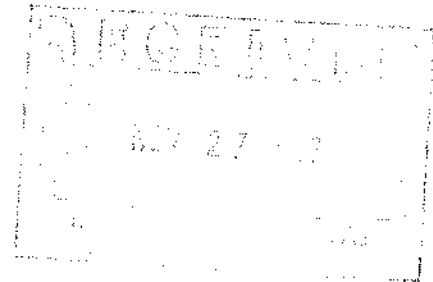


# WOODLOT LICENCE # 0046



## WOODLOT LICENCE PLAN #1

First Term  
2007 to 2017

Harper Logging Ltd.  
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Authorized Licensee Signature:

Harper Graham

*for Paul Katz*  
Signature

Date November 26, 2007

F1001

B. Hawrys  
Dec 18, 2007.

## DISCLAIMER

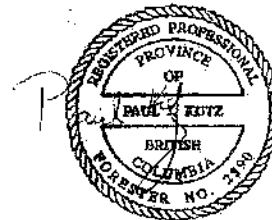
- Recognising the special nature of management on a woodlot licence, this disclaimer forms part of the Woodlot Licence Plan (WLP) for Woodlot Licence Number 0046 and advises that:
  - The decision to operate under one or more of the Default Performance Requirements provided in the Woodlot Licence Planning 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

Signed

Name: Paul J. Kutz

RPF # 2390

Contact phone number (604) 485-2062



Email: paulkutz@shaw.ca

Seal:

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# **I. CONTENT FOR A WOODLOT LICENCE PLAN (WLP)**

## **1.0 PLAN AREA**

☒ This plan covers the entire Woodlot Licence area.

This Woodlot Licence 0046 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 Sunshine Coast Forest District (SCFD) has provided the Objectives Matrix that is used to determine relevant and current FRPA Values and Elements.

The holder of Woodlot Licence 0046 is Harper Logging Ltd., based out of Heriot Bay, BC. The Woodlot is an aggregate of crown (Schedule B) and private (Schedule A) lands. The private land portion is 165 hectares while the crown land portion totals 1485 hectares. This brings the total area of WL0046 to 1650 hectares. The Annual Allowable Cut level as approved by the Ministry of Forests is 7022 m<sup>3</sup> per year. The Licence is located on Read Island within the Sunshine Coast Forest District. A map is provided in the attached appendix.

The operable forest cover is primarily age class 4 and 5 second growth, Douglas fir leading stands that were restocked by natural regeneration following logging. The terrain is generally gently rolling with pockets of rock outcrops.

## **2.0 MAP AND INFORMATION**

The development of this Woodlot Licence Plan is intended to identify areas in which harvesting activities will be avoided or modified to protect resource features, manage resource values, and address areas with other special interest of sensitive areas. The areas above are located, identified and discussed within the text and mapping components of this plan. Furthermore, management strategies are highlighted and performance requirements defined as spelled out in the Woodlot regulations.

In the opinion of the authors, this Woodlot Plan is consistent with the Ministry of Forests objectives as per the Sunshine Coast District's "Objectives Matrix".

The main access route through the Woodlot Licence originates at Evan's Bay where Harper Graham maintains a log dump and local dock. From Evan's Bay roads provide access west and south towards Rosen Lake and east towards Evening Mountain. No publicly scheduled ferry routes serve Read Island; therefore, access is somewhat restricted to the general public. It should be noted that there are a small number of private residences located on Read Island along with a small school that is located in Surge Narrows.

Recent work completed for the submission of this WLP included: a general mapping update of blocks, roads, and tenure lines; a review of wildlife tree patches within the woodlot area; and a review of the WLP to ensure consistency with the objectives stated by the Minister of Environment regarding both the winter survival of specified ungulate species and the survival of a Species at Risk (notice) applicable to the Sunshine Coast Forest District.

The Woodlot License Plan Map (Appendix 1) includes the following information:

- Forest cover,
- Topography,
- Location and riparian class of streams and wetlands,
- The location of public utilities (transmission lines),
- Contiguous areas of sensitive soil,
- Domestic water supply intakes (known),
- Existing roads,
- Recreation trails,
- Known scenic areas (per Sunshine Coast Forest District May 16, 1997 letter),
- Private property within and adjacent to the woodlot,

The following does not apply to the woodlot and is not shown:

- Wildlife habitat areas,
- Ungulate winter ranges,
- Community watersheds or fisheries sensitive watersheds,
- Licensed community water supply intakes and infrastructure,
- Temporary or permanent barricades to restrict vehicle access.

**Other information pertaining to the Woodlot Licence Plan is described in words (text) as follows:**

- Biogeoclimatic Ecosystem Classification

The woodlot is within the CWH xm biogeoclimatic sub zone where the average rainfall can range from 110 to 270cm/yr. Past fire occurrence and logging have resulted in a forest cover primarily composed of Douglas fir (Fd), accompanied by Western Hemlock (Hw) and minor amounts of Western Red Cedar (Cw). On the wetter and richer sites deciduous species including maple (Mb) and Red Alder (Dr) and Grand Fir (Bg) can be found. Throughout the Woodlot Licence area the majority of sites are zonal. The general terrain of the woodlot is rolling with numerous rock outcrops, some in the form of prominent rock bluffs. Slopes range from flat to vertical (at bluffs), but are generally moderate in the operable forested areas.

- Wildlife Notice-Minister of Environment

The Notices for wildlife rely on the Identified Wildlife Management Strategy Version 2004 (IWMS) to guide the identification of suitable habitat required for the survival of species at risk.

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Winter Survival of Ungulate Species in the Sunshine Coast Timber Supply Area.

*Critical Mountain Goat Winter Habitat is not found within this license.*

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Survival of Species at Risk in the Sunshine Coast Timber Supply Area.

A. Coastal Tailed Frog: The Notice amount calls for a maximum of 30ha, not exceeding an impact to the MTHLB of 20 ha.

*The SCFD requirement has been met with the creation of a Frog management area located in the Mt Elphinstone geography managed by BC Timber Sales (BCTS).*

B. Marbled Murrelet:

*No nest of the Marbled Murrelet is known to exist on this plan.*

*The Notice amount calls for:*

- 1) All suitable nesting habitat within the non-contributing land base.*
- 2) All suitable nesting habitat located within OGMA.*
- 3) Suitable nesting habitat to a maximum of 495 ha of MTHLB.*

In order to be consistent with the Notice criteria, future harvest areas are to be selected for conservation management in the Cortes LU based on;

- a) All suitable nesting habitat within the non-contributing land base,
- b) All suitable nesting habitat located within OGMA, and
- c) Suitable nesting habitat to a maximum impact of 495 ha

Note 1: For the case of a Wildlife Habitat Area, the spatial delineation is maintained by government as part of the Order that legally establishes the WHA. Since the Notice was given, 11 WHAs have been established in the Howe Landscape Unit and 2 WHAs have been established in the Brittain Landscape Unit. These 13 WHAs account for an impact on the Mature THLB of 428 ha, which leaves only 67 ha available for future WHAs within the THLB in the SCFD.

Note 2: Inventory work completed in 2003, 2004, and 2005 to identify high priority Marbled Murrelet habitat remains in draft and is not shown. Refinements of suitable nesting habitat provided by acceptable inventory methods will be preferred to the habitat algorithm initially proposed by the Habitat Recovery Team until such time as the final WHA amounts are identified in the SCFD.

Note 3: Currently, the Cortes Landscape Unit Plan is in the draft stage.

➤ *Old Growth Management Areas (OGMA's):*

These have been preliminarily selected within the Landscape Unit. On Read Island, there are several draft OGMA's selected; however, none are within the identified Woodlot 0046 area.

➤ *Grizzly Bear:*

The Cortes Landscape Unit is not known to have any Grizzly Bear populations.

➤ *Vananda Creek Sticklebacks:*

The Cortes Landscape Unit is not known to have any Stickleback populations.

➤ *"Queen Charlotte" Goshawk\*\*:*

The notice identifies the amount distribution and attributes consistent with the habitat required. The Woodlot holder anticipates that the area being set aside be built around active nest sites. There are currently no known active nests within the area to which the Notice applies, managed under this Woodlot License Plan.

\*\* To determine suitable Northern Goshawk habitat (*Accipiter gentiles laingi*) a habitat supply model was developed for the Sunshine Coast Forest District, (shared between major licensees) that could accurately predict amounts of suitable habitat based on available forest cover attributes. From this model three-goshawk management areas located in the Cortes FDU (West Redonda Island) have been spatially identified. The amounts and impacts associated for the three goshawk management areas meet the Notice requirement and fulfil the district (SCFD) requirements until such time as WHA's are officially declared.

➤ There currently is no Notice for Survival of Regionally Important Wildlife.

### **3.0 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED**

There are no areas in this woodlot licence where timber harvesting will be strictly avoided.

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

Arcas in this Woodlot Licence where timber harvesting will be modified to protect and manage resource are shown on the map by shading, hatching or lines.

☒ Riparian reserve zones (RRZs) are not planned for regular harvesting other those specified by regulation (as outlined in the WLPPR Sect 39) such as tree removal for the purpose of creating trails, carrying out a sanitation treatment or salvaging of a windthrow tree. Streams classifications that contain a RRZs are outlined in Table 1 and are denoted by a red line on the map.

☒ Riparian Management Zones (RMZs). Table 1 below outlines how timber harvesting will be modified based on the stream and lake classification. Depending on the present stand structure, terrain, windthrow risk and block configuration the retention level will be uniform, grouped or spatially distinct. Harvesting operations are permitted within a RMZ provided they are conducted with the intent of meeting the requirements as outlined in Table 1 and the specific site conditions. This site-specific information will be used to determine the range of retention (all streams except S3 range from 0-100% retention) for the specific RMZ. In general, understory and unmerchantable timber and other conifers of good form and vigour will be maintained as much as possible to provide cover, maintain stream bank stability and natural stream flow.

Road construction within riparian management zones will be avoided where possible, unless alternate locations would result in a higher risk of environmental damage. Where encroachment is unavoidable, impacts will be minimized through the use of narrow right of ways, silt fencing, grass seeding, etc. Riparian management areas will be protected throughout all phases of forestry operations through careful stream assessments and classifications, applying appropriate prescriptions that meet the general objectives as stated above, and through appropriate supervision of operations in the vicinity of these areas. A documented rationale will be placed on file and signed off by a qualified member of the Association of BC Professional Foresters for any areas requiring an encroachment.

☒ Scenic Areas within the Woodlot are shown on the attached map. Harvest areas within the approved scenic area polygons contain a variety of Visual Quality Objectives. The layout strategies to meet the objectives will be accomplished by locating blocks using existing screens such as topography whenever possible. Small opening sizes and

utilizing partial harvesting systems such as the retention silvicultural system will also be used whenever ground conditions permit. Also, at the pre-harvest planning stage, visual concerns can be modelled and remedied prior to harvesting if problems are perceived.

Table 1: Modification of harvesting in RMZ's 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) |  |  |   |
| S3<br>(Fish bearing)<br>1.5-5m wide | 20            | 20            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ.</li> <li>Manage windthrow hazard to the reserve zone</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul> | <i>modified</i><br>Fd, Cw, Hw, Pw, Ss, Dr and Mb | 25-100%   |
| S4<br>(Fish bearing)<br>< 1.5m wide | 0             | 30            | <ul style="list-style-type: none"> <li>Maintain stream bank integrity</li> <li>Provide shaded cover, LWD and litter, i.e.: Retain under story conifers, and other non-merch species and vegetation where possible.</li> </ul>  |  | 0-100%  |
| S5<br>(non-Fish)<br>≥3m wide        | 0             | 30            | <ul style="list-style-type: none"> <li>Minimize debris transport to lower reaches of stream</li> <li>Retain under story Cw, and other non-merch species and vegetation where possible.</li> </ul>  |  | 0-100%  |
| S6<br>(non-Fish)<br>≤3m wide        | 0             | 20            | <ul style="list-style-type: none"> <li>Minimize debris transport to lower reaches of stream</li> <li>Retain under story Cw, and other non-merch species and vegetation where possible.</li> </ul>  |  | 0-100%  |
| W1<br>(wetland >5ha)                | 10            | 40            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>  |  | 0-100%  |
| W3<br>(wetland 1-5ha)               | 0             | 30            | <ul style="list-style-type: none"> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>   |  | 0-100%  |
| W5<br>(wetland complex)             | 10            | 40            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>  |  | 0-100%  |

## 5.0 CONSERVING AND PROTECTING CULTURAL HERITAGE RESOURCES

There are no known Cultural Heritage Resource Features within Woodlot 0046. While planning and implementing proposed activities, potential impacts on archaeological resources will be minimized. In order to accomplish this, Harper Logging Ltd. will endeavour to identify objects, sites, or locations of traditional aboriginal societal practices during field layout and site plan stages. Bands with Traditional Territory within Woodlot 0046 include the Klahoose, Homelco First Nations and Hamatla Treaty Society. Consultation with these bands is ongoing during the planning stages to avoid or minimize impacts on archaeological resources. Documentation of all consultation with affected First Nations is included within the supplemental information (Part 2) of the plan.

On an annual basis, commencing the year after the WLP comes into effect, Harper Logging Ltd. will attempt to contact the First Nations that have an asserted traditional territory with the defined area to discuss the harvesting and road building activities planned for the upcoming year of operations. In addition, a request will be made to the First Nation for any new information regarding any potentially affected Cultural Heritage Resource not previously identified to Harper Logging Ltd. Any new information received will be forwarded to the Ministry of Forests.

The following results and strategies (Table 2) for managing cultural heritage values will apply.

Table 2: Cultural Heritage Values and Associated Results and Strategies

| Cultural Heritage Value | Result and Strategy   |
|-------------------------|---|
| Cedar                   | <p><i>Result:</i></p> <ul style="list-style-type: none"><li>• Enable continued access to red cedar for traditional use by local First Nations</li></ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"><li>• Based on availability of stock and ecological suitability (e.g. Cw listed as preferred species), a component of Cedar will continue to be planted in the woodlot to ensure a long-term supply.</li><li>• Naturally occurring young cedar trees (including poles) will be retained where operationally feasible.</li></ul> |

|                                    |   |
|------------------------------------|---|
| <b>Traditionally Used Plants</b>   | <p><i>Result:</i></p> <ul style="list-style-type: none"> <li>• Enable continued access to traditionally used plants for traditional use by local First Nations.</li> </ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"> <li>• When local First Nations have indicated specific interest in traditional use plants, the licensee will identify the presence of such plants in planned harvest areas and communicate this to the interested First Nations prior to cutting permit submission. This is to allow for review by the local First Nations and that any collections of traditional use plants can be initiated by the local First Nations prior to harvest.</li> <li>• A no-pesticide use policy is implemented in this Woodlot Licence. Manual brushing and early planting of large stock is the preferred method to overcome brush problems.</li> </ul> |
| <b>Cultural Heritage Resources</b> | <p><i>Result:</i></p> <ul style="list-style-type: none"> <li>• Harvest plans will consider identified cultural heritage resources.</li> </ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"> <li>• The Licensee will share information with local First Nations upon request and be available for field reviews.</li> </ul>   |

If the licensee or any personnel connected with the Woodlot Licence operation finds evidence of tradition use or cultural heritage values, the Ministry of Forests Aboriginal Liaison Officer will be notified and all work will cease within the immediate (20 m) area. The licensee will cooperate fully, as requested by the Ministry of Forests Aboriginal Liaison Officer.



## 6.0 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 of this plan.

### INDIVIDUAL WILDLIFE TREES

#### a) Species and Characteristics:

The following table describes the species and characteristics of individual trees that will guide the selection of wildlife trees to be retained.

Table 3: Wildlife Tree Value and Characteristics

| <b>HIGH (at least two of the listed characteristics)</b>   | <b>MEDIUM</b>  | <b>LOW</b>  |
|--|--|---|
| <ul style="list-style-type: none"><li>• Internal decay (heartrot or natural/excavated cavities present)</li><li>• Crevices present (loose bark or cracks suitable for bats)</li><li>• Large brooms present</li><li>• Active or recent wildlife use</li><li>• Current insect infestation</li><li>• Tree structure suitable for wildlife use (e.g., large nest, hunting perch, bear den, etc.)</li><li>• Largest trees on site (height and/or diameter) and/or veterans</li><li>• Locally important wildlife tree species</li><li>• Should a variety of ecologically suitable species be present on the site the following can be used as a guide to the selection of species for wildlife trees: Douglas Fir, Western Red Cedar, Grand fir as highest priority; Western hemlock, Sitka Spruce and deciduous should be considered a lower priority and only selected as a last resort.</li></ul> | <ul style="list-style-type: none"><li>• Large, stable trees that will likely develop two or more of the above attributes for High.</li></ul> | <ul style="list-style-type: none"><li>• Trees not covered by High or Medium categories.</li></ul> |

Throughout Woodlot W0046 a number of veteran (old growth) trees, mostly Douglas fir are scattered throughout the license area. These trees add structural and biological complexity of the second growth forest and will be retained as wildlife trees (except as itemized in item b) below). In some cases second growth trees will be retained as wildlife trees to supply wildlife and biological diversity values and/or for the recruitment of future vets, to vary the age classes on the Woodlot, to reduce wind fetch in long openings, and/or act as a seed source or visual screen.

WL0046 has an individual wildlife tree management strategy that is predicated on retaining 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 overtime as the majority of the high value trees are Douglas fir and red cedar that are long lived species and will remain structurally strong for long periods even after death. Due to the number of scattered wildlife trees within the Woodlot 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.

Where safe to do so, an average of one (1) wildlife tree per hectare will be retained arranged as singles, clumps or groups either internal or external to the harvest proposal. Where required, these individual trees will count towards the 8% retention target for the WLP. Calculation of the tree's contribution will be determined using basal area (i.e. measuring diameter and heights) as a unit of measurement where 50m<sup>2</sup> of individual trees will be equal to one (1) hectare of Wildlife Tree Retention area.

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

Specific conditions that influence the decision of where individual wildlife trees may be removed include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees adjacent openings.

Alternatives to removal of a wildlife tree will be given priority such as the establishment of a 'no work zone' or widening of a riparian width to protect the feature balanced with tree removal farther away from the feature within the RMA. All workers involved with the removal of potential wildlife trees will be informed of developed standards prior to fieldwork to help mitigate unnecessary removals.

#### **c) Replacement of Individual Wildlife Trees:**

Individual trees will be replaced if they are of "high" wildlife value. Replacement trees will be selected using criteria outlined above with a preference for selecting trees that have two or more high wildlife tree value characteristics. If possible, retain stems within streamside reserves. Harper Logging Ltd. will at all times maintain a minimum of 8% WTR throughout the Woodlot. Individual trees that contribute to the retention target and are required to be replaced will be re-allocated as part of the overall WTR strategy.

## WILDLIFE TREE RETENTION AREAS

### **a) Forest Cover Attributes:**

Wildlife tree retention areas (WTRs) are planned preferably in fully constrained areas for long term retention (e.g. riparian reserve zones). Under the WLPPR 52 (1) the amount of WTR's must be no less than 8% of the area of the Woodlot. The regulation also indicates that the WTR does not have to be mapped as the location of good WTR's can change over time based on changing forest management decision making. Wildlife tree patches (WTP's) previously assigned to cut blocks at the stand level, when combined with the future wildlife tree retention areas to be assigned during future operational planning, will supply a significant area of the Woodlots biodiversity and coarse woody debris (CWD) values.

In review of the May 16, 2006 document "*Wildlife Tree Retention: Management Guidance*" the following sections have been adopted for this WLP. Throughout the WLP the selection of WTR areas will be considered using the following criteria in order of priority:

1. Protect trees with valuable wildlife tree attributes;
2. Where there are few trees with valuable attributes, locate retention in areas most suitable for long-term wildlife tree recruitment; and
3. Where there are no opportunities for current or future valuable wildlife tree attributes, locate wildlife tree retention to be representative of the pre-harvest stand.

Generally, the approach for selecting an area of patch wildlife tree retention is to anchor the patch on ecologically valuable attributes (Table 3 above) such as:

- A high-value wildlife tree (e.g., veteran tree);
- A valuable wildlife habitat feature (e.g., raptor nest),
- An area of high wildlife use (e.g., wetland, riparian management zone, confluence of two small streams); or
- Resource features requiring protection, provided there are also high- or medium-value wildlife trees that will be retained (e.g., culturally modified trees, or habitat for species at risk).

In the absence of ecologically valuable anchors for a wildlife tree patch, the following will be considered (in order of ecological preference):

- Retaining the largest trees possible;
- Retaining trees representative of the pre-harvest stand; and
- Maintaining ecological inter-patch spacing.

Where possible, trees will be selected that have the potential of developing high-value wildlife tree attributes within the rotation period. Characteristics include trees that are more open grown, have current defects (e.g., stem scars, broken tops) or larger branches. Uncommon tree species or stand characteristics present in the stand will also be

considered for retention. In addition, areas that are not operational (e.g., seasonally wetted areas, seepage sites), but contain wildlife tree attributes, will be considered for retention to minimize timber supply impacts. If there are two areas that are equal in terms of wildlife tree and biodiversity benefits, and both are within (or contiguous to) the cutblock, the non-operable area will be selected for retention.

**b) Conditions Under Which Trees May Be Removed from Wildlife Tree Retention Areas:**

Stand-specific issues that influence the decision of where salvage may be appropriate for WTR's include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands including the salvage of windthrow timber
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees in adjacent openings.

Given the stand specific considerations outlined above the salvage of timber is permitted within a WTR area. Should a site-specific condition (such as windthrow or catastrophic events) occur within a RRZ then the conditions for the removal of such timber must follow Sec 39 of the WLPPR.

When assessing the potential to salvage a WTR area the level of impact will be determined. In areas that contain damage up to approx. 50% of the dominant or co-dominant trees the removal would focus on downed timber only, protecting the standing green. If more significant amounts of wildlife trees are lost due to wind-throw or other catastrophic events (exceeds 50% of the dominant or co-dominant trees) in WTR area then salvage of the damaged and remaining stems will be considered. Salvage of the area will be allowed considering other environmental constraints and the replacement strategy below.

The salvage of portions of the WTR either singles, clumps, or impacted areas created for improved safety to people is good forest management. Individual trees may be felled but not removed if considered a safety hazard.

**c) Replacement of Trees Removed from Wildlife Tree Retention Areas:**

No strategy for the specific replacement of individual trees felled as danger trees posing a hazard within a defined distance of a cutting-authority is presented as this will not threaten the long-term function or integrity of WTR's.

Where salvage/harvest is planned and authorized within a wildlife tree retention area, the replacement with another suitable area in size, value and species composition will be selected. When the level of impact on a WTR is <50% (this typically provides for a high level of forest influence within the stand and is considered not to be a clear-cut) then the WTR will continue to contribute to the overall retention target. When the level of impact exceeds 50% then the WTR area should be replaced with other suitable habitat in the nearest possible location.

If a WTR suffers blow down, but is not salvaged, it will not be replaced. Replacement areas must have equal or better wildlife values. For non-riparian WTR's attempts will be made to incorporate important features such as snags, and other significant wildlife features.

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

There is only one invasive species (Scotch Broom) of potential concern; although it is not currently a problem on the woodlot. There is no range use on the woodlot. The introduction or spread of invasive plants, specifically Scotch Broom into the Woodlot is unlikely under current forest management practices. However, in order to prevent the introduction of these plant species the main strategy within the WLP will be to regularly monitor for invasive plants and carry out control measures before they reproduce on roads and other areas where primary forest activities have created suitable seedbeds.

In the event that Scotch Broom or another invasive species does become established the strategies listed below will be implemented. The holder of this Woodlot will use three complimentary strategies to counter the introduction or spread of invasive plant species. These include:

### 1) Prevention and Control

- The holder's foresters will be encouraged to review the MOE's alien species web site and review the identification, control and management of invasive plants.
- The goal of this WLP is to annually identify known sites of invasive plants and sites that are at high risk to invasive plant establishment through their forest practices within the area under this plan
- Preventative measures to minimize the occurrence and spread of invasive plants will include grass seeding of exposed soils following soil disturbance where the introduction or spread of invasive plants is likely. Grass seeding will be done before the end of the first complete growing season immediately following the completion of the relevant activity (e.g. construction of a road or landing or heavy disturbed forest floor displacement). Seed mixtures used for the above purposes or for those under Section 29 of the WLPPR will be assessed to ensure that their use does not introduce other invasive species. These are typically Canada Common No 1 Forage Mixture or better.
- If moderate to high risk invasive plants are likely to establish in cut blocks harvested during the forest regeneration phase, the Holder of this WLP will through normal reforestation practices:
  - i. Establish a stand of coniferous and/or deciduous crop trees consistent with the applicable stocking for the area on or before the regeneration date; and
  - ii. Meet Free Growing requirements consistent with the applicable stocking standards on or before the late Free Growing Date so that the stand will form a closed canopy to suppress seed and vegetative production of shade intolerant invasive plants.

## 2) Detection of Invasive Plant Species

- Invasive plants will be detected through the normal planting surveys, regeneration survival surveys and free-to-grow surveys. Due to the small size of the Woodlot area employees of Harper Logging Ltd. will be able to detect any invasion of unwanted species along roadways and disturbed areas outside of the active harvesting and road construction areas.
- Action plans will be developed to combat the spread of invasive plants, if the introduction or spread is likely to be the result of the WLP holder's forest practices. When discovered, invasive plants will be mapped and reported to the Ministry of Forests.

## 3) Management or Elimination of Invasive Plant Species

- If invasive plants are discovered and if the introduction or spread is likely to be the result of equipment, machinery, or clothing, then: (a) prior to transport the cleaning of tires, tracks, bucket, undercarriage, etc. on machines will be completed and (b) the removal of burrs or plant components from clothing should be normal practice.

## **8.0 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS**

There are no range tenures on Read Island therefore no measures or activities are required or proposed.

## **9.0 STOCKING INFORMATION FOR SPECIFIED AREAS**

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, small pockets of damaged or diseased timber (i.e. windthrow) 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. Specified areas include:

- Areas subject to commercial thinning,
- The removal of individual trees, or
- Areas subject to single/group tree selection or
- Other types of intermediate cutting and /or
- Areas subject to the harvest of special forest products.

For the purposes of this plan, commercial thinning, the removal of individual trees, single/group selection, intermediate cutting or the harvest of special forest products may take place anywhere within the woodlot except in designated areas where harvesting will be avoided. The delineation of specific areas will be conducted in conjunction with the pre-harvest mapping as per Section 33 of the WLPPR. For salvage of scattered windthrow or root rot mortality, openings of up to 1.0 ha in size are acceptable, not requiring regeneration. For openings greater than 1.0 ha even-aged stocking standards will apply.



## **10.0 PERFORMANCE REQUIREMENTS**

### **SOIL DISTURBANCE LIMITS**

- ☒ Default WLPPR s.24(1)(b):
- 8% of Net Area to be Reforested

### **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

### **STOCKING STANDARDS**

- ☒ Alternative WLPPR s. 35(1)(a): The stocking standards, regeneration dates and free growing dates are indicated in Appendix II. In addition, a set of footnotes and rationales are provided for the Alternative Stocking Standards.

### **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).

### **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).

### **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).

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

- ☒ 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 39(2) of the WLPPR.
- ☒ WLPPR s.39(2.1): Within the Woodlot area there are two fish bearing creeks where road construction is proposed and a crossing may be necessary within a riparian reserve zone: Lanny Creek and/or Ralph Creek.

## **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.

## **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:

- ☒ Default WLPPR s.52(1)
  - The defaults specified in Section 52(1) of the WLPPR is adopted. It specifies that the proportion of the Woodlot Licence area that is dedicated to wildlife tree retention areas have to be no less than the least of the following:
    - 8% of the Woodlot licence area.

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

## **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.

\*\*\*\*\*

**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).**

## APPENDICES

## **Appendix I: The Woodlot Licence Plan Map**

## Appendix II: Stocking Standards, Regeneration Dates and Free Growing Dates for Free Growing Stands

These stocking standards are proposed as an alternative performance requirement for the purposes of section 35(1) (a) of the Woodlot Licence Planning and Practices Regulation to areas harvested under this woodlot licence plan where the establishment of a free growing stand is required under section 29(3) of the Forest and Range Practices Act.

| Biogeoclimatic Ecosystem Classification |                |                      | Preferred Species      | Acceptable Species                                    | MITD (m) | TSS (sph) | MSSpn (sph) | MSSp (sph) | Regen date (yrs) | FG Date (yrs) | Min. FG Ht by Species      |                                  | Crop Tree to Brush % |
|---|----------------|----------------------|------------------------|---|----------|-----------|-------------|------------|------------------|---------------|----------------------------|----------------------------------|----------------------|
| ID #                                    | Zone & Variant | Site Series          |                        |   |          |           |             |            |                  |               | Species                    | Ht (m)                           |                      |
| A                                       | CWH xm         | 01/04                | Fd                     | Pw <sup>5</sup> Hw <sup>8</sup> Cw                    | 2.0      | 900       | 500         | 400        | 3                | 20            | Fd<br>Pw<br>Hw<br>Cw       | 3.0<br>2.5<br>2.0<br>1.5         | 150                  |
| B                                       | CWH xm         | 02                   | Pl Fd                  | Pw <sup>5</sup> Lw <sup>8</sup>                       | 2.0      | 400       | 200         | 200        | 3                | 20            | Pl<br>Fd<br>Pw<br>Lw       | 1.25<br>2.0<br>2.5<br>1.5        | 150                  |
| C                                       | CWH xm         | 03                   | Fd                     | Cw Pw <sup>5</sup> Pl <sup>6</sup><br>Lw <sup>8</sup> | 2.0      | 800       | 400         | 400        | 3                | 20            | Fd<br>Cw<br>Pw<br>Pl<br>Lw | 2.0<br>1.0<br>2.5<br>1.25<br>1.5 | 150                  |
| D                                       | CWH xm         | 05/07                | Cw Fd Bg <sup>10</sup> | Pw <sup>5</sup>                                       | 2.0      | 900       | 500         | 400        | 3                | 20            | Cw<br>Fd<br>Bg<br>Pw       | 2.0<br>4.0<br>3.5<br>2.5         | 150                  |
| E                                       | CWH xm         | 06                   | Fd Cw Hw               | Bg <sup>11</sup> Pw <sup>5</sup>                      | 2.0      | 900       | 500         | 400        | 6                | 20            | Fd<br>Cw<br>Hw<br>Bg<br>Pw | 3.0<br>1.5<br>2.0<br>3.0<br>2.5  | 150                  |
| F                                       | CWH xm         | 08/09 <sup>1</sup>   | Cw Bg                  | Ss <sup>7</sup>                                       | 2.0      | 900       | 500         | 400        | 3                | 20            | Cw<br>Bg<br>Ss             | 2.0<br>3.5<br>4.0                | 150                  |
| G                                       | CWH xm         | 10                   | Act                    |   | 2.0      | 800       | 400         | 400        | 3                | 20            | Act                        | 4.0                              | 150                  |
| H                                       | CWH xm         | 11 <sup>1</sup>      | Pl <sup>1</sup> Cw     |   | 2.0      | 400       | 200         | 200        | 3                | 20            | Pl<br>Cw                   | 1.25<br>1.0                      | 150                  |
| I                                       | CWH xm         | 12 <sup>1</sup>      | Cw                     | Hw <sup>1</sup> Pw <sup>5</sup> Ss <sup>7</sup>       | 2.0      | 800       | 400         | 400        | 3                | 20            | Cw<br>Hw<br>Pw<br>Ss       | 1.0<br>1.5<br>2.5<br>1.5         | 150                  |
| J                                       | CWH xm         | 13/14 <sup>1,2</sup> | Bg Cw Fd <sup>1</sup>  | Ss  | 2.0      | 900       | 500         | 400        | 3                | 20            | Bg<br>Cw<br>Fd<br>Ss       | 3.5<br>2.0<br>4.0<br>4.0         | 150                  |

| Biogeoclimatic Ecosystem Classification |                |  | Preferred Species      | Acceptable Species | MITD (m) | TSS (sph) | MSSpa (sph) | MSSp (sph) | Regen date (yrs) | FG Date (yrs) | Min. FG Ht by Species |        | Crop Tree to Brush % |
|---|----------------|--|------------------------|--------------------|----------|-----------|-------------|------------|------------------|---------------|-----------------------|--------|----------------------|
| ID #                                    | Zone & Variant | Site Series  |                        |                    |          |           |             |            |                  |               | Species               | Ht (m) |                      |
| K                                       | CWH xm         | 15 <sup>1,2</sup>  | Cw                     | Ss <sup>1,2</sup>  | 2.0      | 800       | 400         | 400        | 3                | 20            | Cw                    | 2.0    | 150                  |
| L                                       | CWH xm         | 01/06 <sup>11</sup>  | Dr <sup>1</sup> Mb     |                    | 2.0      | 1200      | 1000        | 800        | 3                | 20            | Dr Mb                 | 3.0    | 150                  |
| M                                       | CWH xm         | 05/07/08/<br>09 <sup>1</sup> /02/13/<br>14 <sup>1,2</sup> /15 <sup>1,2</sup> | Act Dr <sup>1</sup> Mb |                    | 2.0      | 1200      | 1000        | 800        | 3                | 20            | Act Dr Mb             | 4.0    | 150                  |

|   |  |  |
|---|--|--|
| Regen date = Regeneration Date<br>F G Date = Free Growing Date        | MITD = Minimum distance between well spaced trees of the preferred and acceptable species  | Crop Tree to Brush % = the height of free growing trees relative to the competing vegetation within a 1 m radius cylinder around the tree. |
| TSS = Target Stocking Standard (sph = healthy well spaced trees / ha) | MSSpa = Minimum Stocking Standard of well spaced trees of preferred and acceptable species | MSSp = Minimum Stocking Standard of well spaced trees of preferred species   |

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### *Foot Notes*

- 1 Elevated microsites are preferred
- 2 These sites represent areas with strongly fluctuating water tables. They are often found as mosaics in combination with other sites. Elevated microsites are preferred, either mechanical or natural
- 3 Trees are not acceptable within 10 m of second growth stumps, except Cw, Pw, Lw and deciduous species.
- 4 Dr & Mb are not acceptable on 02 and 04 site series (too dry). Avoid planting in gleyed soils and frost pockets.
- 5 Pw must be free of blister rust within 60 cm of the stem and be pruned as per ministry guidelines or be blister rust resistant stock ( $\geq 50\%$  resistance)
- 6 Restricted to nutrient-very-poor sites and as a minor species only
- 7 Risk of weevil damage, use resistant stock where available, Ss will not exceed 20% of the free growing stand on 08 & 12 site series or 5% of the free growing stand on 09,13,14,&15 site series on a dispersed basis. Clumps will not to exceed 0.1ha in size.
- 8 Hw is not acceptable on site series 04. Lw may be used but strictly on a trial basis. The proportion of the free-growing stand comprised of Hw or Lw if established will not exceed 20%. Lw will not exceed 5% of the free growing stand on site series 02.
- 9 May be planted on prepared mounds.
- 10 Based on past experience and knowledge Bg performs best on areas that are subject to frost and the slightly wetter/richer areas
- 11 Establishment of deciduous species is permitted within these site series provided the site contains a sufficient moisture regime to support deciduous species (i.e. limited salal content).

## ***Stocking Standards - General Comments***

This alternative stocking standards table has been developed from the Reference Guide for FDP Stocking Standards dated December 11, 2002, the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A as well as the correlated guidelines and site interpretation for the Vancouver Forest Region (VFR). Where site series have similar stocking standards, they have been combined. Sections A-K are the most common stocking standards for the Woodlot and will be employed the majority of the time. Sections L&M are the deciduous stocking standards. Rationales for employing these standards are listed below.

Biogeoclimatic unit or BEC means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems as applicable to a harvested area.

Where standards units (SUs) are comprised of an un-mappable mosaic of site series, the practice will be to manage for the stocking standards, noted by the ID#, of the dominant site series provided that the tree species are suitable in all site series contained within the SU.

Higher stocking is noted for the deciduous stands to ensure self-pruning and may include a conifer component (although mixed stand management is not being proposed). The maximum density post-spacing has been increased to allow for two stage spacing entries in order to manage snow press, blow down risks and provide the opportunity to capture the small-diameter resource.

A limited number of scattered deciduous trees will be tolerated on all conifer plantations: to provide a nurse crop, promote nutrient cycling or for general biodiversity objectives. Allow up to 50 sph as "ghost" trees during surveys on all sites. No deciduous within 10m of each other will be accepted for dispersed single stems due to increased competitive density effects. Should one of the "ghost trees" be encountered within a plot during a free growing survey the conifer tree will be deemed to be not free growing following the normal definition of a free growing tree.

Reduction of inter-tree spacing to 1.5 m is acceptable for the following site-specific conditions: frequent bedrock, large blocky colluvium, hygric sites, and disturbed roadside areas amongst slash accumulations (up to 10 m from the traveled portion of the road). Reduction of inter-tree spacing to 1.0 m is acceptable on mounded sites only.

## ***Deciduous Management***

Deciduous management within W0046 is planned strictly as an option – not as the preferred management regime. The establishment of a deciduous crop will only be considered provided the stocking standards as outlined in ID#s L&M can be met. Past experience with deciduous management indicates that within a cutblock only a portion of the area is suitable for the establishment of deciduous. The number of sites within W0046 that may be suitable are limited; therefore, no more than 1-2 hectares of area per year (to a maximum of 10 hectares within a 5-year cut-control period) may be selected for deciduous management.

When reviewing the W0046 Management Plan it outlines in Section 6.41 the potential for planting deciduous species\*\* on a trial basis provided they are planted on suitable sites. This WLP wishes to continue to operate in the spirit of not wanting to limit the possibility or opportunity to try regenerating alternative species on a very minor basis and to have the ability to grow a viable stand of quality deciduous for potential future markets.

Although available, the amount of operational information available for the establishment of deciduous stands is known only by few local foresters. As part of the trial basis, Harper Logging Ltd and his forester will seek out information from any local sources to ensure a quality plantation. This may include reviewing of the North-West Hardwood (NWH) FSP and/or discussing regimes with their forester. The information listed below in regards to regimes and establishment of deciduous stands is general in nature and not intended to be a comprehensive guide to establishing a new crop of deciduous tree.

Deciduous production and management is supported by the following research:

- L.Sigurdson et al. 2nd draft report on Weyerhaeuser's Red Alder Management Practices (1998),
- Hibbs et al. The Biology and Management of Red Alder (1994),
- E.B. Petersons et al. FRDA Report 250 . Black Cottonwood and Balsam poplar managers handbook for British Columbia (1996).
- P.J. Courtin et al. Forest Research Extension Note 016 - Red Alder management trials in the Vancouver Forest Region (2002).

*\*\* Within the W0046 Management Plan (produced in 1998) references are made to the deciduous species cottonwood. In 1998 cottonwood was considered as being a viable deciduous species for the pulp and paper market. Since then cottonwood is no longer considered as a viable deciduous species due to declining interest by the pulp and paper sector – rather red alder and maple are marketable as a high value furniture stock.*

Regime:

The product objective is to manage for high quality knot-free sawlogs on a 40 - 50 year rotation. Establish stand with high densities (1500 sph) is required to achieve a target of 1200 stems/ha at free-growing. At approximately age 10 but not before stand height 12 to 16 m space to 900 stems/ha. Dead branch prune the crop trees early and continue density regulation treatments approx. every ten years to maintain good crown forms and eliminate low quality stems. The minimum free growing height criterion for deciduous species is based on the tallest conifer standard for each site series.

The establishment of a second crop conifer layer (Cw, Ss) before or after density treatment is optional. If a cedar or Sitka spruce understory is planted in addition, then the natural pruning of the alder would be enhanced. The removal of the alder at harvest age is operationally possible, while leaving a fully stocked, semi-mature conifer pole stand behind. Where conifers are established underneath a designated deciduous stand, the stand's regeneration and free to grow status will be measured using the deciduous standards only.

Damage criteria for deciduous species have not been formally established. General free-growing criteria will be adopted, such that well spaced stems will be of good form, health and vigour.

## **II. SUPPLEMENTAL INFORMATION TO SUPPORT OF THE PROPOSED WOODLOT LICENCE PLAN**

### **1. REVIEW AND COMMENT**

#### **a) Advertising**

An advertisement was placed in the Campbell River Courier-Islander on July 27, 2007 and August 1, 2007 and in the Campbell River Mirror on July 27, 2007 and August 3, 2007. A copy is included in Section 5 of this Supplement. Additionally, notices were placed on the bulletin boards at the Surge Narrows Post Office to further raise awareness and solicit comment. An open house at the Read Island Field office was held on August 8, 2007 from 4:00 to 8:00pm. In addition, copies of the WLP are available in a digital form for any interested parties.

#### **b) Referrals**

This plan was referred to the District Manager, Ministry of Forests, Sunshine Coast Forest District, and to the following First Nations for review and comment.

Hamatla Treaty Society  
Campbell River Indian Band  
Klahoose First Nation  
Homalco First Nation  
Cape Mudge First Nation

#### **c) Copy of Written Comments Received**

*No written public comments were received during the Public Review and Comment Period.*

*No public attended the August 8, 2007 open house that was held on Read Island.*

*No digital copies were requested during the Public Review and Comment period.*

*A copy of comments provided by the Ministry of Forests on August 24, 2007 is attached to this document in Section 6.*

#### **d) Revisions Made as a Result of Written Comments Received**

Details of revisions made as a result of the comments provided by the Ministry of Forests can be found in Section 6.

- e) The following documents, reports and maps were reviewed in the preparation and submission of the WLP:
- Provincial Wildlife Tree Policy and Management Recommendations -- February 2000
  - Information concerning Wildlife Habitat for the survival of species at risk in the Sunshine Coast Forest District -- March 2006
  - Order Establishing Provincial Non-Spatial Old Growth Objectives -- June 2004
  - Several Map View plots of the location of Invasive Plant species -- May 2007
  - Invasive Plant Map Label Legend
  - Introduction to the Reference Guide for FDP Stocking Standards -- March 2007
  - Water\_Pod\_50K, - May 2007
  - Water Licences Report -- April 2007
  - SCFD Landscape Unit boundary map
  - Implementation policy for the provincial order of non-spatial old growth objectives.
  - Ministry of Environment Order for: Category of Species at Risk -- June 2006
  - Ministry of Environment Approved Wildlife Habitat Areas (WHAs) -- March 2007
  - Ministry of Environment Approved Fisheries Sensitive Watersheds -- April 2007
  - Ministry of Forests Notice -- Indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species in the Sunshine Coast Timber Supply Area
  - Ministry of Environment Ungulate Winter Range Notices, FPPR section 7 and WLPPR section 9
  - Information concerning wildlife habitat for the winter survival of ungulate species in Sunshine Coast Timber Supply Area
  - Map showing the Proposed Ungulate Winter Range in the Sunshine Coast TSA
  - Ministry of Environment Species at Risk Notices FPPR section 7 and WLPPR section 9 -- April 2007
  - Map showing: Material to support the Notice for Species at Risk the Sunshine Coast Forest District. Included on the map were proposed: Grizzly Bear WHAs; Draft Stickleback WHA and Community Watershed Boundaries for the Sunshine Coast Forest District -- February 2005
  - Map showing: Suitable Marbled Mulelet habitat for the Sunshine Coast Forest District -- July 2004
  - Ministry of Forest Notice -- Indicators of the Amount, distribution and Attributes of Wildlife Habitat required for the survival of species at risk in the Sunshine Coast Forest District -- March 2, 2006
  - Proposed Draft Order for the List of Wildlife Habitat Features
  - Ministry of Environment's Proposed List of Wildlife Habitat Features -- April 2007
  - Ministry of Environment's Approved Ungulate Winter Ranges -- Updated March 1, 2007
  - NorthWest Hardwood's Cortes FDU map

- Reference Guide for FDP Stocking Standards -- December 11, 2002,
- Woodlot Licence Forest Management Regulations -- January 31, 2004
- WLPPR
- WLFMR
- Forest and Range Practices Act
- Forest Planning and Practices Regulation

## **2. EFFORTS MADE TO MEET WITH FIRST NATIONS**

On July 27, 2007 the following First Nations with asserted traditional territory were provided with a formal letter containing information relating to the preparation and development of a Woodlot Licence Plan for W0046:

- Klahoose First Nation (also included a map of the WLP area)
- Homalco First Nation (also included a map of the WLP area)
- Hamatla Treaty Society (also included a map of the WLP area)
- Cape Mudge Band (letter only)
- Campbell River Band (letter only)

Below is a synopsis of the letters that were sent and what was asked of the various First Nations Bands. They were requested to:

- Provide any information that the Band may be willing to share on cultural heritage resources within the woodlot licence area that are of continuing importance to your community.
- Provide any site-specific information on cultural heritage resources that the Band may be willing to provide.
- Meet with representatives of the First Nation sometime during the month of August when it was mutually convenient to discuss and obtain any specific information that can be provided to assist in the development of a successful result or strategy

**Please see below for documentation on sending the documents and to whom. A copy of one of the letters is provided below.**

*As of September 27, 2007 (60 days) no representative from Harper Logging Ltd. had been contacted by any of the First Nations Bands to discuss the Woodlot Licence Plan.*

On September 28, 2007 a representative from the Campbell River Band phoned Harper Graham to suggest that he forward on the letter and information to the Homalco First Nation.

On October 3, 2007 Harper Graham personally attempted to make contact with the Klahoose, and Homalco First Nation and the Hamatla Treaty Society by going to their respective offices. At that time Harper Graham provided an additional copy of the letter



that was previously sent to the Bands; in all cases the secretary took note of the fact that Harper Graham came by the office and was told the letter would be passed onto the appropriate person. As of October 17, 2007 there has been no further contact been made by any of the Bands to any representatives of Harper Logging Ltd, including the Klahoose First Nation.

## COPY OF RECEIPTS FOR LETTERS SENT TO FIRST NATIONS

| Customer Receipt  | Reçu du client  |
|---|---|
| <p>LT 102 076 045 CA 2007 07 23</p> <p>PAUL RUTZ 604 437 7022<br/>6919 Hammond St<br/>Powell River BC V8B 1R3</p> <p>Klahoose First Nation<br/>P.O. Box 9<br/>Squamish BC V8P 1K0</p>             | <p>LT 204 263 419 CA 2007 07 23</p> <p>PAUL RUTZ 604 437 7022<br/>6919 Hammond St<br/>Powell River BC V8B 1R3</p> <p>Campbell River<br/>Atkinson 9806<br/>4500 Westwindsor Rd<br/>Campbell River BC V9W 5W3</p> |
| <p>LT 204 263 422 CA 2007 07 23</p> <p>PAUL RUTZ 604 437 2062<br/>6919 Hammond St<br/>Powell River BC V8B 1R3</p> <p>Coquihale Band<br/>Atkinson 9806<br/>P.O. Box 220<br/>Quesnel BC V2A 1G5</p> | <p>LT 102 076 010 CA 2007 07 23</p> <p>PAUL RUTZ 604 437 2062<br/>6919 Hammond St<br/>Powell River BC V8B 1R3</p> <p>Honorable Mary Hogg<br/>1415 Rte. 1<br/>Campbell River BC V9W 1G5</p>                      |
| <p>LT 102 076 037 CA 2007 07 23</p> <p>PAUL RUTZ 604 437 2062<br/>6919 Hammond St<br/>Powell River BC V8B 1R3</p> <p>Honorable Mary Hogg<br/>1415 Rte. 1<br/>Campbell River BC V9W 2C4</p>        |   |

## EXAMPLE OF LETTER SENT TO FIRST NATIONS

### *Harper Logging Ltd.*

BOX 209  
HERIOT BAY, B.C.  
V0P 1H0 2B5-2325

July 25, 2007

Klahoose First Nation  
PO box 9  
Squirrel Cove, British Columbia  
V0P 1K0

Dear Chief Ken Brown:

I am initiating the process of preparing a Woodlot Licence Plan (WLP) for Woodlot Licence W0046, located on Read Island, as illustrated in the attached map.

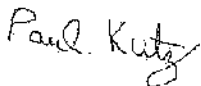
Recognizing that this woodlot licence area is within the asserted traditional territory of the Klahoose First Nation, I am requesting any information you may be willing to share on cultural heritage resources within the woodlot licence area that are of continuing importance to your community. The woodlot licence plan requires the preparation of a result or strategy to conserve and protect cultural heritage resources that are of continuing importance to First Nations and are not protected by the *Heritage Conservation Act*. I have provided a copy of the DRAFT WLP for your review and comment -- particularly the Culture Heritage Resources section.

This woodlot licence covers an area of 1485 hectares of Crown land and has a long term sustainable harvest rate of 7022 cubic meters per year. Only small portions of the woodlot licence area will be the site of harvesting activities in the foreseeable future. To assist us in understanding the cultural heritage resources that may be practised or located in the woodlot licence area, I would appreciate any site specific information on cultural heritage resources that you may be willing to provide.

I would like to meet with representatives of the Klahoose First Nation sometime during the month of August when it is mutually convenient to discuss and obtain any specific information that can be provided to assist in the development of a successful result or strategy. Please contact either Harper Graham by phone at (250) 285-2325 or myself at (604) 485-2062 to discuss when it may be possible to meet; alternatively you may contact me by e-mail at: [paulkutz@shaw.ca](mailto:paulkutz@shaw.ca)

Please let me know if you are unable to meet or provide information and I will develop this result or strategy based on the available information. Any comments received by the Klahoose First Nation will be submitted as part of the formal review and comment process prior to the final plan being submitted to the Ministry of Forests and Range District Manager, for approval.

Yours Truly,  
Harper Logging Ltd.



Paul Kutz RPF  
Forester

### 3. EXEMPTIONS

None requested

### 4. RATIONALE IN SUPPORT OF PROPOSED ALTERNATIVE PERFORMANCE REQUIREMENTS

#### STOCKING STANDARDS

The alternative stocking standards (see Appendix 2) that apply under this Woodlot Licence Plan comprise minor modifications to the default standards to reflect circumstances, experience, and management regimes particular to the woodlot. These are consistent with the licensee's intent to manage the woodlot to produce high quality forest products, maintain site productivity, and explore new concepts for efficient, economic, and low impact forest management as well as to manage a small part of the woodlot for deciduous species.

The table of stocking standards presented in Appendix 2 has been developed from the *Reference Guide for FDP Stocking Standards* dated December 11, 2002 and from the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A, as well as the related guidelines and site interpretation for the Vancouver Forest Region (VFR). In addition, the establishment of stands and the free growing dates as outlined in the FPPR regulations were considered. The table represents a synthesis of these requirements and describes how they will apply to the woodlot.

The primary differences from the default standards are:

- a) Where site series have similar stocking standards, they have been combined.
- b) The latest free growing date for most site series has been set at 20 years which is consistent with the FPPR regulations,
- c) Sitka spruce (Ss) has been added as an acceptable species on sites with fluctuating water tables where mechanical mounding is undertaken. On wet sites and sites with fluctuating water tables, it is possible to mound in order to create micro planting sites for Sitka spruce, cedar and alder. This is proposed on a small scale and has therefore added Ss as an acceptable species and has reduced the minimum inter-tree distance to 1.0m on mounded sites.

In addition, ID #s L & M have been added to the stocking standards. This table is intended to define the stocking standards that will apply to deciduous (broadleaf) management. The Chief Foresters stocking standards accept black cottonwood (Act), red alder (Dr) and bigleaf maple (Mb) as productive, reliable and feasible regeneration options on several site series within the CWHxm zone.

The use of deciduous species will be implemented in consideration of the Chief Foresters memorandum dated August 22nd, 2000 and the supporting note Common Principles for the Management of Red Alder within the Coast Forest

Region. Dated August 2004. The management for deciduous species is proposed on a limited scale and is consistent with the management assumptions adopted in the Management Plan Annual Allowable Cut (AAC) calculation for the Sunshine Coast TSA.

## **5. Copies of Newspaper Advertisements**

Friday, July 27, 2007

906 **Coming Events** 906 **Coming Events**

**SATURDAY AUGUST 18<sup>th</sup>**

**SNOOP DOGG**

WITH FULL BAND PERFORMANCE

**LIL' JON ONE CLICK**

Butta Sparxxx Swollen Members  
Donald Glaude Over 40 DJ's  
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tickets available at: **ALL HALLS AND THE SUMMER DRINKS CO.**  
Specialty: **PLAZA RITA, CHILLERIE, BRITISH COLUMBIA**

**PUBLIC VIEWING OF THE  
WOODLOT LICENCE PLAN FOR  
WOODLOT 0046 - READ ISLAND**

Wednesday, Aug. 1, 2007

Frats, Services & Accessories
36
Boats, Services & Accessories

**912**      **Legals and Features**

**PUBLIC VIEWING OF THE  
WOODLOT LICENCE PLAN FOR  
WOODLOT 0046 - READ ISLAND**

Copyright

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CAMPBELL RIVER MIRROR FRIDAY, AUGUST 3, 2007 B7

B8 CAMPBELL RIVER MIRROR FRIDAY, JULY 27, 2007

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WOODLOT 0046 - REAG ISLAND

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WOODLOT 0046 - REAG ISLAND

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## 6. MINISTRY OF FORESTS COMMENT AND REVIEW OF WLP FOR WL0046

August 24, 2007

### Comments on the Woodlot Licence Plan (2007-2017) For Woodlot Licence W0046 Located on Read Island

A review of the above plan was completed during the review and comment stage of the planning process. This review was completed consistent with previous practices where MoFR staff has reviewed Forest Stewardship Plans of other licensees as a service to the licensee and to hopefully accelerate the approval process once the WLP is submitted for approval.

During this review the *Forest and Range Practices Act*, Woodlot Licence Planning and Practice Regulation Woodlot Licence Plan Template (May 2006 Version) and the Companion Guide Woodlot Licence Planning and Practices Workshop were used as references.

#### 1. Map and Information

##### Mapping Content

What do the blue polygons signify? I did not notice this colour in the legend. Adjacent Private land is not shown and private land within the woodlot is not shown.

Large blue polygons indicate the Woodlot Licence Plan Area.

Adjacent private land is now shown on the map. Private land within the Woodlot is shown on map and indicated with Schedule A lands.

#### 2. Wildlife Notices

MAMU – From the information that we have from the recovery team it appears that there are some areas in the woodlot that are suitable for MAMU nesting. These areas are located in the contributing. We have a map showing these areas including Read Island. You are welcome to have a look .

I have reviewed the DRAFT Cortes Landscape Unit Plan. I do note that several of the contributing areas you refer to are already constrained as OGMAs.

#### 3. Areas Where Timber Harvesting Will be Modified

Looking at the WLP template regarding areas where harvesting is to be modified it states that "the WLP should provide a general description of the post harvest stand structure that is measurable and verifiable."

Table 1 Noted that you have included in your table S1 and S2 streams. Are there any in the WL? No there are none present. The remaining streams, you have basal area retention 0-100%. How is 0% modified from other areas?

Table 1 has no reference to S1 or S2 creeks. Within the text I have defined what a 0% basal area retention is within the RMA.

The statement that you have included regarding the rationale signed by a professional, does this only apply in situations where a road will be constructed in a RMA or does it also cover areas where harvesting is carried out within the RMZ as well.

A professional signoff is only required for constructing a road within a RMA

Scenic Areas – You reference a site plan. The WLPPR does not require the development of a site plan so maybe a brief explanation of what is a site plan is needed. I would expect that this will be an expanded pre –harvest map with any data that needed to be collected for management decisions. Both of these are not enforceable documents.

Reference to a Site Plan has been removed and replaced with a pre-harvest planning stage document.

4. Conserving and Protecting Cultural Heritage Resources  
Communication with FN, what is the timeline for this to take place prior to harvesting?

This section has been updated to reflect the comments and provide timelines for communications.

5. Wildlife Tree Retention's Strategy  
Wildlife Tree Characteristics – a personal thought, you have stated all species, do you think it is worthwhile to put the species in a priority list, which species will be emphasized? Just thinking for long term retention that conifer is more appropriate than deciduous.

I have considered your comments and updated this section with a priority of species to consider.

Retention of individual trees – you have used the word “generally” in regards to the retention of WTs. Any thoughts to the situations where this may not happen? Generally does not include all situations. I have removed the word Generally.

Will the retention of these trees go toward the 8% retention target? If so how will you determine the tree's contribution? This section has been updated to include how the individual trees will contribute – through the use of basal area determinations

Conditions of removal – “The desire to re-assign the WT...” When you refer to site plans are you referring to blocks harvested under a site plan? There is no



reference to site plans under FRPA for woodlots. Reference to Site Plans has been removed.

Replacement of WT – only high value WT will be replaced. If you have individual WT that are contributing to the WTR target and this includes medium or lower class WT will this not potentially put you in a position of not meeting the target? This section has been updated to indicated that the WTs will be re-allocated

6. Wildlife Tree Retention Areas

WLPPR Section 11(b) describes the general forest cover attributes for WTR area. How have you done this? Could someone go out on the woodlot and know that an area has met the necessary criteria for being a WTR? I have revised this section using information outlined in the *Wildlife Tree Retention: Management Guidance* Policy paper

Removal Conditions – reference to a site plan? Reference to Site Plan removed.

Not sure of what you are describing regarding the salvage of blowdown in RRZ? Are saying that if the area loses its character and function it will be harvested or is the RRZ excluded from salvage? Are you saying “character and function”? Looking at Sec 39 WLPPR trees can only be removed from a RRZ if the removal will not have a material adverse affect on the RRZ. Need some clarity of what you are saying here. Are you saying that salvage will take place in WTR areas, not in a RRZ, only if the character and function of the WTR area is maintained? From your strategy it appears that salvage will not be undertaken if the blowdown is less than 25% and >25% salvage will be assessed? This section has been re-written to provide clarity.

Replacement Strategy – replacement of salvaged areas will be “assessed”. Does this mean that the surrounding area will be assessed to identify an alternate similar area to the area salvaged?

Will partially harvested WTR areas still contribute to the WT retention target? If so how will the contributory amount be calculated?

This section has been re-written to provide clarity. The word “assessed” has been changed to “selected”.

7. This section includes measures to prevent the introduction of invasive plants but in your opening paragraph you seem to imply that the strategy will be applied if invasive plants become established. How about the strategy to prevent the introduction of these plants? Section has been updated.

Third bullet under Prevention and Control

Is there a timeline from time of disturbance to time of seeding? From what I have seen in FSPs, the current standard for seed is Canada Common No 1 Forage Mixture or better. Section has been updated and timeline included.

Detection of Invasive Plant Species

You have mentioned that the detection will be through normal surveys on blocks but you don't mention anything about road side disturbed areas outside of blocks. Section has been updated

8 Stocking Information for Specified Areas

They way that I understand this section working is that if you do not include a copy of the standards you want to apply if they change the standards in the WLP will automatically change. See this section in the WLP template. I have reviewed and agree that the standards will automatically change.

Last sentence do you mean openings greater than 0.1 ha in area? Yes, updated.

9 Restrictions in RRZ

If you believe you will be crossing a specific RRZ within the WL it should be specified in the text or the approximate location shown on the map. Section 39(2.1) speaks about roads within a RRZ within a cutblock but this is incorrect and the training on WLPs was based on the construction of a road within a RRZ anywhere which will be in the next amendment to the WLPPR. The allowable reasons for felling trees in a RRZ includes construction of a crossing but this does not authorize the building a road within a RRZ.

Within the WLP there are no current plans to construct a road within a RRZ.

10 Restrictions in a RMZ

In your alternate performance requirement are saying that all of Section 40 applies or only section 40(1)(b), (c) and (d)? By applying all of section 40 you remove the ability to be exempted from the requirements under sections 40 (2), (3) and (4). These apply unless otherwise exempted.

The template also suggests that the approximate location of the proposed road location in the RMZ should be shown on the map or described in the text. Do you know if instances where this may be applied?

I have re-considered the statements outlined in the Alternative standards and have revised the document to select the Default

## 11 Appendix II Stocking Standards

I have had some discussions with other staff regarding some of the standards that you have proposed. The points that have been raised are as follows:

- a) Acceptance of Pw blister rust free within 10 cm of the stem. In discussions with Ron Diprose he stated that anything rust less than 60cm from the stem and there is high likelihood that the main stem will be infected. I will default to the expert. Footnote changed to reflect 60 cm.
- b) Where Bg is referenced with a foot note will the establishment and acceptance of Bg be restricted to the areas described in the foot note? Yes
- c) Stocking ID G – Dr and Mb are limited in productivity, reliability and/or feasibility according to the Estab to Free Growing Guidebook. Also, there are no stocking levels for this site in the guidebook. What did you base your standard on? I have reviewed the standards for the Low bench sites and have removed Dr and Mb as preferable/acceptable species from this standard.  
As I understand these are low bench sites associated with fluctuating river levels that may result in periods of flooding. Generally, the species you would find is cottonwood. Are there sites like this in the woodlot? Rarely
- d) Stocking Unit J – no free growing height for Ss. Free growing height updated.
- e) Stocking Unit L your foot note says that Dr and Mb are acceptable on 02 and 04 sites but you have included the 04 site? I have reviewed and updated the stocking unit to exclude the 04 site.

## 12 Stocking Standards –General Comments

You reference minimum post spacing density but no densities are shown. I don't believe that this has to be specified. Meeting the definition of a free growing stand would require you to space. I have updated and removed this reference to post spacing densities.

# WOODLOT LICENCE # 2062

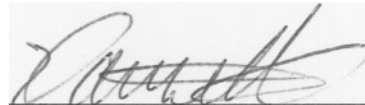
## WOODLOT LICENCE PLAN #1

First Term  
2011 to 2021

Harper Logging Ltd and  
Evans Bay Contracting Ltd.  
Box 299  
Heriot Bay, BC  
E-mail: [harplog@hotmail.com](mailto:harplog@hotmail.com)  
[grahamda84@hotmail.com](mailto:grahamda84@hotmail.com)  
Phone: (250) 202-0619

Authorized Licensee Signature:

---



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Signature

May 1, 2011

---

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 2062 and advises that:
  - The decision to operate under one or more of the Default Performance Requirements 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

Signed

Name: Paul J. Kutz

RPF # 2390

Contact phone number (250) 283-2963



Email: paulkutz@cablerocket.com

Seal:

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# **I. CONTENT FOR A WOODLOT LICENCE PLAN (WLP)**

## **1.0 PLAN AREA**

☒ This current plan covers strictly the Crown portion of Woodlot 2062, located on Read Island. At the time of writing this WLP, no decision around the management of the private land has been made; therefore, an amendment to the plan will be required to include that portion into the plan prior to the commencement of any operations.

This Woodlot Licence 2062 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 Sunshine Coast Forest District (SCFD) has provided the Objectives Matrix that is used to determine relevant and current FRPA Values and Elements.

The holder of Woodlot Licence 2062 is Harper Logging Ltd. and David Graham, based out of Heriot Bay, BC. The Woodlot area, located within the Sunshine Coast Forest District and on Read Island is made up of an aggregate of six blocks totalling 800 hectares of crown lands (Schedule B). They are as follows:

|          |           |
|----------|-----------|
| Block 1: | 118.75 ha |
| Block 2: | 225.91 ha |
| Block 3: | 57.43 ha  |
| Block 4: | 254.08 ha |
| Block 5: | 77.89 ha  |
| Block 6: | 65.91 ha  |

The Annual Allowable Cut level as approved by the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) is 2087 m<sup>3</sup> per year. A map is provided in the attached appendix.

The operable forest cover is primarily age class 4 and 5 second growth, Douglas fir leading stands that were restocked by natural regeneration following logging. The Woodlot contains a variety of terrain from gently rolling to areas of steep rock outcrops.

## **2.0 MAP AND INFORMATION**

The development of this Woodlot Licence Plan is intended to identify areas in which harvesting activities will be avoided or modified to protect resource features, manage resource values, and address areas with other special interest of sensitive areas. The areas above are located, identified and discussed within the text and mapping components of this plan. Furthermore, management strategies are highlighted and performance requirements defined as spelled out in the Woodlot regulations.



In the opinion of the author, this Woodlot Plan is consistent with the MFLNRO objectives as per the Sunshine Coast District's "Objectives Matrix".

The main access route through the Woodlot Licence originates at Evan's Bay where Harper Graham maintains a log dump and local dock. From Evan's Bay roads provide access west and south towards Rosen Lake and east towards Evening Mountain. The Woodlot 2062 is also adjacent in many places to Woodlot 0046, held and managed by Harper Logging Ltd. No publicly scheduled ferry routes serve Read Island; therefore, access is somewhat restricted to the general public. It should be noted that there are a small number of private residences located on Read Island along with a small school that is located in Surge Narrows.

Recent work completed for the submission of this WLP includes: a general mapping review and update of blocks, roads, and tenure lines and a review of the WLP to ensure consistency with the objectives stated by the Minister of Environment regarding both the winter survival of specified ungulate species and the survival of a Species at Risk (notice) applicable to the Sunshine Coast Forest District.

The Woodlot License Plan Map (Appendix 1) includes the following information:

- Forest cover,
- Topography,
- Location of known streams and wetlands,
- The location of public utilities (transmission lines),
- Contiguous areas of sensitive soil,
- Domestic water supply intakes (known),
- Existing roads,
- Recreation trails,
- Known scenic areas (per Sunshine Coast Forest District June 2009 map "Read Island – Visual Quality Objectives and Contours"),
- Private property within and adjacent to the woodlot,

The following does not apply to the woodlot and is not shown:

- Wildlife habitat areas,
- OGMA's
- Ungulate winter ranges,
- Community watersheds or fisheries sensitive watersheds,
- Licensed community water supply intakes and infrastructure,
- Temporary or permanent barricades to restrict vehicle access.

**Other information pertaining to the Woodlot Licence Plan is described in words (text) as follows:**

- **Biogeoclimatic Ecosystem Classification**

The woodlot is within the CWH xm biogeoclimatic sub zone where the average rainfall can range from 110 to 270cm/yr. Past fire occurrence and logging have resulted in a forest cover primarily composed of Coastal Douglas fir (Fdc), accompanied by Western Hemlock (Hw) and minor amounts of Western Red Cedar (Cw). On the wetter and richer sites deciduous species including maple (Mb) and Red Alder (Dr) and Grand Fir (Bg) can be found. Throughout the Woodlot Licence area the majority of sites are zonal. The general terrain of the woodlot is rolling with numerous rock outcrops, some in the form of prominent rock bluffs. Slopes range from flat to vertical (at bluffs), but are generally moderate in the operable forested areas.

- **Wildlife Notice-Minister of Environment**

The Notices for wildlife rely on the Identified Wildlife Management Strategy Version 2004 (IWMS) to guide the identification of suitable habitat required for the survival of species at risk.

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Winter Survival of Ungulate Species in the Sunshine Coast Timber Supply Area.

*Critical Mountain Goat Winter Habitat is not found within this license.*

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Survival of Species at Risk in the Sunshine Coast Timber Supply Area.

A. Coastal Tailed Frog: The Notice amount calls for a maximum of 30ha, not exceeding an impact to the MTHLB of 20 ha.

*The SCFD requirement has been met with the creation of a Frog management area located in the Mt Elphinstone geography managed by BC Timber Sales (BCTS).*

B. Marbled Murrelet:

*No nest of the Marbled Murrelet is known to exist on this plan.*

*The Notice amount calls for:*

- 1) *All suitable nesting habitat within the non-contributing land base.*
- 2) *All suitable nesting habitat located within OGMA.*
- 3) *Suitable nesting habitat to a maximum of 495 ha of MTHLB.*

In order to be consistent with the Notice criteria, future harvest areas are to be selected for conservation management in the Cortes LU based on;

- a) All suitable nesting habitat within the non-contributing land base,
- b) All suitable nesting habitat located within OGMA, and
- c) Suitable nesting habitat to a maximum impact of 495 ha

Note 1: For the case of a Wildlife Habitat Area, the spatial delineation is maintained by government as part of the Order that legally establishes the WHA. Since the Notice was given, 11 WHAs have been established in the Howe Landscape Unit and 2 WHAs have been established in the Brittain Landscape Unit. These 13 WHAs account for an impact on the Mature THLB of 428 ha, which leaves only 67 ha available for future WHAs within the THLB in the SCFD.

Note 2: Inventory work completed in 2003, 2004, and 2005 to identify high priority Marbled Murrelet habitat remains in draft and is not shown. Refinements of suitable nesting habitat provided by acceptable inventory methods will be preferred to the habitat algorithm initially proposed by the Habitat Recovery Team until such time as the final WHA amounts are identified in the SCFD.

Note 3: Currently, the Cortes Landscape Unit Plan is in the draft stage.

➤ *Old Growth Management Areas (OGMA's):*

These have been preliminarily selected within the Landscape Unit. On Read Island, there are several draft OGMA's selected; however, none of the Draft OGMA shapes and locations are identified within the Woodlot Licence Plan area.

➤ *Grizzly Bear:*

The Cortes Landscape Unit is not known to have any Grizzly Bear populations.

➤ *Vananda Creek Sticklebacks:*

The Cortes Landscape Unit is not known to have any Stickleback populations.

➤ *"Queen Charlotte" Goshawk<sup>\*\*</sup>:*

The notice identifies the amount distribution and attributes consistent with the habitat required. The Woodlot holder anticipates that the area being set aside be built around active nest sites. There are currently no known active nests within the area to which the Notice applies, managed under this Woodlot License Plan.

\*\* To determine suitable Northern Goshawk habitat (*Accipiter gentiles laingi*) a habitat supply model was developed for the Sunshine Coast Forest District, (shared between major licensees) that could accurately predict amounts of suitable habitat based on available forest cover attributes. From this model three-goshawk management areas located in the Cortes FDU (West Redonda Island) have been spatially identified. The amounts and impacts associated for the three goshawk management areas meet the Notice requirement and fulfil the district (SCFD) requirements until such time as WHA's are officially declared.

- There currently is no Notice for Survival of Regionally Important Wildlife.

### **3.0 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED**

As per a commitment made by the MFLNRO an area of timber along the Read Island Road in DL182 will be retained and not harvested. In addition, this polygon has been removed from the inventory used in the timber supply analysis. However, although this reserve will not be harvested it will continue to be part of the area that is included in the woodlot licence area. The area is identified on the attached WLP map as “No Harvest Area”.

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

One area within the Woodlot 2062 has been identified by the MFLNRO, as requiring a “modified harvest” – this area is specifically along the Steam Boat Trail. This area runs through DL 783 (Block 6) which connects the government wharf on Evans Bay at the north end and the Read Island Road at the south end. According to many local residents this trail is recognized as having significant recreational and historical values on Read Island. In an email from a Ministry of Transportation representative (Max Walker, Area Manager, BC MoT) he offered the following comments regarding the status of the trail:

*"I would like to make a note of clarification regarding the status of Steamboat Trail.*

*The northern portion of Steamboat Trail from Read Island Road down to wharf has been established as gazetted public road. It has a r/w width as established by a ministry survey. A Section 4 road (now Section 42 of the Transportation Act) is basically limited to the width of the travelled surface and ditches if any. Roads of this type do not have any additional r/w and only come into being by being in public use and having approved government expenditure. To the best of my knowledge, the southern portion of the trail may be public but it is not road."*

As referenced in the WL2062 Management Plan, the Woodlot Licence plan would address and consider the significance of this trail when planning road and harvesting activities in the vicinity of this trail. Based on some preliminary reconnaissance of the area there are several key control points that must be utilized in order to provide for a safe road and provide for an efficient operational harvesting plan. The plan for harvesting this area is as follows:

- Establish a 50m buffer on each side of the trail (i.e. 100 m wide strip). This strip represents a total of 9.4 ha
- Within the buffered area, at any time no more than a total of 20% (approx. 1.9 ha) of the stand may be harvested.
- The next entry into the stand for harvesting will not occur until the regenerating stand has been declared Free Growing (which requires meeting minimum height requirements).

- Harvesting above this level may only occur in order to mitigate a safety concern (e.g. blowdown across the trail) and will be discussed with Ministry officials prior to the commencement of harvest.

The trail is shown on the Woodlot Licence Map.

☒ Riparian reserve zones (RRZs) are not planned for regular harvesting other those specified by regulation (as outlined in the WLPPR Sect 39) such as tree removal for safety, the purpose of creating trails, carrying out a sanitation treatment or salvaging of a windthrow tree. Streams classifications that contain a RRZs are outlined in Table 1 and are denoted by a red line on the map.

☒ Riparian Management Zones (RMZs). Table 1 below outlines how timber harvesting will be modified based on the stream and lake classification. Depending of the present stand structure, terrain, windthrow risk and block configuration the retention level will be uniform, grouped or spatially distinct. In general, understory and unmerchantable timber and other conifers of good form and vigour will be maintained as much as possible to provide cover, maintain stream bank stability and natural stream flow.

Road construction within riparian management zones will be avoided where possible, unless alternate locations would result in a higher risk of environmental damage. Where encroachment is unavoidable, impacts will be minimized through the use of narrow right of ways, silt fencing, grass seeding, etc. Riparian management areas will be protected throughout all phases of forestry operations through careful stream assessments and classifications, applying appropriate prescriptions that meet the general objectives as stated above, and through appropriate supervision of operations in the vicinity of these areas. A documented rationale will be placed on file and signed off by a qualified member of the Association of BC Professional Foresters for any areas requiring an encroachment.

☒ Scenic Areas within the Woodlot are shown on the attached map. Harvest areas within the approved scenic area polygons contain a variety of Visual Quality Objectives. The layout strategies to meet the objectives will be accomplished by locating blocks using existing screens such as topography whenever possible. Small opening sizes and utilizing partial harvesting systems such as the retention silvicultural system will also be used whenever ground conditions permit. Also, at the Site Plan stage, visual concerns can be modelled and remedied prior to harvesting if problems are perceived.

Table 1: Modification of harvesting in RMZ's 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) |  |                               |   |
| S1<br>(Fish bearing)<br>> 20m Width | 50            | 20            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ.</li> <li>Manage windthrow hazard to the reserve zone</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul> | Fd, Cw, Hw, Pw, Ss, Dr and Mb | 25-100%   |
| S2<br>(Fish bearing)<br>5-20m Width | 30            | 20            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ.</li> <li>Manage windthrow hazard to the reserve zone</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul> |                               | 25-100%   |
| S3<br>(Fish bearing)<br>1.5-5m wide | 20            | 20            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ.</li> <li>Manage windthrow hazard to the reserve zone</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.</li> </ul> |                               | 0-100%  |
| S4<br>(Fish bearing)<br>< 1.5m wide | 0             | 30            | <ul style="list-style-type: none"> <li>Maintain stream bank integrity</li> <li>Provide shaded cover, LWD and litter, i.e.: Retain under story conifers, and other non-merch species and vegetation where possible.</li> </ul>  |                               | 0-100%  |
| S5<br>(non-Fish)<br>≥3m wide        | 0             | 30            | <ul style="list-style-type: none"> <li>Minimize debris transport to lower reaches of stream</li> <li>Retain under story Cw, and other non-merch species and vegetation where possible.</li> </ul>  |                               | 0-100%  |
| S6<br>(non-Fish)<br>≤3m wide        | 0             | 20            | <ul style="list-style-type: none"> <li>Minimize debris transport to lower reaches of stream</li> <li>Retain under story Cw, and other non-merch species and vegetation where possible.</li> </ul>  |                               | 0-100%  |
| W1<br>(wetland >5ha)                | 10            | 40            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>  |                               | 0-100%  |
| W3<br>(wetland 1-5ha)               | 0             | 30            | <ul style="list-style-type: none"> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>   |                               | 0-100%  |
| W5<br>(wetland complex)             | 10            | 40            | <ul style="list-style-type: none"> <li>Maintain integrity of the RRZ</li> <li>Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure</li> </ul>  |                               |   |

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

Within WL2062 a number of Cultural Heritage Resource Features have been identified. A March 31, 2009 report was provided to the MFLNRO by Archipelago Maritime Heritage entitled “Archaeological Overview Assessment (AOA) of Woodlot 2062 Read Island”. In terms of archaeological potential, the AOA report has identified and defined areas of high, medium, low and unknown potential throughout the Woodlot. The AOA further makes recommendations for further archaeological work in areas of moderate, high and unknown potential areas.

While planning and implementing proposed activities, potential impacts on archaeological resources will be minimized. In order to accomplish this, Harper Logging Ltd. will endeavour to identify objects, sites, or locations of traditional aboriginal societal practices during field layout and site plan stages. In addition, a review of the AOA and considerations of the outlined recommendations will be conducted prior to the completion of the planning process.

First Nations information sharing will be with the following Bands or Societies that have a Traditional Territory within Woodlot 2062. These include the Klahoose, Homalco, and Comox First Nations along with the Nanwakolas Council Society and the Laich-Kwil-Tach Treaty Society. Consultation with these bands is ongoing during the planning stages to avoid or minimize impacts on archaeological resources. Documentation of all information sharing with affected First Nations is included within the supplemental information (Part 2) of the plan.

On an annual basis, commencing the year after the WLP comes into effect, Harper Logging Ltd. will attempt to contact the First Nations that have an asserted traditional territory with the defined area to discuss the harvesting and road building activities planned for the upcoming year of operations. In addition, a request will be made to the First Nation for any new information regarding any potentially affected Cultural Heritage Resource not previously identified to Harper Logging Ltd. Any new information received will be forwarded to the MFLNRO, Lands and Mines.

The following results and strategies (Table 2) for managing cultural heritage values will apply.



Table 2: Cultural Heritage Values and Associated Results and Strategies

| Cultural Heritage Value            | Result and Strategy   |
|------------------------------------|---|
| <b>Cedar</b>                       | <p><i>Result:</i></p> <ul style="list-style-type: none"> <li>• Enable continued access to red cedar for traditional use by local First Nations</li> </ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>   |
| <b>Traditionally Used Plants</b>   | <p><i>Result:</i></p> <ul style="list-style-type: none"> <li>• Enable continued access to traditionally used plants for traditional use by local First Nations.</li> </ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"> <li>• When local First Nations have indicated specific interest in traditional use plants, the licensee will identify the presence of such plants in planned harvest areas and communicate this to the interested First Nations prior to cutting permit submission. This is to allow for review by the local First Nations and that any collections of traditional use plants can be initiated by the local First Nations prior to harvest.</li> <li>• A no-pesticide use policy is implemented in this Woodlot Licence. Manual brushing and early planting of large stock is the preferred method to overcome brush problems.</li> </ul> |
| <b>Cultural Heritage Resources</b> | <p><i>Result:</i></p> <ul style="list-style-type: none"> <li>• Harvest plans will consider identified cultural heritage resources.</li> </ul> <p><i>Strategy:</i></p> <ul style="list-style-type: none"> <li>• The Licensee will share information with local First Nations upon request and be available for field reviews.</li> </ul>   |

If the licensee or any personnel connected with the Woodlot Licence operation finds evidence of tradition use or cultural heritage values, the MFLNRO Aboriginal Liaison Officer will be notified and all work will cease within the immediate (20 m) area. The licensee will cooperate fully, as requested by the MFLNRO Aboriginal Liaison Officer.

## 6.0 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 of this plan.

### INDIVIDUAL WILDLIFE TREES

#### a) Species and Characteristics:

The following table describes the species and characteristics of individual trees that will guide the selection of wildlife trees when they are chosen to be retained.

Table 3: Wildlife Tree Value and Characteristics (All Species)

| <b>HIGH (at least two of the listed characteristics)</b>  | <b>MEDIUM</b>  | <b>LOW</b>  |
|---|--|---|
| <ul style="list-style-type: none"><li>• Internal decay (heartrot or natural/excavated cavities present)</li><li>• Crevices present (loose bark or cracks suitable for bats)</li><li>• Large brooms present</li><li>• Active or recent wildlife use</li><li>• Current insect infestation</li><li>• Tree structure suitable for wildlife use (e.g., large nest, hunting perch, bear den, etc.)</li><li>• Largest trees on site (height and/or diameter) and/or veterans</li><li>• Locally important wildlife tree species</li></ul> | <ul style="list-style-type: none"><li>• Large, stable trees that will likely develop two or more of the above attributes for High.</li></ul> | <ul style="list-style-type: none"><li>• Trees not covered by High or Medium categories.</li></ul> |

Throughout WL2062 a number of veteran (old growth) trees, mostly Douglas fir are scattered throughout the license area. These trees add structural and biological complexity of the second growth forest and will be retained as wildlife trees (except as itemized in item b) below). In some cases second growth trees will be retained as wildlife trees to supply wildlife and biological diversity values and/or for the recruitment of future vets, to vary the age classes on the Woodlot, to reduce wind fetch in long openings, and/or act as a seed source or visual screen.

WL2062 has an individual wildlife tree management strategy that is predicated on retaining 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 overtime as the majority of the high value trees are Douglas fir and red cedar that are long lived species and will remain structurally strong for long periods even after death. Due to the number of scattered wildlife trees within the Woodlot 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.

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

Specific conditions that influence the decision of where individual wildlife trees may be removed include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees and CWD in adjacent openings.
- ✓ The desire to re-assign the Wildlife tree as part of an amended site plan.

Alternatives to removal of a wildlife tree will be given priority such as the establishment of a 'no work zone' or widening of a riparian width to protect the feature balanced with tree removal farther away from the feature within the RMA. All workers involved with the removal of potential wildlife trees will be informed of developed standards prior to fieldwork to help mitigate unnecessary removals.

## **c) Replacement of Individual Wildlife Trees:**

Individual trees will be replaced if they are of "high" wildlife value. Replacement trees will be selected using criteria outlined above with a preference for selecting trees that have two or more high wildlife tree value characteristics. If possible, retain stems within stream side reserves.

## **WILDLIFE TREE RETENTION AREAS**

### **a) Forest Cover Attributes:**

Wildlife tree retention areas (WTRAs) are planned preferably in fully constrained areas for long term retention (e.g. riparian reserve zones). Under the WLPPR 52 (1) the amount of WTRA's must be no less than 8% of the area of the Woodlot. The regulation also indicates that the WTRA does not have to be mapped as the location of good WTRA's can change over time based on changing forest management decision making.

Given the multitude of variables considered in locking down the reserves (fish streams, resource features, visual buffers, ocean zones, large trees, recreation features, recruitment areas, unique species/form, wildlife anchors, special places, perching presentation, vistas, bluffs, wetland anchors, productivity evaluation etc.) the reserves include some representative larger trees (DBH > average operational cruise) with moderate to high value to wildlife and regenerating stands with future wildlife potential.

The wildlife tree retention areas retain 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 red cedar that are long lived species. The naturally recruitment of wildlife trees

can occur over time as trees age and either take on old growth like characteristics (wildlife habitat) or turn into snags and eventual biodiversity value as large woody debris.

**b) Conditions Under Which Trees May Be Removed from Wildlife Tree Retention Areas:**

Stand-specific issues that influence the decision of where salvage may be appropriate for WTRA's include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands including the salvage of windthrow timber
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees and CWD in adjacent openings.
- ✓ The desire to re-assign the Wildlife Tree Retention areas as part of an amended site plan.

Salvage of wind thrown timber is permitted within WTRA's when not in a RRZ, unless the area loses significant character of the function supplied by the wildlife tree area. This would generally occur in wind-throw impacts of 25% to 50% of the dominant or co-dominant trees. This would focus on removal of downed timber only, protecting the standing green.

If more significant amounts of wildlife trees are lost due to wind-throw or other catastrophic events (exceeds 50% of the dominant or co-dominant trees) in a wildlife tree area then salvage of the damaged and remaining stems is permitted.

The salvage of portions of the WTRA either singles, clumps, or impacted areas created for improved safety to people is good forest management. Individual trees may be felled but not removed if considered a safety hazard.

Salvage of the area will be allowed considering other environmental constraints and the replacement strategy below.

**c) Replacement of Trees Removed from Wildlife Tree Retention Areas:**

No strategy for the specific replacement of individual trees felled as danger trees posing a hazard within a defined distance of a cutting-authority is presented as this will not threaten the long-term function or integrity of WTRA's.

Where salvage/harvest is planned and authorized within a non RRZ wildlife tree patch, the replacement with another suitable area in size, value and species composition will be assessed. This area must meet the target amount. When all or part of a WTRA is salvaged, the salvaged area should be replaced with other suitable habitat in the nearest possible location. If a WTRA suffers blow down, but is not salvaged, it will not be replaced. Replacement areas must have equal or better wildlife values. For non-riparian WTRA's attempts will be made to incorporate important features such as snags, and other significant wildlife features.

## **7.0 MEASURES TO PREVENT INTRODUCTION OR SPREAD OF INVASIVE PLANTS**

There is only one invasive species (Scotch Broom) of potential concern although it is not currently a problem on the woodlot. There is no range use on the woodlot. The introduction or spread of invasive plants, specifically Scotch Broom into the Woodlot is unlikely under current forest management practices. In the event that Scotch Broom or another invasive species does become established the strategies listed below will be implemented.

The holder of this Woodlot will use three complimentary strategies to counter the introduction or spread of invasive plant species. These include:

### **1) Prevention and Control**

- The holder's foresters will be encouraged to review the MOE's alien species web site and review the identification, control and management of invasive plants.
- The goal of this WLP is to annually identify known sites of invasive plants and sites that are at high risk to invasive plant establishment through their forest practices within the area under this plan
- Preventative measures to minimize the occurrence and spread of invasive plants will include grass seeding of exposed soils following soil disturbance where the introduction or spread of invasive plants is likely. Seed mixtures used for the above purposes or for those under Section 29 of the WLPPR will be assessed to ensure that their use does not introduce other invasive species.
- If moderate to high risk invasive plants are likely to establish in cut blocks harvested during the forest regeneration phase, the Holder of this WLP will through normal reforestation practices:
  - i. Establish a stand of coniferous and/or deciduous crop trees consistent with the applicable stocking for the area on or before the regeneration date; and
  - ii. Meet Free Growing requirements consistent with the applicable stocking standards on or before the late Free Growing Date so that the stand will form a closed canopy to suppress seed and vegetative production of shade intolerant invasive plants.

### **2) Detection of Invasive Plant Species**

- Invasive plants will be detected through the normal planting surveys, regeneration survival surveys and free-to-grow surveys.
- Action plans will be developed to combat the spread of invasive plants, if the introduction or spread is likely to be the result of the WLP holder's forest practices. When discovered, invasive plants will be mapped and reported to the MFLNRO.

### 3) Management or Elimination of Invasive Plant Species

- If invasive plants are discovered and if the introduction or spread is likely to be the result of equipment, machinery, or clothing, then: (a) prior to transport the cleaning of tires, tracks, bucket, undercarriage, etc. on machines will be completed and (b) the removal of burrs or plant components from clothing should be normal practice.

## **8.0 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS**

There are no range tenures on Read Island; therefore, no measures or activities are required or proposed.

## **9.0 STOCKING INFORMATION FOR SPECIFIED AREAS**

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, small pockets of damaged or diseased timber (i.e. windthrow) 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. Specified areas include:

- Areas subject to commercial thinning,
- The removal of individual trees, or
- Areas subject to single/group tree selection or
- Other types of intermediate cutting and /or
- Areas subject to the harvest of special forest products.

For the purposes of this plan, commercial thinning, the removal of individual trees, single/group selection, intermediate cutting, salvage of windthrow or the harvest of special forest products may take place anywhere within the woodlot except in designated areas where harvesting will be avoided. The delineation of specific areas will be conducted in conjunction with the pre-harvest mapping as per Section 33 of the WLPPR. For salvage of scattered windthrow or root rot mortality, openings of up to 0.1ha in size are acceptable, not requiring regeneration. For openings greater than 0.1ha even-aged stocking standards will apply.

## **10.0 PERFORMANCE REQUIREMENTS**

### **SOIL DISTURBANCE LIMITS**

- ☒ Default WLPPR s.24(1)(b):
- 8% of Net Area to be Reforested

### **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

### **STOCKING STANDARDS**

- ☒ Alternative WLPPR s. 35(1)(a): The stocking standards, regeneration dates and free growing dates are indicated in Appendix II. In addition, a set of footnotes and rationales are provided for the Alternative Stocking Standards.

### **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).

### **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).

### **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).

### **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.



## **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 Construction of a road in a riparian management zone is limited to the conditions described in Section 40(1) of the WLPPR.
- For the purposes of Section 40(1)(a) of the WLPPR, roads may be constructed in a riparian management zone if a road grade previously existed in this location and it is practicable to re-establish the road on the old grade.
  - 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.

## **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:

- ☒ Default WLPPR s.52(1)
- The defaults specified in Section 52(1) of the WLPPR is adopted. It specifies that the proportion of the Woodlot Licence area that is dedicated to wildlife tree retention areas have to be 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% of the Woodlot licence area.

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

## **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.

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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).**

## APPENDICES

## **Appendix I: The Woodlot Licence Plan Map**

## Appendix II: Stocking Standards, Regeneration Dates and Free Growing Dates for Free Growing Stands

These stocking standards are proposed as an alternative performance requirement for the purposes of section 35(1) (a) of the Woodlot Licence Planning and Practices Regulation to areas harvested under this woodlot licence plan where the establishment of a free growing stand is required under section 29(3) of the *Forest and Range Practices Act*.

| Biogeoclimatic Ecosystem Classification |                |                      | Preferred Species                   | Acceptable Species                                    | MITD (m) | TSS (sph) | MSSpa (sph) | MSSp (sph) | Regen date (yrs) | FG Date (yrs) | Min. FG Ht by Species      |                                  | Crop Tree to Brush % |
|---|----------------|----------------------|-------------------------------------|---|----------|-----------|-------------|------------|------------------|---------------|----------------------------|----------------------------------|----------------------|
| ID #                                    | Zone & Variant | Site Series          |                                     |   |          |           |             |            |                  |               | Species                    | Ht (m)                           |                      |
| 1028291                                 | CWH xm         | 01/05                | Fd                                  | Pw <sup>5</sup> Hw <sup>8</sup> Cw                    | 2.0      | 900       | 500         | 400        | 3                | 20            | Fd<br>Pw<br>Hw<br>Cw       | 3.0<br>2.5<br>2.0<br>1.5         | 150                  |
| 1028293                                 | CWH xm         | 02                   | Pl Fd                               | Pw <sup>5</sup> Lw <sup>8</sup>                       | 2.0      | 400       | 200         | 200        | 3                | 20            | Pl<br>Fd<br>Pw<br>Lw       | 1.25<br>2.0<br>2.5<br>1.5        | 150                  |
| 1033258                                 | CWH xm         | 03                   | Fd                                  | Cw Pw <sup>5</sup> Pl <sup>6</sup><br>Lw <sup>8</sup> | 2.0      | 800       | 400         | 400        | 3                | 20            | Fd<br>Cw<br>Pw<br>Pl<br>Lw | 2.0<br>1.0<br>2.5<br>1.25<br>1.5 | 150                  |
| 1033259                                 | CWH xm         | 05/07                | Cw Fd Bg <sup>10</sup>              | Pw <sup>5</sup>                                       | 2.0      | 900       | 500         | 400        | 3                | 20            | Cw<br>Fd<br>Bg<br>Pw       | 2.0<br>4.0<br>3.5<br>2.5         | 150                  |
| 1033260                                 | CWH xm         | 06                   | Fd Cw Hw                            | Bg <sup>10</sup> Pw <sup>5</sup>                      | 2.0      | 900       | 500         | 400        | 6                | 20            | Fd<br>Cw<br>Hw<br>Bg<br>Pw | 3.0<br>1.5<br>2.0<br>3.0<br>2.5  | 150                  |
| 1033261                                 | CWH xm         | 08/09 <sup>1</sup>   | Cw Bg                               | Ss <sup>7</sup>                                       | 2.0      | 900       | 500         | 400        | 3                | 20            | Cw<br>Bg<br>Ss             | 2.0<br>3.5<br>4.0                | 150                  |
| 1033262                                 | CWH xm         | 10                   | Act Dr <sup>4</sup> Mb <sup>4</sup> |   | 2.0      | 800       | 400         | 400        | 3                | 20            | Act<br>Dr<br>Mb            | 4.0<br>4.0<br>4.0                | 150                  |
| 1033263                                 | CWH xm         | 11 <sup>1</sup>      | Pl <sup>1</sup> Cw                  |   | 2.0      | 400       | 200         | 200        | 3                | 20            | Pl<br>Cw                   | 1.25<br>1.0                      | 150                  |
| 1033264                                 | CWH xm         | 12 <sup>1</sup>      | Cw                                  | Hw <sup>1</sup> Pw <sup>5</sup> Ss <sup>7</sup>       | 2.0      | 800       | 400         | 400        | 3                | 20            | Cw<br>Hw<br>Pw<br>Ss       | 1.0<br>1.5<br>2.5<br>1.5         | 150                  |
| 1033265                                 | CWH xm         | 13/14 <sup>1,2</sup> | Bg Cw Fd <sup>1</sup>               | Ss  | 2.0      | 900       | 500         | 400        | 3                | 20            | Bg<br>Cw<br>Fd<br>Ss       | 3.5<br>2.0<br>4.0<br>4.0         | 150                  |

| Biogeoclimatic Ecosystem Classification |                   |  | Preferred Species      | Acceptable Species | MITD<br>(m) | TSS<br>(sph) | MSSpa<br>(sph) | MSSp<br>(sph) | Regen date<br>(yrs) | FG Date<br>(yrs) | Min. FG Ht by Species |                   | Crop Tree to<br>Brush % |
|---|-------------------|--|------------------------|--------------------|-------------|--------------|----------------|---------------|---------------------|------------------|-----------------------|-------------------|-------------------------|
| ID #                                    | Zone &<br>Variant | Site Series  |                        |                    |             |              |                |               |                     |                  | Species               | Ht<br>(m)         |                         |
| 1033266                                 | CWH xm            | 15 <sup>1,2</sup>  | Cw                     | Ss <sup>7,9</sup>  | 2.0         | 800          | 400            | 400           | 3                   | 20               | Cw<br>Ss              | 2.0<br>4.0        | 150                     |
| 1033267                                 | CWH xm            | 01/04/06 <sup>11</sup>   | Dr <sup>4</sup> Mb     |                    | 2.0         | 1200         | 1000           | 800           | 3                   | 20               | Dr<br>Mb              | 3.0<br>3.0        | 150                     |
| 1033268                                 | CWH xm            | 05/07/08/<br>09 <sup>1</sup> /02/13/<br>14 <sup>1,2</sup> /15 <sup>1,2</sup> | Act Dr <sup>4</sup> Mb |                    | 2.0         | 1200         | 1000           | 800           | 3                   | 20               | Act<br>Dr<br>Mb       | 4.0<br>4.0<br>4.0 | 150                     |

|   |  |  |
|---|--|--|
| Regen date = Regeneration Date<br>F G Date = Free Growing Date              | MITD = Minimum distance<br>between well spaced trees of the<br>preferred and acceptable species  | Crop Tree to Brush % = the<br>height of free growing trees<br>relative to the competing<br>vegetation within a 1 m radius<br>cylinder around the tree. |
| TSS = Target Stocking Standard<br>(sph = healthy well spaced trees /<br>ha) | MSSpa = Minimum Stocking<br>Standard of well spaced trees of<br>preferred and acceptable species | MSSp = Minimum Stocking<br>Standard of well spaced trees of<br>preferred species   |

LEFT BLANK INTENTIONALLY





### ***Foot Notes***

- 1 Elevated microsites are preferred
- 2 These sites represent areas with strongly fluctuating water tables. They are often found as mosaics in combination with other sites. Elevated microsites are preferred, either mechanical or natural
- 3 Trees are not acceptable within 10 m of second growth stumps, except Cw, Pw, Lw and deciduous species.
- 4 Dr & Mb are not acceptable on 02 and 04 site series (too dry). Avoid planting in gleyed soils and frost pockets.
- 5 Pw must be free of blister rust within 10 cm of the stem and be pruned as per ministry guidelines or be blister rust resistant stock ( $\geq 50\%$  resistance)
- 6 Restricted to nutrient-very-poor sites and as a minor species only
- 7 Risk of weevil damage, use resistant stock where available; if weevil resistant stock is available Ss may exceed 20% of the free growing stand on 08 & 12 site series or 5% of the free growing stand on 09,13,14,&15 site series on a dispersed basis.
- 8 Hw is not acceptable on site series 04. Lw may be used but strictly on a trial basis. The proportion of the free-growing stand comprised of Hw or Lw if established will not exceed 20%. Lw will not exceed 5% of the free growing stand on site series 02.
- 9 May be planted on prepared mounds.
- 10 Based on past experience and knowledge Bg performs best on areas that are subject to frost and the slightly wetter/richer areas
- 11 Establishment of deciduous species is permitted within these site series provided the site contains a sufficient moisture regime to support deciduous species (i.e. limited salal content).

### ***Stocking Standards - General Comments***

This alternative stocking standards table has been developed from the Reference Guide for FDP Stocking Standards dated December 11, 2002, the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A as well as the correlated guidelines and site interpretation for the Vancouver Forest Region (VFR). Where site series have similar stocking standards, they have been combined. Sections A-K are the most common stocking standards for the Woodlot and will be employed the majority of the time. Sections L&M are the deciduous stocking standards. Rationales for employing these standards are listed below.

Biogeoclimatic unit or BEC means the zone, subzone, variant and site series described in the most recent field guide published by the MFLNRO for the identification and interpretation of ecosystems as applicable to a harvested area.

Where standards units (SUs) are comprised of an un-mappable mosaic of site series, the practice will be to manage for the stocking standards, noted by the ID#, of the dominant site series provided that the tree species are suitable in all site series contained within the SU.

The minimum density post-spacing shown corresponds to the values recommended in the Establishment to free-growing guidebook for the VFR. i.e. the same as the minimum-stocking standard for conifer stands.

Higher stocking is noted for the deciduous stands to ensure self-pruning and may include a conifer component (although mixed stand management is not being proposed). The maximum density post-spacing has been increased to allow for two stage spacing entries in order to manage snow press, blow down risks and provide the opportunity to capture the small-diameter resource.

A limited number of scattered deciduous trees will be tolerated on all conifer plantations: to provide a nurse crop, promote nutrient cycling or for general biodiversity objectives. Allow up to 50 sph as “ghost” trees during surveys on all sites. No deciduous within 10m of each other will be accepted for dispersed single stems due to increased competitive density effects. Should one of the “ghost trees” be encountered within a plot during a free growing survey the conifer tree will be deemed to be not free growing following the normal definition of a free growing tree.

Reduction of inter-tree spacing to 1.5 m is acceptable for the following site-specific conditions: frequent bedrock, large blocky colluvium, hygric sites, and disturbed roadside areas amongst slash accumulations (up to 10 m from the traveled portion of the road). Reduction of inter-tree spacing to 1.0 m is acceptable on mounded sites only.

## ***Deciduous Management***

Deciduous management within W2062 is planned strictly as an option – not as the preferred management regime. The establishment of a deciduous crop will only be considered provided the stocking standards as outlined in ID#s L&M can be met. Past experience with deciduous management indicates that within a cutblock only a portion of the area is suitable for the establishment of deciduous. The number of sites within W2062 that may be suitable are limited; therefore, no more than 1-2 hectares of area per year (to a maximum of 10 hectares within a 5-year cut-control period) may be selected for deciduous management.

This WLP wishes to continue to operate in the spirit of not wanting to limit the possibility or opportunity to try regenerating alternative species on a very minor basis and to have the ability to grow a viable stand of quality deciduous for potential future markets.

Although available, the amount of operational information available for the establishment of deciduous stands is known only by few local foresters. As part of the trial basis, Harper Logging Ltd and his forester will seek out information from any local sources to ensure a quality plantation. This may include reviewing of the North-West Hardwood (NWH) FSP and/or discussing regimes with their forester. The information listed below in regards to regimes and establishment of deciduous stands is general in nature and not intended to be a comprehensive guide to establishing a new crop of deciduous tree.

Deciduous production and management is supported by the following research:

- L.Sigurdson et al. 2nd draft report on Weyerhaeuser's Red Alder Management Practices (1998),
- Hibbs et al. The Biology and Management of Red Alder (1994),
- E.B. Petersons et al. FRDA Report 250 . Black Cottonwood and Balsam poplar manager.s handbook for British Columbia (1996).
- P.J. Courtin et al. Forest Research Extension Note 016 - Red Alder management trials in the Vancouver Forest Region (2002).

### Regime:

The product objective is to manage for high quality knot-free sawlogs on a 40 - 50 year rotation. Establish stand with high densities (1500 sph) is required to achieve a target of 1200 stems/ha at free-growing. At approximately age 10 but not before stand height 12 to 16 m space to 900 stems/ha. Dead branch prune the crop trees early and continue density regulation treatments approx. every ten years to maintain good crown forms and eliminate low quality stems. The minimum free growing height criterion for deciduous species is based on the tallest conifer standard for each site series.

The establishment of a second crop conifer layer (Cw, Ss) before or after density treatment is optional. If a cedar or Sitka spruce understory is planted in addition, then the natural pruning of the alder would be enhanced. The removal of the alder at harvest age is

operationally possible, while leaving a fully stocked, semi-mature conifer pole stand behind. Where conifers are established underneath a designated deciduous stand, the stand's regeneration and free to grow status will be measured using the deciduous standards only.

Damage criteria for deciduous species have not been formally established. General free-growing criteria will be adopted, such that well spaced stems will be of good form, health and vigour.

## **II. SUPPLEMENTAL INFORMATION TO SUPPORT OF THE PROPOSED WOODLOT LICENCE PLAN**

### **1. REVIEW AND COMMENT**

#### **a) Newspaper Advertising**

On February 16, 2011 the Public Review and comment period was advertised in two separate Campbell River newspapers: Campbell River Mirror and Campbell River Courier-Islander. These two papers provide for the widest coverage of the Island area. Furthermore, local Read Island residents generally travel to the Campbell River/Quadra area for supplies. Copies of the advertisements are listed below in Section 5.

#### **b) Efforts to make WL2062 Plan Available to local Read Island residents**

As part of the Public Review and comment, on February 23, 2011 Harper Logging Ltd. held an open house at the Read Island logging field office for any interested residents to view the plan and map and ask any questions. Essentially, no local residents attended the open house.

However, during the 30-day review and comment period a number of residents became concerned that the “Steamboat Trail” was going to be logged and wanted to voice their concerns. Their concerns also included that they did not have adequate notice of the WL2062 plan and its content. In response to these concerns a second “Talk and Walk” style meeting was held on March 19<sup>th</sup> 2011 on the Steamboat Trail. A total of 26 residents plus three Harper Logging representatives met to discuss the plan. The meeting was highly charged where many of the residents openly voiced their opinions about logging on Read Island as a whole. Generally, the majority of residents that attended the open house wanted a prohibition against any harvesting within DL783 (which contains the Steamboat Trail). To help the public better understand some possible scenario’s surrounding the harvesting of the Steamboat Trail area a small group (6-8) were convinced to walk the trail where a 50m buffer of ribbon had been established prior to the meeting.

At the conclusion of the meeting an additional two-week period was given for any of the residents to provide written comments to Harper Logging on the WL plan. This was past the original public review and comment period date but it was felt important to allow adequate time for the public to comment. During the two-week period a letter writing campaign was held by a number of groups and approx. 120 form letters were sent to Chuck Anderson, of the Ministry of Forests, with copies going to the Licencee. The form letters (not included in the submission as they were sent to the Ministry) all pointed to wanting the removal of DL783 from the WL2062 so that the Steamboat Trail would not be logged. It should also be noted that a comment in the form letter referring to Harper Graham twice “turning it down” (referring to DL783) was taken out of context. Harper Graham was referencing the choices he had during the selection process of lands to be included in the original WL0046 and a subsequent selection of lands during the amalgamation of the WL0046 and TSL chart area. No further action is planned.

c) Referrals

This plan was referred to the District Manager, MFLNRO, Sunshine Coast Forest District, and to the following First Nations for review and comment.

1. Klahoose FN
2. Homalco FN
3. Campbell River FN
4. Cape Mudge FN
5. Nanwakolas Council Society
6. Laich-Kwil-Tach Treaty Society – cc. Letter only that I send to Campbell River and Cape Mudge FN

d) Copy of Written Comments Received

One letter was received back from the Laich-Kwil-Tach Treaty Society and one request for a meeting with the Homalco FN. Please see below.



**Laich-Kwil-Tach Treaty Society**  
1441 Old Island Highway  
Campbell River, B.C.  
V9W 2E4  
Tel: (250) 287-9460  
FAX: (250) 287-9469  
Toll free: 1-888-900-5720  
e-mail: [reception@lkts.ca](mailto:reception@lkts.ca)

March 11, 2011

Paul Kutz, RPF  
Box299  
Heriot Bay, BC V0P1H0  
Phone 250-283-2963

Dear Mr. Kutz:

Re: Woodlot Licence W2062 Harper Logging Ltd. on Read Island

The Laich-Kwil-Tach Treaty Society has now had a chance to review the referral sent from Harper Logging Ltd. for new development areas on Read Island on Woodlot Licence WL2062. The Laich-Kwil-Tach Treaty Society (formerly the Hamatla Treaty Society) represents its member Nations, the We Wai Kai (Cape Mudge Band) and Wei Wai Kum (Campbell River 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 engage in meaningful consultation, but also must seek an accommodation of our interests (including cultural and economic ones).

At this point the LKTS have no concerns but when Harper Logging is ready to engineer blocks 1-5-6 we will have concerns and want these areas walked with our First Nation

Recon people. We also want the opportunity to comment on the other Blocks after they are engineered.

We may choose to address the issues of Aboriginal rights and title infringement and compensation with respect to this project through the treaty 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 have not foreseen.

Yours truly,



Rod Naknakim  
Chief Negotiator

cc Member Nations





Xwémalhkwu First Nation  
1218 Bute Crescent  
Campbell River, B.C. V9H 1G5  
Phone: (250) 923-4979  
Fax: (250) 923-4987

May 18, 2011

Harper Logging  
Box 299  
Heriot Bay, B.C.  
V0P 1H0

**RE: WLP for Woodlot Licence WL2062**

Dear Paul Kutz:

Thank you for your letter of April 11, 2011. We wish to advise you that further consultation with Xwémalhkwu First Nation will be required. At this time we would like to request a meeting with you. This will give us an opportunity to determine the complexity of the matter and anticipate our requirements for further consultation.

Respectfully,

Rob Harry  
Treaty Land Selection/ Forestry Dept.

e) Revisions Made as a Result of Written Comments Received

None

- f) The following documents, reports and maps were reviewed in the preparation and submission of the WLP:
- W0046 Woodlot Licence Plan #1
  - Provincial Wildlife Tree Policy and Management Recommendations – February 2000
  - Information concerning Wildlife Habitat for the survival of species at risk in the Sunshine Coast Forest District – March 2006
  - Order Establishing Provincial Non-Spatial Old Growth Objectives – June 2004
  - Several Map View plots of the location of Invasive Plant species – May 2007
  - Invasive Plant Map Label Legend
  - Introduction to the Reference Guide for FDP Stocking Standards – March 2007
  - Water\_Pod\_50K, - May 2007
  - Water Licences Report – April 2007
  - SCFD Landscape Unit boundary map
  - Implementation policy for the provincial order of non-spatial old growth objectives.
  - Ministry of Environment Order for: Category of Species at Risk – June 2006
  - Ministry of Environment Approved Wildlife Habitat Areas (WHAs) – March 2007
  - Ministry of Environment Approved Fisheries Sensitive Watersheds – April 2007
  - MFLNRO Notice – Indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species in the Sunshine Coast Timber Supply Area
  - Ministry of Environment Ungulate Winter Range Notices, FPPR section 7 and WLPPR section 9
  - Information concerning wildlife habitat for the winter survival of ungulate species in Sunshine Coast Timber Supply Area
  - Map showing the Proposed Ungulate Winter Range in the Sunshine Coast TSA
  - Ministry of Environment Species at Risk Notices FPPR section 7 and WLPPR section 9 – April 2007
  - Map showing: Material to support the Notice for Species at Risk the Sunshine Coast Forest District. Included on the map were proposed: Grizzly Bear WHAs; Draft Stickleback WHA and Community Watershed Boundaries for the Sunshine Coast Forest District -- February 2005
  - Map showing: Suitable Marbled Mulelet habitat for the Sunshine Coast Forest District – July 2004
  - Ministry of Forest Notice – Indicators of the Amount, distribution and Attributes of Wildlife Habitat required for the survival of species at risk in the Sunshine Coast Forest District – March 2, 2006
  - Proposed Draft Order for the List of Wildlife Habitat Features
  - Ministry of Environment's Proposed List of Wildlife Habitat Features – April 2007
  - Ministry of Environment's Approved Ungulate Winter Ranges -- Updated March 1, 2007
  - NorthWest Hardwood's Cortes FDU map

- Reference Guide for FDP Stocking Standards -- December 11, 2002,
- Woodlot Licence Forest Management Regulations -- January 31, 2004
- WLPPR
- WLFMR
- Forest and Range Practices Act
- Forest Planning and Practices Regulation

## 2. EFFORTS MADE TO MEET WITH FIRST NATIONS

The following First Nations have been provided information relating to the W2062 Woodlot Licence Plan:

- Klahoose FN
- Homalco FN
- Campbell River FN
- Cape Mudge FN
- Nanwakolas Council Society
- Laich-Kwil-Tach Treaty Society – cc. Letter only that I send to Campbell River and Cape Mudge FN

### EXAMPLE LETTER

*Harper Logging Ltd.*

BOX 299  
HERIOT BAY, B.C.  
V0P 1H0 2B5-2325

February 21, 2011

***Council of Chiefs***

Laich-Kwil-Tach Treaty Society  
1441 Old Island Highway  
Campbell River, BC  
V9W 2E4

Attention: Shirley Johnson, Research Assistant

Dear Ms. Johnson:

I am initiating the process of preparing a Woodlot Licence Plan (WLP) for Woodlot Licence WL2062, located on Read Island.

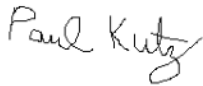
Recognizing that this woodlot licence area is within the asserted traditional territory of the Campbell River First Nation and Cape Mudge First Nation, I am requesting any information you may be willing to share on cultural heritage resources within the woodlot licence area that is of continuing importance to the communities. The woodlot licence plan requires the preparation of a result or strategy to conserve and protect cultural heritage resources that are of continuing importance to First Nations and are not protected by the *Heritage Conservation Act*.

This Crown Land portion of the woodlot licence covers an area of approximately 777 hectares and has a long term sustainable harvest rate of 2,087 cubic meters (m<sup>3</sup>) per year. To assist us in understanding the cultural heritage resources that may be practised or located in the woodlot licence area, I would appreciate any site specific information on cultural heritage resources that you may be willing to provide. For your convenience and review, I am attaching an electronic copy of the proposed Woodlot Licence Plan area map.

Harper Logging Ltd. would like to meet with representatives of the Laich-Kwil-Tach Treaty Society sometime during the month of March when it is mutually convenient to discuss and obtain any specific information that can be provided to assist in the development of a successful result or strategy. Please contact either Harper Graham by phone at (250) 285-2325 or myself at (250) 283-2963 to discuss when it may be possible to meet; alternatively you may contact me by e-mail at: [paulkutz@cablerocket.com](mailto:paulkutz@cablerocket.com)

In addition, please let me know if you are unable to meet or provide information and I will develop the result and strategy based on the available information. Any comments received by the Laich-Kwil-Tach Treaty Society on or before April 11, 2011 will be submitted as part of the formal review and comment process prior to the final plan being submitted to the Ministry of Forests, Mines and Lands District Manager, for approval.

Yours Truly,  
Harper Logging Ltd.



Paul Kutz RPF  
Forester

c.c. Mr. Brian Kukulies, Ministry of Forests, Mines and Lands  
Chief Robert Pollard and Council (via email), Campbell River First Nations  
Chief Ralph Dick and Council (via email to Brian Kelly), Cape Mudge First Nations

### 3. EXEMPTIONS

### 4. RATIONALE IN SUPPORT OF PROPOSED ALTERNATIVE PERFORMANCE REQUIREMENTS

#### STOCKING STANDARDS

The alternative stocking standards (see Appendix 2) that apply under this Woodlot Licence Plan comprise minor modifications to the default standards to reflect circumstances, experience, and management regimes particular to the woodlot. These are consistent with the licensee's intent to manage the woodlot to produce high quality forest products, maintain site productivity, and explore new concepts for efficient, economic, and low impact forest management as well as to manage a small part of the woodlot for deciduous species.

The table of stocking standards presented in Appendix 2 has been developed from the *Reference Guide for FDP Stocking Standards* dated December 11, 2002 and from the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A, as well as the related guidelines and site interpretation for the Vancouver Forest Region (VFR). In addition, the establishment of stands and the free growing dates as outlined in the FPPR regulations were considered. The table represents a synthesis of these requirements and describes how they will apply to the woodlot.

The primary differences from the default standards are:

- a) Where site series have similar stocking standards, they have been combined.
- b) The latest free growing date for most site series has been set at 20 years which is consistent with the FPPR regulations,
- c) Sitka spruce (Ss) has been added as an acceptable species on sites with fluctuating water tables where mechanical mounding is undertaken. On wet sites and sites with fluctuating water tables, it is possible to mound in order to create micro planting sites for Sitka spruce, cedar and alder. This is proposed on a small scale and has therefore added Ss as an acceptable species and has reduced the minimum inter-tree distance to 1.0m on mounded sites.

In addition, ID #s L & M have been added to the stocking standards. This table is intended to define the stocking standards that will apply to deciduous (broadleaf) management. The Chief Foresters stocking standards accept black cottonwood (Act), red alder (Dr) and bigleaf maple (Mb) as productive, reliable and feasible regeneration options on several site series within the CWHxm zone.

The use of deciduous species will be implemented in consideration of the Chief Foresters memorandum dated August 22nd, 2000 and the supporting note Common Principles for the Management of Red Alder within the Coast Forest Region. Dated August 2004. The management for deciduous species is proposed on a limited scale and is consistent with the management assumptions adopted in the Management Plan Annual Allowable Cut (AAC) calculation for the Sunshine Coast TSA.

## 5. Copies of Newspaper Advertisements

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Listed: Wednesday 16 February, 2011

Viewed: 263 times

### Public Viewing of the

Public Viewing of the Woodlot Licence Plan for Woodlot 2062 – Read Island  Copyright

B8 CAMPBELL RIVER COURIER-ISLANDER

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Wednesday, Feb. 16, 2011

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Legals and Tenders

PUBLIC VIEWING OF THE WOODLOT  
LICENCE PLAN FOR  
WOODLOT 2062 - READ ISLAND

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# March 19<sup>th</sup>, 2011 Attendance Record for Open House

| Read Island Pub.2 Meeting   |                          |
|-----------------------------|--------------------------|
| MARCH 19, 2011 Read Island. |                          |
| Shawni Hollanders           | 250 203-3924             |
| Sadie Hollanders            | 250 203 3024             |
| Tanjira Gilbert             | 250 287 6440             |
| Tom GILBERT                 | "                        |
| Violine Hollanders          | 250 287-0994             |
| Rackford Royko              | 250-203-8716             |
| Tom Hollanders              | 250-203-3924             |
| Pied Hollanders             | " "                      |
| Doug Davis                  | Bird Surge Vanner B.L.   |
| Sheila Hollanders           | 250-203-8716 fashedo@    |
| Jim Shaw                    | 250-287-6521 hotmail.com |
| Leah Polk                   | 250-13@hotmail.com       |
| Ron Bicklin                 | 250-230-8671             |
| Colleen Carter              | 250 203 2296             |
| Keith Anzell                | "                        |
| Goady Webb                  | Zef @ 13@hotmail.com     |
| Salix Webb                  | "                        |
| Ken HARRIS                  | 250-287-0965             |
| Merlin Blixhavn             | 250-203-4703             |
| Anna Blixhavn               | read-island@hotmail.com  |
| Renate Kviet                | ✓                        |
| Richard Gillmore            | 250 830 7003             |
| Christopher Greenwood       | 250 830 7003             |
| Jesse Cox                   | 250 830 7003             |
| RACH KERR                   | 250 285-2823             |
| Lannie Keller               | 250 285-2823             |
| Paul Kutz                   |                          |
| Harper Graham               |                          |
| David Graham                |                          |



## 6. MFLNRO COMMENT AND REVIEW OF WLP FOR WL2062

- The woodlot plan should have the same licensee name(s) and signature(s) as the woodlot document and management plan.

Will confirm

- Section 8 of the WLPPR requires that the mapping include:
  - c) the location and riparian class of streams, wetlands and lakes shown on government-endorsed
    - (i) forest cover maps, Riparian was never a component of FC1 of VRI
    - (ii) terrain resource inventory maps, and TRIM never classified riparian features
    - (iii) fish and fish habitat inventory maps; not available
  - (d) any of the streams identified in paragraph (c) that are fish streams;

I am not seeing anything like that so can we assume that this information is currently unknown / unavailable? Correct

- With respect to Section 4.0 Areas where Timber Harvesting will be Modified – Steamboat Trail:

Generally we are not comfortable approving a plan that states the government specifies specific harvesting modifications or constraints. The specific harvesting constraint you have referred to was only used in the timber supply analysis. How the area is managed is something for the licensee to address.

The plan now provides a specific harvesting plan for conducting operations and management of this “modified harvest” area.

I am confused by the statement that the Steamboat Trail is not on the WLP map. It appears there is a linear feature with a reserve no harvest designation on the map?

Fixed

- Section 6 WILDLIFE TREE RETENTION STRATEGY:

Unlike the WLP for W0046 there is no species priority indicated.

Unlike WL0046 I did not include a commitment for a specific number of individual wildlife trees or species priority by block.

With respect to the sections on Conditions under which trees may be removed, I am unsure what is meant by “The desire to re-assign the Wildlife tree as part of an amended site plan”.

The intention was to state that a wildlife tree could be moved around via a Site Plan amendment

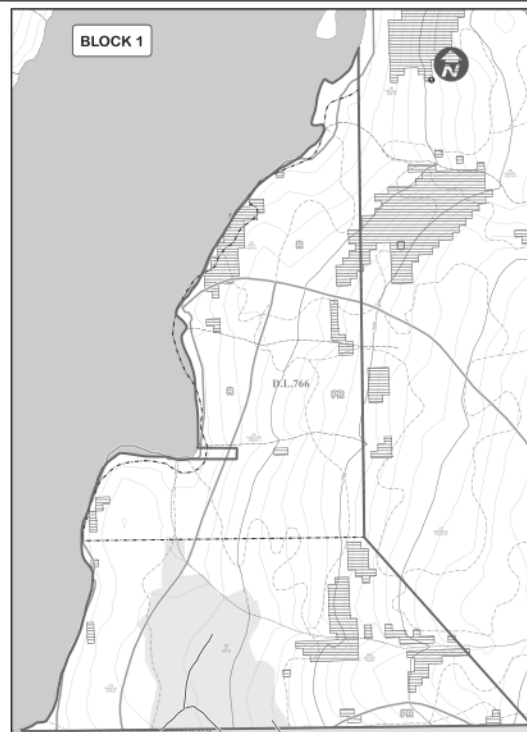
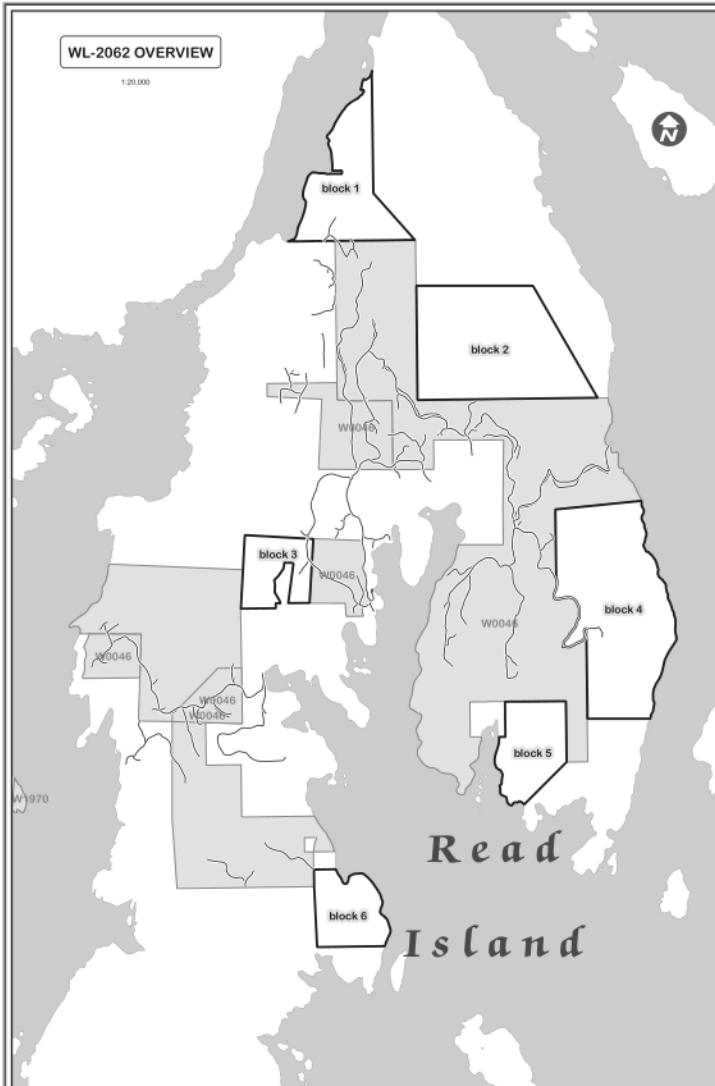
- Appendix II Stocking Standards:

- ID # 1028291 - Should the site series be 01/05? – Yes, fixed

- ID # 1033262 - The approved standard does not seem to include Dr and Mb. Fixed

- ID # 1033265 - No Ss FTG Height Fixed

- ID # 1033266 - No Ss FTG Height Fixed



# WOODLOT PLAN

## WL 2062

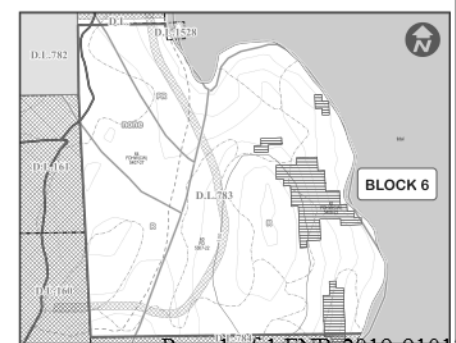
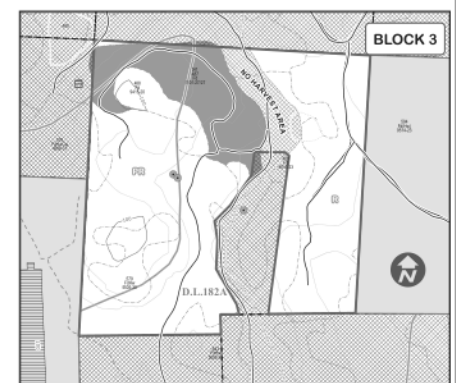
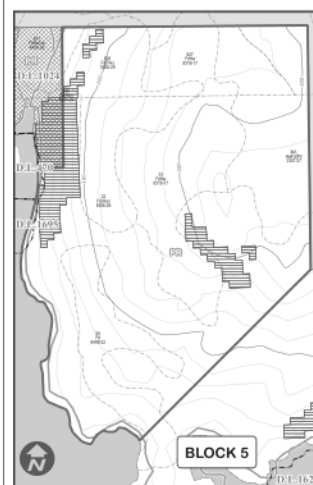
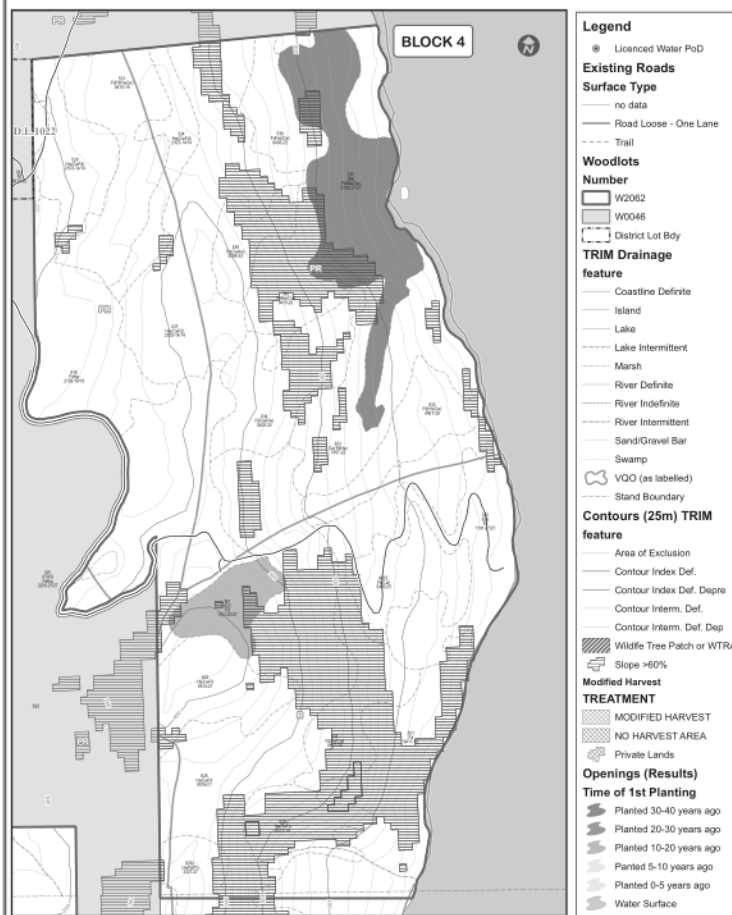
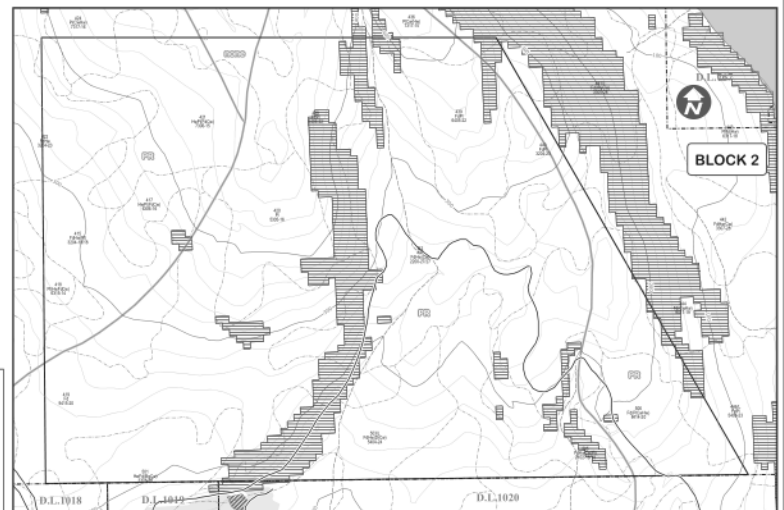
### READ ISLAND

This map document consists of one Overview map showing the location of all 6 Blocks and their location on Read Island. The remaining 5 maps show the existing woodlot boundaries at a scale of 1:20,000. All data is derived from the 1:20,000 scale map.

prepared for  
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by  
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TOWN PLANNING SERVICES



NOTES/COMMENTS/SIGNATURES:

Read Island, B.C.

# Woodlot License W0046

LICENSE PLAN  
2007 - 2017



**Forest Cover Labels**  
1:25,000 FCI coverage

**FCI**  
4000-57

**Forest Cover Labels**  
1:50,000 Woodlot Inventory

**MATURE STAND**  
Leaving open for logging. Third Species  
See Labels for Age

**JUVENILE STAND**  
Leaving open for logging. Third Species  
See Labels for Age

| AGE CLASS TABLE   | CHRONO CLOSURE TABLE  | HEIGHT CLASS TABLE  |
|---|---|---|
| 1. 0-10<br>2. 11-20<br>3. 21-30<br>4. 31-40<br>5. 41-50<br>6. 51-60<br>7. 61-70<br>8. 71-80<br>9. 81-90<br>10. 91-100 | 1. 0-10<br>2. 11-20<br>3. 21-30<br>4. 31-40<br>5. 41-50<br>6. 51-60<br>7. 61-70<br>8. 71-80<br>9. 81-90<br>10. 91-100 | 1. 0-10<br>2. 11-20<br>3. 21-30<br>4. 31-40<br>5. 41-50<br>6. 51-60<br>7. 61-70<br>8. 71-80<br>9. 81-90<br>10. 91-100 |

**Read Island**  
1:15,000 LEGEND  
BC ALBERS projection  
NAD83 DATUM

**TRIM Road Legend**

**SCENIC POLYGON**

**Forest Age (2007)**

**Riparian Classification**

**Riparian Feature (TRIM)**

**Water Feature**

**Non-Forest Cover**

**Environmentally Sensitive Areas (ESA)**  
CLASS 1 (HIGH)

**Environmentally Sensitive Areas (ESA)**  
CLASS 2 (MODERATE)

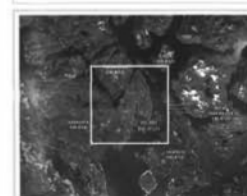
**Environmentally Sensitive Areas (ESA)**  
CLASS 3 (LOW)

**Environmentally Sensitive Areas (ESA)**  
CLASS 4 (VERY LOW)

Map was produced using a combination of the following data sources: 1:25,000 FCI, 1:50,000 Woodlot Inventory, and the most current aerial photography available.

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**MAP NOTES:**  
Landscape Unit: Entire plan lies within the COWIT-10 landscape unit.  
Biogeographic Zone (BGC Zone): Entire plan is within the COWIT-10 landscape unit.

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