
		WTP	Mature Fd & Pl, cavity nesters, perches and bat habitat	
Karst Reserve	Fd(H) 5606-38 Fd 4303-22 Fd(H) 4406-32 NP- Approx. 0.25 ha rock bluff	Karst features	Grikes, sinkholes and sinking seasonal stream Catchment area for cave and karst area	5.6
		Wildlife	Raptor, cougar & deer winter range	
		Visual	Exposed peaks visible from Village Bay Road	
		WTP	Mature Fd & Pl, cavity nesters, perches and bat habitat, root rot patch for cavity nesters	

Grike Creek Reserve	Fd(H) 5606-38 NP – 0 ha	Karst features	Grikes & sinkholes	0.5
		Wildlife	Potential specialized habitat for underground stream dwelling fish, amphibians and plants	
WTP 1	Fd(H) 5407-29 Fd(H) 5606-38 NP – 0 ha	Wildlife	Potential specialized habitat for cave dwelling mammals and plants	2.1
		WTP	Mature Fd & Cw, cavity nesters and bat habitat	
K1, K2 & K3	Fd 5507-32 Fd(H) 5407-29 NP – 0.1 ha wetland	Riparian	Wetland	0.7
		Wildlife	Bird nesting and foraging, deer winter range, bat habitat, amphibians, drinking water source	
		WTP	Mature Fd and Dr	
			Total area	107.6

1.6.1 INDIVIDUAL WILDLIFE TREES

The woodlot area has Douglas fir (Fd), western hemlock (Hw), western redcedar (Cw) and red alder (Dr) as the most common tree species. Tree species that are less common are white pine (Pw), Sitka spruce (Ss), lodgepole pine (Pl), big leaf maple (Mb), hybrid poplar (Act). The uncommon to rare species found on the woodlot are western yew, cascara, Pacific crab apple and arbutus (Ra) and are generally present in more unique habitats and stand types. The disturbance history on the woodlot area is fairly homogenous, with extensive logging of the old growth stands occurring in the early 1900's with two separate wildfires burning the slash and some of the few remnant stands remaining after harvesting. This latter area today has more numerous groups and individual old growth trees remaining as both dead and live trees. These areas provide many large diameter veteran Douglas-fir and Western redcedar trees that are ideal for large nesting birds or potential bear dens.

These high value wildlife trees are the primary targets for selection and protection from harvesting and road building. The old growth trees are frequently class 2 wildlife trees with broken tops and evidence of fungal fruiting bodies indicating the presence of heart rot, a valuable wildlife tree characteristic. These trees have habitat value for primary cavity-excavating woodpeckers and the numerous species of secondary cavity bird and mammal users. The thick sloughing bark on the Douglas fir trees and the burned trunks of redcedar trees are ideal for bats, myotis and some bird species that can be utilized for nurseries, roosting and nesting. The large snags in the advanced tree classes can continue to provide habitat for many species and are also utilized by amphibians such as newts, salamanders and frogs.

In the extensive stands of mature second growth present on the woodlot high value wildlife trees are ones with current wildlife presence or other indicators suggesting decay or structural potential for future use. Many stands have a mixed component of conifer and alder that allow targeting the two types for retention. The conifers provide the longer term supply of wildlife trees and the alder are excellent for immediate use if they are dead or declining.

Individual wildlife trees will be assessed using the Wildlife /Danger Tree Assessor's Workbook for their wildlife characteristics and rated habitat value and also the danger category based on the activity planned in the vicinity of the trees. Prior to deciding on the layout and prescription a Windthrow Assessment will also be conducted to determine the future stability of the trees after the treatment is conducted. Past experience has shown that the ability to leave individual or group retention is site and stand specific.

Specific individual wildlife trees and trees within group retention areas or wildlife tree patches (WTP) may be removed if they are assessed and determined to be a safety hazard. In this determination the assessment will include the specific activity or level of disturbance that is expected to be performed within the exposure range of the suspect tree. Alternatives to removal of the wildlife tree will be given priority such as establishment of a 'no work zone' or altering the disturbance level by modifying the treatment prescribed. Where tree removal is necessary the economic opportunity for salvage will be allowed after assessments for potential ground or other site disturbance factors are considered.

In addition to safety concerns, individual wildlife trees and/or individual trees within retention areas or wildlife tree patches (WTP) may be removed if they are infested with insects which threaten the health of adjacent trees or stands. This is presently not seen as a likely scenario but is included as a precautionary tool if in the future global warming or other unusual events precipitate insect infestations.

The individual wildlife tree management strategy is predicated on retaining a high number of trees that have existing wildlife use and valuable characteristics. There will be many individual trees that are composed of a variety of species, age and form. Within this wildlife tree population there will be an increasing value for wildlife over time as the majority of the high value trees are Douglas fir and redcedar that are long-lived species and will remain structurally strong for long periods even after death. When one individual tree is lost it will not materially affect the potential wildlife trees available for the wildlife tree users. In fact, even the trees that may fall will continue to provide wildlife habitat and biodiversity values as large woody debris.

If a very specific function is performed by an individual tree (e.g. osprey nest) then recruitment of another tree may include modification to enhance the usability (e.g. topping) for the wildlife user.

1.6.2 WILDLIFE TREE RETENTION AREAS

The list of reserves presented in this Plan in Table 1 gives the reserve name, biodiversity function and resource values associated with each protected area. The total area already in reserves is currently at 107.6 ha and when combined with the future wildlife tree patches and potential reserves prescribed when operational planning is conducted will supply a significant area of the woodlot for biodiversity values. These reserves contain the two main high value fishery systems and associated riparian areas that provide preservation for fish, birds, mammals and amphibious users of this ecosystem. Other reserves have been installed that meet objectives for specific use, as in the Raven and Vulture Reserves. They also function as valuable south aspect deer winter range with favourable attributes for many mammals and bird species. The Karst Reserve will provide stability for this valuable karst feature (not rated “significant” in the Karst Survey and Recommendations in Appendix IV) and provide an area for future development and recruitment of specialized wildlife users such as bats and myotis. The upper karst reserve is established to protect the catchment area for the downhill cave reserve and also provide the other named values. During operational planning such areas as WTP1 that have pockets of old growth veteran trees that partially survived the fire are reserved. In addition, in-block reserves such as K1, 2 and 3 provide small refugia and habitat for all wildlife users. Valuable but small areas of unclassified wetlands or drainages can be protected beyond the required riparian regulations.

Wildlife trees within reserves, group retention areas or wildlife tree patches (WTP) may be removed if they are assessed and determined to be a safety hazard. In this determination the assessment will include the specific activity or level of disturbance that is expected to be performed within the exposure range of the suspect tree. Alternatives to removal of the wildlife tree will be given priority such as establishment of a ‘no work zone’ or altering the disturbance level by modifying the treatment prescribed. Where tree removal is necessary the economic opportunity for salvage will be allowed after assessments for potential ground or other site disturbance factors are considered.

Wildlife trees within reserves, retention areas or wildlife tree patches (WTP) may be removed if they are infested with insects which threaten the health of adjacent trees or stands. This is presently not seen as a likely scenario but is included as a precautionary tool if in the future global warming or other unusual events precipitate insect infestations.

The wildlife tree area management strategy is predicated on retaining a high number of trees that have existing wildlife use and valuable characteristics. There will be many individual trees that are composed of a variety of species, age and form. Within this wildlife tree population there will be an increasing value for wildlife over time as the majority of the high value trees are Douglas fir and redcedar that are long-lived species and will remain structurally strong for long periods even after death. Therefore, when one individual tree is lost it will not materially affect the potential available for the wildlife tree users. In fact, even the trees that may fall will continue to provide wildlife habitat and biodiversity values as large woody debris.

If a significant amount of wildlife trees are lost due to windthrow or other catastrophic event in a wildlife tree area then the replacement with another suitable area in size, value and species composition will be assessed. When the area loses a significant character of the function supplied by the wildlife tree area then salvage of the area will be allowed considering other environmental constraints. If a very specific function is performed by an individual tree (e.g. osprey nest) then recruitment of another tree may include modification to enhance the usability (e.g. topping) for the wildlife user.

1.7 MEASURES TO PREVENT INTRODUCTION OR SPREAD OF INVASIVE PLANTS

Invasive plants are of increasing concern on Vancouver Island and the surrounding area as certain non-native species escape gardens and become established in the natural environment. These plants can adversely affect the local ecology by out-competing the native flora and forming dense monospecific stands. Often, invasive plants prove difficult to eradicate and it can take decades to fully rehabilitate an infested area, which is why trying to control the problem before it becomes fully established is critical. Invasive species detection will be part of the regular operations on the entire woodlot area and an eradication program will be developed and implemented in a timely manner. When areas have been treated for eradication of an invasive species the disturbed area will be immediately reseeded and monitored for successful eradication. All equipment used in the eradication treatment will be thoroughly cleaned prior to removal as well any equipment arriving from a known contaminated site before use on the woodlot.

Currently the crown portion of Woodlot Licence 1897 has a small area of incidence of invasive species, that being bull thistle (*Cirsium vulgare*) which has appeared along roadside ditches that were grass seeded for erosion control. The method for eradication of the thistle is to dig the entire plant out by the roots prior to the plant going to seed. On the Schedule A land actions are currently being taken to eradicate the invasive shrub Scotch Broom (*Cytisus Scoparius*) along the surrounding roadways so that it will not colonize cutblocks or other open areas. This is done by cutting adult plants at ground level and pulling any juvenile plants by hand. On an annual basis, new seedlings will have to be pulled as the seeds can persist in the soil for up to 20 years. This has been a limited problem and is not anticipated to require extensive eradication. Other locally found invasive shrubs such as English ivy, English holly, and Himalayan blackberry have not established themselves on the property but similar action will be taken if they appear.

Invasive grasses are one of the biggest threats to many species at risk on Southern Vancouver Island due to the threatened Garry Oak Ecosystem and similar habitats. On Quadra Island, grasslands and sparse woodlands are much less abundant yet are just as susceptible to the introduction of non-native grasses. Historically, grass seed containing varieties from the United States were used to control erosion along unstable soil embankments and right of ways, which greatly accelerated the problem. Current regulations stipulate that if natural groundcovers have the ability to re-colonize the exposed soil quickly, the use of grass seed is deemed unnecessary. On Woodlot Licence 1897, this practice of allowing nature to take its course will be implemented in areas that seem appropriate, and in areas that require seed, only grass from local, native stock will be used.

1.8 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS

Not applicable, an exemption is applied for to the District Manager.

1.9 PERFORMANCE REQUIREMENTS

1.9.1 STOCKING INFORMATION FOR SPECIFIED AREAS

Accept default: The Uneven-aged Stocking standards for single-tree selection (Appendix III), as found in the MoF Publication “Reference Guide for FDP Stocking Standards” are adopted for specified areas (Section 12 WLPPR).

1.9.2 SOIL DISTURBANCE LIMITS

Accept default: WLPPR s.24 (1, 2 & 3)
8% of Net Area to be Reforested

1.9.3 PERMANENT ACCESS STRUCTURES

Accept default: WLPPR s.25
the maximum area occupied by permanent access structures is as follows:
Cutblocks \geq 5 ha – 7% of cutblock area
Cutblocks < 5 ha – 10% of cutblock area
Total Woodlot Area – 7% of Woodlot Licence area

1.9.4 USE OF SEED

Accept default: WLPPR s.32
Adoption of Chief Forester’s Standards for Seed Use

1.9.5 STOCKING STANDARDS

Alternative: Appendix II Woodlot Licence Plan 1897 Stocking Standards

1.9.6 WIDTH OF STREAM RIPARIAN AREAS

Accept default: as specified in Section 36(4) of the WLPPR

1.9.7 WIDTH OF WETLAND RIPARIAN AREAS

Accept default: as specified in Section 37(3) of the WLPPR.

1.9.8 WIDTH OF LAKE RIPARIAN AREAS

Accept default: as specified in Section 38(2) of the WLPPR.

1.9.9 RESTRICTIONS IN A RIPARIAN RESERVE ZONE

Accept default: WLPPR s.39

Cutting, modifying or removing trees in a riparian reserve zone is limited to the purposes described in Section 39(1) and Section 39(2) of the WLPPR.

Restrictions on constructing a road in a riparian reserve zone are as described in Section 39(2.1).

1.9.10 RESTRICTIONS IN A RIPARIAN MANAGEMENT ZONE

Accept default: WLPPR s.40

Construction of a road in a riparian management zone is limited to the conditions described in Section 40(1) of the WLPPR.

Restrictions and conditions on road construction, maintenance and deactivation activities, and on cutting, modifying or removing trees in a riparian management zone are as described in Section 40.

1.9.11 WILDLIFE TREE RETENTION

Accept default: WLPPR s.52 (1)

The proportion of the Woodlot Licence area that is occupied by wildlife tree retention areas is no less than the least of the following:

- The proportion specified for the area in a land use objective, or
- The proportion specified in the WLP, or
- 8%

1.9.12 COARSE WOODY DEBRIS

Accept default: WLPPR s.54 (1)

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

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.

1.9.13 RESOURCE FEATURES

Accept default: WLPPR s.56 (1)

Ensure that forest practices do not damage or render ineffective a resource feature.

2 SUPPLEMENTAL INFORMATION REQUIRED TO BE SUBMITTED IN SUPPORT OF THE PROPOSED WOODLOT LICENCE PLAN

2.1 REVIEW AND COMMENT

2.1.1 Advertising: Quadra Island Discovery Islander, June 10, 2005



2.1.2

Advertising: Campbell River Mirror, June 10, 2005

CS CAMPBELL RIVER MIRROR FRIDAY, JUNE 10, 2005

809 - Building Services

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**PUBLIC VIEWING
OF THE WOODLOT
LICENCE PLAN
for W1897**

The draft 10-year Woodlot
Licence Plan for Woodlot
Licence W1897 will be
available for public viewing
and comments at the Quadra
Community Centre, Room
#1, on June 20, 2005 from
4:00 to 8:00. The Plan is
now available for review
and comments for a period
of 30 days, starting with the
publication of this notice.
Written comments must be
received no later than July
11, 2005.

Copies of the plan will be
located at the Quadra Island
Library, at the Campbell
River District Office of the
Ministry of Forests (370
South Dogwood Street) and
at the Licensee's residence at
1210 West Road. Please call
285-2804 for viewing. An
electronic copy of the plan
can be requested by email
at jbenner@oberon.ark.com.
Written comments should be
sent to Jerry Benner RPF,
Benner Forestry Ltd., PO Box
427, Heriot Bay, V0P 1H0.

Recent legislation has
changed the planning
requirements for the holders
of a Woodlot Licence. The
Woodlot Plan requires all
sensitive and highly valued
areas of the woodlot to be
identified and either placed
in reserves or management
areas that will have modified
harvesting. The crown forest
land is located on the north
side of Village Bay Road
and south of the Provincial
Park. The private portion is
at 1210 West Road.

**Comox Valley Sports
& Aquatic Centres**

**Request For Proposal
Concession Services**

The Regional District of Comox-Strathcona (Regional
District) invites proposals from qualified and interested
firms to operate Concession Services at the Comox Valley
Sports Centre, a Regional District of Comox-Strathcona
facility.

The Regional District is seeking an experienced Operator
with proven ability in recreational food service that is
decisive, dedicated to excellence and is able to respond to
the needs and challenges of a facility committed to a wide
variety of events held throughout the year and to marketing
an exciting experience. The successful Proponent must
be market oriented, exhibit a strong personal training
capability and bring a genuine commitment to the Comox
Valley Sports Centre's marketing program of service
excellence.

The Regional District reserves the right to short-list those
Proponents who have complied with the Request for
Proposal requirements.

All enquiries related to this Request for Proposal are to be
directed, in writing or by email, to:

Ray Boogaards	Mailing Address
General Manager	P.O. Box 3370
3001 Vanier Drive	Courtenay, B.C.
Courtenay, B.C.	V9N 5N5

2.2 Referrals

Complete copy of Draft Woodlot Licence Plan delivered to the following:

- Hamatla Treaty Society
- Cape Mudge First Nation
- Campbell River First Nation
- Homalco First Nation
- MOF - Campbell River
- Quadra Island Public Library

Letter of notification of Draft Woodlot Licence Plan and offer of complete copy:

- Klahoose First Nation

Digital copy of Draft Woodlot Licence Plan emailed to the following:

- Quadra Forest Watch – Judy Johnson
- Land and Water BC – Kate Turney and Mike Lakin
- Water, Land and Air Protection – David Donald
- MOF First Nation’s Liaison – Aaron Smeeth

2.3 Copy of Written Comments Received

Letter received from Quadra Island Forest Watch by email on July 10, 2005 (Appendix VIII).

2.4 Revisions Made as a Result of Comments Received

The Draft Woodlot Licence Plan was amended after receiving comments from:

1. The public during the community consultation and open house on June 20, 2005 (Appendix VII).
2. Quadra Island Forest Watch (Appendix VIII).
3. Email and telephone conversations with MOF Jim Simpson.
4. Telephone conversation with WLAP Ron Diederichs
5. Review of the Draft Plan with MOF Jim Simpson.
6. Field reconnaissance and establishment of the Fish and Wildlife Reserve Boundary adjacent to the southern end of Moses Meadow with MOE Dave Donald and MOF Jim Simpson.

The most significant comments received concerned the Fish and Wildlife Reserve that was labelled Moses Meadow Wetland Reserve in the Draft Woodlot Licence Plan. The Draft Plan had identified all of the riparian areas for the wetland and streams and placed the appropriate boundaries according to riparian reserve zone regulations; this resulted in an area of 37.6 ha. Conversations were held with Jim Simpson and Ron Diederichs which clarified the history and status of the reserve area as an area that was designated from Fish and Wildlife Management Reserve to Woodlot Licence 1897 prior to the issuing of the woodlot. It was agreed by all that

the original W1897 application boundary was primarily a mapped boundary. The field boundary would be assessed in the field by MOE and MOF staff with the Licensee and the only deviations would be where actual field circumstances warranted changing in either direction. This field work was performed on Sept. 8, 2005 on the section of boundary between the Village Bay Road near the Eastern most Douglas fir tree in the Three Sisters group going North and West until the Sisters Stream was met. The flagged boundary was traversed with laser and GPS, a resultant line that wandered in and out of the map line was calculated by GIS with the total Fish and Wildlife Reserve area being amended from 69.9 ha to 67.4 ha. This is now on the Woodlot Licence Plan Map and amended in the text and tables of the Plan

2.4.1 Quadra Island Forest Watch

Quadra Island Forest Watch made specific comments that have been addressed in the following sections:

Information on area, size, features and history was added.

The digital copy sent to Forest Watch did not open with all of the features that were present in the Draft Woodlot Licence Plan Map available at the public meeting or elsewhere. All of the required content is on the map.

- a) See above for explanation of Fish and Wildlife Reserve comments.
 - b) Regarding the confusion on the Karst areas, the Karst Reserve is 5.6 ha which comprised the Cave Reserve and the Karst Catchment Reserve as per confidentiality for Charlie Cornfield.
1. Regarding machine free zones as stated in the Draft Woodlot Licence Plan the minimum will be 5m unless site conditions that could be affected by machinery warrant a larger buffer e.g. soft or wet soil.
 2. Regarding the visual corridor the low impact harvesting prescribed along the road will provide adequate retention of the existing visual quality attributes and in the long term will enhance. Matching the plans of the two Licensees across the road from W1897 is seen as unnecessary given the prescribed management.
 3. Regarding Karst Management Area past experience in W1897 has shown very little siltation due to the lack of surface water capable of distributing silt. Statement in plan is sufficient.
 4. Regarding Areas of Concern the operational areas of the W1897 have been limited due to the high percentage of reserves and additional modified harvesting areas. The 3,165 m length of Park boundary would require an unnecessary constraint on both harvesting opportunities and stewardship choices. The areas of harvest are sufficiently distributed and designed with natural features and retention to be compatible with the dispersed recreational activities occurring inside the park. The use of the old road referred to on W1897 Map as SL100 for public walking access to Stramberg Lake will be continued, harvesting will be planned to minimize disturbance to this recreational activity. The area of the woodlot that will be visible from Stramberg Lake is reduced by the geographic layout and the presence in the Park of very tall trees that will always act as a visual shield. The areas where potential visibility exists will have management practices similar to the Village Bay Road corridor. The harvesting areas will be designed to take advantage of natural

geographic features utilizing a combination of selection and small patchcut silviculture systems with strategic placement of wildlife tree patches and retention. Consultation will continue as described in the Management Plan with all First Nations and affected and interested groups or individuals.

2.5 Efforts Made to Meet With First Nations

All of the First Nation's that the Draft Woodlot Licence Plan was referred to were cooperative and positive. From past experience and in communication with all of the First Nation's consulted, the primary referral was considered to be the Hamatla Treaty Society and there was good communication and a positive response (Appendix IX) in their letter dated July 15, 2005 and signed by the Chief Negotiator Dan Smith. Details of the communication process with the individual bands and Hamatla Treaty Society is presented in table format (Appendix X) as the First Nation's Consultation Diary.

2.6 EXEMPTIONS

An exemption for measures to mitigate effect of removing natural range barriers is applied for in this Woodlot Licence Plan due to the inapplicability.

2.7 RATIONALE IN SUPPORT OF PROPOSED ALTERNATIVE PERFORMANCE REQUIREMENTS

The rationale for the Alternative Stocking Standards is presented in Appendix II in the text of Section 1.

3 APPENDICES

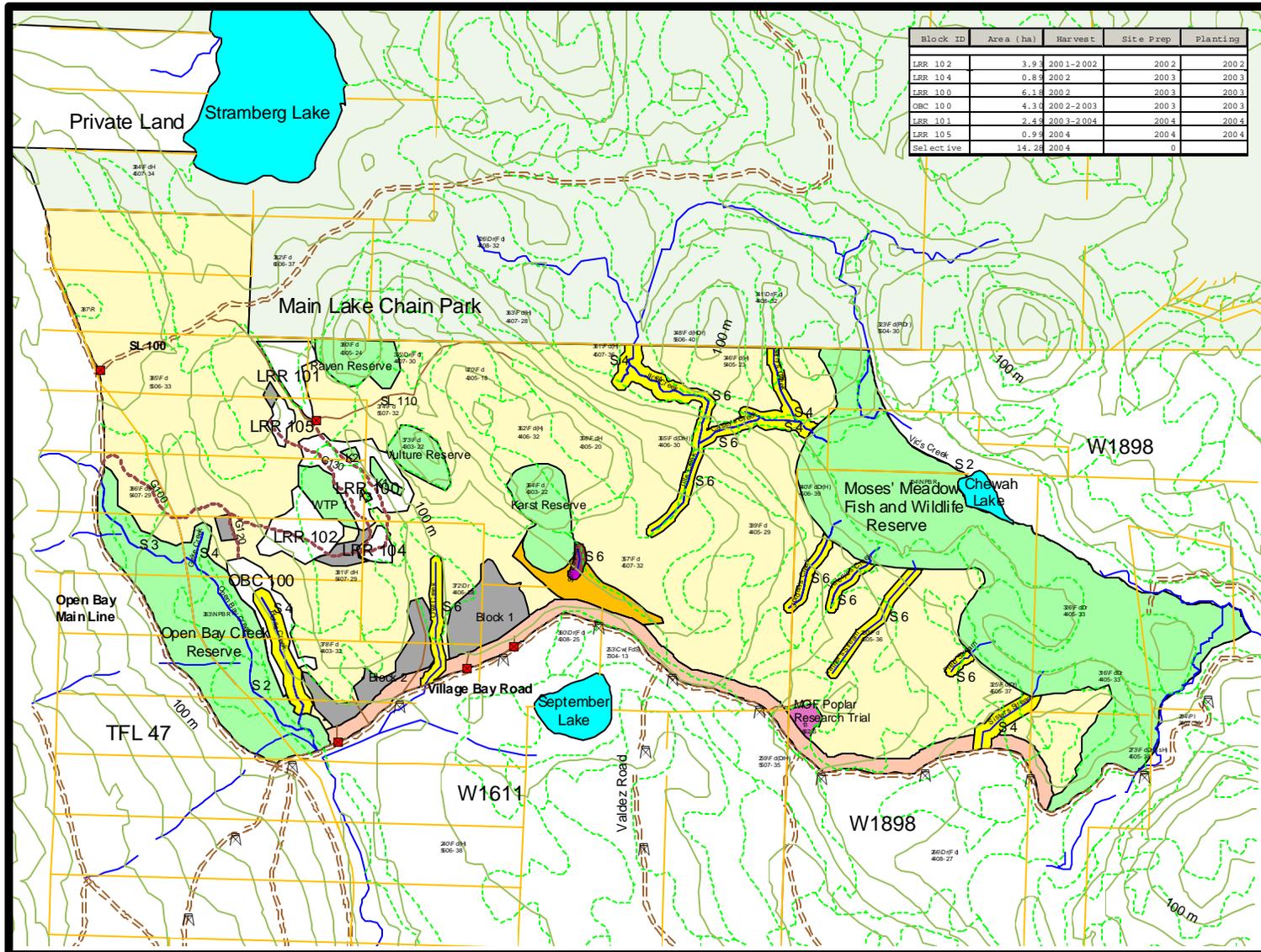
- Appendix I Schedule B (Crown) Map
- Appendix II Stocking Standards
- Appendix III Stocking Standards for Specified Areas
- Appendix IV Karst Survey and Management Recommendations
- Appendix V Village Bay Road VQO Distance Calculations
- Appendix VI Schedule A (Private) Map
- Appendix VII Public Open House Sign-Up And Comment Form
- Appendix VIII Comment Letter From Quadra Island Forest Watch
- Appendix IX Hamatla Treaty Society Consultation Letter
- Appendix X First Nation's Consultation Diary

3.1 Appendix I Schedule B (Crown) Map

Woodlot Plan # 1

Woodlot Licence W1897

CROWN PORTION



Block ID	Area (ha)	Harvest	Site Prep	Planting
LRR 10.2	3.9	2001-2002	2002	2002
LRR 10.4	0.8	2002	2003	2003
LRR 10.0	6.1	2002	2003	2003
OBC 10.0	4.3	2002-2003	2003	2003
LRR 10.1	2.4	2003-2004	2004	2004
LRR 10.5	0.9	2004	2004	2004
Selective	14.2	2004	0	0

Areas Where Timber Harvesting Will Be Avoided	Area (Ha)	Areas Where Timber Harvesting Will Be Modified	Area (Ha)
Open Bay Creek Reserve	24.9	Riparian Management Zones	17.9
Fish and Wildlife Reserve	67.4	Karst Management Zone	4.8
Raven Reserve	3.7	Visual Management Zone	16.3
Vulture Reserve	2.7		
Karst Reserve	5.6	Total Size	39.0
Coke Creek Reserve	0.5		
WTP 1	2.1		
K1, K2, K3	0.7		
Total Size	107.6		

Licensee: Benner Forestry Ltd.
 Biogeoclimatic Zone: CWHxm
 V.I.L.R.U.M.P.: SMZ 19
 Woodlot Area: 400 ha
 Datum: NAD83
 Zone: 10
 TSA: Strathcona
 Date: September 22, 2005
 Drafted By: Benner Forestry Ltd.

- Swallow
- Roads blocked
- Hydro Lines
- Contour Lines
- Legal Boundaries
- Forest Cover
- Built Roads
- Previously Built Roads
- Streams
- Lakes
- Riparian/Wetland Reserve
- Wildlife Reserve Area
- Riparian management 2.shp
- Visual Management Area
- Sinking Stream Management Area
- Karst Management Area
- MOF Poplar Research Trial
- Selectively Harvested
- Cutblocks
- Park
- Woodlot 1897



3.2 Appendix II Stocking Standards

Objectives:

The objective of developing alternative Stocking Standards has a primary goal of meeting the WLPPR first objective in Section 9(1) (a) of maintaining a valuable supply of timber. The freedom to manage that is implicit in the option to develop an alternative and gives the Licensee latitude to meet other objectives such as biodiversity and scientific research. The addition of accepting a minor percentage of alternate species, those that are resident or species out of their normal range yet not normally acceptable will allow a small degree of experimentation. On the Schedule B lands these non-acceptable (or beyond the maximum percentage allowed) species will be planted in a dispersed pattern and will not be counted at free growing (ghost trees). With the future silviculture assumptions clouded by the spectre of global warming, the ability to have trials conducted in a minor context across the woodlot where good observations over time are easily accomplished with the woodlot tenure, is a prudent practise of forestry stewardship.

Administration:

Pursuant to the WLPPR s.135(1) the following tables are the stocking standards that are to be applied to blocks harvested under the Woodlot Licence 1897 Plan#1. These tables are to be used in conjunction with Site Plans that are to be prepared as required by the *Forest and Range Practices Act*. These standards are to apply to all harvest areas except those areas harvested as an intermediate cut, whereby the uneven-aged stocking standards as found in the MoF Publication "Reference Guide for FDP Stocking Standards", are adopted for specified areas (Section 12 WLPPR).

Information Sources:

The stocking standards have been developed based on the information in the "Reference Guide for FDP Stocking Standards" for the Vancouver Forest Region, Land Management Handbook Number 28, and the Chief Foresters memorandum from Aug. 22, 2000 titled "Silviculture Prescription Submissions that include Broadleaf Species", "Guidelines for Tree Species Selection and stocking standards for British Columbia" and the experience of the Licensee as a registered professional forester and based on 31 years experience in the operating area. The table covers all the site series found within the operating area for the following Biogeoclimatic Subzone: CWHxm.

Specific Comments and Standards:

CWHxm site series 11-15 These are swampy types with elevated microsites capable of growing trees. These site series, when present within the net area to reforest, are usually very small in size and harvested due to windthrow or another natural disturbance. These sites are often found as an un-mappable, minor part of a site series mosaic.

Riparian Management Area (RMA): In RMA's, MSSpa and minimum inter-tree distance may vary by up to 50% to enhance the stand level biodiversity value of second growth stands. This is intended to simulate naturally occurring patterns and maintain a partially open canopy to promote understory vegetation and horizontal patchiness.

Site Series Transitions and Complexes: Stocking standards for transitions and complexes will be based on the dominant site series with modification by professional

foresters to reflect the minor site series component(s). In some cases where components of a complex are of similar proportion, discrete and easily recognizable in the field, each component may be treated and assessed on the basis of its respective standard.

Acceptable Specie: To promote biodiversity any species native to North America not listed in the table may be deemed acceptable on the Schedule A land up to 25% of the target stocking if the height is greater than the lowest minimum acceptable height listed for acceptable trees in the site series.

Other Performance Standards for Free Growing Stands

The following standards are to apply to all subzones and site series.

Advanced Regeneration Characteristics: The following characteristics for a free growing tree are to apply to advanced regeneration:

- good vigour (green healthy foliage, greater than 30% continuous live crown, and free of significant disease or insect damage) and good form (no severe forks or crooks).
- evidence of post harvest release.
- no open injuries (scars) with a horizontal width at the widest point(s) greater than 25% of the circumference of the tree at that point.

Western White Pine: Pw is to be considered free growing if there are no stem infections of blister rust and, if at the time of the FG survey individual trees are as follows:

- pruned to 50% of total tree height when tree height is less than 5 m,
- pruned to 3.0 m when tree height is 5.0 m or greater, or
- planted Pw seedlings are genetically selected or bred to be resistant.

Western Larch: Lw is an acceptable species in the “Red Book” and was included as an acceptable species in 01, 03 and 04. It is agreed with the district staff that the use of Lw will not commence on the schedule B land until a policy has been developed for its use by the DCR.

3.2.1

Table 2 Woodlot Licence 1897 Schedule B Stocking Standards

Site Series listed cover all the possibilities found in CWHxm and may not be present on the area of W1897.

Subzone	Site Series	Species/Min Heights (m) FG			Well Spaced (sph)				Regen Delay (Max Yrs)
		Preferred	Acceptable	Broadleaf	Target	Min. P & A	Min. P	Min. Inter-tree (m)	
CWHxm	01	Fd/3.0 Hw/2.0 ⁽⁹⁾ Cw/1.5	Pw/2.5 ⁽²⁾ Yc/1.5 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾	Dr ^(a) Mb ^(b)	900	500	400	2.0	3
	02	Fd/3.0 Pl/1.25		Qg ^(b)	400	200	200	2.0	3
	03	Fd/2.0 Cw/1.0	Pw/2.5 ⁽²⁾ Yc/1.0 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾ Pl/1.25 ⁽⁶⁾	Dr ^(b) Mb ^(b) Ra ^(b)	800	400	400	2.0	3
	04	Fd/3.0	Cw/1.5 Pw/2.5 ⁽²⁾ Yc/1.5 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾	Mb ^(a) Dr ^(b) Act ^(b)	900	500	400	2.0	3
	05	Fd/4.0 Cw/2.0	Ss/3.0 ^(1, 5) Bg/3.5 ⁽⁴⁾ Pw/2.5 ⁽²⁾ Yc/2.0 ⁽⁵⁾ Hw/2.0 ⁽⁹⁾	Dr ^{(a) (9)} Mb ^(a) Act ^{(a) (9)}	900	500	400	2.0	3
	06	Hw/2.0 Cw/1.5 Fd/3.0 ⁽³⁾	Bg/3.5 ^{(4) (7)} Ss/3.0 ^(1, 5) Yc/1.5 ⁽⁵⁾	Dr ^{(a) (7) (8)} Mb ^(b) Act ^(b)	900	500	400	2.0	3
	07	Fd/4.0 ⁽³⁾ Bg/3.5 Cw/2.0	Ss/4.0 ^(1, 5) Pw/2.5 ⁽²⁾ Yc/2.0 ⁽⁵⁾ Hw/2.0	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain High Bench	08	Cw/2.0	Bg/3.5 ⁽⁴⁾ Ss/4.0 ^(1, 5)	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain Med. Bench	09	Cw/2.0 ⁽³⁾	Bg/3.5 ^{(3) (4)}	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain Low Bench	10	NA	NA	Dr ^(b) Mb ^(b) Act ^(b)					
	11	Pl/1.25 ⁽³⁾	Cw/1.0 ⁽³⁾ Yc/1.0 ^{(3) (5)} Lw/1.5 ^{(3) (5)}	NA	400	200	200	2.0	3

	12	Cw/1.0 ⁽³⁾	Hw/2.0 ⁽³⁾ Pw/2.5 ⁽²⁾ Yc/1.0 ^{(3) (5)} Lw/1.5 ^{(3) (5)} Ss/4.0 ^(1, 5)	Dr ^(b) Mb ^(b) Act ^(b)	800	400	400	2.0	3
	13	Fd/4.0 ⁽³⁾ Bg/3.5 Cw/2.0	Yc/1.0 ⁽⁵⁾	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
	14	Bg/3.5 ⁽³⁾ Cw/2.0 ⁽³⁾	Yc/2.0 ⁽⁵⁾	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
	15	Cw/2.0	Yc/2.0 ⁽⁵⁾	Dr ^(b) Mb ^(b) Act ^(b)	800	400	400	2.0	3

Footnotes:

- 1) Ss is to be from seed sources selected or bred for high resistance to *Pissodes strobi*. Planting will be distributed to discourage attack by *Pissodes strobi*
- 2) Pw is to be from seed which has been selected or bred to be resistant to *Cronartium ribicola*
- 3) restricted to elevated microsites on well drained soils.
- 4) restricted to richer/moister microsites up to 15% of the stand.
- 5) species extended beyond normal range; restricted to dispersed microsites and a maximum 5% of the stand.
- 6) restricted to nutrient-very poor sites
- 7) restricted to nutrient-medium sites
- 8) limited by poorly drained soils
- 9) restricted to fresh soil moisture regimes

Broadleaf Management Constraints:

- a) productive, reliable and feasible regeneration option
- b) limited in productivity, reliability and/or feasibility; restricted to 5% of the stand.

3.2.2

Table 3 Woodlot Licence 1897 Schedule A Stocking Standards

Site Series listed cover all the possibilities found in CWHxm and may not be present on the area of W1897.

Subzone	Site Series	Species/Min Heights (m) FG			Well Spaced (sph)				Regen Delay (Max Yrs)
		Preferred	Acceptable	Broadleaf	Target	Min. P & A	Min. P	Min. Inter-tree (m)	
CWHxm	01	Fd/3.0 Hw/2.0 ⁽⁹⁾ Cw/1.5	Pw/2.5 ⁽²⁾ Yc/1.5 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾	Dr ^(a) Mb ^(b)	900	500	400	2.0	3
	02	Fd/3.0 Pl/1.25		Qg ^(b)	400	200	200	2.0	3
	03	Fd/2.0 Cw/1.0	Pw/2.5 ⁽²⁾ Yc/1.0 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾ Pl/1.25 ⁽⁶⁾	Dr ^(b) Mb ^(b) Ra ^(b)	800	400	400	2.0	3
	04	Fd/3.0	Cw/1.5 Pw/2.5 ⁽²⁾ Yc/1.5 ⁽⁵⁾ Lw/1.5 ⁽⁵⁾	Mb ^(a) Dr ^(b) Act ^(b)	900	500	400	2.0	3
	05	Fd/4.0 Cw/2.0	Ss/3.0 ^(1, 5) Bg/3.5 ⁽⁴⁾ Pw/2.5 ⁽²⁾ Yc/2.0 ⁽⁵⁾ Hw/2.0 ⁽⁹⁾	Dr ^{(a) (9)} Mb ^(a) Act ^{(a) (9)}	900	500	400	2.0	3
	06	Hw/2.0 Cw/1.5 Fd/3.0 ⁽³⁾	Bg/3.5 ^{(4) (7)} Ss/3.0 ^(1, 5) Yc/1.5 ⁽⁵⁾	Dr ^{(a) (7) (8)} Mb ^(b) Act ^(b)	900	500	400	2.0	3
	07	Fd/4.0 ⁽³⁾ Bg/3.5 Cw/2.0	Ss/4.0 ^(1, 5) Pw/2.5 ⁽²⁾ Yc/2.0 ⁽⁵⁾ Hw/2.0	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain High Bench	08	Cw/2.0	Bg/3.5 ⁽⁴⁾ Ss/4.0 ^(1, 5)	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain Med. Bench	09	Cw/2.0 ⁽³⁾	Bg/3.5 ^{(3) (4)}	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
Floodplain Low Bench	10	NA	NA	Dr ^(b) Mb ^(b) Act ^(b)					
	11	Pl/1.25 ⁽³⁾	Cw/1.0 ⁽³⁾ Yc/1.0 ^{(3) (5)} Lw/1.5 ^{(3) (5)}	NA	400	200	200	2.0	3

	12	Cw/1.0 ⁽³⁾	Hw/2.0 ⁽³⁾ Pw/2.5 ⁽²⁾ Yc/1.0 ^{(3) (5)} Lw/1.5 ^{(3) (5)} Ss/4.0 ^(1, 5)	Dr ^(b) Mb ^(b) Act ^(b)	800	400	400	2.0	3
	13	Fd/4.0 ⁽³⁾ Bg/3.5 Cw/2.0	Yc/1.0 ⁽⁵⁾	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
	14	Bg/3.5 ⁽³⁾ Cw/2.0 ⁽³⁾	Yc/2.0 ⁽⁵⁾	Dr ^{(a) (8)} Mb ^{(a) (8)} Act ^{(a) (8)}	900	500	400	2.0	3
	15	Cw/2.0	Yc/2.0 ⁽⁵⁾	Dr ^(b) Mb ^(b) Act ^(b)	800	400	400	2.0	3

Footnotes:

- 1) Ss is to be from seed sources selected or bred for high resistance to *Pissodes strobi*. Planting will be distributed to discourage attack by *Pissodes strobi*
- 2) Pw is to be from seed which has been selected or bred to be resistant to *Cronartium ribicola*
- 3) restricted to elevated microsites on well drained soils.
- 4) restricted to richer/moister microsites up to 15% of the stand.
- 5) species extended beyond normal range; restricted to a maximum **25%** of the stand.
- 6) restricted to nutrient-very poor sites
- 7) restricted to nutrient-medium sites
- 8) limited by poorly drained soils
- 9) restricted to fresh soil moisture regimes

Broadleaf Management Constraints:

- c) productive, reliable and feasible regeneration option
- d) limited in productivity, reliability and/or feasibility

Tree Species Labels:

Common Name	Latin Name	Symbol
Douglas fir	<i>Pseudotsuga menziesii</i>	Fd
Grand fir	<i>Abies grandis</i>	Bg
Lodgepole pine	<i>Pinus contorta</i>	Pl
Sitka spruce	<i>Picea sitchensis</i>	Ss
Western hemlock	<i>Tsuga heterophylla</i>	Hw
Western larch	<i>Larix occidentalis</i>	Lw
Western redcedar	<i>Thuja plicata</i>	Cw
White pine	<i>Pinus monticola</i>	Pw
Yellow-cedar-Cypress	<i>Chamaecyparis nootkatensis</i>	Yc
Arbutus	<i>Arbutus menziesii</i>	Ra
Bigleaf maple	<i>Acer macrophyllum</i>	Mb
Black cottonwood	<i>Populus balsamifera</i>	Act
Garry oak	<i>Quercus garryana</i>	Qg
Red alder	<i>Alnus rubra</i>	Dr

		June 21	Left message.
		June 27	Left message on Band Manager's voice mail to contact me. Was referred to Contract Forester Corby Lamb of Capacity Forestry, he returned my call and said he has read the plan and has no problem. Will recommend to the Chief that Homalco defer comments to Cape Mudge Band.
		Aug. 8	Faxed cover letter and copy of Hamatla Treaty Society letter and requested a response.
		Aug. 12	Spoke to receptionist Josh, Chief Blaney was in meeting, FAX Left message for Treaty Coordinator Faye Blaney explaining and requesting confirmation of receipt of FAX and response.
		Aug. 15	Called and left another message for Faye Blaney
		Aug. 25	Faye explained that she is not involved in consultation and to talk to Corby or Darren, but the chief is very busy. If Corby has said it was to be deferred to Cape Mudge Band then that is sufficient due to their lack of capacity.

3.3 Appendix III Stocking Information for Specified Areas

The specified areas are the zones identified on the woodlot map and cited in the text as Visual Management Zone (VMZ), Riparian Management Zone (RMZ) and Karst Management Area (KMA).

3.4 Appendix IV Karst Survey Report and Recommendations

3.5 Appendix V Village Bay Road VQO Distance Calculations

The following table is cited in the text with reference to various tree cover areas with each change noted by the road section, measured from the beginning of W1897 at Open Bay Mainline. In addition where different management styles or constraints were adjacent to the road a new section was identified. The bottom of the table has some statistics for the species present and type of management.

Village Bay Road VQO Distance Calculations

VQO Section	Tree species	Running Distance (m)	Section Length (m)	Percentage of Total
OBC Reserve	Mixed- Fd Hw Ss Dr	0 to 195	195	6%
Lot 1 Horse Log	Fd Hw	195 to 544	349	10%
Owl Creek RMA	Fd Hw	544 to 619	75	2%
Lot 2 Horse Log	Fd Hw	619 to 969	350	10%
Conifer	Fd Hw	969 to 1135	166	5%
Karst Mgmt. Area	Fd Hw Dr	1135 to 1332	197	6%
Mixed	Fd Hw Dr	1332 to 1879	547	16%
Poplar Plantation	Act Dr	1879 to 2040	161	5%
Mixed	Fd Ss Hw Dr	2040 to 2580	540	16%
Alder - Mature	Dr	2580 to 2676	96	3%
Sister's Stream RMA	Dr Ss Hw	2680 to 2742	62	2%
Mgmt. Area 3 Sisters	Fd Bg Hw Dr	2742 to 3060	318	9%
Fish and Wildlife Reserve	Fd Bg Hw Dr Mb	3060 to 3428	368	11%
		Subtotal	3424	100%
		Conifer	940	27%
		Broadleaf	257	8%
		Mixed	2227	65%
		Subtotal	3424	100%
		Riparian reserves	563	16%
		Misc. mgmt. areas	334	10%
		Commercial thin	699	20%
		Subtotal	1596	47%

3.6 Appendix VI Schedule A (Private) Map

3.7 Appendix VII Public Open House Sign-Up And Comment Form

Woodlot Licence 1897 Woodlot Plan Public Review
 Benner Forestry Ltd. Jerry F. Benner RPF
 June 20, 2005

Name	Address & Phone	Comment
Ray Grigg	Box 362 (3298)	
BOB LABBY	Bx42 HB 3501	
Daniel D. Bingham	Box 219 Q. COVE (3766)	ALWAYS CAREFUL SELECTIVE
MARIL NIGHSWANDER	BOX 68 Q COVE 3548	LOOKS GOOD
Jordan Benner	Box 165 285-2520	
Grant Hayden	Box 71 H. Bay 285-2841	Keep up the good work
Val Bass	Box 71 H Bay 285-2841	Like to walk your WL
Geraldine Kenny	Box 348 H. Bay 285-2272	we will consider the plans for comments
John Barclay	Box 205 H Bay 285-3897	
Beverly Barclay	Box 205 H Bay 285-3897	
Geel Beckhurst	Box 165 H Bay 285-3224	Awesome!
Ray Bury	Box 348 H Bay 285-3224	Visuals are the Islands Forest & Community Bank Act
Bruce	Box 267 Q. Cove 285-3705	Looks good.
Jocelyn Reekie	Box 267 Q. Cove 285-3705	

3.8 Appendix VIII Comment Letter From Quadra Island Forest Watch

Quadra Island Forest Watch

Box 487
Heriot Bay, B.C.
V0P 1H0

June 10, 2005

Benner Forestry Ltd.
Box 427
Heriot Bay, B.C.
V0P 1H0

RE: Woodlot Licence Plan for Woodlot Licence #1897
July 1, 2005 to June 30, 2015

Quadra Island has a history of public involvement and input into forestry issues especially since the years of the Forest Resources Committee. Much of Quadra's forests were placed in a Special Management Zone which noted timber as a secondary objective to primary values such as ecosystem biodiversity, wildlife values and visual qualities. The new Woodlot Licence Planning and Practices Regulation which permits ten year plans without providing any cutblock or road information is of little use to the general public. Due to these new regulations the public will not have an opportunity to comment on specific cutblocks that may occur in recreation areas, over trails, in viewscapes, favourite mushrooming sites, sensitive areas etc. This right to speak out for the other values in our forests is of paramount importance. Adding to our cynicism is the number of exemptions allowed through out the WLPPR and the lack of MoF personnel in the field. During the period that Forest Watch has been operating we have felt that the opportunity to discuss concerns prior to the approval of development and site plans is more beneficial to the community and the health of the forest, than reporting post harvest complaints. Our comments are as follows, based on the information the licensee has provided.

Plan Area

It would be helpful for those not familiar with this WL to have the plan area, its size and the AAC all described in this section.

Map

The map provided with the plan by e-mail was difficult to read. It would appear the following information was missing or not clearly indicated:

Forest cover

The location and riparian class of all streams, wetlands and lakes

The biogeoclimatic ecosystem classification of the area, to the subzone level

As well, though it is not required, the park should be identified on the map.

The Schedule A map is not showing all the required information.

Areas Where Timber Harvesting will be Avoided

- Vic's Creek/Moses Meadow Wetland Reserve is not just a riparian reserve but a Fish and Wildlife Reserve. The boundary should be the same as what was shown on the maps of the bid package. This boundary was the result of a cooperative arrangement between Ron Diederichs of the Ministry of Environment and MoF. It is also noted that in your first Development Plan you allowed 68.9 ha for this reserve whereas you are now only showing 37.6 ha.
- We are pleased to see a reserve being placed around the most valuable karst features. However, the written text and table note a reserve of 7.9 ha but the map which has two karst areas shown, notes one of 5.6 ha and the other 4.8 ha in size. Which is correct?

Areas Where Timber Harvesting Will be Modified

- Riparian Management Zones: You note that you will meet or exceed the regulations. We encourage you to exceed the requirements especially for the S6 streams, which will receive little or no protection under the WLPPR. We would also like to see a minimum distance of 10 rather than the proposed 5 meters as a machine free zone along stream banks and a commitment to fall away and yard away.
- The Village Bay Road Visual Corridor: We are not aware of any 50-meter distance being established. The old Quadra Plan of June 13, 1993, is the only map showing a V.Q.O. along the road and it has varying widths. We are pleased to see you are proposing a number of ways of meeting the retention standards and have included this area in this section. However we question whether the 50 meters will be sufficient especially if there are openings directly behind that proposed corridor. Also, as another woodlot borders the same road, logging plans will need to take their plans into consideration when planning impacts on the visuals.
- Karst Management Area: Again we are pleased to see this area included along with the karst reserve and that you will be following the Karst Management Handbook. We have noticed in karst areas within TimberWest's TFL on Quadra that the road material can also be a problem. Therefore we request that material that can silt not be used for road construction through a karst area.
- Other Areas of Concern: There are a number of other areas within the woodlot where we have concerns about the amount and type of logging and future road access. These include: the park boundary, the visuals from Stramberg Lake and the area around the old road into the lake and park. As this is the only opportunity to comment on logging plans, it would seem that the only way to ensure that these concerns are addressed is to have these areas included in this section.

Wildlife Tree Retention Strategy/Individual Wildlife Trees/Wildlife Tree Retention Areas

- All of the strategies outlined appear fine and we are pleased that you will continue to be on the lookout for potential wildlife trees and areas. In the past we have noted on Quadra a problem with retaining fallen large diameter Douglas fir and red cedar as wildlife habitat and large woody debris. They are usually taken for firewood or for other reasons. How will you ensure that these trees are left in the forest?

We note that you have accepted the default for all of the Practice Requirements. From your previous statements in this plan we are hopeful that in many cases such as stream requirements that your woodlot will exceed these standards.

In your Management Plan under Community Consultation Commitments you undertook to consult and work with individuals and various organizations. The lack of detailed information in the WLPPR makes this commitment even more important. Therefore we request that when the District Manager is notified of your plans for timber harvesting or road construction that Forest Watch is notified and plans are made available. We look forward to a response on our comments.

Yours truly,

Judy Johnson

CC: Rory Annett
Charlie Cornfield, MoF
Ron Diederichs, Senior Ecosystem Biologist
David Donald, Ecosystem Officer

3.9 Appendix IX Hamatla Treaty Society Consultation Letter
(Scanned Version)

HAMATLA

HAMATLA TREATY SOCIETY

1441 Old Island Hwy.

Campbell River, BC V9W 2E4 Phone: (250)287-9460

Fax: (250)287-9469

Toll free No. 1-888-900-5720 email: hamatla@island.net Web: <http://www.hamatla.com/>



TREATY SOCIETY

Friday, July 15, 2005

Jerry F. Benner
PO Box 427
Heriot Bay BC
VOP 1N0
Phone: (250) 285 2804
Fax:(250)2852108

Dear Mr. Benner:

Re: Woodlot Licence # 1897

I am writing to you regarding our concerns with the Woodlot 1897 located in the Village Bay area. As you may know, the Hamatla Treaty Society represents its member Nations, the We Wai Kai (Cape Mudge Band), Wei Wai Kum (Campbell River Band), Kwiakah (Phillips Arm), and K'omoks (Comox Band).

As the courts have confirmed on numerous occasions, both the provincial and the federal governments owe a fiduciary duty of utmost good faith to First Nations. The Supreme Court of Canada made it clear in *Delgamuukw* that this duty can only be satisfied by the involvement of First Nations in decisions taken with respect to our lands. The Court then went on to say "There is always the duty of consultation." (para. 168) This consultation must, at a minimum, be in good faith with the intention of substantially addressing the concerns of the First Nation whose lands are at issue." The BC Court of Appeal in its February 2002 decision in *Council of the Haida Nation* has further clarified this obligation by confirming that your government is obliged to make an initial assessment of our rights and must not only to engage in meaningful consultation, but also must seek an accommodation of our interests (including cultural and economic ones).

At this time, we have no objection with the Management Plan for Woodlot Licence 1897. However, we may choose in the future to address the issues of infringement and compensation with respect to this project through the treaty process, the courts or other dispute resolution process.

We also reserve the right to raise objections if any cultural use or archaeological sites are identified when the project is being carried out or if we discover impacts on our rights or interest that we had not foreseen. We would like to remind you that there is potential for this development to unearth archaeological remains. If this occurs, we expect you to halt development immediately and contact our office as well as the provincial Archaeology Branch. If this occurs, we will work with you to ensure that proper protocol is followed.

Yours truly,

Dan Smith
Chief Negotiator
Hamatla Treaty Society

cc. Member Nations

Aaron Smeeth, MOF Aboriginal Liaison

**3.10 Appendix X Klahoose First Nation Treaty Office
Consultation Letter (Scanned Version)**

3.11 Appendix XI

First Nation's Consultation Diary

Name	Phone	Date	Comment
Hamatla Treaty Society	287-9460	June 17	Spoke on phone with Forestry Art Wilson and then emailed Woodlot Licence Plan.
		June 20	Dropped off Woodlot Licence Plan at office-Art not there.
		June 21	
		June 24	Left message for Art to call me.
			Visited office, spoke with Rod Naknakim regarding Woodlot Licence Plan and general good relations with First Nations. He would let Art know I was in.
		June 27	
		July 13	Spoke with Art, he will look at Plan hopefully within the next week.
		July 15	Left message for Art to call me.
		July 15	Talked to Art, he will try to track it down, maybe it is at TR?, then he will try to get Dan to respond to it on Monday. Received letter from Dan Smith with no objections to Woodlot Licence Plan. Cautions about treaties, consultation with Govt., potential archaeological discoveries etc.
Cape Mudge Band	285-3316	June 17	Called Gail Smith and emailed Woodlot Licence Plan to her for distribution.
		June 27	Spoke with Shawna, she will pass message to Brian and gave me Ted's # where I left another message. Called back and talked to Brian, he said Hamatla Treaty Society will undertake the referral for the Cape Mudge Band.
Campbell River Band	286-6949	June 17	Spoke on phone with Chris Drake and then emailed Woodlot Licence Plan and dropped copy off at 4:30. Hamatla Treaty Society will undertake the referral for the Campbell River Band.
Klahoose First Nation	935-6536	June 17	Called receptionist and Faxed cover letter to her for distribution to Chief Duane Hansen.
		July 13	Spoke to Duane regarding the referral, it is on the pile and he will take it to the council and potentially defer to Cape Mudge Band. We also discussed their Woodlot and their need to get some work going, I offered my services.
		Aug. 8	Faxed cover letter and copy of Hamatla Treaty Society letter and requested a response.
		Aug. 12	Spoke to Chief Duane Hansen, he has it third on his list of correspondence to respond to, will try today.
		Nov. 21	Received letter from Chief Duane Hansen stating that consultation is deferred to the Hamatla Treaty society and the Cape Mudge First Nation.
Homalco First Nation	923-4979	June 20	Dropped off Woodlot Licence Plan at office-left with office worker on lunch break.