

# Rationale for Decision

Sts' Ailes Natural Resources Inc.  
(Chehalis Indian Band and Interpac)  
Forest Licence A63986  
2003 to 2006 Forest Development Plan

Echo Island and Stokke Creek Area

August 3<sup>rd</sup>, 2004



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## 1. MY LEGAL AUTHORITY AS A STATUTORY DECISION MAKER

The *Forest and Range Practices Act* provides transitional provisions for the preparation and approval of Forest Development Plan's (FDP) or FDP Amendments. Section 41(1) of the *Forest Practices Code of British Columbia Act* (the Code) provides that a district manager *MUST APPROVE* an operational plan if:

- a) *the plan or amendment was prepared and submitted in accordance with the FPC, the regulations and the standards, and*
- b) *the district manager is satisfied that the plan or amendment will adequately manage and conserve the **forest resources** [emphasis added] of the area to which it applies.*

**Forest resources** are defined in the Code as “resources and values associated with forests and range including, without limitation, timber, water, wildlife, fisheries, recreation, botanical forest products, forage and biological diversity”.

The discretion granted to me by section 41(1)(b) is not unlimited. Statutory discretion must be exercised within the boundaries set out in the legislation and by the common law principles of administrative fairness, i.e., I cannot impose additional content requirements on licensees that are outside of the legal requirements.

I considered the **statutory** limit of my discretion by applying the rules of statutory interpretation. This involves a consideration of the context within which the statutory power is granted. A fundamental part of the context I considered is the **PREAMBLE to the CODE**, which states:

WHEREAS British Columbians desire sustainable use of the forests they hold in trust for future generations; AND WHEREAS sustainable use includes

- a) managing forests to meet present needs without compromising the needs of future generations,
- b) providing stewardship of forests based on an ethic of respect for the land,
- c) balancing economic, productive, spiritual, ecological and recreational values of forests to meet the economic, social and cultural needs of peoples and communities, including First Nations,
- d) conserving biological diversity, soil, water, fish, wildlife, scenic diversity and other forest resources, and
- e) restoring damaged ecologies;

As the Code and the *Forest Act* comprise part of the Province's statutory forest management regime, they set the context within which statutory interpretation should be determined. For example, the contractual rights of licensees, as reflected in the terms of their *Forest Act* tenure agreements, form part of the context for decision making. This is

not to say that the terms of the tenure agreement can restrict my discretion with respect to evaluating whether or not a proposed plan satisfies the “adequately manage and conserve test”. However, the existence of those contractual rights is one factor to be considered as part of balancing the economic, social and environmental values. Also to be considered is the *Ministry of Forests Act*, which sets out the ministry’s mandate.

The **common law** rules of administrative fairness, on the other hand, limit the discretion of statutory decision makers by requiring that decisions on whether to approve or not approve a proposed operational plan must be made in a manner that is fair, reasonable, and legally defensible. It is not defensible for statutory decision makers to base statutory decisions on irrelevant considerations, or to exceed their statutory authority. For example, the courts have recently confirmed that statutory decision makers must avoid mixing political issues with their duties as statutory decision makers, and that broad land use decisions should be made by cabinet, unless the power to make them is expressly or by necessary implication, granted to the statutory decision maker in the enabling statute.

Administrative fairness also requires that decisions must not be made arbitrarily. Having an adequate evidentiary basis is a fundamental test for the reasonableness of any statutory decision. Unlike determinations made by the courts with respect to criminal matters, which have to be proved “beyond a reasonable doubt”, the standard of proof for Forest Development Plan (FDP) approval is the “balance of probabilities”. *This means that prior to approving a proposed plan, I must be satisfied that it is more likely than not that the plan satisfies both the 41(1)(a) and 41(1)(b) tests that were explained previously.* The consequence is that prior to not approving a proposed plan, I must be satisfied that it is more likely than not that the plan fails to satisfy one or both of those tests. An adequate evidentiary basis, therefore, is one that has enough weight to tip the balance one way or the other – either toward plan approval or plan non-approval. In weighing the evidence, the statutory decision maker must be unbiased, and must not start with a preconceived presumption either against or in favour of approval of the plan. I must balance what may appear to be conflicting statutory requirements. I did this by weighing the evidence and information related to mandatory content, along with information concerning “other” forest resources.

In terms of the Ministry of Forests authority for Echo Island being outside the Provincial Forest, I note the following:

- The *Forest Act* defines **Crown land** as “has the same meaning as in the Land Act, but does not include land owned by an agent of the government;”
- The Land Act defines **Crown land** as “means land, whether or not it is covered by water, or an interest in land, vested in the government;”
- The *Forest Act* defines **Crown timber** as “means timber on Crown land, or timber reserved to the government;”
- Section 12 of the *Forest Act* states that a “...district manager, regional manager...may enter into an agreement granting rights to harvest **Crown timber** in the form of a (a) forest licence,...”

- The FDP holder, Sts' ailes natural Resources Inc., has a Forest Licence A63186, dated June 14, 2001 between the regional manager and Sts' Ailes Natural Resource Inc. The licence grants rights as per Section 1.00 of the document (“... from areas of Crown land , where other resource values take precedence, within the Timber Supply Area which are specified in cutting permits and road permits, and...”).
- This licence document under Section 10.00 (LEGISLATIVE FRAMEWORK) states that the licence is subject to the *Forest Act* and *Forest Practices Code of British Columbia Act*.

## 2. OVERVIEW OF FDP

The licensee, Sts' Ailes Natural Resources Inc., the proponent, has followed the licence development objective of demonstrating innovative forest management where other resource values take precedence by targeting two sensitive areas for development. One is located in a known scenic area with a recommended retention management objective and the other in an area designated as a Special Resource Management Zone (SRMZ) under the Spotted Owl Management Plan (SOMP). Echo Island, lying approximately 4.5 km north of Harrison Hot Springs, is in the scenic area. The Stokke Creek area, situated approximately 10 km from the north end of Harrison Lake on the east side of the lake in the SRMZ. The non-replaceable licence has an AAC of 8,000 m<sup>3</sup>/year resulting in a total allowable cut of 40,000 m<sup>3</sup> over the 5-year term of the licence. The proposed FDP contains approximately 78,478 m<sup>3</sup> of timber.

The FDP is comprised of **eight blocks**, three on Echo Island and five in the Stokke Creek area. The proposed **harvest method** for all blocks is **helicopter** (no roads are proposed) and the proposed **silviculture system** for all blocks is **partial cutting**. There are nine proposed water helicopter drop areas located around Echo Island and six distributed along the shore at Stokke Creek.

Block layout on Echo Island is such that the blocks include very few areas with slopes >60%. The blocks in the Stokke Creek area contain more areas of slopes > 60%. Visual design models were generated from numerous viewpoints for areas proposed for harvesting on Echo Island. Echo Island can be seen from both Harrison Hot Springs and the District of Kent, Rockwell Drive.

Echo Island is located within the Coastal Western Hemlock Dry Maritime Subzone (CWHdm) biogeoclimatic unit and the West Harrison Landscape Unit. Stokke Creek blocks are located in the Coastal Western Hemlock Southern Dry Submaritime (CHWds1) and Southern Moist Submaritime (CWHms1) biogeoclimatic unit and in the Big Silver Landscape Unit.

### **3. REVIEW AND COMMENT**

The 2003-2006 FDP, dated May 01 2003, was submitted by Interpac Resources Ltd., for and on behalf of Sts' Ailes Natural Resources Inc. to the Chilliwack Forest District Office.

The FDP was advertised and available for review and comment from May 02, 2003 to June 30, 2003. The proponent voluntarily extended the review and comment period by a further 30 days to August 01, 2003.

The public and various stakeholders were notified of this development as follows:

- The proponent's newspaper advertisements of April 30 and May 7, 2003.
- The proponent sent notification letters to a number of stakeholders.
- The proponent set-up public viewing forums: Sts'ailes Natural Resources office, Interpac Resources Ltd office, Chilliwack Forest District office, and Agassiz Public Library.
- Public meetings in the Harrison Memorial Hall and a meeting in the Harrison Hot Springs council.
- The proposed development on Echo Island was noted in several newspaper articles of the local paper.

After the review and comment period, the proponent submitted further information including a copy of the written comments received, responses to comments, an additional visual model, and a summary of the revisions made to the proposed plan. There has been mention of a 1200 name petition against the proposed harvesting on Echo Island. This 'petition' has not come to my attention.

The Chilliwack Forest District Office received a significant number of comments regarding this plan. Comments on the forest resources applicable to this area are discussed in more detail in subsequent sections of this rationale. As well, the rationale is supported by backgrounder information by topic or resource as cited in the Appendix.

### **4. FIRST NATIONS**

In making this determination, I have considered and taken into account the impact of the FDP on First Nations.

The proponent referred their complete FDP or information pertaining to their FDP under letter dated April 30, 2003 to all of the following:

- Lower Stl'atl'imx Tribal Council
- Boothroyd Band.
- Sto:lo Nation – Tim Peters
- Yale First Nation – Theodore Hope
- Douglas First Nations – Chief Daryl Peters
- Nlaka'pamux Nation Tribal Council – Chief Robert Pasco

- Chehalis Indian Band – Chief Alexander Paul.
- Cheam Indian Band – Syd Douglas.

Consultation for this 2003 -2006 FDP started in May 2003 when the District sent its initial consultation letter, dated May 09, 2003, to the following parties:

- Sto:lo Nation – Tim Peters
- Yale First Nation – Theodore Hope
- Douglas First Nations – Chief Daryl Peters
- Nlaka’pamux Nation Tribal Council – Chief Robert Pasco
- Chehalis Indian Band – Chief Alexander Paul.
- Cheam Indian Band – Syd Douglas.

Cheam Indian Band was the only party to respond. A second consultation letter from the District Manager, dated June 11, 2003, was sent to those parties that did not respond to the initial letter.

The Cheam Indian Band indicated to the MoF that they did not receive the original mailed FDP package so the proponent delivered a package on May 28, 2003.

The proponent sent a second letter dated June 5, 2003 to all parties to remind them of the review and comment period timeframe.

The Cheam Indian Band responded to the MoF on June 3, 2003. Within this letter the Cheam Indian Band made note that they claim Echo Island as traditional territory. They also stated that they are willing to meet to discuss contents of the letter. A meeting on July 2, 2003 between Cheam and the proponent failed to discuss FDP plans. In a meeting on July 7, 2003 between the proponent, Cheam Indian Band and MoF, the Cheam indicated that there may be possible old camps on the island (three potential sites indicated). Cheam asked if there were suitable Cw trees for canoe logs for their use. Chehalis indicated that there could be and they would make them available to the Cheam. Cheam indicated that spiritual uses exist but could not identify areas of use. Cheam stated that they would look into Cheam Indian Band traditional use and would forward it to Sts’ailes. A discussion on deer hunting on the island ensued with the Cheam stating that harvesting impacts negatively upon hunting. The proponent indicated that he felt that harvesting would increase foraging habitat for the deer.

When referencing A Sto:lo Coast Salish Historical Atlas, 2001, I found indications of the significance of Echo Island to the First Nations. Four place names on the Island are listed and located. Xwixwe’agel is a bay where voices echo off the rock wall back to the people in their canoes. This bay is situated on the westerly side of the island on the shoreline. Chitmexw is a probable transformation site. This site is also on the westerly side of the island on the shoreline. It is a rock shaped like a horned owl. Spa:th is another probable transformation site. This one is a rock shaped like a giant bear, again on the westerly side of the island near the shoreline. The forth place is just listed as “stone waves” and is a transformation type. It is found on the extreme southern tip of Echo

Island. Harvesting plans show that proposed operations will not negatively impact upon these locations.

A search of our Map of Known Archaeological Sites, January 12, 1999 (Scale 1:85,000) revealed that there are eight sites on Echo Island. All sites are pictographs and are located on the shoreline of the island. Harvesting will not negatively impact these sites.

There has been no indication from First Nations of negative impacts occurring to them as a result of harvesting of the blocks proposed in the Stokke Creek area. A search of the Map of Known Archaeological Sites, January 12, 1999 (Scale 1:85,000) revealed no recorded sites in the vicinity of the blocks in the Stokke Creek area.

Within the proposed FDP the proponent has stated that they will conduct archaeological impact assessments (AIA) in all areas to be harvested to determine the existence of objects, sites, or locations of traditional aboriginal societal practices.

I have considered the information from meetings with and letters from First Nations in relation to this proposal. As well, I have considered the reference information from historical sources.

In reviewing the information before me, assessing the concerns raised, I have outlined what has been done to accommodate the first nation comments as described below:

- Block layout is such that the harvesting will not impact upon known archaeological sites.
- All operations will use helicopter logging and does not include road building or ground or cable yarding to extract the logs from the blocks. This will mitigate potential impacts to the land base.
- All harvesting utilizes the partial cutting silviculture system that enhances biodiversity for plant species for deer foraging.
- The proponent has made a commitment to make available suitable trees for canoe logs.
- The proponent has committed to undertaking archaeological impact assessments on all proposed blocks for harvesting.

Besides the above points, the MOF is working on several other initiatives to accommodate First Nation interests under the Ministry of Forests' Revitalization Plan.

The **Forest Revitalization Plan** will enhance the ability of the Ministry of Forests to provide economic opportunities for first nations through a **reallocation of volume** from some of the major licensees. In addition, the province has identified a fixed amount of **money for revenue sharing with first nations**. These initiatives will be implemented through negotiated agreements between the Ministry of Forests and the First Nation that outlines economic benefits such as forest revenue sharing and greater access to volume and includes provisions for greater certainty on the land base.

I believe that there have been adequate steps of consultation and measures to accommodate First Nation interests. Several meetings and correspondence document the consultation that has taken place and measures to accommodate the resources identified for the area.

## **5. GOVERNMENT AGENCIES**

In making this determination, I have considered and taken into account the comments, concerns and recommendations received from agencies.

The proponent received referral letters from several government organizations during the review and comment period. Details are discussed in subsequent sections.

### **5.1 Ministry of Forests – Tenures**

A copy of Ministry of Forests – Tenures' (MoF) comments (MoF letter dated June 20, 2003) was received as part of the FDP submission dated December 24, 2003. MoF's comments pertained to water, fisheries, riparian management, wildlife, visual and recreation, cultural heritage resources and archaeological sites, harvesting and maps and they have been reviewed and considered in my determination. The licensee has made revisions to the text and or maps as required. Consequently, the licensee has acknowledged, addressed, or clarified all the general and specific comments from MoF.

### **5.2 Ministry of Water Land and Air Protection**

The proponent contacted the Ministry of Water, Land and Air Protection (WALP) on April 16, 2003 prior to referring their FDP to them. The purpose of the contact was to gather information on trappers within their planning area. WALP indicated that there are no trappers on Echo Island and that two records in the Stokke Creek area are out of date; no data or incorrect data attached to them.

Bill Jex, Ecosystems Specialist, responded in an e-mail dated May 7, 2003, to the referral of the FDP. Bill Jex commented on wording in the FDP and the proponent modified the wording to reflect the comments in the sections on Deer Winter Range (DWR), and Biological Diversity.

In respect to Goat Winter Range (GWR) (Stokke Creek), Bill Jex stated:

- he would be willing to assist in defining the GWR boundaries,
- made aware the timing window for operations in GWR,
- requested that other applicable Operational Management Strategies also be implemented consistent with the direction provided in the draft Fraser TSA GWR Plan,
- indicated that he believed natal ranges to occur within 500m of the blocks, and offered to assist in determining this, and
- stated that operations within 500 m of natal ranges should be curtailed until after July 15.

Bill Jex also noted that Old Growth Management Areas were being proposed on Echo Island.

### **5.3 Department of Fisheries and Oceans**

The proponent referred Fisheries and Oceans a copy of the proposed FDP under cover letter dated May 1, 2003. No comments were received from the referral. The proponent is required to obtain a Licence of Occupation tenure over a number of sites including foreshore and lakebed adjacent to Echo Island. The application is made to and issued from Land and Water British Columbia Inc. Fisheries and Oceans Canada has opportunity for input into this process. This process is not within the legislative framework for approving or not approving a FDP and therefore forms no part of this rationale.

### **5.4 Ministry of Energy and Mines**

The proponent referred Ministry of Energy and Mines a copy of the proposed FDP under cover letter dated May 1, 2003. No comments were received from the referral.

### **5.5 Land and Water British Columbia Inc.**

The proponent referred Land and Water British Columbia Inc. (LWBC) information pertaining to the proposed FDP under cover letter dated June 10, 2003. LWBC responded on July 31, 2003 indicating that they have no objection to the proposed timber harvesting activities; however, they indicated that the related log storage and handling activities would require a permit under the *Land Act*. As such, the permitting process forms no part of this rationale.

### **5.6 Fraser Valley Regional District**

The Fraser Valley Regional District (FVRD) sent their comments to the proponent in a letter dated June 12, 2003. The FVRD stated that they do not object to the proposed FDP subject to the following (summarized):

- Visual quality from Harrison Hot Springs and Sasquatch Provincial Park satisfied. They also wish a copy of the visual impact assessment for all three blocks.
- In respect to blocks 1 and 3 on Echo Island, that the neighbouring property owners be contacted and a terrain stability field assessment be conducted for the two blocks. FVRD also requested a copy of the assessments.
- In respect to the Stokke Creek blocks that the proponent be aware of the risk of a major rockslide identified by Thurber in 1989 on Mount Breakenridge and that appropriate actions are taken not to increase the slope instability.
- In respect to Block 8 near Stokke Creek that any possible conflicting issues with the proposal for a green energy power plant on Stokke Creek be addressed.

The FVRD sent a letter to the proponent dated July 28, 2003 supporting the Harrison Hot Springs request for an extension to the review and comment period.

Sts'ailes has committed in a letter dated August 1, 2003 to:

- Providing FVRD with a final visual impact assessment and the terrain stability field assessments for Blocks 1 and 3.
- Providing buffers along property lines, coordination of danger tree removal from private properties, and to conduct a hydrology assessment above one property that is concerned with water supply.

### **5.7 District of Kent**

The District of Kent (Kent) responded on June 26, 2003 to the proponents' second reminder letter. Kent requested a sixty-day moratorium be placed upon the project to allow for receiving information regarding the impact from harvesting on the residents of Kent. The proponent informed Kent on July 11, 2003 of an extension to August 1, 2003.

Kent submitted a letter dated July 30, 2003 to the proponent stating that the proponent should notify all property owners on Rockwell Drive of the proposed harvesting. I note that it is not within the legislative requirements for the proponent to conduct such notification.

### **5.8 The Village of Harrison Hot Springs**

The Corporation of the Village of Harrison Hot Springs (HHS) responded to the proponents' review and comment letters on June 26, 2003. They requested a 60-day extension to the review and comment period. They would like a full visual impact assessment conducted and would like the views from higher elevations addressed. The proponent informed HHS on June 27, 2003, that they are offering to voluntarily extend the review and comment period by 30 days. The District Manager granted a 30-day voluntary extension to August 1, 2003. I have also considered other submissions up to the time of determination on the FDP.

HHS requested in a letter dated July 4, 2003 that the proponent make a presentation to council. The proponent agreed and made the presentation. (HHS was not satisfied with the information presented and sent the District Manager a letter stating such. HHS's main concern is what are the reasons for Interpac wanting to log Echo Island and why visual affects from such places as the condos, have not been addressed.) The proponent sent a letter dated July 24, 2003, to HHS. Attached to the letter was an additional visual model from a higher elevation, which HHS had requested. Within the letter the proponent listed a number of aspects which they have incorporated into the FDP to address the high tourism and recreational importance of the Harrison Lake area.

## **6 PUBLIC AND STAKEHOLDERS**

In making this determination, I have considered and taken into account the comments, concerns and recommendations received from individuals and stakeholders.

A letter from the Districts' Tenure Officer dated May 9, 2003 was sent, as requested, to specific members of the Chilliwack Forest District stakeholder list. The letter informed the member that the proponent has submitted a copy of a proposed FDP to the District Manager and it is available for viewing at the Chehalis Indian Band office and in the Chilliwack Forest District office.

The non-government groups who commented are Harrison Agassiz Chamber of Commerce and Kent-Harrison Green Legacy Society.

During the May 14, 2003 public viewing of the proposed FDP a total of eight citizens attended. Three parties signed in and five others declined to sign in. The proponent had verbal communication with eight parties and included the discussion notes with the proposed FDP submission. The proponent received nine written submissions from the public during the extended review and comment period ending August 1, 2003.

I have received numerous comments in the form of letters and e-mails, submitted after the review and comment period, that I have considered in my review. The main themes of the majority of comments are for the protection of visuals, safety of recreationists, concern over noise of helicopters, soil erosion, debris management, water issues, timing of operations and the over all concept of logging on the island. The protection of scenic views of the Island and the timing of the operations are the two concerns that are brought forward the most often.

I have considered the general and specific comments, licensee responses, and made comments where needed in the subsequent sections of this rationale.

## **7 KEY FOREST RESOURCES AND VALUES**

### **7.1 Timber Resources**

#### **Working Forest**

The statement has been made that Echo Island should be declared a park. Many people and/or groups stated that the island would be best left preserved as a protected area. Other statements ask the question is it necessary to log Echo Island.

The issue around establishing a park on Crown land does not fall within the jurisdiction of the Ministry of Forests. It is a land use function that is dealt with by the Ministry of Sustainable Resource Management. It is not an issue that is dealt with in my determination.

I considered that Echo Island is mainly Crown land. There are a few lease properties and a few privately owned properties scattered around the shoreline. The timber on the Crown land portion of the island is Crown timber. The licensee under Forest Licence A63186 has been granted the rights to harvest Crown timber. MoF assigned Chart area in consultation with Small Business Forest Enterprise Program (SBFEP) (now called BC Timber Sales Program) and Sts'ailes Natural Resources Inc.

I have also considered that the timber on Echo Island contributes to the Timber Harvesting Landbase for the Fraser Timber Supply Area (Fraser TSA) as defined by the Fraser Timber Supply Area Data Package, May 2003. The timber volume within the Fraser TSA is apportioned to many companies and as such, with respect to the Code and regulations will be harvested. Arbitrarily setting aside the timber harvesting landbase on Echo Island (outside of the Timber Supply Review process) will put unacceptable harvesting pressure on other areas within the TSA.

### **Second Harvest**

Green Legacy Society stated that the Echo Island was last logged about 50 years ago and doing so again would give evidence to the idea that BC is allowing its' forest to be seriously degraded.

I considered the brief historical account of harvesting in the Harrison Lake area given in The Harrison-Chehalis Challenge (1988), the authors indicated that harvesting on Echo Island commenced about 1936. A 1939 map, The Harrison Drainage, BCFS – Forest and Economics Division, identifies areas on the island as being harvested in 1935, '36 and '38. The Forest Cover Map Series (map 92H.32) produced by the Resources Inventory Branch, revised Aug-2001, and identifies areas as being harvested in 1949. A review of old airphotos shows areas scattered around the island that have been disturbed by harvesting. Forest Cover polygon data supports this as it lists a number of polygons in the age classes 3 and 4 (40 to 80 years of age). The site indexes for these polygons range from 18 to 32 (moderate growing sites) and there are abundant, thrifty growing trees found on the sites. The range of site indexes in the non-harvested areas spans the same range. I have not found evidence that past harvesting has seriously degraded the forests on Echo Island.

### **Choice of Areas**

HHS questioned what the reasons are for Sts' ailes wanting to log on Echo Island. I considered that one development objective of the forest licence is to demonstrate innovative forest management such as non-clearcutting silviculture systems and commercial thinning in areas where other resource values, such as Spotted Owl habitats and visual corridors, take precedence. Also I note that the notice inviting applications for this forest licence states "Initial operating areas available under this licence are within the Chilliwack Forest District Small Business Forest Enterprise Program operating areas." Stokke Creek area and Echo Island fulfil both criteria and through discussions after the award of the forest licence, these two areas were chosen as the proposed operating areas.

Public in general question "why Echo Island when you have the entire province to harvest?" This is a difficult question to address in this type of communication; however; I believe it is a fair question that requires a response:

1. The public is correct that the Fraser Timber Supply area is large at approximately 1.5 million hectares;

2. Of that 1.5 million hectares less than 20% of the area is actually available for harvest and of that it is still constrained by elements like riparian management, visuals, slope stability restrictions to name a few.
3. The 20% must be developed and managed in a balanced manner so that the harvesting is not concentrated in any one area.
4. Historically licensees developed from the valley bottoms to the height of land, from the front of the valleys to the back. They have done so in accordance with adjacency requirements that prevent harvest openings from becoming too large and in recognition of the wildlife and hydrological impacts. Many of those first pass blocks are now coming back on line for a second pass harvest.
5. As these areas come back on line there is a need to move into more visible areas that have been part of the working forest and included in the Chief Foresters determination as annual allowable cut opportunities.
6. Portions of Echo Island is second growth forest which was previously harvested and burned.
7. And finally, as stated previously Echo Island is not a park or considered to be a protected area, it therefore is available to the licensees of the Fraser Timber Supply Area as working forest.

### **Volume of Timber in FDP**

I considered that the proponent in his FDP has identified a Total Harvest Volume in the amount of 78,478 m<sup>3</sup>. A breakdown of the proposed volume shows that 44,798 m<sup>3</sup> is being proposed for harvesting on Echo Island and 33,680 m<sup>3</sup> from cutblocks proposed in the Stokke Creek area. The total Harvest Volume is almost twice the amount that is required to be harvested under the Forest Licence A63986, 40,000 m<sup>3</sup>.

I considered that Section 10 of the Code (FDP content) states that a FDP must include the approximate size, shape and location of cutblocks proposed for harvesting. I also note that the proponent throughout his proposed FDP refers to this point and states that during the cutblock engineering phase final block boundaries will be established. I understand that the location of these boundaries will be derived by taking into account many resource issues; visual, windthrow, spotted owl and terrain stability, to mention a few.

I have considered that in the Forest Practices Board's Complaint Investigation 990207, Number of cutblocks in a Forest Development Plan on the North Coast of BC, June 2001, that the licensee in this case supplied data to indicate that the engineered volume for their cutblocks was 58% of the estimated forest development plan volume for the cutblocks. The large reduction in volume was directly related to managing forest resources. Considering the number of forest resources found in these two areas and the large constraints these resources place on timber harvesting, I feel that the Total Harvest Volume stated in this FDP is acceptable.

### **Block Size**

Block #1 on Echo Island has a gross area of 112 ha which is larger than the allowed 40 ha stated in the regulations. The timber management strategy applied in this block is driven mainly by the visual sensitivity of the views. As such the proponent has stated that a

minimum of 40% or more of the pre-harvest basal area will remain in the partial cutting silviculture system being applied here. There is no harvesting variance required under such management.

### **Forest Health -Windthrow**

An owner of property on the eastside of Echo Island states that she is very concerned about the effects of windthrow on her property. Specifically, she is concerned with the possibility of windthrow progressing from the cutblock through the standing timber buffering her property, onto her property and possibly resulting in damage to her dwelling. She has indicated that she believes that the most damaging winds (those winds that result in windthrow) come from a southerly direction.

The proponent has indicated in his FDP that windthrow is a natural occurrence within a forest stand and operational treatments, such as timber harvesting, can increase the windthrow hazard. The proponent also states that certain sites are inherently more prone to windthrow due to characteristics in topography, soils or stand structure. I considered that the proponent states that forest health protection measures will include the use of windthrow assessments in designing harvest plans to minimize windthrow events. The proponent states that strategies will be put in place to reduce windthrow risk, including buffers along windthrow prone areas, should they exist.

I considered that the Environment Canada does not list weather information for Echo Island or HHS on their website, Canadian Climate Normals 1971-2000. The town of Agassiz, located 12 km south of Echo Island, is listed. In respect to general weather patterns Agassiz and Harrison Lake seem to exhibit similar trends. Recorded data indicate that for each month of the year the direction of maximum hourly speed for Agassiz is from the North or Northeast. The months of November to February record the highest wind speeds, recording 92 km/hr in January from the North.

I considered that the locations of lots on Echo Island are all up-wind of the proposed harvest blocks. That is to say the most severe winds blow from the lots towards the proposed harvesting blocks. Topography around the properties, as seen on the FDP maps, does not seem conducive to turbulence (roller eddies) on the leeward side of the properties. Therefore, it seems reasonable to assume that if there were a windthrow event; windthrow would not proceed back into the wind towards the properties.

### **Other Forest Health Factors**

I considered that the proponent has stated seedling protection devices may be used to protect the cedar seedlings from deer browse. This has worked very well on other areas in the District with good results.

I considered that the proponent has stated that in respect to managing Hemlock mistletoe, the most effective management strategy, if infections are significant, is the removal of all Hemlock trees greater than 2 meters in height. The proponent has committed to not

selecting hemlock trees as well spaced trees in the silviculture layer if within 15 meters of an infected overstory residual hemlock. The management strategy presented above will lower the risk of the spread of Hemlock mistletoe in the residual stand on this block.

The evidence of other forest health factors is not significant for the area under the plan. I note that the proponent has stated that the licensee will continue to monitor plantations for forest health concerns during regeneration surveys and visual assessments.

### **Burning**

There are two individuals who voiced concerns with burning (hazard reduction). I considered that the proponent in his FDP states that a Fire Preparedness Plan will be prepared and submitted as per s.91(2) of the Code. Further, the proponent states that an assessment will be conducted of the fire hazard that exists on the individual cutblocks after harvesting and the appropriate measures will be taken to reduce the fire hazard on the cutblocks as per s.30(2) of the *Forest Fire Prevention and Suppression Regulation*.

I also considered that the proposed harvest method will be helicopter. No roads are proposed and the log drop sites are in the lake. I also note that the proponent in his application for Crown Land and Water Licence, states that ‘debris accumulating within the drop zones and storage area will be collected on a regular basis (concurrently with harvesting) and returned to the cut blocks’ and that this is a requirement of their log drop permit.

## **7.2 Riparian Management, Water and Fisheries Resources**

I considered that the proponent’s general objectives in riparian areas are to protect the various resource values the riparian areas provide including streamside vegetation to ensure water quality, regulate water temperature and provide a continual source of woody debris to the stream channel. I considered that the objectives for all cutblocks will be to identify all streams, wetlands, and lakes so that steps can be taken to protect and maintain critical areas during forestry operations. Specific measures that will be taken to protect the water resource include the use of helicopter harvesting systems, fall and yard away from streams where possible and seeding of exposed mineral soil. The proponent states that stream classification will be as per the *Operational and Site Planning Regulation*, Riparian Management Area Guidebook and the Fish Stream Identification Guidebook. The proponent will utilize the Code and the Riparian Management Area Guidebook to guide riparian management decisions.

### **Streams**

I have considered that the proponent has classified all streams within the area under the plan (as found on Forest Cover Maps). Stokke Creek is classified as S2 for the first 200 m and S3 for the next 2.4 km. All other streams within or adjacent to cutblocks in the Stokke Creek area and on Echo Island are classified as S5 / S6, by gradient.

I considered that the proponents' FDP map identifies no blocks within the riparian management area of Stokke Creek. The riparian management area on the S2 portion of Stokke Creek is 70 m and the S3 portion is 50 m. I note that the minimum distance from any block boundary to a creek is approximately 100 m as measured on the planimetric FDP maps.

I have considered that specific individuals who own or lease properties on Echo Island have expressed concerns regarding the impact of harvesting changing the ground water or surface water flows on their properties or water run off from the hillside above. The proponent has stated that a hydrology report will be conducted on the cutblock behind the properties and the proponent will have a terrain stability specialist look at logging above the property. The cutblock referred to is Block 3. The proponent stated during the field trip on July 28, 2004 that the assessments will be conducted in conjunction with the block engineering phase of planning.

### **Lake**

I have considered that Harrison Lake is classified as L1. Harrison Lake is larger than a 1000 ha therefore, by regulation does not have a riparian reserve zone and the district manager has not established a width for the riparian management zone. I also note that only Block 1 (Echo Island) and Block 4 (Stokke Creek) have a boundary running along the shoreline of the lake with a combined total length of approximately 220 m.

I have considered the concerns raised regarding the quality of water at a water intake situated between the two small islands (Marguerite, Camille) located near the south east end of Echo Island. The concern is that the intake could be negatively impacted by harvesting on Echo Island and by the log drop operation in the lake (i.e. an increase in silt and debris). In respect to the log drop operation, I have considered that Land and Water British Columbia, who retains the authority to assign a Helicopter Log Drop, and Log Handling and Storage tenure, states in a letter dated March 26, 2004, that "I [the Land and Water Licensed Officer] was satisfied that CFP [Chehalis Forest Products] met all the technical and legislative requirements needed to maintain water quality, appropriate wildlife habitat, etc of the aquatic habitat." Subsequently Lands and Water British Columbia did issue a Crown land tenure for the drop sites proposed for around Echo Island.

In respect to the possibility of silt moving from the cutblock into the stream, into the lake and then into the intake, I have considered that the proponent states in his FDP that 'site specific decisions regarding the level of basal area retention will be made on a stream by stream basis'. The management strategy selected will be based upon the resource values to be protected. The proponent states that use of the Riparian Management Area Guidebook will guide all forest practices.

A few respondents stated that the harvesting on Echo Island could negatively impact the Harrison Hot Springs drinking water intake. The location of the intake is found approximately 1 km due north of the HHS beachfront or 2.9 km south of the southern tip

of Echo Island. This is therefore an unrealistic fear given the proximity from the potential source and the conditions required under the drop site permit.

### **7.3 Recreation Resource**

#### **Hiking**

A concern was raised in respect to hiking on Echo Island that hiking not be negatively impacted by the aftermath of harvesting.

I note that there is no specific trail identified on the island, therefore, the statement implies that hiking occurs throughout the island. Harvesting on the Crown land is proposed within three blocks that cover an approximate area of 162.9 ha or 28.8 % of the island. The blocks are dispersed and do not include the highest elevation area on the island that could possibly be a destination point and, with the exception of one 200 m section, are well off the lake foreshore. Within these three blocks, the proponent is proposing a silviculture system of partial cutting that will leave many undisturbed stands of timber. I also note that no roads are proposed for construction and the harvesting method will be helicopter. I have also considered, that within the proposed cutblocks there will be a variety of densities of standing timber left (see section on Visuals for details). These densities will vary based on the ability of the Island's topography to mitigate visual impacts.

#### **Boating**

Log drop sites, log storage sites and helicopter operations have been identified as a concern in respect to safety. Specifically, concerns have been raised in regard to boater safety ('the log drop sites not having restrictive boundaries blockading them'), debris impacting docks and boaters

The proponent has identified 9 water helicopter drop areas scattered around Echo Island and five along the shoreline in the area of Stokke Creek. There is a log storage site identified on the eastside of Echo Island. Land & Water BC have approved the Echo Island sites and a Licence of Occupation has been issued to Chehalis Forest Products Ltd.

The proponent has identified proposed heli-flight paths on the FDP. The logging company must follow Transport Canada's regulations for helicopter logging activities.

The proponent has stated in the FDP that debris management plans will be developed to ensure safe navigation of vessels and will include measures such as:

- limbing trees prior to watering, ensuring logs remain free floating in storage areas,
- the use of containment booms, and
- periodic cleanup of debris from the sites.

As previously noted, the proponent has stated in the Application Form for Crown Land and Water Licence that debris accumulating within the drop zones and storage area will be collected on a regular basis (concurrently with harvesting) and returned to the cutblocks.

In reviewing this proposal, I note that the harvesting and recreation activities are not mutually exclusive for this area.

#### 7.4 Visual Resource

I have considered that the proposed FDP covers Echo Island and areas in the vicinity of Stokke Creek. Both areas are part of what the Chilliwack Forest District considers to be key scenic areas. Stokke Creek is located at the northern end of Harrison Lake on the eastern shore and Echo Island is at the southern end of Harrison Lake. Echo Island is located roughly 4.5 km due north of the main beach of HHS and 2.2 km west of Sasquatch Provincial Park.

Although there were no comments on the visual resource in Stokke Creek, the support for the protection of the visual or scenic value of Echo Island was extensive and is by far the most frequently raised concern regarding this FDP proposal.

Visual Quality Objectives have not been made *known* in the Chilliwack Forest District. However, the District developed **recommended** Visual Quality Classes (rVQC) for **all known scenic areas**. I note the rVQCs for Echo Island are Retention with three smaller areas of non-visible. The cutblocks on Echo Island fall within the Retention area and two of the non-visible areas. The rVQC for the areas in Stokke Creek range from Modification to Partial Retention-Low.

The recommended objectives are based upon a visual inventory conducted in 1996, Chilliwack Forest District Visual Landscape Inventory 1996.

The proponent has completed and submitted a visual analysis of Echo Island and my staff has summarized comments on this resource as follows:

- Partial harvesting silviculture systems are proposed on all three cutblocks.
- Eight key viewpoints identify ‘visible areas within cutblocks’ that will incorporate group selection and [single tree] selection showing that the activities are not visually evident.

I understand that concern was raised regarding the views of Echo Island from surrounding heights of land (on the Bear Mountain Forest Service Road, the Harrison East Forest Service Road, and the Campbell Lake Trail). I have considered the District Manager’s (Mr. Jerry Kennah, RPF) letter dated October 1, 1999, regarding scenic area management within the Chilliwack Forest District. He states that:

“The Known Scenic Areas within the boundaries of the Chilliwack Forest District are the view sheds associated with ...areas that attract people.... this includes but is not limited to, local communities, meeting places, parks, sports facilities, shopping malls, rest stops and tourist attractions.”

I also have considered that the District’s Standard Operating Procedure for Visual Resource Management states “Viewpoints to use for design/visual simulations should be those that offer the best (common) view of the proposed block(s).” However, it is not

realistic to meet scenic standards when looking down on forest harvesting from an elevated location.

I note that the Visual Landscape Inventory 1996 identifies the views from the beach in front of HHS and the beach at Green Point (Sasquatch Provincial Park) as major view points. I have considered that the proponent modelled views from eight viewpoints that he considers to be representative of the views around Echo Island including the aforementioned.

The following are mitigative measures I have considered in making my determination:

- The island has good absorption capacity in that there are numerous rock outcrops, bluffs, open patches and some deciduous stands.
- The harvesting will entail helicopter extraction methods only. There are no proposed roads or landings on the island.
- Block design utilizes irregular boundaries and partial cutting.
- There is a buffer around the foreshore for the most part.
- Strategies to reduce windthrow will be considered wherever trees are retained and windthrow risk is moderate or high.
- The proponent conducted a model from a height of 25 meters to mimic views from Harrison Hot Springs Resort Hotel.
- 40 % or more of the pre-harvest cutblock basal area will be retained in Block 1.
- Group selection and [single tree] selection will be applied to visible areas within cutblocks.
- Trees will be retained at higher levels and uniformly distributed in the visible areas.
- The Visual Landscape Design Training Manual will be used to guide final block design.
- During harvesting operations, timber falling will be monitored from view points to ensure cut blocks are consistent with the final landscape design models.
- My observations of the Island during a field trip conducted on July 28, 2004 revealed that the Island topography will provide good opportunities to screen harvesting from the key view points.

I have considered the proponents statement that Stokke Creek cutblocks will be utilizing a partial cutting silviculture system. This system will be directed by the Spotted Owl Management Plan. This plan indicates retention of 67 % of the pre-harvest basal area. I note also that the Chilliwack Forest District SOP for Visual Resource Management exempts a proponent from the requirement for submitting a visual assessment package for the area if a basal area of more than 40% is left. I also note that the harvesting will be done with helicopters that eliminate the need for yarding corridors.

On May 10, 2004 the undersigned responded to Linda Pearson of the District of Kent via e mail that the harvest proposal “cannot be visually impacted by harvesting (that is the law), it is a 0 alteration (1.5% to be exact)”. The context of the note was to indicate that the visuals cannot be impacted adversely given the parameters that the licensee must comply with. The alteration levels actually vary between the proposed blocks included in

this plan ranging from 0 to 3%, therefore my e mail was inaccurate. That said, it is the licensee's intent to provide 0 alteration from the key view points, in particular HHS and Rockwell Drive. More importantly the assertion and concerns that the Island will be left with unsightly clear cuts is simply not the objective of this development plan proposal.

During my field trip of July 28<sup>th</sup> with representatives from the Chehalis Indian Band's forestry department and Interpac Foresters it was evident that the sensitivities of this harvest proposal are well understood and that the level of effort being considered for the layout engineering and actual harvest monitoring is substantive and assuring.

During meetings with Ministry of Forest officials, Village of Harrison staff, Friends of Echo Island, District of Kent representatives it was requested that further digital terrain modelling work be shared with the group prior to harvest approval so they may comment on the modelling. On this point I wish to clarify that the terrain modelling is not a public decision or a subsequent referral point but rather falls within the purview of the statutory decision maker to determine whether the proposed harvest will adequately manage and conserve the forest resources in this area. It is also important to understand that the digital terrain modelling prepared by Interpac was based on clear cut harvest which provides the worst case scenario. As harvest is constrained by a 40% basal area retention level and view scape impacts must be less than 3%, terrain modelling work is unlikely to suggest a noticeable impact.

Although not a consideration of this determination many respondents wanted assurances that the licensee proposing this work had some level of experience with similar harvesting techniques elsewhere in British Columbia. Interpac foresters provided information related to a harvest operation that they planned and carried out in Grenville Channel (Halfway Creek), Inside Passage. This view scape is also designated as a scenic area and is on the route frequented by north and south bound cruise ships. This harvest operation removed 50,000 m<sup>3</sup> and successfully retained the attributes of the scenery in Grenville Channel.

### **Tourism Values**

The Chilliwack Forest District's forest and tourism sectors are very important to the area's economic activity. I have considered the *Fraser Timber Supply Area Analysis, December 2003*, which outlines forestry and tourism as key economic sectors in the economy.

I have considered that many respondents have highlighted that HHS is a world renowned destination resort, has a fragile tourism industry and the harvesting of trees on Echo Island will negatively impact the economy of the area. I also note that John Allan, in his letter to The Honourable John Les, dated March 30, 2004, states that Harrison [Village of Harrison Hot Springs] 'has been BC's first resort since 1886'.

I have considered the brief history of Harrison Lake as told in the book The Harrison-Chehalis Challenge (1988). I note that both tourism and harvesting have co-existed and grown together since the first settlers came to the area. I also note that the population of HHS grown substantially in the last 5 years.

## **7.5 Forest Soils Resource**

I considered the proponents terrain stability mapping on both Echo Island and in the Stokke Creek area. The proponent has produced overview maps that identify areas of over 60% slope. The proponent has indicated that for areas proposed for harvesting with slopes over 60% slope or deemed by field indicators as potentially unstable, terrain stability assessments will be conducted by a qualified registered professional.

### **Adjacent Properties to Echo Island Harvest**

I note that several comments and concerns state this proposal will potentially cause soil instability, debris torrent, flooding, or landslides and could pose a serious threat to people, property, or other values down slope on Echo Island. I also note that the FVRD drew attention to the fact that Block 1 and 3 on Echo Island are situated up slope of private lands. FVRD recommended that the proponent conduct terrain stability field assessments on the two blocks and that the assessments be forwarded to the FVRD.

The proponent have committed to the terrain stability field assessments within their Forest Development Plan, a copy will be provided to the FVRD.

### **Mount Breakenridge**

I reference the point that the FVRD cautioned the proponent that in the Stokke Creek area in 1989 Thurber assessed the risk of a major rockslide due to the potential mountain slope instability on Mount Breakenridge. FVRD recommended that the proponent be aware of this potential hazard and take appropriate action not to increase the slope instability.

The proponent responded by stating that they are aware of the issue and terrain stability assessments will be conducted by qualified registered professional on harvest areas that are over 60% side slope or deemed by field indicators as potentially unstable.

## **7.6 Biological Diversity Resource**

The Natural Disturbance Type (NDT) for both Echo Island and the Stokke Creek areas is NDT2. Echo Island is within the West Harrison Landscape Unit that has a draft biodiversity emphasis option (BEO) rating of low. Stokke Creek operating area falls within the Big Silver Landscape Unit with a draft BEO rating of intermediate.

I note that a concern was expressed in the way of a 'Petition against Logging on Echo Island' that stated 'logging activities will have a severe negative effect on the island's biodiversity'. Concern was also raised that 'small island ecosystems should be left intact as re-colonization of wildlife and plant life from surrounding areas is difficult'.

I note that the Ministry of Sustainable Resource Management (MSRM) has identified four areas for possible Old Growth Management Areas (OGMAs) on Echo Island. The proposed cutblocks do not conflict with proposed OGMAs. I considered that MSRM and the proponent have worked together and have avoided establishing OGMAs over any proposed cutblock area.

I reference the Riparian Management Area Guidebook that states wetlands are uncommon within the CWH dm biogeoclimatic unit. I note that on Echo Island there are three wet lands identified on the TRIM maps. I note that the closest a proposed cutblock boundary is to a wetland is 40 meters. I note the proponent in the FDP states that when rare ecosystems are identified at the stand level, site specific prescriptions will be developed to protect the community or ecosystem.

I have considered that the proponent in the FDP has established objectives for Coarse Woody Debris that align with those presented in the document titled A Short-term Strategy for Coarse Woody Debris Management in British Columbia's Forests, March 2000. I note that the proponent in the FDP states five objectives for the establishment of Wildlife Tree Patches (WTP) and states that the WTPs will be located using the recommendations from the Landscape Unit Planning Guide, Biodiversity Guidebook, and Windthrow Handbook for B.C. Forests.

## **7.7 Wildlife Resource**

### **Unidentified owls, important species**

I have considered that there were several comments received that has animal and plant species present, or suspected to be present, on Echo Island. Some of these include a pair of Peregrine Falcons, eagles, herons, kingfishers, and a golden eagle pair. I have considered that my staff have conversed with a local amateur birder who indicated that he has seen Peregrine Falcons on the island and I have considered that staff of WALP believes there is a nest on the island.

I reference A Field Guide to Species at Risk in the Coast Forest region of British Columbia, 2003, that states 'Peregrine falcons place their nests on high and inaccessible vertical cliff edges' and 'sometimes ...will occupy abandoned bird's nest (bald eagle). Given this preference and the proposed harvest locations there is a very low risk of displacing this important raptor. I also considered that Peregrine falcon chick fledge period is the start of July to the end of August and harvesting operations are proposed for outside of the summer months.

I note that the proponent in the FDP states that management of the red and blue listed species will be guided by the procedures described within the Managing Identified Wildlife: Procedures and Measures Volume 1, February 1999. I further note that the proponent states in the FDP that if wildlife features are identified, management prescriptions will be developed to ensure that harvesting activities do not significantly impact these features.

### **Rare Freshwater Seals**

I have considered the respondents concerns that the harvesting operations on Echo Island (specifically heli log drops) would have a negative impact on the rare Harrison Lake Freshwater Seal. I note that my staff conducted a search of Internet web sites and of the University of British Columbia library (on the Internet) and found no literature on such a species. I note that an Ecosystems Specialist for the Ministry of Water, Land and Air Protection agreed that seals in the Harrison Lake were Harbour Seals that follow the salmon up the rivers into the lake. It is common knowledge that (Harbour) seals may be seen in the Harrison River and Harrison Lake in the water, on the shores and on the booms tied up along the shores. Their presence in the river and lake system is transient and associate with the salmon runs. Further it is the jurisdiction of Water Land and Air Protection to address the protection of wildlife where required. The Harbour Seal is not considered at risk by this operation.

### **Spotted Owls**

I have considered that proposed cutblocks 5, 6, 7, 8 and a portion of 4 in the Stokke Creek area are within a Spotted Owl Management Area - the Douglas Special Resource Management Zone 14.

The BC government in 1997 approved the Spotted Owl Management Plan (May 1999) (SOMP), which consists of the Strategic Component and Managing Spotted Owl Habitat – Operational Guidelines Component. The SOMP is not a higher level plan under the FPC, and I am not bound by it. It is a guide for managing the spotted owl in the Chilliwack and Squamish Forest Districts, and provides one important measure against which I can determine whether the FDP adequately manages and conserves the spotted owl.

The approval of the SOMP by government is an attempt to balance spotted owl requirements with social and economic concerns. Despite the stabilization of habitat within these conservation areas, the spotted owl population is predicted to decline over the short term (20 to 30 years) as suitable habitats outside of these areas are harvested. Over the long term, the probability of owl population stabilization and possible improvement under the SOMP is about 60%.

Under the SOMP, Resource Management Plans (RMPs) were developed for each Special Resource Management Zone (SRMZ) and approved in a letter dated July 23, 1999. I reiterate the statement from this letter that the RMPs provide guidance for the development of operational plans in all spotted owl SRMZs. Under the RMP's Table 2 (p 13), partial harvest is permitted in all management areas for the purposes of creating, enhancing or maintaining suitable owl habitat. Details of the partial harvesting objectives are described in the RMP section entitled "Key Resource Management Plan Strategy # 5" (RMP Strategy # 5, p 13).

I note that the silviculture system for all proposed cutblocks in Stokke Creek area is partial harvest. The proponent states in the FDP that management strategies will be guided by Strategy 5 of the Spotted Owl Management Plan.

I have considered that Spotted Owl Detection Sites (sightings) determined in 2002 do not conflict with proposed cutblocks.

#### **Goat Winter Range – Stokke Creek only**

I note that proposed cutblocks in the FDP in the Stokke Creek area are adjacent to or overlap portions of draft goat winter range areas. I also note that the Fraser Timber Supply Area Mountain Goat Winter Range Plan, October 2002, is a draft plan and is not an approved plan.

I have considered the location of proposed cutblocks in the Stokke Creek area in relation to draft goat winter range areas. I note that the proponent infers in the FDP that Cutblocks 6, 7 and 8 are the only cutblocks adjacent to GWR where I also include Cutblock 5 in the list. I note that the proponent has stated in the FDP that cutblocks adjacent to draft goat winter range (GWR) areas will subsequently be engineered, and habitat values assessed in the field, to protect adjacent GWR areas including the timing of operations where applicable.

#### **Deer – Stokke and Echo Island**

I note that the Forest Cover maps for Echo Island do not identify any polygon being labelled as ESAw. I note that new DWR Analysis, West Harrison Landscape Unit map (December 05,2002) does not indicate any deer management unit over the proposed blocks under category Section 69 Operational and Site Planning Regulation. However, I note Cutblock 1 has some overlap with the new category of deer winter range, unit WH8 (draft maps). I have considered the partial cutting silvicultural system for the cutblocks located on the island.

I note that all proposed cutblocks in the Stokke Creek area contain areas labelled as ESAw. I note also that the new DWR Analysis, Big Silver Landscape Unit map, does not indicate any deer management unit over the proposed blocks under category Section 69 Operational Site Planning Regulation. I further note that all blocks or a portion of a block overlap with the new category of deer winter range units BS 18, 19, 20, 21 and 29.

I have considered that the proponent has stated in the FDP that the proposed cutblocks in the Stokke Creek area are located within long term spotted owl habitat and that management strategies will be guided by strategy five of the Spotted Owl Management Plan, permitting a maximum of 33 percent basal area removal.

I have also considered the following:

- Deer are not an endangered species
- There are no approved ungulate winter ranges in the Chilliwack Forest District
- Timber supply perspective indicates that there is alternative habitat in the area.
- Hunting regulations allow harvesting of deer in the area

## **7.8 Cultural Heritage Resources and Archaeological Sites**

As I have noted previously in my rationale, in the section dealing with First Nations, there are numerous archaeological sites identified on Echo Island and the First Nation groups did conduct societal practices on the island. Proposed harvesting is not located near the two transformer sites or the nine identified archaeological sites (pictographs) found along the shore of the Island.

The First Nations indicated that hunting for deer still occurs on the Island. The silvicultural system proposed will encourage the growth of plants that the deer can forage on. This will increase the deer population on the Island and may improve hunting results.

I have considered that during the consultation process and during the review of office files, no additional information of any archaeological sites or cultural heritage resources in the Stokke Creek area was found.

I note that that the proponent has stated that archaeological assessments will be conducted on all areas proposed for harvesting prior to harvesting. This will allow for the identification of further archaeological sites (old camps) and possibly areas of spiritual use.

## **7.9 Other Resources, Values or Comments**

### **Noise Levels**

I have considered that some respondents have identified that the noise generated from the helicopter is a primary concern. The owner of Lot 421 has outlined that they use their property every weekend of the year (when physically possible). The residents of Camille Island have stated that they are full time residents and the helicopter will be highly disruptive and make it difficult to homeschool their children. Other respondents felt that the noise levels would negatively impact the tourist business.

I have considered that Echo Island is outside of the District of Kent and The Village of Harrison Hot Springs and there are no noise by-laws applicable to the area. Although noise levels may be an inconvenience to the limited number of residents on the Island, I note that the helicopter system proposed will shorten the duration of the industrial operation in comparison to conventional systems. I also note that the proponent stated that the complete operation would occur over an approximate a 3 to 5 month time period. On review of the areas proposed for harvesting it is evident that not all operations would occur near Lot 421 and Camille Island. It is estimated that approximately 40% of the volume harvested would be flown to log drops located in the vicinity of these two properties.

I have considered that during the summer months on Harrison Lake there is a significant level of recreational activity. There are several facilities and events that support these activities, including but not limited to:

- A Village owned boat launch off Esplanade Avenue in HHS.
- A public boat launch at Sasquatch Provincial Park, Green Point.

- A jet-ski rental, water-ski tours, and boat rental business.
- Lake tours.
- A Harrison Lake Poker Run scheduled for August.
- A float plane dock.
- International Sand Castle Contest.
- World Famous Harrison Hot Springs Hotel and Resort.
- Numerous hotel and campground facilities.
- Access from the Harrison River to power boats and fishing resorts.

I have considered that the proponent has stated in the FDP that they commit to timing helicopter yarding activities outside of the high use summer months to minimize the impact on area users. I note that the Harrison Hot Springs Tourist Information Center has the most number of visitors in the months of August, July, September, and June (listed in declining order). The World Championships Sand Sculpture competition starts on September 7 and finishes on September 12. Viewing of the exhibits continues till October 11.

#### **Traffic on the lake**

I note that a comment raised the concern of an increase in traffic on the lake. I have considered such factors as timing of operations (activities taking place outside of the high use summer months), the use of helicopter service barges and the towing of timber on the lake. I also have considered recent and historical movement of wood on the lake and do not believe that this harvest proposal will adversely affect lake traffic.

#### **Hydro Project – Stokke Creek**

The FVRD stated that there is a proposal for a green energy power plant on Stokke Creek. FVRD commented that there could be a possibility of conflicting uses. I note that a conflict could occur in Block 8 with the proposed route of the transmission line; an operational timing conflict could arise. I also note that the proponent has stated that they will co-ordinate with the Cloudworks Energy Inc. to avoid any timing or operational conflicts. I understand that BC Hydro has a 10-stage process that Cloudworks Energy Inc. must advance through to complete the project and there is ample opportunity for the two operators to discuss timing concerns.

#### **Harrison River**

A comment was received that raised a concern over log movement down the Harrison River. The proponent has stated that they may utilize Harrison River as a route for moving logs out of Harrison Lake. I note that Fisheries and Oceans Canada, out of their Mission office administer the towing of logs in the Harrison River. Fisheries and Oceans have guidelines in place to protect the fisheries resource in the River. The proponent has stated in the FDP that timing windows, due to low water levels, will be adhered to in order to protect the fisheries resource.

**Other Resources** - Other resources or values considered but not previously mentioned in this rationale generally fit into the following situations, in that:

- They have been previously discussed or considered in FDP (including response letters by the proponent and backgrounder information), or
- There has been no information or little relevant information to support the resource concern raised, or
- Based on the information before me, the resource does not exist in the vicinity of the proposed blocks and therefore the development poses no or negligible risk to the resource in question.

### **7.10 Socio-Economic Factors**

As I noted in a previous section on Tourism, the Chilliwack Forest District's forest and tourism sectors are very important to the area's economic activity. I have considered the *Fraser Timber Supply Area Analysis, December 2003*, which outlines forestry and tourism as key economic sectors in the economy.

In terms of this FDP, I note the proponent has indicated that the volume of timber required to be harvested (40,000 m<sup>3</sup>) is important for meeting one of the objectives of the licence which is to support local milling with emphasis on the value added manufacturing sector. I note that the proponent in their information sheet, Sts'ailes Natural Resources Inc. Visually and Environmentally Sensitive Harvest Proposal for Echo Island, Harrison Lake, state that the harvesting phase employs approximately 30 people with a further 8 full time milling and marketing jobs. On the other hand, I have considered that a large number of people are opposed to development in this area, due to the non-timber values of interest.

However, as cited previously, my decision is based on the two tests of Section 41(1) of the *FPC*. I considered the statutory limit of my discretion by applying the rules of statutory interpretation. This involves a consideration of the context within which the statutory power is granted. A fundamental part of the context I considered is the *PREAMBLE* to the Code.

I note the previous sections in this rationale and FDP that discuss the cultural, recreation, and socio-economic factors applicable to this FDP. I have had to consider a number of different, often conflicting or competing resources and values applicable in this area. The socio-economic factors considered in reviewing this plan include but are not limited to such items as employment, stumpage revenue, tax revenue, and indirect revenue along with cultural, visual quality, recreation value, or other social values.

## **8 SUMMARY OF CHANGES TO THE FDP**

As required under the *FPC*, the proponent has submitted a summary of the changes to this plan as outlined in the FDP submissions to our office after the review and comment

period. The licensee also included changes made to the FDP in response to my requests for further information.

## 9 CONCLUSION

I find that this FDP was prepared and submitted in accordance with the Code and associated regulations thus fulfilling the requirement of section 41(1)(a) of the Code. In light of all of the evidence and submissions that I received in this matter, and upon careful examination and consideration of this material, I have determined, pursuant to section 41(1)(b) of the Code that the FDP adequately manages and conserves the forest resources to which it applies.

Therefore, it is my determination that this FDP is approved.



Kerry Grozier, District Manager  
Chilliwack Forest District



Date

**Appendix 1** – The Primary Sources Considered in this Rationale and Determination

Sts'ailes Natural Resources Inc.'s 2003 – 2006 Forest Development Plan, Forest Licence A63986.

*Forest Practices Code of British Columbia Act* and related regulations.

*Forest Act.*

*Ministry of Forests Act.*

*Land Act.*

Forest Licence A63986.

*Provincial Policy for Consultation with First Nations* (October 2002).

Ministry of Forests' Policy 15.1 – Aboriginal Rights and Title, June 3, 1999 updated May 14, 2003.

Map of Known Archaeological Sites, January 12, 1999 Scale 1:85,000.

District Maps – Archaeological Sites, Feb. 78, Scale 1:50,000.

A Sto:lo Coast Salish Historical Atlas / Keith Thor Carlson, editor 2001.

The Forestry Revitalization Plan, B.C. Heartlands Economic Strategy – Forests,  
<http://www.for.gov.bc.ca/mof/plan/#information>.

Chilliwack Forest District's First Nations Consultation List for this FDP and correspondence (see Rationale's Backgrounder – Cultural Heritage Resource and Archaeological Sites).

Fraser Timber Supply Area Data Package, May 2003,  
<http://www.for.gov.bc.ca/hts/tsa/tsa30/docs.htm>.

The Harrison-Chehalis Challenge, McCombs, Chittenden, 1988.

The Harrison Drainage, BCFS – Forest and Economics Division, 1939, map.

The Forest Cover Map Series, map 92H.32, revised Aug – 2001.

Number of Cutblocks in a Forest Development Plan on the North Coast of BC,  
Complaint Investigation 990207, FPB/IRC/45, June 2001.

Canadian Climate Normals 1971-2000, Environment Canada website.

File 18818-60/WHLOOP, Chilliwack Forest District, Western Hemlock looper.

Riparian Management Area Guidebook, December 1995.

Fish Stream Identification Guidebook, (Second edition) Version 2.1 August 1998.

Letter dated December 23, 1996, Rivtow Marine Ltd. – Transportation Guidelines on Harrison River, (DFO).

Application Form for Crown Land and Water Licence, Land and Water British Columbia Inc., Fax from Land and Water BC – Surrey, 04/21/04

Chilliwack Forest District Visual Landscape Inventory 1996, Resource Design Inc., March 18, 1997.

Preparing and Interpreting Visual Assessment Packages, Ministry of Forests, Chilliwack Forest District, Feb 27 & 28, 2001.

Consolidated Parcel Encumbrance report, Date Created: 19-Apr-2004, TANTALISX

Resource Tenures and Engineering Branch, Ministry of Forests, map 092H032/31; plotted Sept 2001, scale 1:20,000, Forest Atlas Information.

File 19510-55/A633986, Chilliwack Forest District

Fraser Timber Supply Area Analysis, December 2003.

A Short-term Strategy for Coarse Woody Debris Management in British Columbia's Forests, March 2000, Ministry of Forests, Operations Division.

Landscape Unit Planning Guide.

Biodiversity Guidebook, September 1995

Windthrow Handbook for British Columbia Forests, Stathers, R.J., T.P. Rollerson, and S.J. Mitchell, B.C. Min. For., Victoria, B.C. Working Paper 9401.

A Field Guide to Species at Risk in the Coast Forest region of British Columbia, International Forest Products limited and Min. of Water, Land and Air Protection, 2003

Managing Identified Wildlife: Procedures and Measures Volume 1, Min. of Water, Land and Air Protection, February 1999.

Spotted Owl Management Plan, Resource Management Plans, Chilliwack Forest District, May 1999, Min. of Environment Lands and Parks, Min. of Forests.

E-mail dated February 24, 2004 to John Coles, FOR from Bill Jex, WLAP

Fraser Timber Supply Area Mountain Goat Winter Range Plan, October 2002, DRAFT.

DWR Analysis, Chilliwack Forest District, Big Silver / West Harrison Landscape Units maps, 1:50,000, December 05, 2002, Ministry of Sustainable Resource Management.

Sts'ailes Natural Resources Inc. Visually and Environmentally Sensitive Harvest Proposal for Echo Island, Harrison Lake, David George, Interpac Resources Ltd..

BC STATS: British Columbia Municipal Census Data 1921 to 2003.

2001 Community Profile – Harrison Hot Springs –Statistics Canada

[http://www.harrisand.org/visitor\\_info.htm](http://www.harrisand.org/visitor_info.htm)

Agassiz-Harrison Observer, Wednesday, May 26, 2004, Lady luck takes to the lake.