

# Appendix 2a

Detailed Indicator Descriptions

&

Results

Honeymoon Bay portion of the Defined Forest Area

June 2011



The **Teal-Jones Group**

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## Summary of Changes

This section includes a summary of the changes to the SFM Plan Indicators, Targets and Variance that have been made since the last version:

Date	Indicator	Comment
Pending Changes 2009-2011	Core Indicators	Development of Core Indicators, amalgamation of common indicators with Fraser portion of the DFA
March 2010	H1-8 Public Access	Removed from Criterion 1, retained under criterion 5 (repeat indicator) as H5-6
	Pacheedaht First Nation Cultural Cedar Strategy	New indicator
October 2008	H6-1 First Nations participation in SIPAG	Now measures actual participation in SIPAG as well as invitations extended.
	H6-2 First Nations Operational Plan Reviews	Added review of SFMP
	H6-3 First Nations Responses to Plan referrals	New indicator
	H6-4 Cultural Heritage Resources	Correction to 2007 Annual Report and Monitoring sections
May 2008	H1-1 Old Growth	Added new Draft OGMA for the Cowichan Landscape Unit
	H1-5 Roosevelt Elk & Black Tailed Deer	Adjusted total UWR within TFL from 1219.6ha to 1215.3 (area recalculated following removal of Forest Revitalization take back areas removed from the TFL calculations)
	H3-2 Landslides in Recently Built Roads	Title change and modified reporting to include natural caused landslides as well as those caused by management activities
	H3-3 Landslides in Recent Harvesting	Title change and modified reporting to include natural caused landslides as well as those caused by management activities
	H3-5 Spill to Land & H3-7 Spills to Water	Modified the reporting tables to include type of product spilled as well as quantity
	H3-12 Bridge and Major Culvert	New indicators
	H4-5 Coarse Woody Debris	

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Date	Indicator	Comment
May 2008 cont'd	H5-7 Full Time Jobs	New Indicator
	H5-13 Community Benefits	New indicator Community Benefits (merges indicator H5-8 Revenues paid to the crown, H5-9 Support of local resource projects and H5-11 Local Supplies and Services (H5-8, H5-9 and H5-11 deleted).
	H6-2 First Nations Plan Review	Updated indicator to include site level plan reviews (i.e., cutblock and roads).
	H6-3 Information Sharing Protocol	Delete (documents the same target as H6-2)
	Multiple Indicators	Slight revisions to terminology in order to provide clarification
March 2007	Coarse Woody Debris	Indicator deleted from plan. SIPAG members determined that current legislation adequately addressed their concerns.
	H1-9 Invasive Plants	New indicator
	H1-10 Hardwoods	New indicator
	H3-9 Riparian Management Zones	New indicator
	H3-10 Fisheries Sensitive Features	New indicator
	H1-2 Stand Level Retention (WTP)	Target revised to be consistent with the requirements under the Forest and Range Practices Act and the associated regulations.
	Multiple Indicators	Slight revisions to terminology in order to provide clarification



# Summary of Results and Changes to the SFMP

## 2010 Annual Report: Honeymoon Bay Indicators

The 2010 version of the SFMP includes several new and revised indicators. The Public Advisory Groups revisited all Sustainable Forest Management criteria over the last few years; amalgamating those indicators that were common for both portions of the DFA, creating core indicators and re-writing targets for existing indicators where it made sense to do so. This report is one of three reports for 2010, this report contains information on all indicators that apply to the Honeymoon Bay portion of the DFA; see Appendix 2c for the 2010 Annual Report on the indicators that are common to the entire DFA and Appendix 2b for the 2010 Annual Report on the Fraser portion of the DFA.

For 2010, Teal was in conformance with the target and permitted variance of 13 of the 14 indicators that are applicable to the DFA. The indicator that was determined to be in non-conformance is as follows:

- Indicator H3-10: Fisheries Sensitive Features

Explanations, analysis and rationale, including measures to address the deficiencies, are found for Indicator H3-10 within the 'Current Status & Results within this Appendix 2a.

## 2009 Annual Report

For 2009, Teal was in conformance with the target and permitted variance of 50 of the 52 indicators. The indicators that were determined to be in non-conformance were as follows:

- Indicator H4-5: Coarse Woody Debris
- Indicator H5-12 & 6-8: Training Requirements

Indicator H1-10 (Hardwoods) did not meet the target in 2009, however the target is measured over a 5 year rolling average so the true results will not be available until 2011.

Indicators H1-9 (Invasive Plants), H2-3 (Industrial Caused Fire) and H6-3 (First Nations Response to Plan Referrals) reported values that were within the acceptable variances, but did not meet the targets. These were considered in conformance.

Explanations, analysis and rationale, including measures to address the deficiencies are included for each indicator section within Appendix 2.

## 2008 Annual Report

For 2008, Teal was in conformance with the target and permitted variance of 52 of the 53 indicators. Indicator H5-12 (Training Requirements) did not meet the target in 2008, however it is thought that the information currently available does not reflect the actual training that was completed in 2008.

Indicator H3-10 (Fisheries Sensitive Features) had values that were within the acceptable variance, but did not meet the targets. These were considered in conformance.

The information to determine the results for indicator H5-7 Full Time Jobs is not currently available due to unexpected shutdowns and shortages of office staff. This information is expected to be available in the near future and will be included in the report at the next revision. In addition indicator 5-13 one of the figures in Community Benefits is based on indicator 5-7.

Explanations, analysis and rationale, including measures to address the deficiencies are included for each indicator section within Appendix 2.



## 2007 Annual Report

For 2007, Teal was in conformance with the target and permitted variance of 50 of the 53 indicators. The indicators that were determined to be in non-conformance were as follows:

- Indicator H1-10: Hardwoods
- Indicator H2-5: Windthrow Treatments
- Indicator H3-5: Reportable Spills to Land

Indicator H1-10 (Hardwoods) did not meet the target in 2007, however the target is measured over a 5 year rolling average so the true results will not be available until 2011.

Indicators H3-2 (Landslides Resulting from Roads), H3-3 (Landslides from Harvesting) and H5-12 (Training Requirements) reported values that were within the acceptable variances, but did not meet the targets. These were considered in conformance.

Explanations, analysis and rationale, including measures to address the deficiencies are included for each indicator section within Appendix 2.

## 2006 Annual Report

For 2006, Teal was in conformance with the target and permitted variance of 51 of the 53 indicators. The indicators that were determined to be in non-conformance were as follows:

- Indicator H5-12: Internal Training Requirements
- Indicator H6-1: First Nation Participation in SIPAG

Indicators H3-2 (Landslides from Roads), H3-3 (Landslides from Harvesting) and H3-5 (Spills to Land) reported values that were within the acceptable variances, but did not meet the targets. These were considered in conformance.

Explanations and rationale, including measures to address the deficiencies are included for each indicator section within Appendix 2.



## CH1.1.2: Forest Area by Type or Species Composition

Value	Objective	Indicator	Target	Acceptable Variance
Ecosystem Biodiversity	Conserve Ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA	Forest Area by type or species composition	Regeneration with 100% ecologically appropriate and native species	Zero

### Current Status & Results

Year	Species used for regeneration	% ecologically appropriate and native species	Target Met (Y/N)	Variance
2010	Douglas fir & cedar	100	Y	N/A

Currently, Teal's reforestation program includes planting only native species and ecologically appropriate species (Teal does not use exotic species).

### Strategy

Regeneration strategies are developed at the planning stages of the cutblock (prior to harvesting). Ecosystem typing is completed in order to determine ecologically appropriate species (using A Field Guide for Site Identification and Interpretation for the Vancouver [Coast] Forest Region).

### Monitoring

Teal's Forestry and Engineering Department will monitor and report the species and seedlots used for planting. The use of ecologically appropriate and native species will be confirmed by reviewing the Site Plan (to confirm Biogeoclimatic Zone) and comparing the Reforestation Prescription to the interpretations in the book 'A Field Guide for Site Identification and Interpretation for the Vancouver [Coast] Forest Region'.

### Forecast

It is anticipated that Teal will use only ecologically appropriate and native species in their reforestation, therefore they will be in conformance with this target for the foreseeable future.



## H1-6: Bear Dens

Bear dens are considered critical habitat in landscapes with significant second growth stands. The Bear Den Protection Key was originally developed in conjunction with the Ministry of Environment and Ministry of Forest and Range based on general habitat characteristics of bear dens (e.g., size of opening, signs of usage, location of the tree, etc.). The characteristics of the potential bear den are assessed and a value rating is determined based on criteria in the Bear Den Protection Key.

Value	Objective	Indicator	Target	Acceptable Variance
Critical habitat features for special interest species	Maintain existing and potential bear dens	Number of bear dens found during field work that are protected	Retain 100% 'high value' and 80% 'moderate value' bear dens as rated on the Bear Den Protection Key	10% per 5 year rolling average

### Current Status & Results

Year	Value	# of Bear Dens Identified	# of Bear Dens Retained	% of Bear Dens Retained	Target Met (Y/N)	Variance
2010	Moderate	0	0	100	Y	0
	High	1	1	100		
2009	Moderate	2	2	100	Y	0
	High	0	0	N/A		
2008	Moderate	3	3	100	Y	0
	High	0	0	N/A		
2007	Moderate	2	2	100	Y	0
	High	0	0	N/A		
2006	Moderate	0	0	N/A	Y	0
	High	1	1	100		

In 2010, one high value bear den was located and retained. In addition a low value bear den (the den was inactive) was identified but had to be felled due to safety (it was a hazard tree).

In 2009, two moderate value bear dens were located. Both were retained.

In 2008, three moderate value bear dens were located. All three were retained.

In 2007, one moderate value bear den was found in cutblock 5619. An additional bear den was discovered within cutblock 5620 during falling. It was reserved from harvesting and some saplings were left standing around the den. This den has not yet been assessed for value, but has been reported as moderate value for this years annual performance reporting. It will be updated in future reporting once the value assessment has been completed.

In 2006, one potential high value bear den was identified and protected from harvesting. An additional potential bear den was assessed and it was determined that it was not a bear den (Hemmingsen area, cutblock 8361).



Two potential high value bear dens were identified in 2005, and were reserved from harvesting (Granite Creek cutblock 8580B and Hatton Creek cutblock 5620).

## Strategy

During field work, potential bear dens are located and assessed using the Bear Den Protection Key. Generally, Teal staff do not have the expertise to make a final determination on dens, so all dens are referred to as 'potential'. All assessments are filed in the Bear Den Inventory.

Where possible, layout will take into consideration the potential bear den locations. Potential dens are not generally mapped as protection of wildlife may be an issue.

Where dens are located after harvesting commencement, crew will stop work in the area and contact their supervisor. In this case, plans will be altered to protect the den, where operationally feasible. The Forestry & Engineering Department note potential bear dens in the Bear Den Inventory file.

## Monitoring

The Forestry & Engineering Department tallies the number of bear dens found, versus the number of high or moderate value bear dens retained and reports the information under "Current Status and Results".

## Forecast

It is anticipated that Teal staff will continue to find bear dens and protect them wherever operationally feasible. As the distribution of bear dens is not uniform it is not possible to predict the number located each year, however the target reflects an appropriate forecast of the operational feasibility of protecting the dens.



## H1-7: Cedar/ Cypress Trees

Western Red Cedar and Cypress (or Yellow Cedar) have been recognized as a locally important tree species for economic, social, ecological and cultural reasons.

Value	Objective	Indicator	Target	Acceptable Variance
Cedar/ Cypress	Maintain Cedar/ Cypress population within TFL 46 for cultural, ecological and economic purposes	Total Cedar/ Cypress trees planted by species	Average Cedar/ Cypress planted is minimum 20% of total trees planted over a 5 year rolling average	Zero

### Current Status & Results

Year	Total Cedar Planted	Total Cypress Planted	Total Cedar or Cypress Planted	Total Seedlings Planted	% of Cedar or Cypress	Target Met (Y/N)	Variance
2010	293,740	0	293,740	344,440	85	Y	+37.3
2009	90,520	0	90,520	238,840	38	Y	+18
2008	278,740	11,970	290,710	460,280	63.2	Y	+43.2
2007	274,890	0	274,890	658,770	41.7	Y	+21.7
2006	359,460	0	359,460	613,850	58.6	Y	+38.6

In 2010 the five year average of cedar and cypress trees planted is 57.3%.

In 2009 one spring planting program was completed.

In 2007 and 2008, planting programs were completed in the spring as well as the summer (higher elevation blocks).

In the Summer of 2005, 47% of the trees planted were Cedar or Cypress (44.8% cedar and 2.4% cypress). In the May 2004 to April 2005 time period, 49% of the trees planted were Cedar or Cypress.

### Strategy

Planting species selection considers ecological criteria (i.e., ecosystem type which is based on site factors such as moisture and nutrient levels, existing stand and vegetation, aspect, elevation, etc.) and economical criteria (e.g., potential health risks to plantations, potential competition from other tree species, etc.). Other considerations are based on site specific and general resource values, such as wildlife habitat, visual quality, cultural values, etc.

Where required, cutblock information will be derived from the Phoenix database.

### Monitoring

Each year, the Forestry Department tallies the proportion of Cedar or Cypress planted versus the total trees planted for all planting programs. The proportion of Cedar or Cypress is calculated and reported under "Current Status and Results".



## Forecast

Based on past planting records, it is anticipated that the proportion of Cedar and Cypress planted will exceed the target.



## H1-9: Invasive Plant Species

Invasive Plant Species are species that are non-native (or alien) to the ecosystem under consideration and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health.<sup>1</sup>

The Invasive Plants Regulation provides a provincial listing of the plants that are considered “weeds” and have invasive habits. Only a portion of the plants on the list occur within, or near, TFL 46.

Plants occurring within TFL 46	Plants occurring near TFL 46
<ul style="list-style-type: none"> <li>• Bull Thistle</li> <li>• Common Tansy</li> <li>• Oxeye Daisy</li> <li>• Scotch Broom</li> <li>• St. John’s-Wort</li> </ul>	<ul style="list-style-type: none"> <li>• Canada Thistle</li> <li>• Giant Knotweed</li> <li>• Gorse</li> <li>• Japanese Knotweed</li> </ul>

The Majority of the TFL is ranked as low to moderate in terms of susceptibility to invasive plants, according to information provided in the Ministry of Water, Land and Air Protection discussion paper titled “Invasive Alien Species Framework for BC: Identifying and Addressing Threats to Biodiversity (May 2004).

To view a list of plants currently classified as ‘prescribed’ invasive plant species, visit:

<http://www.for.gov.bc.ca/tasb/legsregs/frpa/frparegs/invplants/ipr.htm#section2>

Value	Objective	Indicator	Target	Acceptable Variance
Maintain natural diversity of native flora and fauna	Mitigate spread of invasive species	% site occupation of invasive plant species at time of Free Growing	0% for Broom, Gorse, Knotweed 10% for Thistle, Tansy, Daisy, St. John’s Wort	5%

## Current Status & Results

Year	% Site Occupation at Time of Free Growing (Broom, Gorse, Knotweed)	% Site Occupation at Time of Free Growing (Thistle, Tansy, Daisy, St John’s Wort)	Target Met (Y/N)	Variance
2010	0.1	0	N	-4.9
2009	0.1	0	N	-4.9
2008	0	0	Y	0
2007	0	0	Y	0
2006	0	0	Y	0

<sup>1</sup> Source: <http://www.invasivespeciesinfo.gov/>



In 2010, Free Growing surveys indicated that Scotch Broom was present along roadsides of 9 of the 9 cutblocks surveyed. In addition, broom was found to occupying less than 5% in three cutblocks. This species is not expected to spread beyond roadsides as it is shade intolerant and will not thrive in mature forests. Canadian Thistle was noted on the roadside of one cutblock, likewise it is generally shade intolerant and not expected to thrive in mature forests.

In 2009, Free Growing surveys indicated that Scotch Broom was present along roadsides of 5 of the 15 cutblocks surveyed. In addition, broom was found to occupying less than 5% in two cutblocks. This species is not expected to spread beyond roadsides as it is shade intolerant and will not thrive in mature forests. Canadian Thistle was noted on the roadside of one cutblock, likewise it is generally shade intolerant and not expected to thrive in mature forests.

In 2008, Free Growing surveys indicated that Scotch Broom was present along roadsides of 17 of the 21 cutblocks surveyed. Currently, the broom is not occupying the growing space of the cutblocks and this species is not expected to spread beyond roadsides as it is shade intolerant and will not thrive in mature forests.

In 2007, Free Growing surveys were completed on 20 cutblocks. Surveys indicated that Scotch Broom was present along roadsides of 10 of the cutblocks. Currently, the broom is not occupying the interior of the cutblocks and is only present on the roadsides. These areas will be monitored in the future to ensure that the broom does not spread into the cutblocks.

Invasive Plant species are present within the TFL, generally along roadsides commonly travelled by the public. Invasive plant species within cutblocks have not been identified as a significant concern at this time, however it is recognized that there is a potential for future problems.

This indicator was developed in the Fall of 2006. Over the last several years, Free Growing surveys have not identified any invasive plant species within any cutblocks within the TFL. Roadside monitoring did not take place in the past.

## Strategy

Teal's Forest Stewardship Plan outlines measures for the management of invasive plant species. The measures fall within three categories: training and education; prevention; and control.

## Monitoring

The Forestry Department will report on the percentage of occupancy of invasive plants that is measured within cutblocks on an annual basis, averaged over all blocks declared Free Growing in each calendar year and report under "Current Status and Results". Site occupancy is a measure of percentage of occupancy within a cutblock.

Government agencies will also carry out monitoring activities during regular inspections (cross reference the Compliance Tracker).

## Forecast

Teal's FSP includes measures to prevent the spread of invasive plants within the TFL. Through the implementation of the measures, the current presence of invasive plant species within the TFL is not expected to increase significantly.



## H1-10: Hardwoods

Alder and Maple are common components in the stands throughout the TFL, other species, such as cottonwood, cherry, willow, etc. may be present in minute quantities.

Value	Objective	Indicator	Target	Acceptable Variance
Maintain natural diversity of native flora and fauna	Retain a component of hardwoods within the stands	Number of hardwood stems per hectare (ha)	Average number of hardwood stems per ha is a minimum of 25, measured on a 5 year rolling average over all cutblocks declared Free Growing in each calendar year	1.25 stems per ha (5%)

### Current Status & Results

Year	Annual Average # of Hardwood Stems per Hectare	5 Year Average	Target Met (Y/N)	Variance
2010	67	NA	Y	+3.4
2009	28.4	NA	Y	+3.4
2008	27.9	N/A	Y	+2.9
2007	23.25	N/A	N	-1.75

The results of this indicator cannot be determined until data is collected for 5 years (2011). It is expected that Teal will meet the target within the 5 year timeframe as alder is generally present along roadsides and commonly scattered in small numbers throughout blocks.

In 2010, all cutblocks surveyed for Free Growing contained Alder (range of 20-250 stems per hectare). In addition, four blocks contained a small portion of cherry and three blocks contained a small portion of big leaf maple.

In 2009, 14 out of 15 cutblocks surveyed for Free Growing contained Alder. In addition, one block contained willows and cherry.

In 2008, all 21 cutblocks surveyed for Free Growing contained Alder. In addition, one block contained big leaf maple and 3 blocks contained cherry.

In 2007, 19/20 cutblocks surveyed for Free Growing contained Alder (range of 10-50 stems per hectare).

This indicator was finalised in the Fall of 2006. Prior to 2006, this information was not tracked in a manner that would enable efficient annual review of the information (it was previously tracked on an individual cutblock basis within each area file). Going forward, we will develop an improved tracking mechanism for this indicator. It is anticipated that Teal is meeting this target.

### Strategy

Under the approved Forest Stewardship Plan, Alder, Maple and Cottonwood are permitted as ghost trees up to a limit of 100, 30 and 20 per hectare of uniform distribution. These trees may remain on site without affecting the stand establishment commitments. If hardwood component of the stand exceeds these levels,



Teal is required to cut the trees to prioritize the growing site for conifers. Under the current management regime, Teal spends a significant investment in brushing activities to reduce the component of hardwoods and assist stands in reaching Free Growing status.

## Monitoring

The Forestry Department tallies average number of hardwood stems per hectare, measured on a 5 year rolling average over all cutblocks declared Free Growing in each calendar year and reports the result under “Current Status and Results”.

## Forecast

Under the current management regime, the target is the forecast. The Forest Stewardship Plan permits management of hardwood species (Alder and Maple) on those portions of the land-base where the present canopy includes mainly hardwoods. Teal is currently conducting a trial to examine feasibility of operating in these areas. These hardwood leading stands represent approximately 5% of the land-base of the TFL.



## H2-4: Catastrophic Windthrow Events

Catastrophic Windthrow Events are defined as: windthrow events in the Riparian Reserve Zone that lead to significant damage to water quality or fish habitat. For example, a debris torrent, creation of a fish barrier, permanent destruction of rearing grounds, or alteration of habitat to the point where it can no longer be utilized in the same manner that it was utilized by wildlife and fish species prior to the event.

The intent is that this indicator measures impacts resulting from harvesting activities, and does not include natural occurrences.

Value	Objective	Indicator	Target	Acceptable Variance
Healthy Forests	Minimize impacts due to windthrow	Number of catastrophic windthrow events within Riparian Reserve Zones as a result of harvesting activities	Zero	Two

### Current Status & Results

Year	# of Catastrophic Windthrow Events within RRZs	Target Met (Y/N)	Variance
2010	0	Y	0
2009	0	Y	0
2008	0	Y	0
2007	0	Y	0
2006	0	Y	0

In 2010, 2009, 2008, 2007 and 2006, there were no catastrophic windthrow events within RRZs that were identified or documented using an internal Incident Investigation Form. Internal inspections and MOFR Compliance & enforcement inspections did not identify any issues relating to windthrow within RRZs.

SIPAG meetings in May and October 2007 discussed some potential blowdown within the RRZ of Harris Creek and Rail Main, as well along the Pacific Circle Route at nine mile junction. Teal reviewed the areas in question and measured the distance from the edge of the rivers and determined that none of the blowdown was within the RRZs. Teal is planning a salvage operation at the Circle Route location. A salvage operation was also completed in Harris Creek Camp. MoFR participated in some of the site visits to confirm whether any impacts on RRZs.

From May 2004 until December 31, 2005, there were no catastrophic windthrow events within any Riparian Reserve Zones as a result of harvesting activities.

### Strategy

Cutblocks are assessed for windthrow potential at the planning stages of layout. Where there is deemed to be a moderate or high hazard for windthrow in Riparian Reserves Zones, management strategies are implemented in order to minimize the risk. For example, buffers, pruning and/ or topping treatments are prescribed.



Post harvest inspections and surveys note any windthrow within cutblocks. Significant windthrow events are assessed and may be recorded using the Incident Investigation Form to determine root cause and any action items required to mitigate the impact.

## Monitoring

The Environmental Department tallies the number of catastrophic windthrow events within Riparian Reserve Areas adjacent to managed areas using Incident Investigation Forms, and report under “Current Status and Results”.

Government agencies also do periodic inspections (cross reference the Compliance Tracker).

## Forecast

Local knowledge indicates that generally significant storm events occur during the fall and winter, however timing and location of windthrow damage is difficult to predict. In some years there is very little windthrow noted, in other years several areas with windthrow damage can be seen throughout the DFA. Riparian Reserve Zones are assessed for potential windthrow at the planning stages and managed accordingly. Therefore it is anticipated that while there will continue to be windthrow damage within the DFA, catastrophic windthrow events within the Riparian Reserve Zone will be very rare.



## H2-5: Windthrow Treatments

The intent is that harvesting and road building activities are managed to avoid creating a situation where windthrow may impact the terrain in a manner that would create the potential for instability (e.g., a windthrown tree uplifts its root system, reducing stability in a gully sidewall).

Value	Objective	Indicator	Target	Acceptable Variance
Healthy Forests	Minimize impacts due to windthrow	Percentage of required windthrow treatments that are completed in a timely manner. (areas specified within site level plans as requiring edge treatments to address windthrow risk)	100%	Zero

### Current Status & Results

Year	# of Cutblocks Requiring Windthrow Treatments	# of Treatments Completed	% Completed	Target Met (Y/N)	Variance
2010	2	2	100	Y	0
2009	1	1	100	Y	0
2008	1	13	100	Y	0
2007	8	0	0	N	-100
2006	4	0	0	N	-100

In 2010 two blocks were prescribed and treated for windthrow.

In 2009 one block was prescribed and treated for windthrow (one boundary of block 8012 was located along a ridge break above a stream, there was a high risk for windthrow, therefore a windthrow treatment was prescribed).

In 2008 block 4587 was pruned for prescribed windthrow treatment. In addition, outstanding pruning treatments for blocks identified in 2006 and 2007 were completed by hand as helicopter services are no longer available.

This indicator was reviewed and revised in February 2007. In 2007, there were eight cutblocks requiring windthrow treatments. However, no treatments were completed because the helicopter company was not available to complete the treatments within the year. Pruning treatments for both 2007 and 2006 blocks are scheduled for spring of 2008 as soon as weather permits.

In 2006, there were four cutblocks requiring windthrow treatments. However, no treatments were completed because the helicopter company was not available to complete the treatments within the year.

Previous indicator info: In 2006, there were no reported landslides that were deemed to be caused by windthrow induced instability as a result of harvesting activities. Previous indicator (prior to February 2007): Landslides caused by windthrow induced instability as a result of harvesting activities (target - all areas, as specified within site level plans, where windthrow may induce instability have edge treatments to avoid windthrow. Variance - Zero). From the period of May 2004 until December 31 of 2005, there were no windthrow induced instability events within managed areas (harvesting or road building).



## Strategy

Cutblocks are assessed for windthrow potential at the planning stages of layout. Where there is deemed to be a moderate or high hazard for windthrow in Riparian Reserves Zones, management strategies are implemented in order to minimize the risk. For example, buffers, pruning and/or topping treatments are prescribed.

In addition, areas with potentially unstable terrain are assessed to determine potential impacts of harvesting and road building activities, including potential impacts from windthrow events.

Post harvest inspections and surveys note any windthrow within cutblocks. Significant windthrow events are assessed and may be recorded using the Incident Investigation Form to determine root cause and any action items required to mitigate the impact.

“Timely manner” refers to treatments conducted before the first winter season following harvest completion, where they are operationally feasible. In some cases, there may be situations that are outside of Teal’s control that prevent treatments being completed prior to the first winter season following harvesting. For example, poor weather conditions during planned treatment may prevent helicopter operations from being completed in a timely manner, or availability of the helicopter and/or pruning crews may also hinder treatment scheduling.

## Monitoring

The Forestry & Engineering Department maintains a tracking system for windthrow treatments. The Environmental Department tallies the number of required windthrow treatments that are completed in a timely manner and reports the percentage under “Current Status and Results”.

Government agencies also do periodic inspections (cross reference the Compliance Tracker).

## Forecast

It is anticipated that all blocks prescribed for windthrow treatments will be treated, however due to shortages in experienced crew some treatment plans may not be completed within the optimal timeframe.



## H3-4: Restoration of Erosion Hazards

Erosion hazards are rated based on road risk ratings, the road risk level is calculated as: HAZARD (i.e., physical factors such as terrain, instability indicators and likelihood of event) X CONSEQUENCE (i.e., downslope resources such as human safety, fisheries/ water quality, and landbase). Reducing erosion hazards may include, but are not limited to, slope re-vegetation, road deactivation or rehabilitation.

Teal is responsible to inspect and maintain all roads built post 1995. However they have no obligation for roads built prior to 1995, unless they have a road permit. The government provides funding through the Forest Investment Account, which may be available to Teal for watershed restoration activities that result in the reduction of erosion hazards.

Value	Objective	Indicator	Target	Acceptable Variance
Soil	Protection of forest soils	Number of activities related to restoration of significant erosion hazards resulting from roads	Mitigate high erosion hazards on a priority basis	Activities completed as funding is available

### Current Status & Results

Year	# of Restoration Activities	Location	Target Met (Y/N)	Variance
2010	0	N/A	Y	0
2009	1	Cheewhat	Y	0
2008	1	Project Evaluation	Y	0
2007	1	Project Evaluation	Y	0
2006	0	N/A	Y	0

In 2010 no funds were allocated to restoration of erosion hazards. It is important to note there were significant changes in provincial funding for projects in the DFA; for example the list of eligible projects was changed (in 2010 Net Volume Adjustment Factor sampling was the only project eligible in the Honeymoon Bay portion of the DFA), funds are no longer allocated based upon AAC and several funding sources are now amalgamated. Since funding availability is changing Teal informed the PAGs of these changes, and they agreed to re-evaluate those indicators affected in a year's time.

In 2009 Teal, in partnership with BCTS, built a sediment basin on the Cheewhat (drainage contributes a lot of sediment to a valuable salmon site.area) and is conducting a multi-phase, multi-year project to improve conditions.

In 2008 the Effectiveness Evaluation project was completed.

In 2007, an Effectiveness Evaluation project was initiated to complete some field reviews of some past deactivation activities. The field reviews are planned for 2008, pending funding availability.

During 2006, there were no activities completed related to restoration of erosion hazards, due to lack of available funding. Restoration of erosion hazards (i.e., road deactivation) is identified as a priority within the Land Based Investment Rationale (LBIR), but competing priorities and limited funding has been a factor.



Teal deactivated approximately 2 kilometres of road under the Forest Investment Account between April 2004 and March 2005.

## Strategy

The majority of roads that are no longer under permit to Teal (and were built prior to 1995) have been risk ranked. Teal has been systematically treating high hazard roads to reduce the hazard rating, as funding permits.

## Monitoring

Completed projects are inspected and tracked through the Forest Investment Account and the results are reported under “Current Status and Results”.

## Forecast

Teal is committed to continuing this work, provided government funding is available. Due to changes in government there is currently no funding source for projects such as these, however it is predicted that alternate funding sources will be available in the near future. It should be noted that this work is ongoing and will likely require greater than 10 years to complete (budgets are in the millions of dollars).



## H3-10: Fisheries Sensitive Features

Fisheries Sensitive Zones include: the littoral zone of a lake; a freshwater area where the water is less than 10 m deep; a flooded depression, pond or swamp that is not a stream, wetland or lake, but either perennially or seasonally contains water and is seasonally occupied by a species of fish.<sup>2</sup>

For the purposes of this indicator, fisheries related projects refers to any projects related to water quality, watershed restoration, gully restoration, fish inventories, hydrometric station measurements, stream mapping and classification or riparian treatments.

Value	Objective	Indicator	Target	Acceptable Variance
Fisheries	Protection of fisheries resources	Management of Fisheries Sensitive Features	Minimum of 20% of the annual FIA budget for TFL 46 to be spent on fisheries related projects	-10% (no restrictions on upper limit)

### Current Status & Results

Year	Total Annual FIA Budget (\$)	Total Spent on Fisheries Related Projects (\$)	% of Budget	Target Met (Y/N)	Variance
2010/2011 Fiscal	\$153,000	0	0	N	0
2009/2010 Fiscal	341,000	110,000	32	Y	0
2008/2009 Fiscal	220,167	27,608	13	N	-7
2007/2008 Fiscal	284,164	131,116	47	Y	0
2006/2007 Fiscal	257,989	61,318	24	N/A	N/A

In 2010 no funds were allocated to fisheries related projects as these projects are no longer eligible for funding. It is important to note there were significant changes in provincial funding for projects in the DFA; for example the list of eligible projects was changed (in 2010 Net Volume Adjustment Factor sampling was the only project eligible in the Honeymoon Bay portion of the DFA), funds are no longer allocated based upon AAC and several funding sources are now amalgamated. Since funding availability is changing Teal informed the PAGs of these changes, and they agreed to re-evaluate those indicators affected in a year's time.

In 2009 Teal spent 32% of the FIA budget on fisheries related projects, including the Cheewhat Sediment Basin, Harris Creek maintenance (increase rearing and spawning habitat for Coho and Chinook) and maintenance of the Renfrew Hydrometric/ climatic stations.

In 2008 Teal spent only 13% of the FIA budget on fisheries related projects, which does not meet the target, however is within the allowable variance. In association with BCTS there is a fish passage project currently

<sup>2</sup> Source: Forest and Range Practice Act, Forest Planning and Practices Regulation, Part 1 Interpretation



being pursued within the TFL. In addition further work on the Harris Creek project is required in the next few years so it is expected that Teal will meet the target in the near future.

This indicator was developed in February 2007. Over the last five years, Teal has consistently been spending more than 20% of the annual FIA budget for TFL 46 on fisheries related projects.

## Strategy

Current management of fisheries sensitive features within TFL 46 is on a case by case basis (i.e., each feature is considered as they are located). In general, management strategies include leaving buffers, implementing timing constraints or specific road construction methods, etc. Note: these features are not that common within the TFL.

Annually, a Land Based Investment Rationale is completed for the TFL which establishes the priorities for FIA related projects. Teal will continue to place priority on completion of fisheries related projects.

## Monitoring

The Environmental Department reviews the summary of annual Forest Investment Account projects completed in a given year reports the results under “Current Status and Results”.

## Forecast

Teal is committed to continuing this work, provided government funding is available. Due to changes in government there is currently no funding source for projects such as these, however it is predicted that alternate funding sources will be available in the near future. It is anticipated that funding will be sought through other sources in the future as fisheries projects are a high priority in the DFA.



## H3-11: Fish Barriers

In some cases, old road building methods created barriers to fish passage in fish streams.

Value	Objective	Indicator	Target	Acceptable Variance
Fisheries	Protection of fisheries resources	Number of fish barriers resulting from old road building methods (e.g., steep culverts) addressed as referrals received from outside sources	Fish barriers are addressed where operationally feasible	Zero

### Current Status & Results

Year	# of Fish Barriers	# of Fish Barriers Addressed	Target Met (Y/N)	Variance
2010	0	0	Y	0
2009	0	0	Y	0
2008	0	0	Y	0
2007	12	0	Y	0
2006	0	0	Y	0

In 2010 no funds were allocated to fisheries projects. It is important to note there were significant changes in provincial funding for projects in the DFA; for example the list of eligible projects was changed (in 2010 Net Volume Adjustment Factor sampling was the only project eligible in the Honeymoon Bay portion of the DFA), funds are no longer allocated based upon AAC and several funding sources are now amalgamated. Since funding availability is changing Teal informed the PAGs of these changes, and they agreed to re-evaluate those indicators affected in a year's time.

A project was completed in 2002-2003 under the former tenure holder to identify fish barriers on old roads. The report was reviewed in 2006 and it was determined that the project identified twelve sites that represented a barrier to fish migration. The sites were given a priority ranking of high, medium or low. Teal will review the assessment report to determine the number of fish barriers that are located in the TFL (i.e., all 12 that have been identified within the report may not be located within TFL 46), and is committed to allocating FIA funds to address the barriers, where available.

There are a number of other FIA funded projects that were completed in the TFL in 2007, the Harris Creek side channel development for off-channel salmon habitat, operation and maintenance of five hydrometric stations in Renfrew, vegetation resource index ground sampling (determines site productivity used in timber supply analysis), as well as two timber inventory projects.

There have been no fish barriers from old roads that were identified through referrals from outside sources since Teal has operated in the TFL.



## Strategy

Fish barriers caused by old road building methods are discovered during internal assessments or referrals from outside sources. When fish barriers are discovered, they are mapped and/ or added to the inventory and included in future Forest Investment Account, Watershed Restoration projects.

## Monitoring

The Environmental Department summarizes the completed Forest Investment Account projects related to fish barriers and reports the results under “Current Status and Results”.

## Forecast

A project was completed in 2002-2003, under the former tenure holder, to identify all fish barriers on old roads within the TFL. Based on this information it is anticipated that very few external referrals will be received that identifies additional sites. Where external referrals are received, funding sources will be sought at that time as required.



## H3-12: Bridge & Major Culverts

The intent of this indicator is to ensure water quality is maintained through the regular inspection and prompt maintenance on bridges and major culverts.

Value	Objective	Indicator	Target	Acceptable Variance
Water	Protection of water resource	Bridge & Major Culvert repairs	All structures with a high risk of damage to the environment or safety are repaired within the next weather (fisheries) window	Zero

### Current Status & Results

Year	# Structures at high risk of damage to the environment or safety issues	# Repairs made to structures with high risk of failure	Target Met (Y/N)	Variance
2010	0	0	Y	0
2009	2	2	Y	0
2008	2	2	Y	0

In 2009 bridge & culvert inspections revealed two bridges where guardrails need to be replaced (HBS95-C and HBS95-D). Teal repaired these soon after they were discovered (within the same operating season as they were identified).

In 2008 bridge & culvert inspections revealed two major culverts on McClure Mainline where stringers were separating and causing some sedimentation to the creeks (also a road safety issue). Teal repaired these culverts soon after they were discovered (within the same operating season as they were identified).

This indicator was developed in 2007 and finalized in 2008.

### Strategy

The Forestry & Engineering Department maintains an inventory of bridges and major culverts within the TFL. Wood structures are inspected at least once per year, steel structures are inspected at least once per every 3 years, but usually once per year. Inspections forms are used to record information, including pictures. Any required repairs/ replacements are noted on the form and entered into the operational tracking system. Repair priorities are based on resources and volume of traffic.

### Monitoring

The Environmental Department summarizes the number of repairs made to bridges or major culverts each year, and compares with the number of structures that were deemed to be a high risk in inspections. The results under “Current Status and Results”.



## Forecast

In all cases where there is either a high risk to the environment or safety concerns repairs are a top priority, therefore it is anticipated that the target is the forecast.



## H4-2: Long Term Products

Wood products such as lumber, shake and shingles, etc. are considered 'Long Term Products' as they do not break down as quickly as short term products, such as paper.

Value	Objective	Indicator	Target	Acceptable Variance
Natural ecological cycles	Minimize negative impacts of harvesting on natural global ecological cycles	Percent of volume harvested converted to long term products (e.g., solid wood) versus short term products (e.g., pulp)	80% per year	10%

### Current Status & Results

Year	Volume of Long Term Products (m <sup>3</sup> )	Total Volume Harvested (m <sup>3</sup> )	%	Target Met (Y/N)	Variance
2010	367,297	402,295	91.3	Y	+11.3
2009	176,813.7	208,340.1	84.9	Y	+4.9
2008	272,038.2	306,073.5	89.0	Y	+9.0
2007	291,177.6	296,940.4	98.0	Y	+18.0
2006	367,334.7	373,724.5	98.3	Y	+18.3

From May 2004 until December 2005, approximately 93% of the volume of wood harvested from the TFL was converted to long-term products (Teal has operated within the TFL since May 2004).

### Strategy

On a corporate level, Teal is continually aiming to improve utilization of the timber resource. They have recently built a sawmill in the lower mainland that enables them to mill logs with a diameter of 4 inches into long-term products such as lumber.

Wherever possible, Teal utilizes timber harvested from TFL 46 in their own lumber mills in the lower mainland, or commonly they sell specific products to local mills on Vancouver Island.

### Monitoring

The Accounting and Log Departments review the log sales and reports the results under "Current Status and Results".

### Forecast

It is estimated that this target will be exceeded. Provided the economic conditions allow for business expansion, Teal's long term future goal is to further increase utilization to a diameter of 2 inches by purchasing new equipment for the mills.



## H5-2: Managed Minor Forest Products

Managed Minor Forest Products include post harvest material and damaged timber. Harvesting of these products is tracked and Teal is required to pay stumpage on the volume harvested.

Post harvest material is material recovered following primary harvesting and is generally material that was left on site due to economics (i.e., the cost of yard and hauling is greater than the value of the material using primary harvest methods), or may be material resulting from bridge or culvert deactivation. These products are generally recovered in the form of: shakes and shingles; blocks and bolts; cants; fence rails; hop poles; etc.

Damaged timber generally consists of timber felled to eliminate safety hazards or timber damaged by natural disturbances (e.g., wind, insects, snow, etc.). These products are generally recovered in the form of logs.

Value	Objective	Indicator	Target	Acceptable Variance
Minor Forest Products	Improve utilization of forest through Minor Forest Products harvesting	Annual volume (cubic metres) of Managed Minor Forest Products harvested (Douglas fir and cedar salvage)	Provide opportunities for Managed Minor Forest Products as requested and as available	Zero

### Current Status & Results

Year	Total Salvage volume harvested (m <sup>3</sup> )	Target Met (Y/N)	Variance
2010	11,213.9	Y	N/A
2009	7096.0	Y	N/A
2008	12,625.3	Y	N/A
2007	4,281.74	Y	N/A
2006	3,261.97	Y	N/A

In 2010, the Salvage volume originated from post harvest clean-up and damaged timber (windthrow). Slightly more than 50% of the above volume was delivered to Duke Point Custom Sort with the remainder going to one of the chipping facilities or firewood.

In 2009 total special forest products volume was 3195m<sup>3</sup> (includes shake & shingle, cants, firewood, bolts/ blocks/ blanks) and windthrow/ danger tree log salvage volume was 3400m<sup>3</sup>. In addition a small road right of way project with the Pacheedaht First Nations was completed in 2009: the alder and conifer trees where salvaged along the Harris creek Mainline right of way to abate possible hazards to passers-by (205 m<sup>3</sup> of alder and 295 m<sup>3</sup> of conifer where salvaged).

In 2008 total special forest products volume was 495.58m<sup>3</sup> (includes shake & shingle, cants, firewood, bolts/ blocks/ blanks) and windthrow/ danger tree log salvage volume was 12,129.71 m<sup>3</sup>.



In 2007, total shake and shingle volume was 423.37 m<sup>3</sup>, total cants 114.45 m<sup>3</sup>, small logs 144.52 m<sup>3</sup>. Log salvage second growth was 1483.76 m<sup>3</sup>, old growth 1709.46 m<sup>3</sup>. A total of 406.18 m<sup>3</sup> of logs were sold to a local salvage company. Salvage volumes are lower in 2007 as a result of the Steelworker Union strike. In addition, the Pacheedaht First Nation have not started their salvage program back up (went down in 2006).

Total shake and shingle salvage volume for 2006 was 959.2 m<sup>3</sup>. Total second growth salvage was 1,101.92 m<sup>3</sup> (from the FIA side channel project on Harris Creek) and total old growth salvage was 1,200.85 m<sup>3</sup> (post harvest residue within blocks and some blowdown salvage).

In 2006, the Pacheedaht First Nation salvage operation experienced some operating challenges. They are currently looking into starting a new salvage company under the umbrella of Pacheedaht Forestry Ltd. Dididaht Cedar salvage was not operating during the year due to the lack of old growth harvesting. They are anticipated to play a larger role in the salvage harvesting during 2007 when more old growth harvesting is expected. The majority of the salvage volume for 2006 was harvested by Callander Cedar Products.

The volume harvested between the period May 1, 2004 to April 30, 2005 was 6,596m<sup>3</sup> and may be slightly lower than a normal operating year due to delays in the transfer of TFL 46.

## Strategy

Minor Forest Products are scaled and the volume harvested is reported electronically to Government agencies, Forest Analysis Branch.

## Monitoring

The Stumpage Supervisor reviews the annual volume harvested through Minor Forest Products and reports under "Current Status and Results".

Government agencies also do periodic inspections (cross reference the Compliance Tracker).

## Forecast

It is predicted that the annual volume of Minor Forest Products harvested will remain fairly constant in the short-term, however over the long term the volume available may decrease to reflect changes in harvesting methods.



## H6-5: Cultural Cedar

Protection of cultural values during Forest Management activities within BC is covered either by the Heritage Conservation Act or through Forest Management Legislation (i.e., Forest Act, Forest Practices Code Act and the Forest and Range Practices Act).

The Heritage Conservation Act clearly establishes definitions for heritage sites that require conservation or protection (e.g., Culturally Modified Trees modified prior to 1846). The Ministry of Integrated Land Management is responsible for tracking and maintaining the Provincial registry of sites that are protected under the Heritage Conservation Act (including archaeological, culturally modified tree and traditional use sites).

Forest Management Legislation provides for the conservation of cultural heritage resources and does not include sites that are already protected under the Heritage Conservation Act. Resources may include values that are currently present, desired future conditions or historical areas that are not protected under the Heritage Conservation Act.

A Cultural Heritage Resource (CHR) is defined in legislation as ‘an object, a site, or the location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an aboriginal people’<sup>3</sup>

The TFL is located within the traditional territories of the Pacheedaht First Nation, Ditidaht Band First Nation, Cowichan Tribes First Nation and Lake Cowichan First Nation. A small portion of the TFL overlaps the traditional territory of the Penelakut First Nation.

One of the key concerns identified by the local First Nations is ensuring the future supply of Western Red Cedar and Cypress for cultural use.

Value	Objective	Indicator	Target	Acceptable Variance
Cultural Cedar	Work with First Nations to identify a current and/or future supply of Cedar and Cypress suitable for traditional use and not cause, as a result of road construction or timber harvesting activities, this supply to become unavailable for their continuing extent of use by an aboriginal people up to the extent of historical use	Number of First Nations requests that are responded to for establishing a protocol for identifying a current and/or future supply of Cedar and Cypress trees suitable for traditional use within TFL, consistent with the extent of historical use	100%	Zero

### Current Status & Results

Teal currently has good working relationships with each of the local First Nations. Communication and information sharing has been achieved through many formal and informal processes. Cultural Heritage Resource are identified on an on-going basis.

This indicator was developed in February 2007 and is consistent with the commitments made within the Forest Stewardship Plan.

<sup>3</sup> Forest Act



Year	# Requests for Protocol	# of Responses to Requests	Target Met (Y/N)	Variance
2010	1	1	Y	0
2009	1	1	Y	0
2008	1	1	Y	0
2007	1	1	Y	0
2006	1	1	Y	0

Teal continues to work with Pacheedaht First Nation to reach their cedar conservation goals (see Indicator 6-9 Pacheedaht Cultural Cedar for more information).

Teal has been working with the Pacheedaht First Nation to address the bands concern with regard to long term availability of Western Red Cedar. An inventory of western red cedar within TFL that may be of potential use for cultural purposes has been created. The Pacheedaht has requested a formal agreement to document a commitment to provide a specified volume of cultural wood, this is still in progress.

In 2007, a total of 265 potential cultural cedars were included in the inventory for the Pacheedaht First Nation. As of August 2006, the inventory identifies 202 potential cultural Cedars located within or adjacent to proposed harvesting areas.

No other requests from other First Nations for developing a protocol for cultural cedar use have been received.

## Strategy

Several strategies will provide input into the identification of cultural heritage resources, including but not limited to:

- Landscape Level Plan reviews (Forest Development Plans, Forest Stewardship Plans, Landscape Unit Plans, Vancouver Island Land Use Plan, etc.)
- Archaeological Inventories (Archaeological Overview Assessments are generally done on a landscape or watershed level. They categorize areas based upon the potential for archaeological sites and evaluate existing archaeological resources)
- Archaeological Assessments (Archaeological Impact Assessments are completed, as required, on the stand level where the potential for archaeological sites is rated at moderate or high or at the request of First Nations. The Archaeological Impact Assessment identifies and assess all impacts on archaeological resources that may result from proposed developments)
- Traditional Use Studies
- Information Sharing Protocols
- Southwest Island Public Advisory Group meetings
- Informal discussions

## Monitoring

The Forestry & Engineering Department tallies the number of requests that are responded to for establishing a Cultural Cedar Protocol and reports the percentage under “Current Status and Results”.



Requests can be documented under the FSP review and comment process or within the Communications file.

Government agencies also do periodic inspections.

## Forecast

Teal will continue to provide opportunities for input into planning to all First Nations with traditional territory in the DFA. Requests for protocols will depend upon the individual First Nations, however from past correspondence, it is anticipated that at least one First Nation will continue to request protection of the cedar resource.



## H6-6: Number of SIPAG Meetings per Year

The number of Southwest Island Public Advisory Group (SIPAG) meetings held each year is dependent upon several factors, including: current Forest Management issues; concerns raised by members or Teal; and commitments of the Sustainable Forest Management Plan.

Value	Objective	Indicator	Target	Acceptable Variance
Informed, fair, inclusive and timely decision making	Public values are incorporated into forest management planning	Number of SIPAG meetings per year to review the Sustainable Forest Management Plan and any issues relevant to forest management within TFL	Minimum 2 meetings per year	Zero

### Current Status & Results

Year	# of SIPAG Meetings	Target Met (Y/N)	Variance
2010	3	Y	0
2009	2	Y	0
2008	4	Y	+2
2007	4	Y	+2
2006	4	Y	+2

Generally, the group meets once per quarter with the exception of a longer break during the summer months as well as over the Christmas holidays.

The Southwest Island Public Advisory Group was initiated in June 2005. Nine meetings were held in 2005.

### Strategy

Future Southwest Island Public Advisory Group meetings will be scheduled as required to review the Sustainable Forest Management Plan, address any Forest Management issues in the TFL and maintain a dialogue between Teal and the local communities. Generally, the next meeting date and proposed agenda will be set at the previous meeting, however where significant concerns arise, members will be notified for unscheduled meetings.

Meeting minutes for each Southwest Island Public Advisory Group meeting are filed in the Public Advisory Group file (E2-1).

### Monitoring

The Environmental Department will tally the number of meetings from the meeting minutes and report under "Current Status and Results".



## Forecast

It is anticipated that the target will be exceeded in most years based on the last several years participation.



## H6-7: Response to Correspondence

Periodically, Teal receives verbal or written comments or concerns from the general public.

Value	Objective	Indicator	Target	Acceptable Variance
Informed, fair, inclusive and timely decision making	Public values are incorporated into Forest Management planning	Responses to correspondence received from general public	Respond to all public inquiries/ comments where contact information is provided	Zero

### Current Status & Results

Year	# of Correspondence Received	# Responded to	Target Met (Y/N)	Variance
2010	4	4	N	0
2009	0	0	Y	0
2008	2	2	Y	0
2007	3	3	Y	0
2006	17	17	Y	0

In 2010, Teal received and responded to four inquiries regarding Avatar Grove. Avatar Grove is an area that was highlighted in the media resulting from an Environmental Group press release expressing the wish to preserve the 'ancient forest' values; it is located near Port Renfrew on Southern Vancouver Island. Teal is currently investigating options to protect the area in conjunction with the Ministry of Natural Resource Operations.

In 2009 there were no inquiries or correspondence received from the general public.

In 2008 there was one inquiry with regards to Teal's certification status and another request for a donation. All correspondence was followed up and responded by Teal.

In 2007 there were two requests from First Nations for cultural wood (firewood, carving). The requests were made by the members of the Cowichan Tribes and the Coast Salish (Employment and Training program). The other correspondence received was inquiries into planned activity within the Walbran area. All correspondence was followed up and responded to by Teal.

During 2006, there were 17 documented cases of correspondence received from the public and First Nations. There was a request from a First Nation for some firewood for a ceremonial fire that was not resolved within the year. However, communication was on-going and follow up was conducted in late 2006 and early 2007 and arrangements are in progress for delivery of the firewood.

Through formal and informal processes, Teal receives public input with regards to Forest Management in TFL. Teal has an internal policy to respond to all public inquiries or comments where contact information is provided.



## Strategy

Written correspondence is filed in the external communications file (File E4 and FSP Binder). Where possible, verbal communications are summarized in note form and filed within the same file.

## Monitoring

The Environmental Department reviews the external communications file and the FSP Review & Comment Binder, and summarizes the number of correspondence received by the general public and the respective number of responses and reports the results under “Current Status and Results”.

## Forecast

Teal will continue to follow up all correspondence, therefore the target is the forecast.



## H6-9: Pacheedaht Cultural Cedar

Value	Objective	Indicator	Target	Acceptable Variance
Cultural Cedar	Work with First Nations to identify conserve and manage over the long term a current and future supply of Cedar and other tree species, suitable for traditional use and not cause, as a result of road construction or timber harvesting activities, this supply to become unavailable for their continuing extent of use by an aboriginal people up to the extent of historical use	Identification, mapping and documentation of specific cedar trees and other tree species or small areas containing cedar trees that meet or will meet the size and quality parameters as specified in the Pacheedaht First Nation – Cultural Cedar Conservation Strategy	700 trees within 3 years (Dec 31, 2012); 800 trees within 5 years (Dec 31, 2014)	Zero

### Current Status & Results

Year	# trees identified	# total trees	Target Met (Y/N)	Variance
2010	45	613	Y	0
2009	568	568	Y	0

In 2010 an additional 45 trees were identified and approved by Pacheedaht First Nation.

In 2009 a total of 568 trees were identified and approved by Pacheedaht First Nation.

This indicator was developed throughout 2008 and 2009 and finalized in September 2009. It is the result of multiple discussions with SIPAG members, Pacheedaht First Nation and Teal, including a field trip to the Pacheedaht village.

Teal has been actively locating cultural cedar since January 2006. At the time of writing the inventory was estimated to be over 500 trees.

### Strategy

Teal incorporates cedar conservation into planning. Trees are preferably selected from previously constrained areas, such as Riparian Reserve areas or Old Growth Management Areas in order to limit the impact on the timber resource and minimize constraints on harvesting in the present and future. Future, long term accessibility is considered when trees or areas are selected. Teal's layout crews incorporate



cedar conservation into field planning. Where potential candidates are located in the field, they are measured and marked with a unique numbering system. Individual trees or small areas located near cutblocks are generally selected.

Alternatively, where resources can be obtained, a Pacheedaht field crew locates trees and small areas where large cedar timber types are indicated in constrained areas, such as Old Growth Management Areas or Parks.

## Monitoring

All trees are assessed and recorded using the Pacheedaht Cultural Tree Inventory field card. All trees located within the DFA portion of Pacheedaht traditional territory are then recorded in the Pacheedaht First Nation Cedar Inventory (excel spreadsheet). Pacheedaht First Nation is notified of selected trees.

As funding is available, Pacheedaht field crews monitor selected trees and areas to ensure trees meet the specified size and quality parameters. They may either accept or reject trees, and notify Teal of the status.

## Forecast

In the past four field seasons, Teal crews have identified over 500 trees (approximately 120 trees per field season). It is reasonable to expect similar progress towards the first (3 year) target of 700 trees.

The location of the last 100 trees (to meet the 5 year target of 800 trees) is anticipated to take require more resources as some trees in the inventory may be rejected and need to be replaced, and selection criteria may become more precise in order to meet all the trees specified in the size and quality parameters.

Pacheedaht First Nation has requested a minimum of 1400 trees throughout their traditional territory. The DFA encompass a large portion of Pacheedaht traditional territory, and therefore a large portion of the trees will be located within the DFA. A target of 800 trees within the DFA has been set, however this number may need to be adjusted where resources outside the DFA combined with the inventory inside the DFA do not meet the overall target (i.e., an additional 600 trees must be located within Pacheedaht traditional territory).

