



The **Teal-Jones Group**

Fraser Public Advisory Group
(Fraser PAG)

Soil and Water

Forest License A19201 & Timber
License T0822

Sustainable Forest Management



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Introduction

This document has been created to give members of the Fraser Public Advisory Group (Fraser PAG) relevant background information to participate in identifying and selecting local Values, Objectives, Targets and Indicators for soil and water.

The goal of this meeting is to identify values, objectives, indicators and targets for Soil and Water, considering:

- Quality
- Quantity

In order to aid members and their respective groups, the following information is provided in this document.

- Overview of Soil and Water Resources
- Forest License A19201 & Timber License T0822 (the **Defined Forest Area** or **DFA**) and ecosystem condition and productivity (including a brief description of mandatory indicators that Teal must measure for other commitments or processes e.g., legislative requirements, government policy, etc.)
- Reference set of indicators from the Canadian Council of Forest Minister
- Examples of indicators used by forest companies on Vancouver Island in their Sustainable Forest Management Plans
- Draft indicators and targets for consideration by the Fraser PAG as a basis for discussion and building the sustainable forest management plan

Ideally members will review this package prior to the meeting. This will enable members to:

- Educate themselves (and their group where applicable) on ecosystem condition and productivity
- Bring forth informed ideas and opinions to the meeting
- Participate effectively and efficiently to maximize valuable discussion time at meetings

Please feel free to contact us if you have any questions on this material, or bring your questions to the meeting!



Overview of Soil and Water

Soil and water are essential components of forest ecosystems. Conservation of soil and water refers to measures that maintain the quantity and quality of soil and water within and leaving forested ecosystems.

The primary focus for soil conservation is the maintenance of the living substrate for forest stands or the physical ability of the soil to sustain forest growth and productivity.

Soil properties may be impacted by activities that take soil out of forest production or activities that reduced organic matter levels, compact soil or led to erosion. Sensitive site conditions include riparian zones, wet soils, infertile soils, steep slopes and shallow soils over bedrock.

Water conservation centers on the provision of potable water for human and wildlife use and the provision of suitable aquatic environments for plants and animals.

Aquatic factors refer to both physical and chemical properties: for example, flow patterns, water temperature, aeration, sediment load, and chemistry which provide for aquatic plant and animal life. With respect to aquatic systems, management of stream crossings, watershed management, and riparian areas are required to maintain water flow patterns, waterlevels, and water quality.¹

¹ Canadian Council of Forest Ministers Criteria & Indicators (2003) www.ccfm.org



Forest License A19201 & Timber License T0822: Soil and Water

Soil

Soil conservation is currently legislated through provincial acts and regulations. With respect to forestry operations, legislation aims to

- limit the extent of soil disturbance, caused by harvesting and silviculture activities that negatively affect the physical, chemical, and biological properties of the soil.
- conduct forest practices in a manner that addresses the inherent sensitivity of a site to soil-degrading processes to minimize detrimental soil disturbance, landslides, soil erosion, and sediment delivery to streams.
- limit the area of productive forest land that is occupied by permanent roads, landings, pits, quarries, and trails to the minimum necessary to safely conduct forest practices.

There are legislated limitations on soil disturbance for areas occupied by permanent access structures; and areas occupied by soil disturbance within cutblocks.

Permanent Access Structures

Permanent access structures include on-block roads, landings, gravel pits, borrow pits, quarries and permanent logging trails that are reasonably required for timber harvesting and other forest management activities. To be considered permanent they must satisfy either of the following two conditions:

- they will be required for a long enough time (either continuously or periodically) such that a commercial crop of trees could not be produced on the area they occupy by the time a commercial crop is established in the adjacent cutblock area; or
- they will be constructed through soil or rock that is not suitable (or will be composed of ballast or other material that is not suitable) for necessary soil rehabilitation treatments to grow a commercial crop of trees.

For each cutblock, limits are set on the amount of site disturbance that is attributed to permanent access structures. The maximum proportion of an area that can be occupied by permanent access structures and subjected to soil disturbance must be stated in operational plans. Regulations limit site disturbance due to permanent roads to 7% of the block area. In some circumstances such as when the block size is very small, steep terrain requiring wider roads, or where access through the block is required to reach another block, the 7% limit may be exceeded. If the 7% is to be exceeded, the rationale must be filed.



Soil Disturbance within Cutblocks

Soil hazard ratings and soil characteristics are assessed during field work to determine the sensitivity of the soil and if there are any restrictions on harvesting activities, for example ground based harvesting.

Soil disturbance within cutblocks is categorized as the area occupied by trails, compacted areas, areas of dispersed disturbance (ruts and gouges), and un-rehabilitated temporary access structures. Temporary access structures include corderoed wooden trails for excavators (mats of unmerchantable² logs for machines to walk on), skid trails with repeated trafficking, and excavated trails (often segments of another type of trail to level the running surface or to remove stumps). All temporary access structures must be rehabilitated at the completion of harvesting.

For each cutblock, limits are set on the amount of site disturbance that is acceptable as a result of harvesting activities. For example, where sensitive soils are identified, a maximum of 5% of the cutblock area may be disturbed. Units without sensitive soils have a maximum of 10% of the cutblock area may be disturbed.

Soil disturbance levels specified above may be exceeded on a temporary basis through the construction and use of temporary access structures. Soil disturbance levels will be reduced to within the above standards through the rehabilitation of these structures when they are no longer required.³

Terrain Stability

A professional geoscientist is hired to assess proposed harvesting activities or road building in all areas with indicators of instability, high likelihood of landslides, unstable terrain, or slopes gradients greater than 60%. The assessment will recommend actions ranging from modified techniques for harvesting or road building to deleting areas from the plan.

Where harvesting is proposed within a gully, an assessment is carried out (in accordance with provincial government policy) to determine management actions that may be required to ensure stability of these landscape features.

During periods of heavy rain, all activities on or down slope of areas identified to have risks of landslides, are stopped.

Soil Nutrients

Forest Management activities have the potential to remove significant inputs to the soil in the form of woody debris (e.g., branches, fallen trees, leaves, etc.). To address this harvesting and silviculture activities leave unmerchantable woody debris dispersed throughout the cutblocks where ever possible. In the past, legislation has limited the amount of wood 'waste' that can be

² Unmerchantable woody debris is wood that is too small, or rotten to be utilized in a wood processing facilities.

³ Forest Practice Code Soil Conservation Guidebook May 2001



left within a cutblock via utilization standards (i.e., companies were fined if merchantable timber was left on the block). In recognition of the valuable role that larger pieces of woody debris play in biological diversity, habitat and nutrient inputs, new legislation has been created to allow more flexibility in the types and sizes of woody debris left on site after completion of harvesting activities. Internal reserves and adjacent stands also play a significant role in providing input into cutblocks after harvesting is completed in the form of branches and trees that blow down.

Productivity of the soil is considered at the planning stages of a cutblock. For example, shallow soils over bedrock, where regeneration may be a challenge, are heavily scrutinized and surveyed where required, prior to finalizing block boundaries. Where regeneration challenges exist, foresters may elect to remove the area from harvest or use selected species and/or seedlings sizes and types to address the regeneration challenge. When making these decisions, foresters are aware of the requirement to establish a free growing stand on all harvested blocks.



Water

Riparian Area Management

Riparian habitat occurs next to the banks of streams, lakes, and wetlands and include both the area dominated by continuous high moisture content and the adjacent upland vegetation that exerts an influence on it. Riparian ecosystems contain many of the highest value non-timber resources in the natural forest. Streamside vegetation protects water quality and provides a "green zone" of vegetation that stabilizes streambanks, regulates stream temperatures, and provides a continual source of woody debris to the stream channel. The majority of fish food organisms come from overhanging vegetation and bordering trees while leaves and twigs that fall into streams are the primary nutrient source that drives aquatic ecosystems. Riparian areas frequently contain the highest number of plant and animal species found in forests, and provide critical habitats, home ranges, and travel corridors for wildlife. Biologically diverse, these areas maintain ecological linkages throughout the forest landscape, connecting hillsides to streams and upper headwaters to lower valley bottoms. There are no other landscape features within the natural forest that provide the natural linkages of riparian areas.⁴

The Riparian Management Area consists of a Riparian Management Zone and, where required by regulation, a reserve zone (see figure below). Within the management zone constraints to forest practices are applied. The width of these zones is determined by characteristics of streams, wetlands or lakes, and adjacent terrestrial ecosystems.

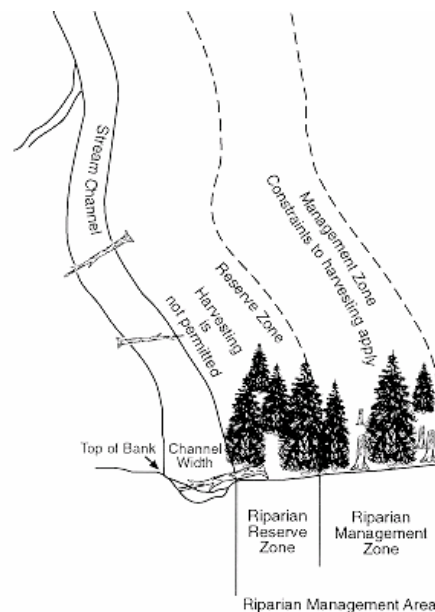


Figure 1: Riparian Management Area showing the application of a Riparian Management Zone and a Riparian Reserve Zone along the stream channel.⁵

⁴ Forest Practices Code Riparian Management Area Guidebook, December 1995

⁵ Forest Practices Code Riparian Management Area Guidebook, December 1995



Prior to harvesting activities, streams are mapped, classified and their characteristics are assessed. Prescriptions are developed based on these classifications, assessments and legislated requirements. For example, width of Riparian Reserve Zone buffers, width of Riparian Management Zones, instructions for falling or yarding around streams and cleaning criteria are included in the operational plan for each cutblock and road.

Fish habitat

An important step in determining the appropriate management prescription for streams is to correctly identify fish bearing streams and those without fish. Correct classification of streams is critical for minimizing the effects of land use practices on stream channels and aquatic ecosystems including fish populations, their habitats, and water quality. Although minor effects on aquatic and riparian ecosystems are difficult to avoid completely, application of diligent management procedures will minimize the harmful effects of forest harvesting upon them.

Teal utilizes many tools to determine the fish bearing status of streams, including inventories, default characteristics (such as connectivity to fish sources, gradient, morphology, etc.) and at times fisheries biologists are called upon to study the habitat.

Water for Domestic Purposes

Water management issues within the DFA are associated with the preservation of water quality, quantity and timing of flow as the principal values in community watersheds.

A designated 'community watershed' is defined by three criteria:

- the water source is from a stream where the water is used for human consumption
- the stream is licensed under the *Water Act* for a waterworks purpose or a domestic purpose controlled by a water users' community
- the drainage area⁶

There are three known (recognized) Community Watersheds within the DFA:

- Gurney Creek (Northeast side of Pitt Lake)
- Norrish Creek (Dewdney)
- Jamieson Creek (north of Boston Bar)

Norrish Creek is a watershed that was designated in 1995 and supplies water to the Central Fraser Valley Water Commission (CFVWC). This water is pumped to Mission and also Abbotsford. The CFVWC also has an intake on Dickson Lake which supplies supplemental water when water levels at the Norrish Creek intake are low. Water from these systems serve approximately 18,000 people.

⁶ Forest Practice Code Community Watershed Guidebook, October 1996



In addition to Community Watersheds there are a high number of Water License holders throughout the DFA that have intakes for domestic water supply. The Inch Creek Hatchery also maintains Water Licenses at Norrish Creek to supply the hatchery.

Management within community watersheds and surrounding water use licenses are guided by legislation and government policies, and generally have stricter requirements surrounding stream management (similar to fish stream management requirements) and in some cases restricted levels of harvesting.

Watersheds

A Watershed Assessment is required before any forest development plan is planned within a Community Watershed. A Watershed Assessment may also be required in watersheds that are determined to have significant sensitivity, significant downstream fisheries values, or licensed domestic water users.

The Watershed Assessment is an analytical procedure to help forest managers understand the type and extent of current water-related problems that may exist in a watershed, and to recognize the possible hydrological implications of proposed forestry activities or restoration in that watershed. The Watershed Assessment considers the cumulative effects of forest practices on the aquatic environment. The assessment of hydrological impacts focuses on:

- 1) potential for changes to peak stream flows;
- 2) potential for accelerated landslide activity;
- 3) potential for accelerated surface erosion;
- 4) channel bank erosion and changes to channel morphology as a result of harvesting riparian vegetation;
- 5) potential for change to the stream channel; and
- 6) interaction of all of these processes, an evaluation of which indicates the sensitivity of the watershed to further forest development.

The assessment also draws attention to natural processes occurring in the watershed. Using the results of a Watershed Assessment, forest managers can make recommendations to prevent or mitigate the impacts of forestry-related activities in the watershed. Results can also be used to guide watershed restoration activities.⁷

One Coastal Watershed Assessment Procedures (CWAP's) is currently under way for the Norrish Creek watershed. Three previous watershed level assessments – different from a CWAP – were completed after the area became established as a Community Watershed. The three assessments were completed in 1996, 1998, and 2001. A CWAP is required before forest development is planned in a Community Watershed.

⁷ Forest Practice Code Coastal Watershed Assessment Procedure Guidebook, April 1999



The Gurney Creek and Jamieson Creek watersheds do not have completed CWAP's as forest development has not been planned in these areas. A CWAP will be necessary before harvesting can be planned.



Corporate Management System

The Teal Jones Group is committed to sustainable management of the resources under their stewardship in a scientifically credible and environmentally, economically and socially responsible manner.

As part of Teal's commitment to sustainable management, they have committed to managing under a **Corporate Management System**, which provides a structured process for the achievement of:

- Continual improvement;
- Legal compliance;
- Prevention of pollution; and
- An environmentally responsible work force.

The Corporate Management System is based on the dynamic, cyclical process of: planning; implementation & operation; checking; and management review. The core elements of the Corporate Management System are designed to transfer management commitments to on the ground practices.

Standard Operating Procedures (SOP) and Emergency Preparedness & Response Plans (EPRP) have been established for forest management activities as control measures to prevent, prepare for, and respond appropriately to activities and incidents that have the potential for significant negative impacts to the environment or jeopardize personnel safety.

Standard operating procedures for harvesting and road building activities are designed to minimize soil disturbance and protect slope stability. Procedures are designed for all activities that have the potential to impact the environment, for example road building, falling and yarding and any activities around streams.



General Guidelines for Choosing Local Values, Objectives, Indicators and Targets

The following is a summary of the CCFM Criteria and CSA Elements, which will serve as a starting point for organizing values and objectives for the DFA. Where local level values and objectives do not fit into CSA Elements, new elements may be developed.

CCFM SFM Criteria 3: Soil and Water

Conserve Soil and water resources by maintaining their quantity and quality in forest ecosystems.

CSA SFM Element 3.1 Soil Quality and Quantity

Conserve soil resources by maintaining soil quality and quantity

CSA SFM Element 3.2 Water Quality and Quantity

Conserve water resources by maintaining water quality and quantity



Canadian Council of Forest Ministers

Indicators

3.1 Physical environmental factors

Physical environmental factors include both soil and water resources. Soil environmental factors refer to the area of productive forest soil where the physical ability of the soil to sustain forest growth has been changed. Proposed measures include the area where land use changes take soil out of forest production or where activities have reduced organic matter levels, compacted soil or led to soil loss through erosion. These reduce the ability of the soil to support forest productivity.

3.1.1 Percentage of harvested area having significant soil compaction, displacement, erosion, puddling, loss of organic matter, etc.

3.1.2 Area of forest converted to non-forest land use, for example, urbanization (ref. 4.2.1)

3.1.3 Water quality as measured by water chemistry, turbidity, etc.

3.1.4 Trends and timing of events in stream flows from forest catchments

3.1.5 Changes in distribution and abundance of aquatic fauna

3.2 Policy and protection forest factors

In order to ensure that terrestrial and aquatic ecosystems are maintained, it is important that policies are in place which provide for specific management practices or the protection of sensitive sites. Sensitive site conditions include riparian zones, wet soils, infertile soils, steep slopes and shallow soils over bedrock. With respect to aquatic systems, policies that address stream crossings, watershed management, and riparian areas will assist in maintaining water flow patterns, waterlevels, and water quality.

3.2.1 Percentage of forest managed primarily for soil and water protection

3.2.2 Percentage of forest area having road construction and stream crossing guidelines in place

3.2.3 Area, percentage and representativeness of forest types in protected areas^b(ref. 1.1.4)

^b As defined by the Canadian Biodiversity Strategy and as established by categories I - VI of the IUCN Guidelines for Protected Area Management



Example Indicators - Other Forest Companies

CCFM Criterion 3 – Conservation of Soil and Water Resources

CSA SFM Element 3.1 – Soil Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
Teal Cedar Products Ltd. (Teal Jones Group)	Southwest Island Timberlands (TFL 46, TLT0910 and FLA52027)	Soil	Protection of forestSoils	Compliance with soil conservation limitations (permanent access structures and soil disturbance)	Full compliance with permanent access and site disturbance limitations as specified within operational plans (or within legislation where not specified within the operational plan)
				Number of landslides originating from roads under permit to Teal	All roads, as specified within site level plans, with high hazard of instability are treated according to recommendations of qualified professionals, inspection and maintenance schedules are followed
				Number of landslides originating from harvesting activities	All areas, as specified within site level plans, with high hazard of instability are treated according to recommendations of qualified professionals
				Activities related to restoration of significant erosion hazards resulting from roads	Mitigate high erosion hazards on a priority basis.



CSA SFM Element 3.1 – Soil Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
Teal Cedar Products Ltd. (Teal Jones Group)	Southwest Island Timberlands (TFL 46, TLT0910 and FLA52027)	Soil	Protection of forestSoils	Number of reportable spills of hazardous materials to land	Zero
Weyerhaeuser	West Island Timberlands	Soil quality	Natural levels of soil productivity and stability are sustained	Openings harvested in which soil disturbance exceeds pre-harvest level as determined by a post-harvest assessment	No more than 5% of any opening OR no more than 1 opening
		Soil cover	Erosion & loss of soil cover are minimized	Area of slides originating in harvested areas or roads	Zero slides originating in harvested areas or roads (post1995 development)
			Erosion & loss of soil cover are minimized	Annual percent of opening areas in access structures	≤ 7% of opening areas in access structures
Western Forest Products Inc.	North Vancouver Island Region	Forest Area	Forest areas lost to other uses (e.g., permanent roads and permanent structures)	Average annual percent in permanent access for DFA	Average annual percent in permanent access for DFA
		Soil Stability	Harvest methods appropriate to site, e.g. Landslide/erosion risk identified and appropriate management applied	Implementation Monitoring	Implementation Monitoring



CSA SFM Element 3.1 – Soil Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
		Soil Productivity	Productive capacity of the soil is maintained and restored	Km of roadside re-vegetated vs. km of roads built	To re-vegetated 75% of roadsides following construction
Western Forest Products Inc.	North Vancouver Island Region	Soil Productivity	Productive capacity of the soil is maintained and restored	Percent of slides seeded and/or planted (within 2 years)	Plant or seed 95% of all reportable slides (with productive soil remaining)
			Productive capacity of the soil is maintained and restored	Implementation Monitoring	Implementation Monitoring
Canadian Forest Products Ltd.	Englewood Division	Protection of forest soils across the landscape	To ensure that areas of moderate and high likelihood of landslides following harvesting or road construction are identified and managed	Operational plans are consistent with terrain stability assessments	Operational plans are 100% consistent with terrain stability assessments, unless the District Manager approves a variance
			Minimize area lost due to permanent roads and permanent structures	Percent of cutblocks at or below site degradation specifications identified in SP's	100% (± 1%) of cutblocks in compliance with site degradation objectives specified in SP's
			Minimize risk of landslides from previously built roads and inactive rail grades	Number of activities related to restoration of significant erosion hazards resulting from road and railways built prior to 1995	Fix significant erosion hazards on pre- 1995 roads on a priority basis. Critical hazards to be fixed within on week of discovery or as soon as seasonal conditions permit



CCFM Criterion 3 – Conservation of Soil and Water Resources

CSA SFM Element 3.2 Water Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
Teal Cedar Products Ltd. (Teal Jones Group)	Southwest Island Timberlands	Water	Protection of water resource	Percent conformance with Coastal Watershed Assessments	100% compliance with Coastal Watershed Assessments
				Number of reportable spills of hazardous materials to water	Zero
	(TFL 46, TLT0910 and FLA52027)	Fisheries	Protection of fisheries resources	Retention of Riparian Reserve Zones	Full retention of Riparian Reserve Zones adjacent to fish bearing streams
				Management of Fisheries Sensitive Features	Complete a strategy for management for fisheries sensitive features by December 2006
Weyerhaeuser	West Island Timberlands	Stream water quality	Natural historic levels of water quality are maintained (Calcium chloride is concern)	To be determined	Bring in Shelley Higman to speak to this and develop indicator.
		Riparian areas (fresh and marine)	Riparian areas are managed to protect water quality, water flow & the habitat	Percent of stream length of <u>S4 fish streams</u> buffered ≥ 15 meters in areas harvested	S4 fish $\geq 85\%$



CSA SFM Element 3.2 Water Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
			needs of land & aquatic species	annually	
		Riparian areas (fresh and marine)	Riparian areas are managed to protect water quality, water flow & the habitat needs of land & aquatic species	Percent of stream length of <u>S4 non-fish streams</u> buffered ≥ 15 meters in areas harvested annually	S4 non-fish $\geq 39\%$
		Riparian areas (fresh and marine)	Riparian areas are managed to protect water quality, water flow & the habitat needs of land & aquatic species	Percent of stream length of S5 streams buffered ≥ 15 meters in areas harvested annually	S5 $\geq 60\%$
		Riparian areas (fresh and marine)	Riparian areas are managed to protect water quality, water flow & the habitat needs of land & aquatic species	Percent of S6 streams with a ≥ 15 meter buffer in areas harvested annually	S6 $\geq 39\%$
Weyerhaeuser	West Island Timberlands	Riparian areas (fresh and marine)	Riparian areas are managed to protect water quality, water flow & the habitat needs of land & aquatic species	Percent of openings harvested where reserve zones (as per table attached) are not maintained (stream crossings are excluded)	Full reserve zones as per table attached %
		Forest hydrologic regimes (including water quantity)	Natural hydrological regimes are perpetuated, & damaged watersheds (water quality or riparian values) are restored	WY will provide ranking and trend line for watersheds in the DFA	To develop a new indicator that measures watershed health



CSA SFM Element 3.2 Water Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
Western Forest Products Inc.	North Vancouver Island Region	Water quality and quantity	Forest management practices minimize impacts on natural seasonal flows	Percent conformance with CWAP's	100% compliance with CWAP's
			Forest management practices minimize impacts on natural seasonal flows	Implementation Monitoring	Implementation Monitoring
			The effects that company activities have on water quality and quantity within freshwater and salt water systems are minimized	Implementation Monitoring	Implementation Monitoring
			Maintain natural conditions and processes of riparian areas	Annual ha's attributed to stand and landscape level retention initiatives (by classification) vs. ha's harvested	Annual ha's attributed to stand and landscape level retention initiatives (by classification) vs. ha's harvested
Western Forest Products Inc.	North Vancouver Island Region	Water quality and quantity	Maintain natural conditions and processes of riparian areas	Dollars spent on watershed restoration	To maintain investment in watershed restoration activities at \$1,000,000 per year
			The effects that company activities have on water quality and quantity flowing to and through karst features is minimized	Percent conformance with karst management prescriptions	100% conformance with karst management prescriptions



CSA SFM Element 3.2 Water Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
			Contaminant spills are minimized and appropriately managed if they occur	Annual number of spills to water (petroleum products)	0
			Contaminant spills are minimized and appropriately managed if they occur	Percent compliance with internal mandatory training requirements	Train 100% of all staff and contractors identified as requiring training
Canadian Forest Products Ltd.	Englewood Division	Naturally clean and clear water	Minimize the effects that Canfor's activities have on water quality and quantity within lakes, streams and wetlands on the DFA	Percent of harvested areas adjacent to streams, lakes and/or wetlands that have riparian management areas that are suited to protection of the associated aquatic habitat	100% of cutblocks adjacent to streams, lakes and/or wetlands must meet or exceed regulatory requirements for riparian management unless the District Manager approves a variance
Canadian Forest Products Ltd.	Englewood Division	Naturally clean and clear water	Minimize the effects that Canfor's activities have on water quality and quantity within lakes, streams and wetlands on the DFA	Number of activities related to restoration of significant erosion hazards resulting from road and railways built prior to 1995	Fix significant erosion hazards on pre- 1995 roads on a priority basis. Critical hazards to be fixed within on week of discovery or as soon as seasonal conditions permit
			Minimize the effects that Canfor's activities have on water quality and quantity	Area managed for cave and karst features, as they are located	Establish management areas for cave and karst features, as they are located



CSA SFM Element 3.2 Water Quality and Quantity					
Company	Operation	Value	Objective	Indicator	Target
			flowing to and through karst features		
			Minimize the chance of contaminant spills	Number of reportable contaminant spills per year that enter a water body	Zero reportable contaminant spills that enter a water body, within legal variances of contaminated sites legislation
		Natural water quantities	Use forest management practices that will minimize impacts on natural seasonal flows	Operational Plans are consistent with Watershed Assessments	Operational plans are 100% consistent with watershed assessments, unless the District Manager approves a variance