

Appendix 19: Glossary



## **S.F.M.P. Glossary**

### **Allowable Annual Cut (AAC)**

The annual rate of timber harvesting specified for an area of land by the Chief Forester of the BC Ministry of Forests. The Chief Forester sets AAC's for timber supply areas (TSA's) and Tree Farm Licences (TFL's) in accordance with Section 8 of the *Forest Act*.

#### **Abiotic**

Not of biological origin (see biotic), e.g., windthrow, forest fires, flooding.

### **Access Management**

The planning, construction, maintenance, use and deactivation of all roads. May also refer to approved methods of restricting access to certain areas to protect other values.

#### **Access Structure**

A structure within a cutblock that

- a) is either a permanent access structure or a temporary access structure, and
- b) was constructed for facilitating the harvesting of timber within the cutblock.

#### **Accumulations**

Term used in reference to waste calculations on post harvested areas. It measures the amount of waste in areas that have been piled and accumulated along the road or on a landing.

#### Act

The Forest Practices Code of British Columbia Act.

#### Adaptive Management

A learning approach to management that incorporates the experience gained from the results of previous actions into decisions. It is a continuous process requiring constant monitoring and analysis of the results of past actions that are used to update current plans and strategies.

# Sustainable Forest Management Plan

### **Aerial Logging**

Harvest method where the logs are carried (fully suspended) from the felling area to roadside or other decking area using some type of aircraft (usually helicopter).

### **Anthropogenic**

Influenced by the impact of man on nature.



### **Applicable Performance Standard (APS)**

The specific level to which a participant or holder of a Timber Sales License must perform a requirement of the Fort St. John Pilot Project Regulation determined in decreasing order of priority as follows

- a) as specified in a higher level plan unless the higher level plan
  - i. was in effect less than 4 months before submission for approval of a Sustainable Forest Management Plan or Forest Development Plan for the areas that specifically addressed the standard of performance and
  - ii. does not otherwise specify that the higher level plan is to prevail despite any Sustainable Forest Management Plan or Forest Development Plan
- b) as specified in a variance with respect to the standard of performance
- c) as specified in a Sustainable Forest Management Plan unless a Forest Development Plan
  - i. was approved for the areas before the Sustainable Forest Management Plan was approved for the area, and
  - ii. specifically addressed the standard of performance
- d) as specified in the Forest Development Plan
- e) as specified in a Site Level Plan

#### **Archaeological Sites**

Locations that contain physical evidence of post human activity for which the application of scientific methods of inquiry (i.e. survey, excavation, data analysis) are the primary source of information.

### Archaeological Impact Assessment (AIA)

Field studies conducted by an Archaeologist used to confirm the presence or absence of archaeological resources as defined by the Heritage Conservation Act where potential conflicts are suspected between archaeological resources and a proposed development. An AIA locates, records and assesses the significance of an archaeological resource where present and assesses the nature and extent of expected impacts and makes recommendations to manage the expected site impacts from forestry activities.

#### Audit

A planned independent and documented assessment to determine whether agreed upon requirements are being met.

### **BC Timber Sales (BCTS)**

Formerly known as the Small Business Forest Enterprise Program. BC Timber Sales is an independent organization within the B.C. Ministry of Forests created to develop Crown timber for auction to establish market price and capture the value of the asset for the public.

### **Bone Dry Unit (BDU)**

A unit of measurement that lumber mills use to measure the amount of byproduct wood chips they can produce. The byproduct chips are used in pulp mills to make paper, etc.

#### **Biogeoclimatic Ecosystem Classification (BEC)**

A hierarchical classification scheme having three levels of integration; regional, local and chronological; and combining climatic, vegetation and site factors. The hierarchical classification includes Biogeoclimatic Zone $\Rightarrow$  sub-zone  $\Rightarrow$  variant $\Rightarrow$  site series.

### **Biogeoclimatic Zone**

A geographic area having similar patterns of energy flow, vegetation, and soils as a result of a broadly homogenous macroclimate. British Columbia has 14 biogeoclimatic zones.

#### **Biogeoclimatic Variant**

A subdivision of a biogeoclimatic subzone. Variants reflect further differences in regional climate and are generally recognized for areas slightly drier, wetter, snowier, warmer or colder than other areas in the subzone.

#### **Biodiversity (or Biological Diversity)**

Diversity of plants, animals and other living organisms in all their forms and levels of organization, including genes, species and ecosystems, and the evolutionary and functional processes that link them.

#### **Biotic**

Relating to living beings, or of biological origin (see abiotic), e.g., insect outbreak, disease.

#### **Blue-listed Species**

In British Columbia, the designation of an indigenous species, sub-species, or population as being vulnerable or at risk because of low or declining numbers or presence in vulnerable habitats. Included in this classification are populations generally suspected of being vulnerable, but for which information is too limited to allow designation in another category.

#### **Boreal Forest**

One of the nine major forest regions of Canada. Typical tree species found in the boreal forest are spruce, pine, aspen and birch.

#### **Botanical Forest Products**

Non-timber based products gathered from forest and range land. There are seven recognized categories: wild edible mushrooms, floral greenery, medicinal products, fruits and berries, herbs and vegetables, landscaping products, and craft products.

#### Cable Logging

Harvest method where the logs are pulled with the use of cables (fully suspended or dragging) from the harvest site to the decking area.

### Canadian Council of Forest Ministers (CCFM)

A council made up of the Ministers, Deputy Ministers and Assistant Deputy Ministers of the various Canadian federal and provincial government agencies responsible for managing Canada's forests. The CCFM provides leadership on national and international issues and sets direction for the stewardship and sustainable management of Canada's forests.

### Category A Block

Blocks reviewed and approved in previous forest development plans.

#### Category I Block

Blocks included in the plan for public information purposes only, and not for official approval. Generally comments received on these blocks will be considered prior to submitting the blocks as proposed Category A blocks (i.e. requested for approval as Category A blocks).

### **Conservation Data Centre (CDC)**

The British Columbia Conservation Data Centre (CDC) (see Blue-listed and Red-listed Species). The staff specialists at the CDC, in co-operation with scientists and specialists throughout the province, have identified those vertebrate animals, vascular plants and plant associations in the province, which have become most vulnerable. Each of these rare and endangered species and plant associations has been assigned a global and provincial rarity rank according to an objective set of criteria established by The Nature Conservancy of the United States, and a status on the provincial Red or Blue lists.

#### Certification

A system of rules or procedures acknowledging conformance to a standard.

#### Cengea Resources (Cengea)

The forest management database used by the Managing Participants of the Fort St. John Pilot Project to track and store the spatial and tabular information associated with their forest development activities and obligations.

### **Culturally Modified Tree (CMT)**

A culturally modified tree (CMT) is a tree that has been altered by native people as part of their traditional use of the forest. Non-native people also have altered trees, and it is sometimes difficult to determine if an alteration (modification) is of native or non-native origin. There are no reasons why the term "CMT" could not be applied to a tree altered by non-native people. However, the term is commonly used to refer to trees modified by native people in the course of traditional tree utilization.

### **Coarse Woody Debris (CWD)**

Sound and rotting logs and stumps that provide habitat for plants, animals and insects and, are a source of nutrients for soil development.

### Community

A group of people living in the same locality and under the same government, a group of people having similar or common interests

#### Coniferous

Cone bearing evergreen trees or shrubs, usually with needle-shaped or scale-like leaves. The wood of coniferous trees is known as softwood (e.g. pine, fir and spruce).

#### **Coniferous Stands**

Those forest stands in which the most predominant trees by volume are coniferous trees. Deciduous trees such as aspen and birch may be present, but are less abundant than the coniferous trees.

An area where, at rotation age, the coniferous trees, collectively, represent a minimum of 75% of the volume of timber on the area.

#### **Conventional Logging**

Harvest method where the logs are pulled using rubber tired skidders or other ground based machines to a roadside decking area, where the logs are loaded onto trucks and transported to the mill.

### Conservation

The controlled use and systematic maintenance, enhancement, restoration and/or protection of natural resources, such as forests, soil, and water systems for present and future generations.

## Sustainable Forest Management Plan

#### Conserve

To protect from permanent loss or irreparable harm, to use carefully or sparingly.

#### Consistent

Not in material conflict.

### Co-operative

A willingness and ability to work with others.

### **Coordinated Resource Management Plan**

A group of management plans dealing with coordinating range resource developments on range tenure areas with other resource users.

### Committee on the Status of Endangered Wildlife In Canada (COSEWIC)

The Committee on the Status of Endangered Wildlife In Canada (COSEWIC) determines the national status of wild Canadian species, sub-species and separate populations suspected of being in danger. It bases its decisions on the best up-to-date scientific information available.

#### **Crop Tree**

A healthy tree that is of a species that is:

- (a) ecologically suitable for the site, and
- (b) commercially valuable.

### Cubic Metre (m<sup>3</sup>)

A measure of standing timber volume, based on solid wood 1 metre x 1 metre x 1 metre. A typical merchantable coniferous tree would have approximately 0.45 to 0.5 cubic metres per tree, although some large trees can exceed 2.0 metres per tree.

#### **Cultural Heritage Resources (CHR)**

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.

#### Cutblock

A specific area of land

- a) identified in a forest development plan, forest operations schedule or a site plan for areas where timber harvesting is to be carried out,
- b) identified in a site plan for any of the following areas that are to be reforested:
  - i. an area where a contravention of section 96 of the Act has occurred;
  - ii. an area that has been naturally disturbed;
  - iii. a backlog area;
- c) identified in a site plan for areas where silviculture treatments on well-growing stands are to be carried out, and
- d) referred to in paragraph (a), (b) or (c) that the District Manager has exempted the Participant from the requirement to prepare the forest development plan or site plan as the case may be.

### **Cut to Length Harvesting (CTL)**

A harvesting method that uses special low ground pressure equipment. The same piece of machinery (harvester) cuts the tree and then bucks it into predefined lengths. A forwarder then brings these pieces to roadside or the landing.

#### Data

Factual information, especially information organized for analysis or used to reason or make decisions; values derived from scientific experiments.

#### **Deactivation**

A term used to describe the process of restoring drainage on roads that are not currently being used. Through the use of ditches across the road surface (perpendicular to the road), water is channeled off the road.

#### **Deciduous**

Trees or shrubs, commonly broad leafed, that shed their leaves annually. The wood of deciduous trees is known as hardwood (e.g. aspen).

### **Deciduous Stand**

An area where, at rotation age, the deciduous trees, collectively, represent a minimum of 75% of the volume of timber on the area.

#### **Defined Forest Area (DFA)**

A specific area of land, forest and water delineated for the purposes of registration of a Sustainable Forest Management system.

#### **Dispersed**

Term used in reference to waste calculations on post harvested areas. It refers to the amount of waste not associated with the road or landing systems (i.e. in the cutblock).

#### Disturbance

A discrete force that causes significant change in structure and/or composition through natural events such as fire, flood, wind, or earthquake; mortality caused by insect or disease outbreaks or by human-caused events such as the harvest of the forest. Disturbances can occur at very small scales or large scales.

### **Equivalent Clearcut Area (ECA)**

Equivalent Clearcut Area (ECA) is the area that has been harvested, cleared or burned, with consideration given to the silvicultural system, regeneration growth, and location within the watershed. ECA and road density are the two primary factors considered in an evaluation of the potential effect of past and proposed forest harvesting on peak flows.

### **Ecosystem**

A community of animals, plants and bacteria and its interrelated physical and chemical environment.

### **Ecosystem Management**

A management system which recognizes and incorporates the natural variability of an ecosystem and attempts to emulate these responses with man-made disturbance while managing forests for a range of values.

### **Environmental Management System (EMS)**

An Environmental Management System is a set of standards established by the International Organisation for Standardization (ISO 14001). This process includes commitment, public participation, preparation, planning, implementation, measuring and assessing performance, and review and improvement of a management system. The incorporation of feedback loops into the process allows for ongoing enhancement of the integrity and performance of the management system, and is designed to lead to continual improvement.

#### Endemic

A disease or organism that is consistently present, but populations are generally not increasing.

#### Ensure

To make sure or certain of an outcome.

#### **Even-aged**

Term given to areas of timber where the tree species are all approximately the same age (+/- 20 years).

#### **Facilitate**

To make easier, applied typically to discussion between parties with varying views.

### Forest Development Plan (FDP)

An operational plan guided by the principles of integrated resource management (the consideration of timber and non-timber values), which details the logistics of timber development over a period of usually five years. Methods, schedules, and responsibilities for accessing, harvesting, renewing, and protecting the resource are set out to enable site-specific operations to proceed.

#### **Fisheries-Sensitive Zone**

A flooded depression, pond or swamp, that:

- a) either perennially or seasonally contains water, and
- b) is seasonally occupied by a species of fish listed in the definition of "fish stream" in the Operational Planning Regulation,
- c) but does not include a wetland or lake that has a riparian management area established under Part 8 of the Operational Planning Regulation, Schedule C of the Pilot Regulation, or a stream.

#### **Forage**

Vegetation that is suitable as food for wildlife or domestic animals - may refer to an area where this vegetation occurs in abundance.

#### **Forest Cover Type**

A stand of trees that have very similar characteristics. Most often grouped together according to tree species, age, and size.

#### Forest Fragmentation

A process whereby large contiguous forest patches are transformed into one or more smaller patches surrounded by disturbed areas. Fragmentation occurs naturally by fire, disease, wind and insect attack.

#### **Forest Licence**

A volume based tenure awarded by the BC Provincial Government which sets out an annual allowable cut a company is allowed to harvest from a specific timber supply area, as well as commitments the company must make, such as operating a manufacturing facility continuously, reforesting cutblocks to government approved standards, payments to the government, etc. Failure to harvest the minimum amount of timber can result in loss of all or a portion of the allowable cut.

### Forest Operations Schedule (FOS)

An operational plan required by the Fort St. John Pilot Project Regulation and described in Part 4 Division 5 of that regulation.

#### **Forest Practice**

Timber harvesting, road construction, road maintenance, road use, road deactivation, silviculture treatment, botanical forest product collecting, grazing, hay cutting, fire use and fire control and suppression.

### Forest Practices Code (FPC)

The Code is a term commonly used to refer to the Forest Practices Code of BC Act, the regulations made by Cabinet under the act and the standards established by the Chief Forester. The term may sometimes be used to refer to field guides as well. It should be remembered that unlike the act, the regulations and standards, field guides are not legally enforceable.

#### **Forest Resources**

Resources and values associated with forests and range including timber, water, wildlife, fisheries, recreation, botanical forest products, forage and biological diversity.

### Forest and Range Practices Act (FRPA)

An act that governs the activities of forest and range licensees in B.C. The statute sets the requirements for planning, road building, logging, reforestation, and grazing.

#### **Forest Stand**

An area of forest that is distinct from the surrounding forest by reason of some combination of topography, species composition, age or other feature.

### Fort St. John Land and Resource Management Plan (LRMP)

The Fort St. John Land and Resource Management Plan approved by government on October 8, 1997 and as amended from time to time.

### Free Growing (FG)

Young trees that are as high or higher than competing brush vegetation with one metre of free-growing space surrounding their leaders. As defined by legislation, a free growing crop means a crop of trees, the growth of which is not impeded by competition from plants, shrubs or other trees. Silviculture regulations further define the exact parameters that a crop of trees must meet, such as species, density and size, to be considered free growing.

### Government Actions Regulation (GAR)

A regulation under the Forest and Range Practices Act that provides the criteria and processes for the creation of localized areas that require special management of certain forest values. These values include wildlife, fish, water quality, visual quality, stream and lake sides and recreation. The regulation also provides for the creation of objectives for managing these areas.

#### **Geographic Information System (GIS)**

Computer systems designed to allow users to collect, manage, and analyze large volumes of spatially referenced information and associated attribute data.

### Goal (as applied to CCFM Criteria and Critical Elements)

A broad, general statement that describes a desired state or condition related to one or more forest values.

#### Grade "Z"

A firmwood reject log where (i) heart rot or hole runs the entire length of the log and the residual collar of the firmwood constitutes less than 50% of the gross scale of the log, (ii) rot is in the log and the scaler estimates the net length of the log to be less than 1.2 m, or (iii) sap rot or charred wood exists and the residual firmwood is less than 10 cm in diameter at the butt end of the log (b). That portion of a log that is less than 10 cm in diameter or that portion of a slab that is less than 10 cm in thickness.

#### Graham River Integrated Resource Management Plan (GRIMP)

A long term strategic plan developed for the Graham River watershed that guides resource development within that area

#### **Green Attack**

Term given to trees that have been attacked by insects but have not yet shown signs of mortality. Usually occurs at the early stage of attack.

#### Greened-up

A cutblock that supports a stand of trees that has attained the green-up height specified in a higher level plan for the area, or in the absence of a higher level plan for the area, has attained a height that is 3 m or greater. Also, if under a silviculture prescription, meets the stocking requirements of that prescription, or if not under a silviculture prescription, meets the stocking specifications for that biogeoclimatic ecosystem classification specified by the Regional Executive Director.

#### Habitat

An area in which a plant or animal naturally lives, part of a broader unit such as the ecosystem.

#### **Harvested Area**

The area within a cutblock, other than that which is occupied by permanent access structures, where timber harvesting has occurred.

### **Harvest Authorization (HA)**

An authorization given by the Ministry of Forests and Range District Manager for a Participant to harvest timber or construct road under 23.1 of the Fort St. John Pilot Project Regulation.

#### Herbaceous

A plant that remains soft and does not develop woody tissue.

#### Herbicide

A controlled product used solely to control or manage weeds.

### **Higher Level Plan (HLP)**

Government approved plans that provide strategic context for operational plans that determine the mix of forest resources to be managed in a given area.

### Hydrology

The science of the waters of the earth, water properties, circulation, principles and distribution.

#### **Hygric**

Term used to describe soils that receive an abundant input of water in the form of soil seepage.

#### Identified Wildlife Management Strategy (IWMS)

Those species at risk that the Deputy Minister of Environment, Lands and Parks or a person authorized by that Deputy Minister, and the Chief Forester, agree will be managed through a higher level plan, wildlife habitat area or general wildlife measure.

### **Indicator (as applied to CCFM Criteria and Critical Elements)**

A measurable variable used to report progress toward the achievement of a goal.

### **Indicator Species**

Species chosen for their ecological, social and economic attributes to monitor habitat supply over time. Based on the LRMP, provincial and federal endangered species lists, the Identified Wildlife Guide and input from the PAC Canfor has selected the following indicator species: grizzly bear, marten, fisher, wolverine, moose, elk, caribou, mountain goat, Blackthroated Green Warbler, Northern Goshawk, Trumpeter Swan and Three-toed Woodpecker.

Or, in a silviculture prescription, species of plants used to predict site quality and characteristics.

#### **Integrated Land Management Bureau (ILMB)**

An organization within the BC provincial government that is tasked with integrated Crown land and resource authorizations, planning dispositions and resource information services

#### Integrated Resource Management (IRM)

a planning and decision making process that coordinates resource use so that the long term sustainable benefits are optimized and conflicts among users are minimized

#### Interior Forest Habitat

Areas generally greater than 600 metres wide which now, or will in the future have continuous forest stand conditions which are relatively consistent. Important because some wildlife species require these larger forested areas to thrive.

### **Joint Management Advisory Committee (JMAC)**

A committee comprised of a subset of Participants and First Nations with interests in the DFA created to discuss, among other things forest management concerns of First Nations and opportunities for affected First Nations within forest industry the Fort St. John TSA

#### Known

When used to describe a feature, objective or other thing referred to in this regulation as known, means a feature, objective or other thing that is:

- a) contained in a higher level plan, or
- b) otherwise identified or made available to a Participant by the District

Manager or designated environment official at least 4 months before the forest development plan, forest operations schedule or site plan for the area was prepared.

### Land and Resource Use Planning

The sub-regional integrated resource planning process for British Columbia. LRMP considers all resource values and requires public participation, interagency coordination and consensus building in land and resource management decisions.

### Land and Resource Management Plan (LRMP)

A plan that provides strategic level direction for managing Crown land resources and identifies ways to achieve community economic, environmental, and social objectives.

#### Landscape

A large area encompassing a wide diversity of adjacent landforms, land cover, habitats and ecosystems.

### Landscape Level Strategy (LLS)

Those activities that are required to be undertaken in order to achieve forest management objectives identified in a sustainable forest management plan.

#### Landscape Unit (LU)

A planning area delineated according to topographic or geographic features such as a watershed or series of watersheds and, as designated by a district forest manager (from: Biodiversity Guidebook, September 1995).

#### **Linear Developments**

Manmade features which extend in a linear manner, e.g. roads, seismic lines or pipelines.

#### Long Run Sustained Yield (LRSY)

The maximum biological capacity of the land base with no recognition of items such as Non Recoverable Losses.

#### Long-term

At a minimum, twice the period in years of the average life expectancy of the predominant tree species up to a maximum of 300 years.

### Long Term Harvest Level (LTHL)

The level at which harvest can occur given management assumptions and rate of harvest. In contrast to LRSY, LTHL takes into account Non Recoverable Losses.

#### Machine Free Zone (MFZ)

Areas within a cut block that forestry equipment may not enter. These are usually associated with streams and wetlands, and are established to prevent soil disturbance and erosion.

### Manage

To handle or direct with a degree of skill; to treat with care; to exercise executive, administrative, and supervisory direction.

### **Managing Participant**

The Participant that manages tenures within the pilot project on behalf of another Participant(s).

### **Mean Annual Increment (MAI)**

The average annual increase in volume of individual trees or stands up to the specified point in time. The MAI changes with different growth phases in a tree's life, being highest in the middle years and then slowly decreasing with age. The point at which the MAI peaks is commonly used to identify the biological maturity of the stand and its readiness for harvesting.

#### Merchantable

At or above minimum specific timber values (i.e. diameter, age and height).

#### Mesic

Term used to describe soil moisture. This refers to sites on which the moisture conditions experienced by plants are primarily under the control of the local climate, with no excessive influx of moisture due to slope position or soil conditions.

#### Mfbm

A measure of lumber produced - a thousand foot board measure. A board foot is 12 inches x 12 inches x 1 inch in thickness. Approximately 240 board feet of lumber can be extracted from 1 cubic metre of timber, with wood chips being made from the edges.

### **Mixedwood Forest**

Forests that include deciduous and/or coniferous species at landscape and/or site levels over time. These forests occur in compositions ranging from intimate mixtures of coniferous and deciduous species to irregular groupings of discrete species in a patchwork distribution.

### Mixedwood Management

A forest management system that incorporates strategies to maintain a deciduous and coniferous component in the forest over time.

#### **Mixedwood Stand**

An area where, at rotation age, the coniferous trees, collectively, and the deciduous trees, collectively, each represents a minimum of 25% of the volume of timber on the area.

#### **Modified Shelterwood**

A shelterwood system designed to protect an existing established understorey stand while removing most or all of the overstorey stand.

### Ministry of Environment (MOE)

The BC provincial government ministry responsible for the management and protection of the province's environmental values such as water and wildlife and fisheries values as well as the management and maintenance of recreational values such as hunting, fishing, trapping and Provincial Parks.

### **Ministry of Forests (MFR)**

Provincial government ministry responsible for the management and protection of the province's forest and range resources for the best balance of economic, social, and environmental benefits to British Columbia.

### Monitoring

The process of checking, observing and measuring outcomes for key variables or specific ecological phenomena against a predefined qualitative objective or standard.

### Muskwa-Kechika Management Area (MKMA)

A designated area of special resource management in north eastern British Columbia which is approximately 6.4 million hectares in size and was established in 1998 under the MKMA Act.

### Net Area to be Reforested (NAR)

The area under a Silviculture Prescription that will be reforested. This excludes areas occupied by permanent roads, areas incapable of growing a stand of trees (rock, wetland etc.), and reserves. This may include areas that did not contain a commercial stand of trees, but because it is capable of growing a stand of trees, will be reforested. See also harvested area.

### **Naturally Disturbed Area**

An area where timber has been damaged or destroyed by causes other than harvesting.

### **Natural Disturbance Types (NDT)**

Characterize areas with different natural disturbance regimes. Natural stand initiating disturbances are those processes that largely terminate the existing forest stand and initiate secondary succession in order to produce a new stand. Native species have adapted to the historical extent and distribution of these events, so timber harvesting patterns which approximate the patch sizes and distribution of natural disturbances are desirable. The boreal forest is in the NDT 3, which is characterized primarily by very large fires, often hundreds or thousands of hectares in size.

### **Natural Disturbance Unit (NDU)**

Spatially defined areas within the Ministry of Forests and Range Northern Interior Forest Region that have had landscape level biodiversity targets established for them for the management of forest resources on the landscape level so that the predominant natural disturbance of the area and its effects can be emulated.

#### **Net Forest Landbase**

That portion of the land that can potentially produce commercial forests. It includes both mature forests, immature and new forests, and potentially productive land which presently does not have forests established.

### Net Area to be Reforested (NAR)

The area on which the licensee is responsible for establishing a free growing crop of trees. This figure is the sum of Standard Unit (SU) areas. The NAR does not include any man caused non-productive areas, reserves of immature trees, and natural non-productive areas that are large enough to stratify and map, as well as non-commercial brush areas greater than 4 hectares that are not deemed to be the obligation of the licensee. Non-productive or non-commercial areas that are too small to stratify are included in the SU area.

### Northern Interior Vegetation Management Association (NIVMA)

A forest industry co-operative initiated by major forest products companies in northern BC and Alberta, the BC Ministry of Forests and Range, the Canadian Forest Service, the University of British Columbia and the University of Alberta. NIVMA uses a common monitoring protocol to track plantation and managed stand development and performance.

### **Non-Commercial Brush (NCBR)**

Describes a potentially productive forest site that is occupied by shrubs and other deciduous species that are not utilized commercially.

### Non-harvestable Land Base (NHLB)

Area not considered part of the timber harvesting land base. This would include areas excluded from contributing to timber supply during the TSR process, such as parks, riparian areas, inaccessible areas, inoperable areas, non-merchantable forest types, low productivity sites, recreation features, and environmentally sensitive areas.

#### Non Productive (NP)

Land that is incapable of growing a merchantable stand within a reasonable length of time.

### Non Recoverable Losses (NRL's)

Losses of timber due to fire, insects or windfall that are either too small or too inaccessible to be retrieved for lumber production.

### Not Satisfactorily Restocked (NSR)

Productive forest land that has been denuded and has not been regenerated to the specified stocking standards for the opening.

#### **Notice of Intent to Treat (NIT)**

A notice required under the Integrated Pest Management Act that is required to be published annually that describes areas to be treated under a Pest Management Plan

### Objective (as applied to CCFM Criteria and Critical Elements)

A clear, specific statement of expected quantifiable results to be achieved within a defined period of time related to one or more goals. An objective is often stated as a desired level of an indicator.

Note: In the context of the Forest and Range Practices Act, objective is a statement of management direction applied to forest resources.

### Old Growth Management Area (OGMA)

Defined in the Forest Practices Code of British Columbia Act Operational Planning Regulation as an area established under a higher level plan which contains or is managed to replace structural old growth attributes.

Old growth forests on BC's coast are characterized by the following:

- a) Two or more tree species of variable sizes and spacing;
- b) Large live trees;
- c) Patchy understorey;
- d) A deep, multi-layered crown canopy with gaps;
- e) Standing dead trees (snags) and coarse woody debris of variable sizes.

#### **Old Growth**

A climax forest that contains live and dead trees of various sizes, species, composition and age class structure. The age and structure of old growth forests varies significantly by forest type and from one biogeoclimatic zone to another (from: Biodiversity Guidebook, September 1995).

### **Operational Plan**

A plan describing the logistics for forestry development. Methods, schedules and responsibilities for accessing, harvesting, renewing and protecting the resource are set out to enable site specific operations to proceed. Includes Forest Development Plans, Forest Operations Schedules, Sustainable Forest Management Plans, Site Level Plans, Access Management Plans, Range Use Plans Silviculture Prescriptions and Stand Management Prescriptions.

### **Participant**

The BCTS program or a major forest tenure holder who has consented in writing to take part in the pilot project. Currently this includes those listed in Section 2.1 of this SFMP.

#### **Performance Indicator**

A measurable variable used to report progress toward the achievement of a goal.

### Permanent Access Structure (PAS)

A road, landing, logging trail, pit, quarry or other similar structure in a cutblock that

- a) is constructed by a Participant or holder of a Timber Sale License and is
  - i. required to be used for timber harvesting or other forest management activities and whose use will continue long enough to prevent the production of a commercial crop of trees on the area occupied by the structure that will be harvestable concurrently with the crop of adjacent trees, or
  - ii. either constructed through material that is not suitable, or contains materials that are not suitable, for use in carrying out the soil rehabilitation treatments necessary to grow a commercial crop of trees, or
- b) was constructed by a person other than a Participant or holder of a Timber Sale License.

### Pest Management Plan (PMP)

A plan that describes

- b) a program, for managing pest populations or reducing damage caused by pests, based on integrated pest management, and
- c) the methods of handling, preparing, mixing, applying and otherwise using pesticides within the program;

### **Pilot Project**

For the purposes of this SFMP, means the Fort St. John Forest Practices Pilot Project authorized under Section 221.1, Forest Practices Code Act and approved by the Government of British Columbia.

### **Preferred and Acceptable Species**

Preferred and acceptable tree species are those commercial tree species that are suited to the growing conditions of the site, and are identified in the Silviculture Prescription.

### **Prescribed Broadcast Burning**

Term given to the act of burning a large area (i.e. harvested cutblock) to minimize the amount of slash or reduce the fire hazard thus allowing a better area for planting.

### **Proposed Roads**

Planned roads that have not been previously approved in a forest development plan.

#### **Protected Area**

An area protected by legislation, regulation, or land-use policy to control the level of human occupancy or activities.

Note: "Categories of protected areas include protected landscapes, national parks, multiple us management areas, and nature (wildlife) reserves" (The State of Canada's Forests 2001/2002), also includes "sites of biological significance" (i.e. critical areas for wildlife habitat, sensitive sites, and unusual or rare forest conditions, as established according to scientific and traditional criteria).

### **Public Advisory Group (PAG)**

For the purposes of this proposal, means the group established under the Fort St. John Pilot Project Regulation to provide advice to the Participants regarding the Sustainable Forest Management Plan and to review Pilot Project Annual Reports, and the results of Pilot Project audits.

#### **Qualified Auditor**

A person who is competent to assess compliance with this regulation.

### **Qualified Registered Professional (QRP)**

With respect to an activity for which this plan or the Fort St. John Pilot Project Regulation requires a qualified registered professional, a person who

- a) has the education and experience that is appropriate to carry out the activity, and
- b) is a member of, or licensed by, a regulatory body in British Columbia that has the legislated authority to regulate its members or licensees carrying out the activity.

### Quantify

To make explicit the logical quantity of; to determine, express or measure the quantity of.

### **Red-listed Species**

In British Columbia, the designation of an indigenous species, sub-species, or population as endangered or threatened because of its low abundance and consequent danger of extirpation or extinction. Endangered species are any indigenous species threatened with imminent extinction or extirpation throughout all or a significant portion of their range in BC. Threatened species are any indigenous species that are likely to become endangered in BC if factors affecting that vulnerability are not reversed.

#### Reforest

To establish on a harvested area, a naturally disturbed area or a backlog area, as the case may be, within the reforestation period, a stand of crop trees that meets or exceeds the stocking requirements for the area; a well-growing stand in accordance with section 35 of the Pilot Regulations.

#### **Reforestation Period**

The period specified in a site plan within which an area must be reforested.

### Regeneration Delay

The maximum time allowed in a prescription, between the start of harvesting in the area to which the prescription applies, and the earliest date by which the prescription requires a minimum number of acceptable well-spaced trees per hectare to be growing in that area.

### Regional Executive Director (RED)

A regional manager employed in the Ministry of Forests and Range.

### Regional Manager

A regional manager employed in the Ministry of Environment.

### Regional Protected Areas Team (RPAT)

a group of representatives from local government agencies tasked with identifying potential protected areas.

### **Registered Seed**

Seeds which are tested to standards for germination and quality, from a healthy source and ensures the uses of local seed sources.

#### Rehabilitate

To restore to a stable condition and to a condition that does not prevent the reforestation requirement from being met.

### **Resource Agencies**

Any government agency, ministry or department having jurisdiction over a resource that may be affected by any activity or operation proposed under a higher level plan or plan required under this regulation.

### **Resource Management Zone (RMZ)**

A land use designation category under the Forest Practices Code that establishes strategic objectives and special requirements to guide subsequent sub-regional, local and operational planning.

### **Resource Management Zone Objectives**

Statements that apply to specific resource management zones and are derived by the LRMP working group to sustain or enhance identified resource values.

### Riparian Area

In proximity to the edge of rivers, streams, lakes and wetlands.

### **Riparian Assessments**

The evaluation of watercourses or wet areas to determine if it can be classified into one of the Riparian Classes, and if so, whether they are fish bearing or not. Management requirements for reserve zones and management zones depend on the assessed fisheries values and size of the stream.

### Riparian Classes

Determined from riparian assessments, streams are classified as follows: S1-fish bearing >20 metres wide; S2 fish bearing 5-20 m wide; S3 fish bearing 1.5 to 5 metres wide; S4 fish bearing < 1.5 metres wide; S5 not fish bearing; >3 metres wide; S6 not fish bearing < 3 metres wide.

### Riparian Management Area (RMA)

An area of a width determined in accordance with Schedule C of the Pilot Regulations that is adjacent to a stream or wetland or a lake with a riparian class of L3, and consists of a riparian management zone and, depending on the riparian class of the stream, wetland or lake, a riparian reserve zone.

### Riparian Management Zone (RMZ)

An area adjacent to a stream, wetland or lake where constraints to forest practices apply for the purpose of maintaining the integrity of the stream, wetland or lake and associated wildlife habitat.

That portion of the riparian management area that is outside of any riparian reserve zone, or if there is no riparian reserve zone, that area located adjacent to a stream, wetland or lake of a width determined in accordance with Schedule C of the Pilot Regulations.

### Riparian Reserve Zone (RRZ)

An area adjacent to a stream, wetland or lake, within the Resource Management Zone, where no logging may occur unless consistent with an approved SFMP.

That portion, if any, of the riparian management area or lakeshore management area located adjacent to a stream, wetland or lake of a width determined in accordance with Schedule C of the Pilot Regulations.

#### **Road Deactivation**

The process of modifying an existing road which will not be used for a period of time to minimize access and environmental effects through such measures as water bars, removing bridges and culverts, reseeding with grass or trees, or rollback of slash onto the running surface. The extent of road deactivation is determined by the amount of time the road is not required for use, and the potential risks to the environment posed by the road.

### **Recreation Opportunity Spectrum (ROS)**

A recreation opportunity is the availability of choice for someone to participate in a preferred recreation activity within a preferred setting and enjoy the desired experience.

#### Rotation

Broadly, the time needed from regeneration of a crop of trees through to harvestable timber. Can be classified under financial, technical, biological or ecological parameters.

### Satisfactorily Restocked (SR)

Productive forest land that has been denuded and subsequently regenerated to the specified stocking standards in the silviculture plan or prescription.

#### Scale

Defined on the basis of elements such as size, shape and distribution of ecosystem components.

### **Selection Silviculture System**

A silviculture system that removes mature timber either as single scattered individuals or in small groups at relatively short intervals repeated indefinitely, where the continual establishment of regeneration is encouraged and an uneven-aged stand is maintained. As defined in the Code's Operation Planning Regulation, group selection removes trees to create openings in a stand less than twice the height of mature trees in the stand.

### **Sequential Clustered Development**

The scheduling of operable timber into groups of neighbouring blocks with a single access route, usually within a subdrainage, with each group being developed in sequence over the full harvest cycle. A one pass, one entry harvesting system which concentrates harvesting, thereby minimizing the amount of new access being created, and reducing the amount of forest fragmentation.

### **Seral Stages**

The stages of ecological succession of a plant community over time.

### Shelterwood Silviculture System

A silviculture system in which trees are removed in a series of cuts designed to achieve a new even-aged stand under the shelter of remaining trees.

#### Siltation

The act of introducing foreign substances into a stream or wetland. Usually comes as a result of eroding stream banks.

#### **Silviculture**

The art, science and practice of controlling the establishment, composition, health, quality and growth of vegetation of forest stands.

### Silviculture Prescription (SP)

A site-specific operational plan or site plan that prescribes the nature and extent of timber harvesting and silviculture activities that are designed to achieve desired forest management objectives including reforestation of a free growing stand to specified standards.

### Site Degradation

Productive forest land significantly degraded or permanently lost to forest production.

### Site Index (SI)

An expression of the forest site quality of a stand, at a specified age, based either on the site height, or on the top height (height of the largest diameter tree on a 0.01 ha plot, providing the tree is suitable), which is a more objective measure (FP Code). The measure of the relative productive capacity of a site for a particular tree species, based on height at a given reference or base age (50).

### Site Level Plan (SLP)

A plan describing the logistics for forestry development prepared under the Fort St. John Pilot Project regulation, but excluding Forest Development Plans. Includes silviculture prescriptions, stand management prescriptions, road deactivation prescriptions, road layout and design and road deactivation prescriptions.

#### Site Series

Variation in site conditions encountered within a biogeoclimatic unit is accommodated within the site classification of BEC. The site series describes all land areas capable of supporting specific climax vegetation. This can usually be related to a specified range of soil moisture and nutrient regimes within a subzone or variant, but sometimes other factors, such as aspect or disturbance history, are important determinants as well. A classification of site series for most of the biogeoclimatic units of the province has been developed by the BC Ministry of Forests and is presented in regional field guides.

### **Small Business Forest Enterprise Program (SBFEP)**

The government program administered by the Ministry of Forests that facilitates the entering into agreements under the Forest Act that generate small business forest enterprise revenue. Now referred to as B.C. Timber Sales.

### Special Management Zone (SMZ)

The Fort St John LRMP has Special Management Zones based on major resource values to be given a high priority in land and resource planning and development. Resource development is permitted but must consider and address all significant values identified. SMZ include wildlife habitat and wilderness recreation, major river corridors, and culture and heritage.

### Snag

Standing dead tree or part of a dead tree.

#### Soil Disturbance

The portion of the harvested area where

- a) the area has been altered by timber harvesting or related forest practices, and
- b) that alteration inhibits reforestation of the area.

### **Spatial**

Pertaining to the physical size, location, pattern and distribution.

### **Spatial Distribution**

The distribution of openings over a landscape, usually in reference to natural disturbance patterns, or to logging. Logging that mimics the natural spatial distribution of natural disturbance patterns is considered to minimize long term effects on wildlife and ecosystems.

#### Stakeholder

Individual, organization or other entity concerned with or by management activities on a given forest area.

#### Stand Level

The level of forest management at which a relatively homogeneous land unit can be managed under a single prescription, or set of treatments, to meet welldefined objectives.

#### Standards Unit (SU)

An area within a cutblock that is subject to uniform: limits for soil disturbance and regeneration dates, stocking standards, free growing dates and free growing heights.

### **Stocking Requirements**

For an area under a site plan, the stocking requirements specified in the site plan for that area.

### Strategic

Broad scope using generalities, not specifics.

#### **Stub Trees**

Snags or live trees that are cut off during harvesting at heights of 3 to 5 metres by feller bunchers, to provide vertical structure and coarse woody debris for wildlife use in the new forest.

#### Stumpage

Price charged for the right to harvest timber from publicly owned forest land.

### Sustainability

The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time. Applied more broadly, the ability of society to maintain a balance of economic, social and ecological values over time.

### Sustainable Forest Management (SFM)

Management to maintain and enhance the long-term health of forest ecosystems, while providing ecological, economic, social and cultural opportunities for the benefit of present and future generations.

### Table Interpolation Projection Program For Stand Yields (TIPSY)

A program that interpolates data from TASS (tree and stand simulator) - a computer model that simulates the growth of individual trees and stands. This program is based on growth trends observed in fully stocked research plots growing in a relatively pest free environment. The yields will be very close to the potential of a specific site, species and management regime.

### **Temporary Access Structure**

An access structure, the area under which will be reforested.

### **Terrain Stability Map**

Terrain mapping is a method to categorize, describe and delineate characteristics and attributes of surficial materials, landforms, and geological processes within the natural landscape. Terrain stability mapping is a method to delineate areas of slope stability with respect to stable, potentially unstable, and unstable terrain within a particular landscape. Terrain stability map polygons indicate areas or zones of initiation of slope failure.

#### Timber

Timber means trees, whether standing, fallen, living, dead, limbed, bucked or peeled (Forest Act)

### Timber Harvesting Land Base (THLB)

The portion of the total area of a management unit considered contributing to, and being available for, long-term timber supply. The harvesting land base is defined by reducing the total land base according to specified management assumptions.

### Timber Range Action Plan (TRAP)

A plan completed between Forest Licensees and Range Licensees to mitigate or minimize the impacts of one licensees activities on the other on overlapping forest and range tenures.

### **Timber Supply Analysis**

An assessment of future timber supplies over long planning horizons (more than 200 years) by using timber supply models for different scenarios identified in the planning process.

### Timber Supply Area (TSA)

An administrative boundary determined by the Ministry of Forests in which annual allowable cuts are determined, and from which timber harvesting rights may be awarded. Forest Licence A18154 provides harvesting rights only to timber within the Fort St. John timber supply area.

### **Timber Sales Office (TSO)**

The head office for each BC Timber Sales Business Area.

### **Timber Sales Manager (TSM)**

The senior manager for a BC Timber Sales Business Area

### Timber Supply Review (TSR)

The timber supply review program regularly updates timber supply in each of the 37 TSA's and 34 TFL's areas throughout the province. By law, the Chief Forester must re-determine the AAC at least once every five years to ensure AAC's are current and reflect new information, new practices and new government policies.

### **Topographic**

The general configuration of the land surface, including relief and position of natural and man-made features.

### Tree and Stand Simulator (TASS)

A three dimensional growth simulator that generates growth and yield information for even-aged stands of pure coniferous species of commercial importance in coastal and interior forests of British Columbia.

### Ungulate

A hoofed mammal (eg. deer, elk, moose, caribou).

### **Ungulate Winter Range (UWR)**

# Sustainable Forest Management Plan

An area that contains habitat that is necessary to meet the winter habitat requirements of an ungulate species. Sections 9 and 12 of the *Government Actions Regulation* of the *Forest and Range Practices Act* outline the regulatory authority for establishing UWR

### Value (as applied to CCFM Criteria and Critical Elements)

A principle, standard, or quality considered worthwhile or desirable.

### **Vegetation Resources Inventory (VRI)**

A photo-based, two-phased vegetation inventory program consisting of:

• Phase I: Photo Interpretation

Phase II: Ground Sampling

### **Vertical Structure**

Those components of a forest which are vertically oriented, eg. live and dead trees of various heights and species.

#### "Vision"

A registered herbicide that targets annual and perennial weeds and hardwoods (grass, aspen birch, etc.) while leaving coniferous trees undamaged. The herbicide is the forestry version of "Roundup", which is used extensively on agricultural and urban areas for the control of grass and other vegetation.

### **Visual Quality Objective (VQO)**

An approved resource management objective that reflects a desired level of visual quality based on the physical and sociological characteristics of the area; refers to the degree of acceptable human alteration to the characteristic landscape.

#### Watershed

An area drained by a particular stream or river. A large watershed may contain several smaller watersheds.

### Waste

The volume of timber left on the harvested area that should have been removed in accordance with the minimum utilization standards in the cutting authority. It forms part of the allowable annual cut for cut-control purposes.

### Waterbody

Any land covered by water.

### Wildlife Habitat Area (WHA)

Spatially defined areas that are necessary to meet the habitat requirements of an Identified Wildlife element. WHAs designate critical habitats in which activities are managed to limit their impact on the Identified Wildlife element for which the area was established. The purpose of WHAs is to conserve those habitats considered most limiting to a given Identified Wildlife element.

#### Windfirm

Areas of forest that are able to withstand the effects of heavy gusts of wind.

#### Windthrow

A tree or trees uprooted by the wind.

#### **Woodlot Licence**

A licence issued by the Ministry of Forests to an individual or group to manage a specific area of Crown timber, plus any private forest land the individual or group owns.

### Wildlife Tree Patch (WTP)

An area specifically identified for the retention and recruitment of suitable wildlife trees. It can contain a single wildlife tree or many. A wildlife tree patch is synonymous with a group reserve.

