

TREE FARM LICENCE 47

PROPOSED MANAGEMENT PLAN NO. 4

Prepared for:

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Subject: TFL 47 – Management Plan No. 4

Dear Gary;

Enclosed please find the final draft Management Plan No. 4 report for Tree Farm Licence 47.

Please review the document and forward any suggested revisions to the undersigned. If you have any questions or comments, please call at your convenience.

Yours truly,

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1. INTRODUCTION

When approved by the Province's Chief Forester, the Management Plan, along with other pertinent information and input, will be used in the Chief Forester's determination of the allowable annual cut (AAC) from Tree Farm Licence (TFL) 47. The AAC determination will be appended to this document once it is completed.

This Management Plan has been compiled to meet with content requirements specified in the *Tree Farm Licence Management Plan Regulation (B.C. 280/2009)*. The regulations have replaced content requirements that were specified in past TFL agreements. Management objectives and strategies that pertain to operations on the TFL are specified in the Forest Stewardship Plan in accordance with the *Forest and Range Practices Act*, and are taken into account in the timber supply analysis that is included in this Management Plan.

2. DESCRIPTION OF TFL 47

TFL 47 is comprised of two management units (MU) located on northern Vancouver Island near Port McNeill (Bonanza Lake MU) and parts of the coastal mainland and islands in the Johnstone Strait (Johnstone Strait MU) (Figure 1). The total TFL area is 125,004 hectares and the productive area 115,444 hectares. Of this, 84,601 hectares is available for timber harvesting.

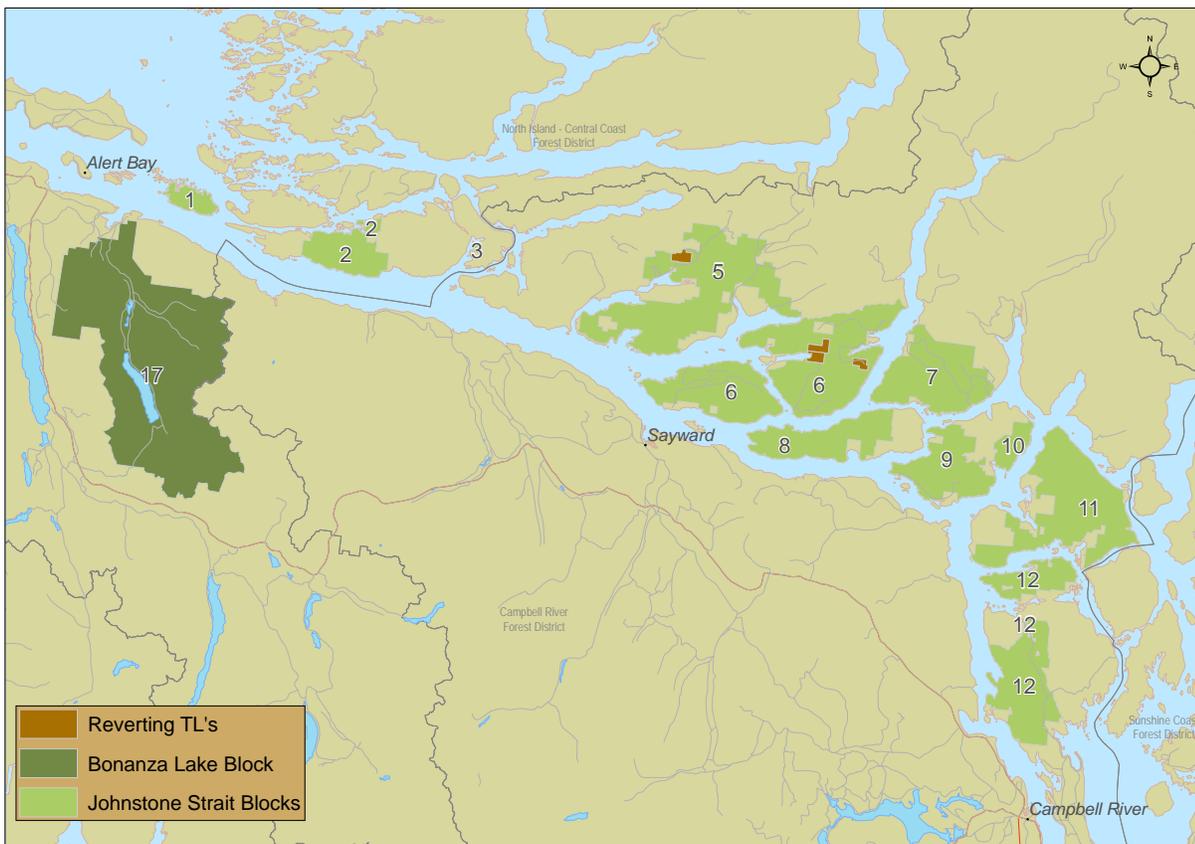


Figure 1. Location of TFL 47

The Johnstone Strait MU extends from Quadra Island near Campbell River to Hanson Island near Port McNeill. It includes islands in the Johnstone Strait and portion of the adjacent mainland. This MU consists of Blocks No. 1-12 (Hanson Island, West Cracroft, Port Harvey, Boughey Bay, Port Neville, Wellbore Channel, Deer Lake, West Thurlow, Simmons Lake, Hemming Bay, Sonora Island and Quadra Island) which are characterised by coastline with mountainous terrain which is not especially rugged or steep. The majority of the MU lies within the Coastal Western Hemlock biogeoclimatic sub-zone with small portions in the Mountain Hemlock sub-zone.

The Bonanza Lake MU consists of Block No. 17 which is located on northern Vancouver Island south of Port McNeill. The unit is contained within a valley formed by glacial processes and is classified within the Coastal Western Hemlock biogeoclimatic subzone.

3. TFL 47 LICENCE HOLDER HISTORY

TFL No. 47 originated as a result of an application by Crown Forest Industries Limited on September 9th, 1983 to amalgamate TFL No. 2 and TFL No. 12. On January 1st, 1985, TFL No. 2 and TFL No. 12 were amalgamated to become TFL No. 47.

Crown Forest Industries Limited continued as a wholly-owned subsidiary of Fletcher Challenge Limited and managed TFL No. 47 under an agreement until December 1992 when it was assigned to Fletcher Challenge Canada Limited. The Licence was later assigned to TimberWest Forest Limited on December 16th, 1993.

Fletcher Challenge Canada Ltd. remained the majority shareholder in TimberWest Forest Limited until June, 1997, when the Minister of Forests consented to the change in control to TAL Acquisition Ltd. In September 1998, TimberWest Forest Limited changed its name to TFL Holdings Ltd and was subsequently changed in October 1998 to TFL Forest Ltd., a wholly owned subsidiary of TimberWest Forest Corp. TFL Forest Ltd currently is the holder of TFL No. 47.

4. TFL 47 CONSOLIDATION AND SUBDIVISION

On December 1, 2006 the Moresby Block (#18) was removed from TFL 47 to create TFL 58. TimberWest is not the licence holder for TFL 58.

5. MAJOR BOUNDARY CHANGES TO TFL 47

Since its creation in 1985, a number of changes have occurred to TFL No. 47. During MP No. 2, the land base of TFL No. 47 was reduced from 221,151 hectares to 167,021 hectares primarily as a result of a land trade between the BC Government and TimberWest in 1999. In exchange for certain TimberWest lands which would be used to form parks and ecological reserves, Blocks No. 13 and No. 14 (Courtenay Management Unit) and No. 15 and No. 16 (Nanaimo Lakes Management Unit) were removed from TFL 47.

The total TFL area for Management Plan No. 3 was 139,867 hectares. This is less than the total area shown in Table 1 because the MP only included the Johnstone Strait and Bonanza Lake blocks – not the Moresby block. A separate timber supply analysis was completed for the Moresby block, and it was not included in MP No. 3. It was officially removed from the TFL under Instrument 19 on December 1, 2006.

The area of the TFL has been further reduced by the take-back that occurred under Instrument 16, Bill 24 (2007) and subsequent Forestry Revitalization Act removals.

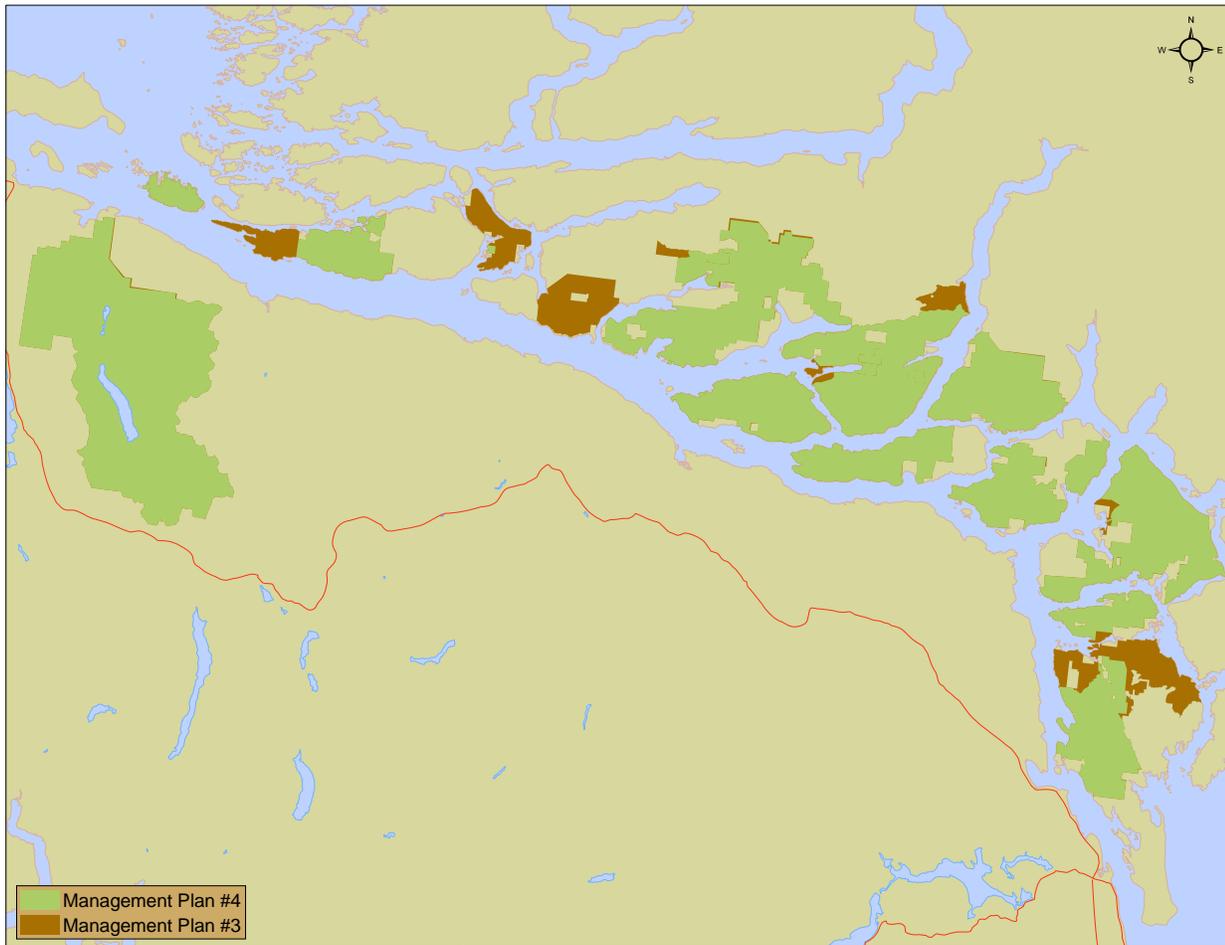


Figure 2. TFL 47 land base changes since MP No. 3

Table 1 (next page) summarizes land base changes since MP No. 3.

Additional area has also been added to TFL 47 - four Timber Licences will revert to the TFL. They are currently the subject of negotiations between the provincial government and TimberWest. Those negotiations are expected to be complete either prior to or during the term of MP No. 4. These areas have been incorporated into the spatial dataset for this analysis. The initial harvest level for the base case will be adjusted to account for the additional area.

Table 1. TFL area change summary – MP No. 3 to MP No. 4

Management Plan No. 3 Area		167,021
<i>minus:</i>		
Order in Council 589 (30 April 1996)	Main Lake Park	-1,660
	Octopus Islands Marine Park	-228
	Small Inlet Marine Park	-573
	Surge Narrows Park	-40
<i>Order in Council 589 Total</i>		<u>-2,502</u>
FRA (31 March 2003)	East Cracroft	-2,341
	Loughborough Inlet	-1,063
	Quadra	-1,236
	West Cracroft	-1,026
<i>FRA Total</i>		<u>-5,666</u>
Instrument 16 (25 June 2003)	Bougey Bay	-3,888
	Fulmore Lake	-318
	Quadra	-1,438
<i>Instrument 16 Total</i>		<u>-5,644</u>
Instrument 19 (1 December 2006)	Moresby Block	-27,154
Bill 24 (3 May 2007)	Boat Bay	-606
	Forward Harbour	-297
	Thurston Bay	-251
<i>Bill 24 Total</i>		<u>-1,154</u>
Total Reductions		-42,120
<i>plus:</i>		
Timber Licence Reversions (2011)	T0168	177
	T0417	41
	T0426 Blk 2	121
	T0995	172
<i>Timber Licence Total</i>		<u>511</u>
Total Additions		511
Boundary Adjustment/Mapping Error		-408
Management Plan No. 4 Area		125,004

6. TFL 47 PLANNING DOCUMENTS

The following are the publicly available planning documents that are used to guide forest management and operations in the TFL 47 area:

6.1 Vancouver Island Summary Land Use Plan¹

At the time that this higher-level plan was completed in February 2000 all of TFL 47 (both Johnstone Straits and Bonanza Lake) were subject to its provisions. The objectives of this plan were to:

- establish protected areas;
- secure the forest land base – specifically the area available for commercial timber use, recreation and tourism, mining and other sustainable resource-based activities;
- provide regional biodiversity direction;
- support food production activities;
- recognize settlement lands;
- maintain energy and mining opportunities;
- address integrated coastal management; and
- promote community stability.

This was accomplished, in part, by zoning forest land into six categories: protected areas, special resource zones (SRMZ), enhanced forestry zones (EFZ), general resource management zone and areas designated for agriculture and settlement. SRMZ's were designated for the management of timber, biodiversity, wildlife, visual resources, recreation resources, tourism resources and aquaculture resources. A portion of Quadra Island within TFL 47 is a designated SRMZ. The entire Bonanza block is an EFZ. EFZ's were implemented to enable greater flexibility for harvest operations while meeting objectives for other non-timber resource values.

6.2 Central Coast LRMP - South Central Coast Order

The Central Coast LRMP was developed through a multi-stakeholder, consensus-building process. Stakeholders included local and provincial government representatives, commercial sector representatives, other interest groups, and representatives from the area's First Nations. First Nation representatives participated at the Table, but abstained from decision making in consideration of government to government discussions on these recommendations. The process of building the recommendations considered all interests and values identified for provincial Crown land, as presented by these groups and the public at large.

This final report provides a description of the plan area (including social, economic and environmental attributes) and an overview of the planning process. This is followed by the

¹ Government of British Columbia. 2001. Vancouver Island Summary Land Use Plan.

recommendations, which include:

- An agreement on Ecosystem Based Management, along with its implementation, monitoring and adaptive management;
- A land use zone map, along with zone definitions for protection areas, biodiversity areas and ecosystem based management operating areas;
- General management directions (GMD);
- Area specific direction regarding visual resource management and grizzly bear management areas;
- Other recommendations for the plan area; and
- Recommendations for plan implementation, monitoring and transition.

The report contains a detailed description of the operating regime recommended for Ecosystem Based Management (EBM). EBM is “an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities”.

6.3 TFL 47 Licence Documents

The TFL 47 Licence document (Bay Tree Farm Licence - March 1, 2010) sets out rules for timber disposition, merchantability and waste assessment, cutting authority, access, contracting and reporting. In addition, it lists in detail the requirements for the preparation of a management plan and supporting timber supply analysis, and the sets that must be taken to solicit public feedback during the planning process. The previous management plan documents (for MP#3) were prepared in accordance with the TFL licence document that was in force at the time that they were compiled. These documents are:

- Tree Farm License 47 – Management Plan No. 3 (January 3, 2002)
- Timber Supply Analysis – Appendix III of MP No. 3 (October 2001)

The timber supply Analysis report was reviewed by the Chief Forester and was considered, along with other sources of information when he established the AAC for the TFL. His findings and the AAC determination are documented in:

- Tree Farm License 47 – Rationale for Allowable Annual Cut (AAC) Determination (August 1, 2003)

These documents will guide planning on the TFL until MP#4 is approved and a new AAC determination is made.

6.4 Forest Stewardship Plans

A Forest Stewardship Plan (FSP) is a plan of potential forest development activities that are intended to take place on the area described in the plan, over a period of up to five or, if extended, up to 10 years. An FSP must be approved before cutting authority can be approved.

Based on commitments made in the FSP, the government can hold agreement-holders accountable for their forest management practices. It also provides a vehicle for agreement-holders to solicit and consider the expectations of the public and other stakeholders (e.g., First Nations) for their use of Crown land and resources.

TimberWest has approved Forest Stewardship Plans for Bonanza, Quadra-Quinsam and Johnstone Straits.

6.5 Miscellaneous Planning Documents

In addition to the documents described above, the following general documents inform forest management decisions on the TFL:

- Tree Farm Licence Management Plan Regulation
- Order to Establish Visual Quality Objectives for the Campbell River Forest District²
- Order to Establish Visual Quality Objectives for the North Island-Central Coast Forest District³
- Forest and Range Practices Act⁴ and the Forest Planning and Practices Regulation (January 2010)⁵
- Order Establishing Provincial Non-Spatial Old Growth Objectives (June 2004)⁶
- Order to Identify Recreation Resource Features for the Campbell River Forest District⁷
- Order to Identify Karst Resource Features for the Campbell River Forest District⁸

² Annett, Rory. 2005. Order to Establish Visual Quality Objectives for the Campbell River Forest District. Ministry of Forests and Range.

http://ftp.for.gov.bc.ca/DCR/external!/publish/CRFD_legal_direction/Scenic/Vqo/Order/CRFD_VQO_Order_p1.pdf

³ Van Hemmen, Charles. 2005. Order to Establish Visual Quality Objectives for the North Island-Central Coast Forest District. Ministry of Forests and Range.

http://ftp.for.gov.bc.ca/DCR/external!/publish/CRFD_legal_direction/Scenic/Vqo/Order/CRFD_VQO_Order_p1.pdf

⁴ Government of British Columbia. 2006. Website. Forest and Range Practices Act. (<http://www.for.gov.bc.ca/code/>)

⁵ Government of British Columbia. 2006. Website. Forest Planning and Practices Regulation.

<http://www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/forplanprac/fppr.htm>

⁶ Abbott, George. 2004. Order Establishing Provincial Non-Spatial Old Growth Objectives. Ministry of Sustainable Resource Management.

⁷ Annett, Rory. 2005. Order to Establish Visual Quality Objectives for the Campbell River Forest District. Ministry of Forests and Range.

http://www.for.gov.bc.ca/ftp/DCR/external!/publish/CRFD_legal_direction/Recreation/Recreation_Resource_Features/Order/CRFD_RecFeatures_Order.pdf

⁸ Annett, Rory. 2007. Order to Establish Visual Quality Objectives for the Campbell River Forest District. Ministry of Forests and Range.

http://www.for.gov.bc.ca/ftp/DCR/external!/publish/CRFD_legal_direction/Scenic/Vqo/Order/CRFDKarstOrder.pdf

6.6 Environmental Certification

TimberWest has achieved and continues to maintain environmental certification under both Sustainable Forestry Initiative (SFI) and the International Organization for Standardization (ISO 14001)

The SFI Standard is based on principles and measures that promote sustainable forest management and consider all forest values in order to promote responsible management on all forest lands in North America. The SFI program is a rigorous system of environmental and conservation practices for wildlife and water quality protection, biodiversity conservation, sustainable harvesting practices and other forest management goals. The SFI certification is widely recognized in the North American marketplace. TimberWest and has been independently certified under SFI since 2000 on its private timberlands. In 2007 the scope of SFI certification was extended to cover all of TimberWest's public timberlands – including TFL 47.

ISO 14001 is a globally recognized standard that outlines requirements for a company's Environmental Management System (EMS). ISO 14001 requires companies to proactively assess their operations to:

- identify environmental risks;
- set goals and objectives for managing those risks;
- continually improve their environmental management system; and
- comply with all environmental regulations.

Annual performance audits are conducted under both systems to ensure that companies are complying with commitments that they have made in management plans and their EMS. The results of the SFI audit are available to the public.

7. TIMBER SUPPLY ANALYSIS

As stated in the *Tree Farm Licence Management Plan Regulation*, the Management Plan must contain a timber supply analysis that analyzes the short term and long term availability of timber for harvesting in the tree farm licence area, including the impact of management practices on the availability of timber. The TFL 47 Timber Supply Analysis Report is attached in Appendix A. The supporting documentation for the timber supply analysis is summarized in the TFL 47 Timber Supply Analysis Information Package attached in Appendix B. The Information Package was accepted as a foundation for the timber supply analysis by the Ministry of Forests, Lands and Natural Resource Operations on May 25, 2011.

The following is a brief summary of the results from the base case analysis as documented in the attached timber supply analysis report.

The base case model was set up to find the highest even-flow harvest level that is possible while adequately managing for non-timber resources. The rate of old growth harvesting was limited to current average levels. This sustainable harvest level was found to be 617,500 cubic metres per year.

An alternative harvest flow scenario was prepared. The initial harvest level was set at the currently approved AAC level of 647,000 cubic metres per year. Attempts were made to continue

this level for as long as possible. After 30 years, the level had to be decreased to the base case harvest level of 617,500 m³/year. This is the scenario that is being recommended as the starting point for the AAC determination. Although two potential significant downward pressures exist, credible arguments for disregarding them in establishing the AAC for the next ten years exist. Even in light of this uncertainty, robust growing stock levels and a well-balanced age class distribution would support a harvest level of 647,000 m³/year for the next ten years.

Two of the sensitivity analyses that were run ('TIPSY yield using OAF1 13%' and 'Reduce stump height') provide upward pressure on harvest levels, and are based on data collected on TFL 47. The 'Alternative VDYP Volume Adjustment' is also a very logical and defensible alternative to the default yield curve adjustment process. The combined impact of these three sensitivity analysis would raise the proposed harvest to 687,500 m³/year.

8. PUBLIC REVIEW STRATEGY

Adequate opportunity for public review – and due consideration of the feedback received – is central to effective management planning for public forest land. The Tree Farm Licence Management Plan Regulation requires (among other things) that:

The tree farm licence holder must make the management plan available for public review and comment in accordance with the strategy approved by the minister [...].

The steps taken to meet this public review requirement are summarized in this section.

The first step in the Public Review Strategy was the preparation of a *Proposed Referral and Public Review Strategy* document describing the measures that TimberWest will take to ensure adequate opportunity for public review and feedback. These include:

- Listing the documents that will be circulated
- Identifying advertising channels
- Designating primary agency contact persons
- Identifying First Nations groups for information sharing and consultation⁹
- Identifying other stakeholder groups
- Designating locations at which advertised documents will be made available to the public

The document also includes a template for the proposed newspaper advertisement, and a commitment to address feedback that the review process generates.

A complete version of the review strategy document can be found in Appendix A, along with a copy of the approval letter from the Ministry. A summary of all correspondence sent or received by TimberWest with regards to the review of TFL 47 MP #4 is provided in Appendix D.

8.1 Timber Supply Analysis Information Package Review

The timber supply analysis Information Package (IP) summarizes the technical information and management practices that formed the basis for the timber supply analysis.

An invitation for public review was published in a notice in the North Island Gazette on January 13 and 20 and the Campbell River Mirror on January 14 and 19, 2011. Copies of the IP were to be made available upon request by mail, email or phone. Copies of the IP were requested and made available to two members of the public. Two responses were received from the public. The first made inquiries regarding operational plans for Sonora Island. Specific questions included concerns about riparian buffer widths and potential future use of the log dump at Owen Bay. The second response was from a resident of East Thurlow Island and expressed concerns that were operational (rather than strategic) in nature. The nature of future operations near a swamp abutting their property was questioned, and general concerns about the use of herbicides and fertilizers were expressed. TimberWest responded to both of these individuals.

⁹ The provincial government, rather than TimberWest, will take the lead role in consulting with First Nations.

The Ministry of Forests, Lands and Natural Resource Operations has undertaken information sharing with First Nations as part of the consultation process for the AAC determination and Management Plan approval on TFL 47. Any feedback received from First Nations has been summarized in this version of this document.

8.2 Management Plan Review

This Management Plan, including the updated Information Package (Appendix C) and the TFL 47 Timber Supply Analysis Report (Appendix B), was posted on the TimberWest website and on the Ministry of Forests, Lands and Natural Resource Operations, Campbell River District internet site and made available for public review and comment for a period of 60 days commencing January 12, 2012. A notice inviting public review was published in two consecutive editions of the North Island Gazette (January 13th and January 20th) and the Campbell River Mirror (January 18th and January 20th). This version of the Management Plan document has been updated to address the feedback that was received.

As was the case with the review of the Timber Supply Analysis Information Package described in the previous section, the Ministry of Forests, Lands and Natural Resource Operations has conducted consultation with First Nations.

Seventy-one comments were received on the Proposed Management Plan. The majority of the responses (69) were from the general public. Of these letters twenty-eight were form letters. Two of the responses were from First Nations. (The provincial government also engaged in consultations with First Nations regarding this plan at a government-to-government level. TimberWest may not have been apprised of all of those discussions, so they will not be reflected in this document). All of the feedback received by TimberWest is catalogued in Appendix D. Complete copies of correspondence received and sent were provided to the MFLNRO.

Two issues raised by several respondents merit further clarification. The first was related to the 20% limit that was placed on the harvesting of old growth, and the perception that this would lead to the liquidation of all old growth over some fixed period of time. In fact, there is almost 9000 hectares of old growth forest that currently falls outside of the timber harvesting landbase that will never be harvested. There is an additional 20,000 hectares of productive forest land outside of the THLB that will reach an old growth condition over the course of the planning horizon.

The second issue raised related to the term 'high value fish habitat', and the assertion in Sections 6.15, 9.2.6.6 and 10.7 of the Information Package that "[...] TFL 47 does not have high value fish habitat" outside of foreshore areas. This statement is based on the specific definition of high-value fish habitat contained in the South Central Coast Order:

“high value fish habitat” means critical spawning and rearing for anadromous and nonanadromous fish including:

(a) estuaries (including eel grass beds, and salmonid and eulachon rearing areas);

(b) wet flood plains (including main channel salmonid and eulachon spawning habitats, and off channel habitat used for rearing and spawning); and

(c) marine interface areas (including, shallow intertidal areas, kelp beds, herring spawning areas, and other nearshore habitats used by marine invertebrates for reproduction and rearing).

TimberWest recognizes the importance of fish habitat throughout the TFL. Riparian buffering has been used to reserve areas from harvesting for this strategic analysis, and guidelines are in place to protect fish habitat during harvesting and other operations.

Appendices

- A. Public Review Strategy and Approval Letter
- B. TFL 47 Timber Supply Analysis Report
- C. TFL 47 Timber Supply Analysis Information Package
- D. Summary of Public Feedback
- E. AAC Determination

Appendix A

Public Review Strategy and Approval Letter

Appendix B

TFL 47 Timber Supply Analysis Report

Appendix C

TFL 47 Timber Supply Analysis Information Package

Appendix D
Summary of Public Feedback

Appendix E
AAC Determination

