



Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Glossary and Acronym List

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# 1 Glossary

## A

**Adaptive management approach:** A learning approach that states intent, provides monitoring and verification of intent, and makes changes to planned or intended activities as required.

**Age Class:** The classification of stands in a forest, or trees in a stand, into a series of ages (e.g. 0 to 4.99 = age class 1). For the FMP, the age class of the AVI stands on the FMA area is defined by the stand age. The stand age is determined by using the FMP base year minus the AVI origin plus five years.

**Age Class Distribution:** Distribution of the amount of area by age class and species group.

**Aeolian:** Well-sorted, poorly compacted, medium to fine sand and coarse silt sediment that has been transported and deposited by wind.

**Aesthetics:** The philosophy concerning judgments made about beauty.

**Afforestation:** The conversion of non-forested land to forested land through the practice of introducing commercial trees species to the site, through appropriate silviculture techniques.

**Alberta Vegetation Inventory (AVI):** A system for describing the quantity and quality of vegetation present. It involves the stratification and mapping of the vegetation to create digital data according to the AVI Standards Manual and associated volume tables.

**Allowable Cut Effect (ACE):** The allocation of anticipated future forest timber yields to the present allowable cut. The effect is typically based on several assumptions about the yields that may develop as a result of activities and decisions taken in the present. Shortening the rotation period, raising the increment, or both, increases the allowable cut.

**Annual Allowable Cut (AAC):** The volume of timber that can be harvested under sustainable forest management in any one year.

**Annual Operating Plan (AOP):** Plans prepared and submitted annually by timber operators describing how, where and when to develop roads and harvest timber. They describe the integration of operations with other resource users, the mitigation of the impacts of logging, the reclamation of disturbed sites and the reforestation of harvested areas.

**Artificial regeneration:** The creation of a new stand by direct seeding or by planting seedlings or cuttings.

**Autecology:** Growth characteristics of specific tree species.

## B

**Berm:** A raised mound of soil.

**Biodiversity:** The variety, distribution and abundance of different plants, animals and other living organisms, the ecological functions and processes they perform, and the genetic diversity they contain at local, regional and landscape levels of analysis.

**Bisequa:** A dark beige colour.

**Broadcast slash buildup:** Slash scattered across a cutblock due to logging practices.

**Broad Cover Group:** Defined by the occurrence of coniferous as determined by AVI:

Coniferous - stands with at least 80% conifer.

Coniferous/Deciduous - stands with at least 50% and less than 80% conifer, and leading species conifer.

Deciduous/Coniferous - stands with at least 30%, and no more than 50% conifer, and leading species deciduous.

Deciduous - stands with less than 30% conifer.

**Buffer:** A protected strip of vegetated land beside roads, watercourses, mineral licks or other important features.

**Buck-For-Wildlife Area:** Area identified for wildlife habitat improvement.

## C

**Carrying Capacity:** The number of individuals in any one species that can live in a habitat without degrading it.

**Chert:** A rock resembling flint.

**Chinook:** A warm dry wind that blows east from the Rockies.

**Clear cut System:** A silviculture system that removes an entire stand of trees from an area of one hectare or more, and greater than two heights in width, in a single harvest operation. With the clearcut system, the opening size and dimensions created are generally large enough to limit significant microclimatic influence from the surrounding stand.

**Coarse filter management:** Forest management at a landscape level or over broad regions aimed at maintaining a range of stands of different size, age and composition to provide habitat for all species.

**Coarse Down Woody Debris:** Sound and rotting logs and stumps that provide habitat for plants and animals, and a source of nutrients for soil structure and development. Generally classified as material greater than 10 centimeters in diameter.

**Colluvial:** Rock or soil material deposited as a result of gravity.

**Common corridors:** Linear land areas established to concentrate utilities and roads and to provide access for resource use and development.

**Commercial Timber Permit:** A timber disposition issued under section 22 of the Forests Act authorizing the permittee to harvest public timber.

**Community Timber Program:** A term used to describe a category of timber use that provides for those operators who harvest volumes through permits.

**Coniferous species:** Are cone bearing plants; pertaining to the class Gymnospermae. In this FMP, it refers to the following tree species used in the processing facilities: white spruce, black spruce, Engelmann spruce, lodgepole pine, balsam fir, alpine fir, and tamarack.

**Coniferous stands:** Forest stands that consist predominately (> 70%) of coniferous tree species.

**Coniferous Timber Quota (CTQ):** A share of the allowable cut of coniferous timber within a forest management unit.

**Constituency:** A group or body that patronizes, supports, or offers representation.

**Constraint:** The restrictions, limitations, or regulation of an activity, quality, or state of being to a predetermined or prescribed course of action or inaction. Constraints can arise from the influence of policies, political will, management direction, attitudes, perceptions, budgets, time, personnel, data availability limitations, or complex interaction of all these factors.

**Cordillera:** A system of usually parallel mountain ranges together with intervening plateaus.

**Criterion:** A distinguishable characteristic of sustainable forest management; a value that must be considered in setting objectives and in assisting performance.

**Cross-ditching:** The practice of constructing ditches across roads to allow for the movement of water from one side of the road to the other.

**Crown charges:** Amounts paid to the Province as a royalty or in consideration of services rendered.

**Crown land:** Land owned by the Province of Alberta.

**Cubic metre:** Unit of measure of the volume of total wood contained in a tree or log, measured as one metre by one metre by one metre of solid wood.

**Cumulative impact:** Additive nature of individual effects.

**Cut control period:** A period of five consecutive forest management operating years or as otherwise agreed to by the Minister and a Company.

**Cut sequence:** The order of harvest operations in time and space.

## D

**Deciduous species:** Belongs to the class Angiospermae. In this FMP, it refers to the following tree species used in the processing facilities: trembling aspen, balsam poplar, and white birch.

**Deciduous stands:** Forest stands that consist predominately (> 70%) of deciduous tree species.

**Deciduous Timber Allocation (DTA):** Percentage of the deciduous annual allowable cut for a management unit, based on either volume or area.

**Decommissioning:** To take out of active service.

**Deleterious:** Harmful.

**Denning sites:** Areas where animals hibernate or raise their young.

**Digital Terrain Model (DTM):** The computerized portrayal of a landform in three dimensions. It involves translating contour lines into digital format for use in the computer. It is also called digital elevation model.

**Disposition:** A lease, license, permit or letter of authority issued under provincial legislation for activities either surface or sub-surface.

**Disturbance:** A force that causes significant change in structure and or composition of a habitat.

**Disturbance modeling:** Computer program that models the degree of some type of disturbance.

**Diversity:** An assessment of the number of species present, their relative abundance in an area, and the distribution of individuals among the species.

## E

**Eastern Slopes Policy:** A Policy for Resource Management of the Eastern Slopes. A policy covering about 90,000 km<sup>2</sup> of the eastern slopes of the Rocky Mountains in Alberta. It was first released in 1977 and revised in 1984. The policy presents the Government of Alberta's resource management policy for public lands and resources within the region.

**Ecology:** The science that studies the interrelationships, distribution, abundance, and contexts of all organisms and their interconnections with their living and non-living environment.

**Ecological integrity:** Unimpaired, functional processes.

**Ecoregion:** A geographic area that has a distinctive, mature ecosystem on reference sites plus specified edaphic variations as a result of a given regional climate.

**Ecosite:** Ecological units that develop under similar environmental influences (climate, moisture, and nutrient regime). It is a functional unit defined by moisture and nutrient regime.

**Ecosystem:** A dynamic complex of plants, animals, and micro-organisms and their non-living environment interacting as a functioning unit.

**Ecotone:** A transition area between two communities which has characteristics of both as well as characteristics of its own.

**Edaphic:** Pertains to the soil, particularly with respect to its influence on plant growth and other organisms together with climate.

**Edge:** Where plant communities meet.

**Element:** A concept used to define the scope of each CCFM SFM criteria. The elements serve to elaborate and specify the scope of their associated criterion.

**Endangered:** In jeopardy of continuing existence.

**Endangered, threatened and rare species:** Classifications of the status of species populations as determined by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Endangered indicates any indigenous species of fauna or flora that is threatened with imminent extirpation or extinction throughout all or a significant portion of its Canadian range. Threatened indicates any indigenous species of fauna or flora that is likely to become endangered in Canada if the factors affecting its vulnerability do not become reversed. Rare indicates an indigenous species of fauna or flora that, because of its biological characteristics or because it occurs at the fringe of its range, or for some other reasons, exists in low numbers or in very restricted areas in Canada but is not a threatened species.

**Endangered wood:** Timber that has or will be impacted by some natural or man-made process.

**Enhanced forest management (EFM):** Undertaking silviculture efforts that exceed Provincial requirements or liabilities.

**Establishment period:** The time elapsing between initiation of regeneration and its acceptance according to defined reforestation standards in the Timber Management Regulation.

**Establishment stage:** The early stage of reforestation where a crop of trees is initiated.

**Even-aged Stand:** A forest stand comprising trees with less than a 20-year difference in age.

**Even flow:** In harvest scheduling, the requirement that the harvest level in each period be equal to the harvest level in the preceding period.

**Extensive silviculture:** Silviculture practices which, at the minimum, meet current provincial reforestation standards and support the current annual allowable cut.

## E

**Fauna:** Animal life.

**Feature species:** Those species that are rare, threatened, endangered or of social value.

**Fine filter management:** Specific habitat management for a single or a few species rather than broad management at a landscape level to maintain a range of habitat opportunities for all wildlife species (coarse filter).

**Fire cycle:** The number of years required to burn over an area equal to the entire area of interest.

**Flora:** Plant life.

**Forecast:** A prediction of future conditions and occurrences based on the perceived functioning of a forest system. A forecast differs from a "projection" which is a prediction of anticipated future conditions based on an extrapolation of past trends.

**Forest:** A collection of stands that occur in similar space and time.

**Forest Access Zone:** An area designated by the Provincial government that has specific access constraints in place.

**Forest Advisory Committee (FAC):** A collection of stakeholder representatives for Weyerhaeuser's FMA area that give advice and direction to the company and Alberta Sustainable Resource Development to

ensure that integrated forest resource management is practiced, to sustain the health and integrity of the land and forests for future generations.

**Forest connectivity:** A measure of how well different areas (patches) of a landscape are connected by linkages such as habitat patches or corridors of like vegetation.

**Forest health:** As a specific condition, the term refers to a growing forest having many or all of its native species of plants and animals. As a management objective, it refers to maintaining or restoring the capacity of a forest to achieve health.

**Forest Management Agreement (FMA):** Agreement between the Province and a company to grow, harvest and reforest on a landbase tenure.

**Forest Management Area (FMA):** Refers to the tract of forest land over which a company has been given management rights for establishing, growing and harvesting trees on a perpetual sustained yield basis for a defined period of time.

**Forest Management Plan (FMP):** A strategic long-term plan that is the foundation for all forest management activities upon the FMA. “Forest Management Plan” is a generic term referring to both Forest Management Unit plans prepared by the government, and Forest Management Plans prepared by industry.

**Forest Management Unit (FMU):** A defined area of forest land located in the Green Area of the province designated by the Department to be managed for sustainable forest management.

**Forested land:** Land is considered to be forested if it supports tree growth, including seedlings and saplings.

**Forests Act:** Revised Statutes of Alberta 1980, Chapter F-16 as amended from time to time. It establishes the authority and means by which the Minister of Environment administers and manages timber on public land for sustained yield. It describes how timber allocations can be made on crown land and empowers the Minister to enforce the Act and associated regulations.

**Fragmentation:** The process of transforming large continuous forest patches into one or more smaller patches surrounded by disturbed areas. This includes loss of stand area, loss of stand interior area, changes in relative and absolute amounts of stand edge, and changes in insularity. This occurs naturally through such agents as fire, landslides, windthrow and insect attack. It also occurs due to anthropogenic activities such as timber harvesting, road building and wellsite development.

**Free-to-grow:** Stands that meeting stocking, height, and/or height growth rate as indicated by specifications or reforestation standards, and judged to be essentially free from competing vegetation.

**Furbearer:** Animals whose pelts and carcasses have a legal trade value.

## G

**General Development Plan (GDP):** A five-year operating plan prepared, updated and submitted annually by the timber harvest operator.

**Glaciofluvial deposits:** Stratified outwash transported and deposited by glacial meltwaters that flowed upon, within, under, or beyond the glacier.

**Goal:** Broad statements of intent or direction relative to an aim, end or state of being to be achieved at some point in the future or maintained over a period of time.

**Grazing disposition:** An authorization issued under authority of the Public Lands Act for the purpose of domestic livestock grazing on Crown land.

**Green Area:** Area designated by the Province whose primary function is timber production.

**Green-up:** The process of re-establishment of vegetation following logging.

**Green-up period:** The time needed to re-establish vegetation after disturbance. Specific green-up periods may be established to satisfy visual objectives, hydrological requirements, or as a means of ensuring re-establishment of vegetation (for silviculture, wildlife habitat, or hydrological reasons) before adjacent stands can be harvested.

**Ground rules:** Provide direction to timber operators and employees of Alberta Sustainable Resource Development for planning, implementing and monitoring timber operations on the FMA. They highlight important management principles, define operating and planning objectives, and present standards and guidelines for timber harvest, road development, reclamation, reforestation and integration of timber harvesting with other forest users.

**Growing stock:** The sum (by number, basal area, or volume) of trees in the forest or a specified part of it.

**Growth and yield:** In timber management, the "yield" is the volume of wood available for harvest at the end of a rotation, usually measured as unit volume per unit area (e.g. Cubic meters per hectare). The "growth" is the rate and yield of biomass produced by plants regardless of function or use.

**Guidelines:** A set of recommended or suggested methods or actions that should be followed in most circumstances to assist administrative and planning decisions, and their implementation in the field. Note that guidelines cannot, by definition, be mandatory.

## H

**Habitat:** The place where a plant or animal naturally or normally lives and grows.

**Harvest area:** A cutblock or cutover.

**Harvest area orientation:** Alignment of harvest area for some purpose, normally perpendicular to the prevailing wind.

**Harvest design:** A forest harvesting plan for a given area which may include in addition to the initially sequenced cutblocks, reserves for fish and wildlife or protection of unique sites, a reforestation program, watershed and riparian area protection, and roading and reclamation requirements.

**Harvest design area (HDA):** Geographically defined area for planning purposes.

**Hectare:** Area of land measuring 10,000 square meters.

**Hibernacula:** A sheltered place where snakes spend the winter.

**Historical resources:** Man-made objects of historical significance.

**Hog fuel:** A by-product of the processing facilities, which is used to generate heat and/or electricity. Hog fuel can be made up of bark, saw dust, and trim blocks.

**Improved stock:** The result of long-term tree breeding programs geared towards selecting for heritable characteristics that are desired.

## I

**Incidental:** Having a minor role in relation to a more important thing or event.

**Increment:** Increase in volume of a particular tree or stand overtime.

**Indicator:** A variable that measures or describes the state or condition of a value

**Integrated Resource Management (IRM):** A cooperative and comprehensive approach to the establishment of plans and to the delivery of benefits from the resource base in an efficient and effective manner.

**Integrated Resource Plan (IRP):** A regional plan developed by provincial government agencies in consultation with the public and local government bodies. It provides strategic policy direction for the use of public land and its resources within the prescribed planning area. It is used as a guide for resource planners, industry and publics with responsibilities or interests in the area.

**Issue:** A matter of wide public concern.

## J, K & L

**Lacustrine:** Fine sand, silt, and clay sediments deposited on the lake bed or coarser sands that are deposited along a beach by wave action.

**Landscape:** A heterogeneous land area with interacting ecosystems.

**Landscape diversity:** The size, shape, and connectivity of different ecosystems across a large area.

**Linear disturbance:** The removal of vegetation in a narrow and generally long pattern, such as a road, pipeline, or seismic line.

**Long run sustained yield average (LRSYA):** The hypothetical timber harvest that can be maintained indefinitely from a management area once all stands have been converted to a managed state under a specific set of management activities.

## M

**Mean annual increment (MAI):** The total increment to a given age in years, divided by that age.

**Merchantable:** A standard applicable to stands of timber or to individual trees indicating net usable volume.

**Miscellaneous Timber Unit (MTU):** Portion of a Forest Management Unit set aside for programs to make timber available to small operators.

**Miscellaneous Timber Use Area (MTU):** An area managed by Land and Forest Division to provide timber to operators who harvest small volumes of timber each year.

**Mission:** The reason an organization exists, the societal need it fulfils, and its functional focus.

**Mixedwood stands:** Stands containing both deciduous and coniferous species. Species content of either/or would be greater than or equal to 20% or less than or equal to 80% of the total cover in the canopy.



**Monitor:** The process of checking a situation or operation to validate.

## N

**Natural regeneration:** The renewal of a forest stand by natural rather than human means, such as seeding-in from adjacent stands, with the seed being deposited by wind, birds, or animals. Regeneration may also originate from sprouting, suckering, or layering.

**Natural process:** Naturally occurring function, such as decomposition, fire, etc. **Non-forested land:** Land is considered to be non-forested if it does not support tree growth, including seedlings and saplings.

**Non-productive land:** Forestland currently incapable of producing a merchantable stand within a reasonable length of time.

**Nutrient Cycling:** The circulation or exchange of elements and compounds, such as nitrogen and carbon dioxide, between nonliving and living portions of the environment.

## O

**Objective:** A broad statement describing a desired future state or condition of a value

**Old growth forest:** Forest older than rotation age that contains live and dead trees of various sized, species, composition, and age class structure.

**Operability:** Classification of a forest site based on the potential to harvest the timber on this site. The physiographic characteristics and moisture conditions of the site are critical to this classification, as is the harvesting equipment available and the technology associated with the harvesting operation.

**Operating guidelines:** Rules that define forest management practices.

**Order in Council:** An order made by the Lieutenant Governor or Governor General by and with the advice of the Executive or Privy Council, sometimes under statutory authority or sometimes by virtue of royal prerogative **Oriented Strand Board (OSB):** wood composite product **Own use permits:** Small volume permit issued to individuals for their own use, e.g., post and rails.

## P

**Patch:** A relatively heterogeneous non-linear area that differs from its surroundings.

**Patch retention:** Islands of timber retained within a generally clearcut area.

**Periodic Allowable Cut:** The total of the annual allowable cuts approved for a five-year cut control period.

**Permanent roads:** Roads that will be in use for more than two years.

**Permanent sample plot (PSP):** Plots established for long-term timber growth and yield studies.

**Philosophy:** General understanding of values.

**Physiography:** Pertains to the physical landform characteristics, also known as geomorphology.

**Policy:** A course of action adopted or proposed; prudent conduct.

**Potentially productive:** A site that is capable of growing trees but is currently void of commercial tree species.

**Predictive modeling:** Computer models that forecast outcomes of actions.

**Pre-harvest assessment:** Survey of area prior to harvest to determine pre- and post-logging requirements, such as season of harvest, reforestation tactics, etc.

**Prescribed burning:** Burning planned to provide some type of desired results.

**Principle:** A formal statement that provides a basis for sustainable forest management policy and that serves as a fundamental guide to action.

**Productive landbase:** Area deemed to support forest growth.

**Public Lands and Forests Division (PLFD):** A part of the Department of Alberta Sustainable Resource Development.

## Q

**Quadrant Volumes:** Five year's accumulation of AAC.

**Quota:** A form of timber disposition defined by the Forests Act that allows for the allocation of a portion of the sustainable harvest level determined for a given forest management unit.

**Quota Certificate:** A certificate that entitles the owner to a percentage share of the AAC of a forest Management Unit. This percentage is translated into a fixed round wood volume.

## R

**Range of natural variability:** The range of results that have occurred naturally.

**Range of variability:** Characterizes fluctuations in ecosystem conditions or process over time. It can describe variations in diverse characteristics such as tree density, vertebrate population size, water temperature, frequency of disturbance, rate of change, etc.

**Rare:** Few.

**Reference ecosite:** Site having average characteristics.

**Reforestation:** Process of reestablishing a crop of trees.

**Reforestation deletion:** Stands which are deleted from the timber harvesting landbase due to their relatively low productivity combined with the difficulty of reforesting the sites.

**Reforestation lag period:** The time between completion of timber harvest operations and the establishment of a regenerated stand, based on current procedures for evaluating successful stand establishment.

**Refugium:** Large areas free from trapping and land-use activity.

**Regeneration:** The renewal of a forest or stand of trees by natural or artificial means.

**Retention period:** The length of time between harvesting passes.

**Right-of-way:** A strip of land over which a power line, railway line, road, or other linear disturbance extends.

**Riparian areas:** Those terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial and /or intermittent water, associated high water tables, and soils that exhibit some wetness characteristics.

**Roll-back:** Strippings and debris returned to disturbed areas for reclamation purposes.

**Rotation:** The period of years required to establish and grow timber crops to a specified condition of maturity.

**Rotation Age:** The planned number of years between regeneration of a forest stand and its final harvest.

## S

**Salvage Cut:** A cutting method to remove dead or damaged trees with merchantable wood.

**Scarification:** Silvicultural practice involving the mechanical disruption of the ground surface to expose mineral soil.

**Sedimentation:** Deposit of waterborne material.

**Selection harvest:** An uneven-aged silvicultural system in which selected trees are harvested individually or in small groups at periodic intervals.

**Selective cutting:** A harvest practice in which only trees of a certain species with a specified diameter and/or value are harvested.

**Sensitivity analysis:** An analytical procedure in which the value of one or more parameters is varied and the changes that this produces are analyzed in a series of iterative evaluations. If a small change in a parameter results in a proportionately larger change in the results, the results are said to be sensitive to the parameter.

**Seral stages:** The stages of ecological succession of a plant community from young to old. This is the characteristic sequence of biotic communities that successively occupy and replace each other.

**Silviculture:** The theory and practice of controlling the establishment, composition, structure and growth of forests.

**Silviculture regimes:** Tactics to establish a crop of trees.

**Single-tree retention:** Process of leaving single trees standing in generally clearcut area.

**Site index:** A measure of forest site productivity expressed as the average height of the tallest trees in the stand at a defined index age, typically less than the planned rotation ages. For this FMP, a site index age of 50 years was used.

**Site preparation:** Mechanical preparation of forest soils for reforestation purposes.

**Site productivity:** The mean annual increment in merchantable volume which can be expected for a forest area, assuming it is fully stocked by one or more species best adapted to the site, at or near rotation age.

**Slash hazard reduction:** Process to remove or reduce the buildup of logging slash.

**Snag:** A standing dead tree from which the leaves and most of the branches have fallen.

**Spatial database:** Data referenced to a set of geographical coordinates and encoded in digital format so that they can be sorted, selectively retrieved, statistically and spatially analyzed. The different data planes can be overlaid in virtually any order.

**Special Places:** A Government of Alberta initiative committed to the establishment of a network of Special Places that represent the environmental diversity of the province's six natural regions (20 subregions). The program encompasses a balanced approach to preservation, outdoor recreation, heritage appreciation, tourism and economic development.

**Stand:** A continuous group of trees or other growth occupying a specific area and sufficiently uniform in composition, age, arrangement, and conditions as to be distinguishable from the forest or other growth on adjoining areas.

**Stand structure:** The various horizontal and vertical physical elements of the forest. The physical appearance of canopy and subcanopy trees and snags, shrub and herbaceous strata, and down woody material.

**Stand Tending:** Activities such as thinning, spacing, removal of diseased trees, and weed or brush control, carried out in already established stands.

**Stewardship:** Obligation to manage.

**Stewardship Report:** A report that accounts for all activities, undertaken as a steward of a given article, resource, area or process, related to strategies to achieve stated stewardship goals. Measures of performance are included and linked to plans that express the desired goals.

**Stocking:** A measure of the proportion of an area occupied by trees/seedlings, expressed in terms of percentage of occupied fixed area sample plots.

**Strata:** A multitude of layers or groups.

**Strategy:** Statement of broad activity designed to achieve the goals or objectives.

**Stratum:** A single layer or group.

**Sub-regional Integrated Resource Plans:** A system of Cabinet approved plans incorporating a cooperative and comprehensive approach to decision making relative to the allocation and use of Crown land and resources.

**Succession:** The replacement of one plant community by another in a progressive development towards climax vegetation.

**Successional patterns:** Evolutionary process of vegetation stages.

**Sustainable development:** Development of a resource while maintaining other values.

**Sustainable forest management (SFM):** The maintenance of the ecological integrity of the forest ecosystem while providing for social and economic values such as ecosystem services, economic, social and cultural opportunities for the benefit of present and future generations.

**Sustainable timber management:** Managing the forest to provide a perpetual supply of timber now and into the future.

**Sustained-yield timber management:** The yield a forest can produce continuously at a given intensity of management.

## T

**Tactic:** A method to achieve something.

**Target:** A specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time-limited and quantified, if possible.

**Temporary road:** Temporary roads are those that are part of a cutblock, or connect cutblocks and are built, used and reclaimed before expiry of the AOP, or reclaimed within two years of construction.

**Temporary sample plot (TSP):** an area of established size used in the measurement of trees and other physical characteristics.

**Threatened:** Class of plant or animal life under pressure to maintain existence.

**Timber harvesting landbase:** The timber harvesting landbase is the portion of the total land area of the FMA that can be considered to contribute to and be available for long-term timber supply. It is the landbase remaining after deductions for areas that cannot, should not, or will not be managed for timber production.

**Timber management:** The activity involving the allocation of forested lands for harvesting of the timber on that land. Timber management may involve planning, road building, logging extraction of merchantable timber for processing off-site, and varying intensities of silvicultural activity to encourage another stand of trees to grow back. Timber management is an important subset of forest management, but it is not an equivalent activity.

**Timber Management Regulation:** The legislative stature that describes the mechanism and regulations by which the forested lands of Alberta are managed.

**Timber Operations:** Includes all activities related to timber harvesting including site assessment, planning, road construction, harvesting, reclamation and reforestation.

**Tufa:** A porous rock composed of calcium carbonate and found around mineral springs.

## U

**Understorey:** Those trees or vegetation in a forest stand below the main canopy level.

**Understorey protection:** Avoidance of damaging immature tree species during harvesting operations.

**Uneven aged stands:** Stands in which the trees differ markedly in age, usually with a span greater than 20 years.

**Ungulate:** Hoofed animal.

**Unique areas:** Sites that contain natural features or special values for wildlife and plant species. Also includes historical and archeological significant areas.

**Unique ecological sites:** Areas supporting rare species or processes.

**Utilization standards:** Standards establishing stand and tree merchantability.

## V

**Value:** A DFA characteristic, component or quality considered to be important in relation to an important SFM element.

**Viewshed:** The visible area, as it appears from one or more viewpoints.

**Vision:** Foresight.

**Volume table:** A table, graph or equation showing the estimated average tree or stand volume corresponding to selected values of more easily measured tree or stand variables.

## W, X, Y & Z

**Water source areas:** That portion of a watershed where soils are water saturated and/or surface flow occurs and contributes directly to stream flow.

**Water yield:** The quantity of water derived from a unit area of watershed.

**Watershed:** An area of land that collects and discharges water into a single creek or river through a series of smaller tributaries.

**White Area:** Forested area in the Province managed primarily for grazing, while also managing for some sustainable timber production. It also includes a mixture of private and Crown land.

**Wood chip direction:** Provincial direction of byproduct of timber manufacturing to specific pulping facilities.

**Woody debris:** Live or dead, standing or downed, woody material left on a site after logging.

**Yield Curve:** Graphical representation of a yield table.

**Yield Table:** A summary table showing, for stands (usually even aged) of one or more species on different sites, characteristics at different ages of the stand.

## 2 Acronym List

<b>AAC:</b>	Annual Allowable Cut
<b>AAF:</b>	Alberta Agriculture and Forestry
<b>ACE:</b>	Allowable Cut Effect
<b>AFGO:</b>	Alberta Forest Growth Association
<b>AFPA:</b>	Alberta Forest Products Association
<b>AOP:</b>	Annual Operating Plan
<b>ARIS:</b>	Alberta Regeneration Information System
<b>ASL:</b>	Above Sea Level
<b>AUM:</b>	Animal Unit Measure
<b>AVI:</b>	Alberta Vegetation Inventory
<b>CAI:</b>	Current Annual Increment
<b>CDWD:</b>	Coarse Down Woody Debris
<b>CNT:</b>	Consultative Notation
<b>CTPP:</b>	Community Timber Permit Program
<b>CTQ:</b>	Coniferous Timber Quota
<b>DFA:</b>	Defined Forest Area
<b>DIDs:</b>	Digital Integrated Dispositions
<b>DTA:</b>	Deciduous Timber Allocation
<b>DTM:</b>	Digital Terrain Model
<b>ECA:</b>	Equivalent Clearcut Area
<b>EFM:</b>	Enhanced Forest Management
<b>EMS:</b>	Environmental Management System
<b>ESIP:</b>	Eastern Slopes Interdepartmental Planning
<b>FHP:</b>	Forest Harvest Plan
<b>FGROW:</b>	Forest Growth Organization of Western Canada
<b>FGYA:</b>	Foothills Growth and Yield Association
<b>FMA:</b>	Forest Management Agreement
<b>FMP:</b>	Forest Management Plan
<b>FMU:</b>	Forest Management Unit

<b>FRIAA:</b>	Forest Resource Improvement Association of Alberta
<b>FRIP:</b>	Forest Resource Improvement Program
<b>FSI:</b>	Fish Sustainability Index
<b>GDP:</b>	General Development Plan
<b>GIS:</b>	Geographic Information System
<b>GOA:</b>	Government of Alberta
<b>GPS:</b>	Global Positioning System
<b>GYMP:</b>	Growth and Yield Monitoring Plot
<b>HASOC:</b>	Huallen Seed Orchard
<b>HSI:</b>	Habitat Suitability Index
<b>IRM:</b>	Integrated Resource Management
<b>IRP:</b>	Integrated Resource Plan
<b>LRSYA:</b>	Long Run Sustained Yield Average
<b>MAI:</b>	Mean Annual Increment
<b>MWMA:</b>	Mixedwood Management Association
<b>NIVMA:</b>	Northern Interior Vegetation Management Association
<b>PFMS:</b>	Preferred Forest Management Scenario
<b>PGYI:</b>	Provincial Growth and Yield Initiative
<b>PSP:</b>	Permanent Sample Plot
<b>PNT:</b>	Protective Notation
<b>RET:</b>	Rare, Endangered or Threatened
<b>RSF:</b>	Resource Selection Function
<b>SAG:</b>	Stakeholder Advisory Group
<b>SFI:</b>	Sustainable Forestry Initiative
<b>SFM:</b>	Sustainable Forest Management
<b>SHS:</b>	Spatial Harvest Sequence
<b>SYU:</b>	Sustained Yield Unit
<b>TDA:</b>	Timber Damage Assessment
<b>WA:</b>	Working Area
<b>WBAC:</b>	Western Boreal Aspen Coop
<b>WESBOGY:</b>	Western Boreal Growth & Yield Co-Op







Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Annex I: Forest Management Agreement

March 19, 2018



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# 1 Forest Management Agreement



FMA# 0900046

# GOVERNMENT OF THE PROVINCE OF ALBERTA

## FORESTS ACT FOREST MANAGEMENT AGREEMENT

(O.C. 603/2009)

### MEMORANDUM OF AGREEMENT

#### BETWEEN:

**HER MAJESTY THE QUEEN** in the right of the Province of Alberta, as represented by the Minister of Sustainable Resource Development, (hereinafter referred to as "the Minister"),

OF THE FIRST PART

and

**WEYERHAEUSER COMPANY LTD.**, a body corporate, registered under the laws of Alberta, with a business office in Edmonton, Alberta (hereinafter referred to as "the Company"),

OF THE SECOND PART

**WHEREAS** the Company owns and operates an oriented strand board plant at Edson, Alberta; and

**WHEREAS** the Company owns and operates a sawmill/planer mill facility at Drayton Valley, Alberta; and

**WHEREAS** the Minister desires to provide for the fullest possible economic utilization of forest stands and employment in local communities, and to ensure a perpetual supply of benefits and products while maintaining a forest environment of high quality; and

**WHEREAS** the Minister desires to enhance the capacity for bio-energy development in Alberta; and

**WHEREAS** it has been mutually agreed by the parties hereto that it is desirable to enter into this forest management agreement to replace the forest management agreements authorized under O.C. 514/2005 and O.C. 521/2007;

**NOW THEREFORE THIS AGREEMENT WITNESSETH** that in consideration of the premises, terms, conditions, covenants, stipulations, agreements and provisions herein contained, the Minister and the Company hereby agree as follows:

#### DEFINITIONS

1 (1) In this Agreement

- (a) "Agreement" means this forest management agreement including all appendices or schedules attached hereto, and any written amendments made hereto from time to time by agreement of all the parties;



- (b) "annual allowable cut" is the amount of timber that may be harvested in any one forest management operating year as stipulated in the pertinent forest management plan approved by the Minister;
- (c) "commencement date" has that meaning provided for in paragraph 2(1);
- (d) "Crown" means Her Majesty the Queen in right of Alberta;
- (e) "cubic metre" shall have the same meaning as that prescribed by the Timber Management Regulation;
- (f) "cut control period" means a period of five (5) consecutive forest management operating years or as otherwise mutually agreed by the Minister and the Company;
- (g) "Department" means the Department of Sustainable Resource Development;
- (h) "Dispositions and Fees Regulation" means Alberta Regulation 54/2000;
- (i) "dollar" means Canadian currency of the value of one (1) Canadian dollar, or the Canadian equivalent value in any other currency;
- (j) "forest management area" refers to the tract of forest land as specifically defined in paragraph 3;
- (k) "forest management operating year" shall mean the operating year established pursuant to paragraph 18(1);
- (l) "forest planning standards" shall mean those forest planning standards published by the Minister as amended from time to time;
- (m) "original net forest management area" means the net area of the forest management area established as of the commencement date and agreed upon by the Company and the Minister;
- (n) "periodic allowable cut" is the total of the annual allowable cuts approved for a five-year (5) cut control period or as otherwise mutually agreed by the Minister and the Company;
- (o) "Scaling Regulation" means Alberta Regulation 195/2002;
- (p) "Timber Management Regulation" means Alberta Regulation 60/73; and
- (q) "Timber Regulation" means Alberta Regulation 404/92.
- (r) "volume supply area 1" means that area depicted as such on Appendix "D";
- (s) "volume supply area 2" means that area depicted as such on Appendix "D";
- (t) "volume supply area 3" means that area depicted as such on Appendix "D"; and
- (u) "volume supply area 4" means that area depicted as such on Appendix "D".

1 (2) Any reference in this Agreement to an Act or regulation of Alberta shall mean for the purposes of this Agreement, those Alberta Acts and the regulations thereunder as each may from time to time be amended respectively or such Acts or regulations as may from time to time be substituted therefore, and terms defined in the *Forests Act* or the *Public Lands Act*, or the regulations made thereunder shall, for the purposes of this Agreement, have the meaning given to them by those Acts and regulations as each may be amended or substituted from time to time.

2 (1) This Agreement shall commence on the first day of December, 2009 (herein referred to as the "commencement date"), and shall expire on the last day of April, 2030 unless renewed under the provisions of subparagraph (3).

- (2) It is the intention of the parties hereto to continue the rights of the Company under paragraph 7 to establish, grow, harvest, and remove timber on the forest management area for additional terms of twenty (20) years if pursuant to subparagraph (3), agreement thereon can be reached by the Minister and the Company and such agreement is approved by the Lieutenant Governor in Council.
- (3) Subject to the approval of the Lieutenant Governor in Council and provided that the Company is not in default as to any of the terms, conditions, stipulations, covenants, agreements or provisions of this Agreement, the Company shall be entitled to a renewal of this Agreement whereby its rights under paragraph 7 to establish, grow, harvest, and remove timber are continued on condition that:
  - (a) the Company gives notice to the Minister during or after the eighth (8<sup>th</sup>) year following the commencement date of its desire to renew this Agreement; and
  - (b) mutually acceptable terms, conditions, stipulations, covenants, agreements and provisions (including further renewal provisions or other requirements) can be negotiated at the time of renewal.
- (4) Within sixty (60) days of the Company giving a notice under subparagraph (3)(a), the Company and the Minister shall commence good faith negotiations in an attempt to agree on a renewal of the Agreement with a term of twenty (20) years and have it approved by the Lieutenant Governor in Council.
- (5) The Company and the Minister may agree to commence negotiations at times other than that provided for in subparagraph (3).

## **FOREST MANAGEMENT AREA**

- 3 The Minister and the Company hereby enter into this Agreement in respect of the forest management area comprising, subject to paragraphs 4, 5, and 6, public lands within the boundaries shown outlined on a map registered with the Department, a copy of which is annexed hereto as Appendix "A".
- 4 Out of the area shown within the boundaries outlined in Appendix "A" the following are excepted:
  - (a) lands which are the subject of a disposition issued pursuant to the *Public Lands Act*, other than a Forest Grazing Licence, prior to the commencement date or lands in respect of which a disposition under the *Public Lands Act*, other than a Forest Grazing Licence, has been approved but which issuance is pending prior to the commencement date;
  - (b) Lands which have been reserved under section 18(c) of the *Public Lands Act* prior to the commencement date or in respect of which a reservation has been approved but which has not been granted prior to the commencement date;
  - (c) the beds and shores of all permanent and naturally occurring bodies of water and all naturally occurring rivers, streams, watercourses and lakes; and
  - (d) lands contained within any Provincial Park, Forest Recreation Area, Provincial Recreation Area, Natural Area or Ecological Reserve existing prior to the commencement date.
- 5 Whenever any of the land excepted under paragraph 4 or subsequently withdrawn from the forest management area becomes available for disposition and where such land is intended to be returned to timber production by the Minister, the Minister shall notify the Company when such land becomes available and where the Company requests that such land be returned

to timber production by the Minister, the Minister shall return these lands back to the forest management area.

## **WITHDRAWALS**

- 6 (1) The Minister may, at any time and from time to time in the Minister's discretion, after consultation with the Company with respect to the effect any such withdrawal may have on the forest management area, either permanently or for a specified term, withdraw from the forest management area:
- (a) any land which cannot be harvested without causing substantial harm to the water table or to lakes, rivers, streams or other bodies of water, to the margins of watercourses or to roads;
  - (b) any lands required for rights-of-way or water resource development;
  - (c) any lands required for any other purposes deemed by the Minister to be required for the human or physical resource development of the Province;
  - (d) any lands required for commercial or industrial purposes; and
  - (e) any lands that are not capable of producing timber unless those lands are required to support forest management planning objectives in the approved forest management plan.
- (2) A withdrawal shall take effect:
- (a) on the date that a notice of withdrawal is given by the Minister to the Company, or
  - (b) where the notice given to the Company states that the withdrawal shall take effect on a future date, on the date stated in the notice.
- (3) In the event from time to time, after consultation with the Company, of any withdrawal or withdrawals of land from the forest management area by the Minister under subparagraph (1):
- (a) for disposition to users other than the Crown, the Company shall be entitled to reasonable compensation from the users of the area withdrawn for any loss of profit or other damage or loss suffered by the Company, including by way of example, but without limitation, damage to timber, improvements, regeneration, forest growth, or to its operations on the forest management area resulting from such withdrawals;
  - (b) for use by the Crown wherein the cumulative net aggregate area withdrawn does not exceed one (1) percent of the original net forest management area, the Minister shall determine the compensation and arrange for reimbursement to the Company for the actual loss or damage resulting from such withdrawal to any improvements created by the Company's efforts, but not for any loss of profit, inconvenience nor increased costs reasonably incurred by the Company in harvesting an equivalent volume of timber elsewhere;
  - (c) for use by the Crown wherein the cumulative net aggregate area withdrawn does exceed one (1) percent of the original net forest management area, the Minister shall determine the compensation in respect of such excess and arrange for reimbursement to the Company for any increased costs reasonably incurred by the Company in replacing the lost volume of timber and for any loss or damage suffered by the Company, including damage to timber, improvements, regeneration, forest growth, or to its operations on the forest management area.
- (4) Notwithstanding subparagraph (3), where lands that are held under reservation PNT 800942 are withdrawn for use by third parties for water resource development, the Company shall not be entitled to compensation for such withdrawal.

- (5) The Minister may, from time to time, designate a withdrawal of lands under subparagraph (1) as exempt from subparagraph (3)(a) and where the Minister has so designated, the compensation with respect to such withdrawal shall be paid by the user requesting the withdrawal as prescribed by the appropriate Alberta timber damage assessment table. Such designated withdrawals shall contribute to cumulative net aggregate area withdrawn in subparagraph 6(3)(b).
- (6) Compensation under subparagraphs (3)(b) and (c) may be monetary or by the addition of available public land to the forest management area or a combination of both.
- (7) If the administration and control of any of the lands comprising the forest management area is transferred to the Crown in right of Canada, the Company shall be entitled to compensation under subparagraph (3) as if the lands were withdrawn for use by the Crown.
- (8) For the purposes of applying subparagraphs (3)(b) and (c),
  - (a) the original net forest management area means the area of the forest management area established as of the commencement date and agreed upon by the Company and the Minister; and
  - (b) the cumulative net aggregate area withdrawn shall be calculated taking into consideration all exceptions and additions to the original net forest management area under subparagraph (6) and paragraphs 4 and 5 and all withdrawals under subparagraph (1) for use by the Crown.
- (9) Monetary compensation received by the Company under subparagraph (3)(a) and paragraph 8(1)(b) shall only be used to replace loss of property, to repair damage to improvements, to replace lost fibre resource, to compensate for lost annual allowable cut, to integrate land management activities on the forest management area and to reforest public lands returned to the forest management area.
- (9) Monetary compensation received by the Company under subparagraph (3)(a) and paragraph 8(1)(b) shall only be used to replace loss of property, to repair damage to improvements, to replace lost fibre resource, to compensate for lost annual allowable cut, to integrate land management activities on the forest management area and to reforest public lands returned to the forest management area.
- (10) The Company shall maintain complete and accurate records of the receipt and use of all compensation funds received under subparagraph (3)(a) and paragraph 8(1)(b) for a period of five (5) years.
- (11) The Minister may from time to time at the Minister's discretion request verifiable documentation of the use of compensation funds received under subparagraph (3)(a) and paragraph 8(1)(b) and the Company shall comply with any such request.

## **RIGHTS OVER THE LAND**

- 7 (1) Subject to all the terms and conditions of this Agreement, the Minister grants to the Company the right, during the term of this Agreement, to enter upon the forest management area to:
  - (a) establish, grow, harvest, and remove timber thereon on a perpetual sustained yield basis as provided for in the approved forest management plan;
  - (b) carry out silviculture and other programs that are approved by the Minister in accordance with this Agreement; and
  - (c) construct, operate and maintain roads, bridges, camps, timber processing operations, wood concentration yards, and other installations necessary and

incidental to the Company's right to establish, grow, harvest, and remove timber from the forest management area.

- (2) For the purpose of interpreting the *Surface Rights Act*, the Company is an occupant of the public lands comprising the forest management area.
  - (3) The Company shall be required to pay all fees prescribed pursuant to the *Public Lands Act* with respect to any dispositions issued, renewed or amended on or after the commencement date. However, the Company shall not be required to pay such fees with respect to any disposition held by it before the commencement date until such time as that disposition is renewed or amended.
  - (4) The Company may obtain sand and gravel needed for its operations under this Agreement from any vacant public land on the forest management area pursuant to the Dispositions and Fees Regulation, subject to the payment by the Company of all required fees and royalties. In no case, however, shall the Company be required to pay fees or royalties for *in situ* right-of-way material located and used where it is found within the right-of-way.
  - (5) It is recognized by the Minister that the use of the forest management area to establish, grow, harvest and remove timber is to be the primary but not exclusive use thereof in keeping with the principles of sustainable forest management.
- 8 (1) The Minister reserves all rights on the forest management area not specifically given hereby to the Company in this Agreement, including by way of example, but without limiting the generality of the foregoing:
- (a) the right of others to travel, hunt, fish and otherwise use the said lands for recreational purposes, subject to any necessary restrictions approved by the Minister for the purpose of prevention of accidents, fire control, protection of wildlife, and seasonal protection of roads;
  - (b) the right to authorize any person to conduct any work in connection with or incidental to geological or geophysical exploration pursuant to the *Mines and Minerals Act*, or the Exploration Regulation; provided that the Company shall be entitled to reasonable compensation, from the person or company that holds the authorization to conduct the exploration, for any loss or damage suffered by the Company and resulting from such exploration including by way of example but without limitation, for any damage to timber, forest growth, regeneration, improvements or to any of its operations on the forest management area; and provided further that the Company shall not be entitled to compensation for damage to timber or forest growth caused by any such geological or geophysical exploration where the right to such timber has been granted to a third party under a timber disposition;
  - (c) the right to maintain and enhance forest resources, including fish and wildlife resources, provided the Company's right to establish, grow, harvest, and remove timber is not significantly impaired; and
  - (d) the right to authorize trapping and, after consultation with the Company, to authorize domestic stock grazing provided that the domestic stock grazing will not damage regeneration of managed species to the point where growth performance and the overall stocking are reduced below the reforestation standards provided for in or agreed to pursuant to the Timber Management Regulation and provided that the Company's right to establish, grow, harvest, and remove timber is not significantly impaired.
- (2) The Minister also reserves the following rights to the timber on the forest management area:

- (a) the right, after consulting with the Company, to issue timber dispositions on the forest management area to those disposition holders listed in Appendix "B", but shall not issue any new or additional timber dispositions except as permitted in 20(4), 34(1), 34(2) and in the case where the Minister intends to convert Community Timber Program permits to quota certificates;
  - (b) the right, after consulting with the Company, to manage and reforest tree species on any lands which may be required to meet the Minister's obligations to disposition holders;
  - (c) the right, after consulting with the Company, to issue timber dispositions from within the forest management area to provide timber for local use in construction and maintenance of public works by any local authority, municipality, county, the Crown in the right of Alberta or Canada and for private use or sale by local residents provided, however, that the total volume of timber cut under authority of such timber dispositions does not exceed one (1) percent of the Company's approved annual allowable cut unless otherwise agreed to by the Company and Minister;
  - (d) the right, after consulting with the Company, to issue coniferous and deciduous timber dispositions from within the forest management area to maintain the Community Timber Program provided that the total volume of timber cut or made available annually under authority of such dispositions does not exceed the timber volumes, areas, or percentages for each volume supply area of the approved forest management plan as described in Appendices B and D; and
  - (e) should the volume of timber available under subparagraph 8(2)(d) remain unused on a periodic basis, the Company may request to harvest and utilize this volume.
- (3) The Minister and the Company agree to provide, each to the other, in confidence, such available information as the Minister and the Company may reasonably request concerning the operations on the forest management area that are authorized under timber dispositions. The Minister shall consult with the Company on an ongoing basis as may be required to minimize any conflict on the forest management area between the operations authorized under the timber dispositions issued pursuant to subparagraph (2) and the operations of the Company.

## **FOREST MANAGEMENT**

### **A. GENERAL PROVISIONS**

- 9 On the forest management area, the Company shall, in accordance with the approved Forest Management Plan, follow sound forest management practices designed to provide a perpetual sustained yield of timber while not reducing the productivity of the land.
- 10 (1) The Company shall submit a forest management plan in accordance with the forest planning standards for the Minister's approval on or before April 1, 2016 and a new forest management plan on or before May 1, 2026.
- (2) Each forest management plan developed under subparagraph (1), when approved, shall replace the previously approved forest management plan.
  - (3) Before the Company submits a forest management plan referred to in subparagraph (1) to the Minister for review and approval, the Company shall make the necessary arrangements required for and shall conduct presentations and reviews of their proposed forest management plans with the public and timber disposition holders in accordance with the forest planning standards as well as with potentially affected First Nations, including but not limited to First Nations having Reserve land located within or in close proximity to the forest management area and such other potentially affected First Nations as may be identified by the Minister to the Company in writing from time to time.

- (4) After such presentations and reviews referred to in subparagraph (3), the Company shall incorporate in the forest management plan its response to the public, First Nations, and timber disposition holders respecting the proposed forest management plan.
  - (5) The Minister may require the Company, after consulting with the Company, to alter any of the methods described in its forest management plans before approving such plans provided, however, that the changes required by the Minister are consistent with the forest planning standards.
  - (6) The Minister agrees that so long as a plan required under this paragraph has been submitted by the Company within the time periods herein specified and provided such plan complies with the requirements of this Agreement, unless the Minister has sent a notice under paragraph 12, the Company is hereby authorized to continue to carry on its operations pursuant to the existing approved plan, pending approval being granted by the Minister to the newly submitted plan.
  - (7) Should the company fail to submit a forest management plan by the dates identified in subparagraph (1) or the submitted plan is not satisfactory to the Minister, without in any way limiting the Minister's other rights or remedies hereunder, the Minister may set new dates by reasonable notice in writing for revised forest management plan submissions.
  - (8) The Company shall co-operate with the development and implementation of integrated land management initiatives to the satisfaction of the Minister.
- 11 (1) The Company shall not deviate from the approved plans without the Minister's consent in writing, with the understanding that the Minister shall provide a full explanation whenever consent is withheld.
- (2) Notwithstanding subparagraph (1), the Company may continue operations under approved plans submitted pursuant to the forest management agreements authorized by O.C. 514/2005 and O.C. 521/2007 until such time as those plans are either replaced by plans approved under this Agreement or the Minister deems the existing plans obsolete or inadequate pursuant to paragraph 12.
- 12 (1) When, in the opinion of the Minister, any approved plan becomes obsolete or inadequate, the Minister may, by reasonable notice in writing, require the Company to submit a revised plan for approval within a specified time, or within any extended time the Minister may subsequently allow.
- (2) In the event the Minister's dates for forest management plan submission under paragraph 10(1) or revised dates under paragraph 10(7) are not met or the Minister requires the Company to submit a revised plan under subparagraph (1), the Minister may, after consulting with the Company, impose remedies until such time as a new revised plan is approved. The remedies may include but are not limited to:
    - (a) imposition of an annual allowable cut;
    - (b) modification of the approved harvest sequence;
    - (c) adjustment of the yield curves used in the approved forest management plan; and/or
    - (d) the requirement to develop cooperative landscape objectives.
  - (3) If the Minister adjusts the dates for forest management plan submission under paragraph 10(7), the Company may continue to carry out operations in accordance with the approved forest management plan as modified by any remedies imposed by the Minister under subparagraph (2).
- 13 (1) The Company shall recommend, in its forest management plans, areas available for harvesting by other timber disposition holders on the forest management area.



- (2) The Minister shall consult with the Company concerning proposed areas and methods of harvesting by holders of timber dispositions on the forest management area before designating the areas in which their operation may be carried on.
  - (3) The Company shall, through sustainable forest management planning, make reasonable efforts to integrate and coordinate the management of the forest resources with all timber disposition holders operating on the forest management area.
  - (4) The Minister shall, through sustainable forest management planning, require timber disposition holders operating within the forest management area to conduct all harvesting operations and management of forest resources in accordance with the Company's approved plans and to refrain from hindering or obstructing the lawful operations of the Company.
- 14 (1) The Company shall conduct such forest inventories of the forest management area as are reasonably necessary to prepare the plans required by this Agreement.
  - (2) The Company shall maintain a reasonably complete and accurate forest inventory in accordance with forest planning standards.
  - (3) Unless otherwise agreed to by the parties, the Company shall maintain or participate in a deciduous and coniferous growth and yield program consistent with prevailing standards and policies and acceptable to the Minister on lands within the forest management area.
- 15 All information and data related to the forest management area that has been collected or generated by the Company or the Minister relating to forest management planning including forest inventory, other resource uses, growth and yield data, reforestation results, and operational and detailed planning maps shall be made available to the Minister, or the Company, whichever is the case, free of charge upon request and on a timely and confidential basis.
- 16 (1) The Company shall conduct its timber harvesting and reforestation operations in accordance with the approved ground rules jointly developed by the Company and the Minister until such time as they are replaced by the new set of ground rules developed in accordance with subparagraphs (2) or (3).
  - (2) Concurrently with the development of the forest management plans developed under paragraph 10(1), or at such time as may be agreed to by the Minister and the Company, the Minister and the Company shall jointly develop a new set of ground rules consistent with the forest management plans.
  - (3) If a set of ground rules, or a revision to a set of ground rules, cannot be established by mutual agreement, the Minister may establish or revise a set of ground rules that are consistent with the approved forest management plans and the "Timber Harvest Planning and Operating Ground Rules" published by the Minister, as amended from time to time.
  - (4) At the initiative of either party, the Minister and the Company shall jointly review the ground rules. These ground rules may be altered by mutual agreement of the Minister and the Company.
- 17 (1) The term of this Agreement shall be divided into four cut control periods each with a duration of five years or as otherwise agreed by the Minister and the Company.
  - (2) If the Company over cuts the periodic allowable cut, the Minister may, after consulting with the Company, reduce the periodic allowable cut during the subsequent cut control period by any amount up to the entire over cut volume at the Minister's sole discretion.
  - (3) Where production is lower than the periodic allowable cut, the Company may submit a program satisfactory to the Minister making up the under cut volume in the subsequent cut control period, or such other period as may be approved by the Minister.



- 18 (1) The Company shall forthwith following the commencement date establish a forest management operating year that shall commence and end on dates approved by the Minister.
  - (2) The Company shall submit to the Minister annual operating plans in accordance with the ground rules referred to in paragraph 16.
  - (3) Each annual operating plan shall be prepared in accordance with the approved forest management plan and include operating projections showing the proposed harvesting operation intended by the Company. Such operating projections shall be in accordance with the forest planning standards and shall cover the period of time specified in the ground rules referred to in paragraph 16.
  - (4) The Minister may approve such plans as are submitted, or may require the Company, after discussing any proposed changes with the Company, to alter any harvesting operations described in the plans, provided that the Minister shall not thereby alter the ground rules and acts promptly so as to avoid delay in the Company's operations.
  - (5) When the annual operating plan does not provide for the salvage of dead, damaged, diseased, or decadent timber, the Minister may give notice to the Company that the Minister requires provision for its salvage in such a plan. The Company shall amend the plan, or justify the exclusion of such timber from its plan within the notice period specified below. If the Company fails or elects not to do either within such period, the Company shall not be deemed to be in default and the Minister may dispose of such timber to any person by a timber disposition without compensating the Company and the volume of timber so disposed may be charged by the Minister as production under this Agreement. For the purposes of this subparagraph, "notice period" shall mean thirty (30) days, unless the timber disposition exceeds two (2) years, in which case "notice period" shall mean one (1) year.
  - (6) When the annual operating plan does not provide for the utilization of all fibre generated as a result of the Company's harvesting operations, the Minister may give notice to the Company that the Minister requires provision for its utilization in such a plan. The Company shall amend its plan, or justify the exclusion of such fibre from its plan within the notice period specified below. If the Company fails or elects not to do either within such period, the Company shall not be deemed to be in default and the Minister may dispose of such unutilized fibre to any person by a disposition without compensating the Company. For the purposes of this subparagraph, "notice period" shall mean thirty (30) days, unless the disposition exceeds two years, in which case "notice period" shall mean one (1) year. No such disposition shall authorize any activities that might reasonably be expected to hinder or obstruct the lawful timber operations of the Company.
- 19 (1) If, concurrent with the grant of this forest management agreement, Sundance Forest Industries Ltd. or any affiliate of it or any successor in title to its Edson facility (herein referred to as "Sundance") is not granted a forest management agreement containing the provisions of subparagraphs (1) through (8) inclusive with the intent that Sundance, as holder of a forest management agreement, shall have reciprocal obligations in favour of the Company respecting the provision to the Company of 43,500 cubic metres of harvested merchantable deciduous timber annually (such forest management agreement incorporating the forest management unit R13 situated outside of the forest management area herein granted to the Company), then the Minister shall grant to the Company as soon as practicable thereafter, for the sum of \$1.00, a deciduous timber allocation within forest management unit R13 situated outside the forest management area with an annual allowable cut of 43,500 cubic metres of merchantable deciduous timber annually. If the unit annual allowable cut is thereafter adjusted to allow for either a decrease or increase in annual harvest, the annual allowable cut as allocated will be adjusted accordingly. Such a deciduous timber allocation shall remain in effect until such time as Sundance is granted a forest management agreement incorporating forest management unit R13 situated outside the forest management area herein granted to the Company and containing the provisions referenced in subparagraph (1) whereupon the Company shall

surrender their deciduous timber allocation and the provisions of subparagraphs (3) through (9) inclusive shall become operative.

- 19 (2) The Company shall offer to Sundance, on reasonable terms and conditions, 43,500 cubic metres of harvested merchantable coniferous timber annually or other volume as is mutually agreed upon by the Company and Sundance which has been harvested under the approved annual operating plan of the Company. Such merchantable coniferous timber shall be made available to Sundance in trade for an equal annual volume of harvested merchantable deciduous timber from Sundance, or such other volume as is mutually agreed upon by the Company and Sundance. If there is any dispute as to whether or not the offer made by the Company is on reasonable terms and conditions, the matter in dispute shall be referred to arbitration by either of the Company or Sundance pursuant to the *Arbitration Act*, and the offer shall be held in abeyance pending the arbitrator(s)' determination, which determination shall be final and binding on the Company and Sundance.
- 19 (3) If Sundance cannot accept the volume of merchantable coniferous timber referred to in subparagraph (2), or any part thereof, such volume of merchantable coniferous timber may be used or disposed of by the Company as it may determine in its sole discretion, and such merchantable coniferous timber will not be subject to further direction by the Minister and the Company shall not be considered in default under this Agreement.
- 19 (4) The Company shall pay to the Minister timber dues on all coniferous timber referred to in subparagraphs (2) and (3) at the rates set out in the Timber Management Regulation.
- 19 (5) If the Company does not supply the contracted volume of harvested merchantable coniferous timber to Sundance in accordance with the terms of the accepted offer described in subparagraph (2), then at the request of Sundance, the Minister shall require the Company to harvest and deliver a volume of merchantable coniferous timber which is equal to the volume of merchantable coniferous timber remaining undelivered under the terms of the accepted offer described in subparagraph (2).
- 19 (6) If the Company fails to comply with the requirements of the Minister under subparagraph (5), the Minister shall authorize Sundance to enter onto those specific cut blocks within the forest management area acceptable to Sundance to remove a volume of merchantable coniferous timber equal to the volume of coniferous timber remaining undelivered under the terms of the accepted offer referred to in subparagraph (2) and no compensation shall be required to be paid by Sundance to the Company in respect of the merchantable coniferous timber.
- 19 (7) If Sundance is authorized to enter onto lands within the forest management area for the purpose of removing merchantable coniferous timber as provided for in subparagraph (6), such entry will be granted to Sundance provided Sundance shall pay the Crown charges prescribed under the Timber Management Regulation. Prior to such entry, the Company shall prepare a plan, in consultation with the Minister, which defines the specific cut blocks to be harvested by Sundance.
- 19 (8) The Company agrees to undertake in favour of Sundance to perform its obligations in favour of Sundance as set out in this paragraph 19.
- 20 (1) The Company shall, on commercially reasonable terms, supply to a bio-energy facility in the vicinity of Drayton Valley acceptable to the Minister (the "approved operator"), 130,000 cubic metres of deciduous timber per annum, or such volume as is mutually agreed upon by the Company and the approved operator, harvested under the approved annual operating plan of the Company from Volume Supply Area 4, or as otherwise approved by the Minister..
- (2) In the event of a dispute concerning the reasonableness of any supply term under subparagraph (1), either the approved operator or the Company may refer the dispute to

an arbitrator appointed pursuant to the *Arbitration Act*, whose determination shall be final and binding on the Company and the approved operator.

- (3) If the timber referred to in subparagraph (1) is offered for trade or sale under the arbitrated terms, and the approved operator does not accept the offer, it may be used by the Company subject to approval of the Minister.
  - (4) In addition to any other rights the Minister may have pursuant to this Agreement, the Minister shall retain the right to issue a timber disposition to the approved operator if the timber referred to in subparagraph (1) is not offered for trade or sale to the approved operator.
  - (5) In the event the bio-energy facility referred to in subparagraph (1) is not constructed, or ceases to be in production and operation for a period of twelve consecutive months, then the Company may submit a proposal to the Minister for the utilization of the timber referred to in subparagraph (1) in another facility for the Minister's consideration.
- 21 The Company shall utilize all the merchantable timber cut in road construction and other incidental operations of the Company unless otherwise permitted in writing by the Minister.
- 22 (1) The Company shall not hinder or obstruct the lawful timber operations of other timber disposition holders.
- 22 (2) It is recognized that during their operations, other timber disposition holders may cause some incidental damage to timber on the forest management area. No claim shall be made by the Company against any timber disposition holder, or the Minister, for reasonably unavoidable incidental damage to timber.
- 22 (3) The Minister shall ensure that all timber dispositions issued on the forest management area after the commencement date shall include a provision preventing a claim against the Company for reasonably unavoidable incidental damage to timber.
- 22 (4) The Minister shall require other timber disposition holders operating within the forest management area to conduct all harvesting operations in accordance with the Company's approved ground rules and to refrain from hindering or obstructing the lawful operations of the Company.

## **B. REFORESTATION**

- 23 (1) The Company shall reforest at its own expense all lands cut over by the Company under this Agreement and under the Forest Management Agreements authorized by O.C. 514/2005 and O.C. 521/2007 to the required reforestation standard and shall describe its reforestation program in its forest management plans and annual operating plans.
- (2) In this Agreement the required reforestation standard means the reforestation standards provided for in or agreed to pursuant to the Timber Management Regulation.
  - (3) As part of its operations under this Agreement, the Company shall, at its sole expense, furnish all of the seedling trees and propagules required for its reforestation needs.
  - (4) Seed, seedling trees and propagules used for reforestation programs under this Agreement shall be produced in accordance with the rules established by the Minister governing the source and type of tree seed and species used to reforest public land.
- 24 (1) The Company shall be solely responsible for reforesting to the required reforestation standard all productive forested lands burned by fire within the forest management area, when the fire has been caused by or arises out of any operations or activities conducted on the forest management area by the Company, its employees, agents or contractors.
- (2) The Company shall not be required to reforest lands cut over or burned after the commencement date unless such cutting or burning was caused by or arises out of any

of the operations or activities conducted on the forest management area by the Company, its employees, agents or contractors.

- 25 The Minister shall be responsible for ensuring that forest lands on the forest management area cut over after the commencement date by persons other than the Company, its employees, agents or contractors, are reforested to the required reforestation standard.
- 26 The Company may devise and implement enhanced forest management programs. The Company and the Minister may enter into an agreement which will define the programs and conditions that, in the Minister's opinion, will establish a sustainable increase in the annual allowable cut approved by the Minister in the Company's forest management plans submitted under paragraph 10.

### **C. FOREST PROTECTION**

- 27 (1) The Minister agrees to provide and maintain an organization of people and equipment necessary for the protection of the forest from and suppression of forest fires on the forest management area and, except as herein otherwise provided, to pay the cost of fighting any forest fire that originates on the forest management area on the understanding that the Minister shall not be liable for damages to the Company resulting from a failure to prevent, control or suppress any fire.
- (2) Notwithstanding subparagraph (1), the Company shall pay the cost of suppressing any forest fire that originates on the forest management area if the fire is caused by or arises out of any of the operations or activities conducted on the forest management area by the Company, its employees, agents or contractors; provided, however, that in no event shall the liability of the Company exceed the liability provided for in a separate Fire Control Agreement which has been negotiated and entered into by the Minister and the Company. If the cause of any fire is disputed by the Company, the dispute shall be resolved by means of civil suit in the Courts of Alberta.
- (3) If a Fire Control Agreement between the Minister and the Company is more than five (5) years old at the commencement date, then notwithstanding any provision in that Fire Control Agreement, that Fire Control Agreement will terminate on the first anniversary of the commencement date unless it has been replaced by a new Fire Control Agreement or the Minister has directed otherwise.
- (4) Where there is no Fire Control Agreement in effect, the Company agrees to have on hand in good working order such fire fighting equipment as is specified in the Forest and Prairie Protection Regulations and shall train its employees in fire suppression as reasonably specified by the Minister.
- (5) Notwithstanding anything contained in this Agreement, the Company shall not be liable for loss of or damage to Crown timber by fire that is caused by or arises out of any of the operations or activities conducted on the forest management area by the Company, its employees, agents or contractors.
- (6) In the event of an occurrence of insect damage of epidemic nature to forest growth or a disease epidemic affecting forest growth on the forest management area the parties hereto will cooperate in suppressing the epidemic.

### **RECORDS AND SCALING**

- 28 (1) All scaling and measuring of timber weights and volumes by or on behalf of the Company shall be conducted in accordance with the Timber Regulation, the Scaling Regulation and the published instructions of the Department.
- (2) Consistent with subparagraph (1), the Company shall maintain, in the form and in the manner approved by the Minister, complete and accurate records of its operations conducted on the forest management area.

- (3) The Minister, or any person authorized by the Minister, may inspect the records maintained by the Company pursuant to subparagraph (2).
- 29 (1) Unless otherwise prescribed in the Timber Management Regulation, within thirty (30) days of the termination of every calendar quarter, the Company shall submit to the Minister in writing, on a form prescribed by the Minister, a return reporting:
- (a) the volume of timber cut by and for the Company;
  - (b) the volume of timber cut or destroyed by others for which the Company is entitled to compensation under this Agreement;
  - (c) at the request of the Minister, the volumes of primary timber products manufactured and sold by and for the Company from its operations in Alberta;
  - (d) at the request of the Minister and on a confidential basis, the volumes of timber and primary timber products purchased for use in its facilities, the names of all persons from whom timber and primary timber products were purchased, and the land from which the timber was cut; and
  - (e) at the request of the Minister and on a confidential basis, the geographic destination of timber and primary timber products sold by the Company from its operations in Alberta.
- (2) The Company or its agent, shall remit to the Minister with each timber return the amount of all dues payable by the Company for the volume of timber shown on such returns and when done by the Company's agent, it shall not relieve the Company of this responsibility.

### **CHARGES AND DUES**

- 30 (1) Once a year during the term of this Agreement, the Company shall pay to the Minister on or before a date specified by the Minister, a holding and forest protection charge.
- (2) (a) Initially, the charge in subparagraph (1) will be \$390,924.63.
- (b) The holding and forest protection charge established in subparagraph (2)(a) shall be adjusted upon approval of a new forest management plan submitted in accordance with paragraph 10.
- (3) Subsequent holding and forest protection charges shall be adjusted annually on the anniversary of the commencement date using the Annual Implicit Price Index for government current expenditure on goods and service, as published by Statistics Canada, in the following formula:

$$\text{Charge for Year of Payment} = \text{Charge for Previous Year} \times \frac{\text{Index for Year Prior to Year of Payment}}{\text{Index for Second Year Prior to Year of Payment}}$$

Example:

$$2011 \text{ Holding and Forest Protection charge} = \$390,924.63 \times (2010 \text{ Index} / 2009 \text{ Index})$$

In the event that the Annual Implicit Price Index is no longer published or in the event of a change in the method used to calculate the Index, the Minister and the Company shall mutually and reasonably agree on a comparable published index to be used in the above formula.

- (4) Notwithstanding subparagraphs (1), (2), and (3), the Lieutenant Governor in Council may by regulation establish the amounts of annual holding and forest protection charges to be paid by the Company. After five (5) years following the commencement date, if the holding and forest protection charges are established by regulation then the holding and

forest protection charges established by regulation shall replace those charges established under this paragraph provided those regulations are of general application (subject only to limitations imposed by contract).

- 31 (1) For all timber on the forest management area cut by or for the Company or for which the Company is entitled to compensation, the Company shall pay to the Minister timber dues at the rates established under the Timber Management Regulation.
- 31 (2) The Company shall co-operate with the reconciliation of timber production and dues associated with the timber production on an annual basis or as mutually agreed upon in accordance with the methods prescribed by and to the satisfaction of the Minister.
- 32 (1) The Company shall maintain a program or programs to enhance its ability to establish, grow, harvest, and remove timber and the level of understanding of forest resources and forest products within Alberta. The minimum annual expenditure by the Company in respect of such a program or programs shall equal or exceed, on average, during each five (5) year term of this Agreement, \$0.25 per cubic metre per year based on all timber cut by or for the Company from the forest management area. The annual funding shall be comprised of direct funding of Canadian research or academic institutes, cooperatives, consultants, in-Company innovations in manufacturing and harvesting technology, silviculture, tree improvement and costs associated with the hiring of scientific personnel in the Company.
- 32 (2) The Company shall annually or as otherwise requested by the Minister provide a report that details the activities of the program referred to in subparagraph (1).

## **FACILITY OPERATION**

- 33 The Company shall notify the Minister, in writing, of any intended reduction in production levels of twenty (20) percent annual capacity or more of manufacturing facilities, and such notification shall be submitted to the Minister at least six (6) weeks prior to the intended reduction taking effect.
- 34 (1) Subject to subparagraph (1)(b), if at any time the Company's oriented strand board plant in Edson, Alberta, ceases to be in production and operation for a period of twelve (12) consecutive months, the Minister shall have the right to:
  - 34 (1)(a)(i) suspend the Company's right to harvest deciduous timber on the forest management area on notice to the Company; and
  - 34 (1)(a)(ii) issue short-term deciduous timber dispositions to third parties on the forest management area for up to one-hundred (100) percent of the approved deciduous annual allowable cut; and
  - 34 (1)(a)(iii) charge as production under this Agreement the volume of timber harvested under timber dispositions issued to third parties under this subparagraph.
- 34 (1)(b) The Minister shall restore the Company's rights to harvest deciduous timber on the forest management area if at any time:
  - 34 (1)(b)(i) the Company advises the Minister in writing of its intentions to resume production and operation of the oriented strand board plant and the Company resumes operation of the oriented strand board plant within ninety (90) days of delivery of the notice; or
  - 34(1)(b)(ii) the Company submits a proposal to the Minister (the "Proposal"), within thirty-six (36) months from the date on which the plant ceases to be in production and operation, for the utilization of timber harvested from the forest management area in another facility in Edson, Alberta, and the Proposal is acceptable to the

Minister, and the Company implements the Proposal within a period of time satisfactory to the Minister.

- 34 (2) Subject to subparagraph (2)(b), if at any time the Company's sawmill-planer mill in Drayton Valley, Alberta, ceases to be in production and operation for a period of twelve (12) consecutive months, the Minister shall have the right to:
- 34 (2)(a)(i) suspend the Company's right to harvest coniferous timber on the forest management area on notice to the Company; and
  - 34 (2)(a)(ii) issue short-term coniferous timber dispositions to third parties on the forest management area for up to one-hundred (100) percent of the approved coniferous annual allowable cut and
  - 34 (2)(a)(iii) charge as production under this Agreement the volume of timber harvested under timber dispositions issue to third parties under this subparagraph.
- 34 (2)(b) The Minister shall restore the Company's rights to harvest coniferous timber on the forest management area if at any time:
- 34 (2)(b)(i) the Company advises the Minister in writing of its intentions to resume production and operation of the sawmill-planer mill and the Company resumes operation of the sawmill-planer mill within ninety (90) days of delivery of the notice; or
  - 34 (2)(b)(ii) the Company submits a proposal to the Minister (the "Proposal"), within thirty-six (36) months from the date on which the mill ceases to be in production and operation, for the utilization of timber harvested from the forest management area in another facility in Drayton Valley, Alberta, and the Proposal is acceptable to the Minister, and the Company implements the Proposal within a period of time satisfactory to the Minister.
- 34 (3) Upon restoration of the Company's rights to harvest either deciduous or coniferous timber, or both, on the forest management area:
- 34 (3)(a)(i) the Minister shall not issue any further timber dispositions to third parties on the forest management area pursuant to subparagraphs (1) or (2) as the case may be; and
  - 34 (3)(a)(ii) the Company shall be entitled to the return of any of the timber temporarily disposed of by the Minister that remains un-harvested on expiry of the short-term deciduous or coniferous timber dispositions.
- 34 (4) Notwithstanding subparagraphs (1), (2) and (3), if any of the facilities referred to in subparagraphs (1) or (2) ceases to be in production and operation for a cumulative, but not necessarily consecutive, period of thirty-six (36) months, the Minister shall have the right to cancel this Agreement.
- 34 (5) At the Minister's request, on a confidential basis, the Company shall report on value added initiatives in relation to commercialization of products, new product development, strategic partnerships, forest management and fibre utilization.
- 34 (6) The Company shall make a minimum of five (5) percent of its primary solid wood products available for sale to secondary manufacturers, subject to terms and conditions acceptable to the Company. The Company shall submit a report annually, or as otherwise requested by the Minister, regarding the activities designated by this subparagraph.



## GENERAL PROVISIONS

- 35 (1) If the Company at any time makes default under any of the covenants, terms, conditions, provisions, agreements or stipulations in this Agreement, the Minister may give notice to the Company setting out the default complained of and requiring the Company to remedy the default within six (6) months of the giving of notice.
- (2) The Minister may, from time to time, extend the period during which the Company is required to remedy any default complained of in a notice given pursuant to subparagraph (1).
- 36 The Minister shall have the right to have the Company perform all its covenants, terms, conditions, stipulations, provisions, agreements and obligations as contained in this Agreement or to sue the Company for damages for any breach or breaches thereof and the Minister shall also have the right to cancel this Agreement as set forth in paragraph 38 provided the remedies available to the Minister under paragraph 38 shall be limited to those set out in paragraph 38.
- 37 When any default or delay by the Company in the performance or observance of any of the terms, conditions, provisions, agreements, covenants or stipulations of this Agreement is occasioned in whole or in part through:
- (a) industrial disputes,
  - (b) governmental review or judicial proceedings respecting the possible environmental impact of the forest products manufacturing facilities or woodlands operations; or
  - (c) interruption which is not the result of any wilful or negligent act or omission by the Company, such as power failure, fire, sabotage, tempest, war or acts of God
- and not avoidable by reasonable effort or foresight, the Company shall not be deemed in default under this Agreement and the time for performance or observance of such term, condition, provision, agreement, covenant or stipulation shall be extended by such reasonable period of time as the Minister may specify in writing to the Company.
- 38 (1) Except as otherwise provided in paragraph 34, the Minister may, by giving to the Company ninety (90) days prior notice in writing, cancel this Agreement when:
- (a) any goods or chattels of the Company, located at the oriented strand board plant located in Edson, Alberta, or the sawmill-planer mill located in Drayton Valley, Alberta, and which constitutes a material part of the Company's assets located thereat, are lawfully seized or taken in execution by a creditor of the Company, and the Company has failed to take any legal action to contest the same within ninety (90) days after such seizure or taking, or
  - (b) the Company makes any general assignment for the benefit of its creditors or an assignment in bankruptcy or takes the benefit of any Act in force for bankrupt or insolvent debtors, or
  - (c) the Company fails from time to time to observe or perform any of the covenants, stipulations, terms, conditions, provisions or agreements required to be observed or performed by the Company under this Agreement, and having been given notice of such failure under paragraph 35 of this Agreement, fails to remedy such failure within the time allowed by the said paragraph for so doing, or any extension thereof given by the Minister.
- (2) Subparagraphs (1)(a) and (b) do not apply if a trustee for the holders or receiver managers or the holders themselves of bonds, debentures, or other securities of the Company exercises any rights or remedies contained in any deed of trust or mortgage or other agreement under which such bonds, debentures or other securities are issued or secured, including but without restricting the generality of the foregoing, the taking of possession by the trustee, receiver managers or the holders themselves of the Company's properties and



- assets and the operation or disposition thereof for the benefit of the holders of the Company's bonds, debentures or other securities.
- 39 The Minister does not guarantee any quality or quantity of timber on the forest management area.
- 40 No implied contract of any kind by or on behalf of the Minister shall arise or be construed from anything contained in this Agreement and the only rights, powers and privileges granted to the Company are those contained in this Agreement and any applicable Fire Control Agreement.
- 41 The Minister and the Company agree that the lines on the map shown in Appendix "A" hereunto annexed are intended, where those lines outline areas that are not surveyed, to be the survey lines of the townships, sections, or half sections, as the case may be, that would exist if such areas were surveyed under the system of township surveys prescribed by the *Surveys Act*.
- 42 The Company shall comply with and observe all the provisions and requirements of all Acts of the Province of Alberta and the regulations thereunder in force from time to time that apply to the Company or to this Agreement either specially or generally by express wording or by implication.
- 43 The Company shall, during the term of this Agreement, maintain an office in the Province of Alberta and maintain a registration under the *Business Corporations Act* and its regulations.
- 44 (1) Except for a dispute as to the cause of any fire referred to in paragraph 27(2), where any dispute arises between the parties to this Agreement concerning the application or interpretation of this Agreement, the dispute may be referred to arbitration pursuant to the *Arbitration Act* but only upon the mutual agreement of both parties.
- (2) Where both parties do not agree to refer a dispute concerning this Agreement to arbitration as provided in subparagraph (1) the dispute shall be resolved by means of civil action before the Courts of the Province of Alberta.
- 45 (1) The Company shall not assign this Agreement or any of the rights granted to it by this Agreement without the consent of the Minister in writing and such consent may, in the Minister's sole discretion, be withheld. Where the Minister refuses consent to an assignment, the Minister shall advise the Company in writing of the reasons for so refusing.
- (2) Subparagraph (1) does not apply to:
- (a) the employment of one or more contractors in the normal conduct of its operations;
  - (b) an assignment or transfer of this Agreement by way of mortgage or charge or the grant of a security interest in this Agreement to lenders to or trustees for lenders to the Company; or
  - (c) an assignment or transfer to a person, firm or corporation upon the sale or other disposition by or on behalf of lenders to or trustees for lenders referred to in subparagraph (2)(b) in the course of realization or enforcement of security against the manufacturing facilities, provided that such assignment, transfer, or other disposition shall not be made without the consent of the Minister in writing. Where the Minister refuses to consent to an assignment, the Minister shall advise the lenders or trustees for lenders, as the case may be, in writing of the reasons for so refusing.
- 46 Any waiver by the Minister of the strict performance by the Company of its covenants or of any term, condition, stipulation, agreement or provision under this Agreement is not binding upon the Minister unless such waiver is expressed in writing under the authority of the Minister and any such waiver or any extension of time granted by the Minister hereunder shall not abrogate such or any covenant, term, condition, stipulation, agreement or provision

herein or constitute a waiver or extension of time as to any subsequent breach of the same or any other covenant, term, condition, stipulation, agreement or provision herein.

- 47 The Company covenants and agrees to observe, perform and keep all covenants, terms, conditions, stipulations, agreements and provisions herein on its part to be observed, performed and kept and time shall be and remain of the essence thereof and notwithstanding any binding waiver given by the Minister as referred to in paragraph 46 or any extensions of time given by the Minister under this Agreement that thereby may affect the time for performing any particular act, covenant, term, condition, stipulation, agreement, or provision of this Agreement herein, time shall remain of the essence pertaining to all subsequent performance by the Company of any and all acts, covenants, terms, conditions, stipulations, agreements and provisions herein contained and to this entire Agreement.
- 48 (1) The Company assumes liability for and shall pay all claims of the Minister for all damages to any real or personal property (other than timber) of the Crown that was caused by, or arising out of, any of the operations or activities conducted on the forest management area by the Company, its employees, agents, or contractors, whether or not the damage so caused is due to the negligence of the Company, its employees, agents, or contractors, as the case may be, provided that such liability under this subparagraph shall not include economic loss or incidental and consequential loss and damage.
- (2) Subparagraph (1) shall not restrict, in any manner, the ability of the Minister to pursue the Company under the common law (as opposed to this Agreement) for economic loss or incidental and consequential loss and damage, which liability may be resolved by means of arbitration pursuant to the *Arbitration Act* with the mutual agreement of both parties, or failing such agreement, by civil action before the Courts of the Province of Alberta.
- 49 (1) The Company agrees to hold the Minister harmless against any and all third party claims, demands, or actions for which the Company is legally responsible, including those arising out of negligence, wilful harm, or crimes by the Company or its employees or agents.
- (2) Subparagraph (1) does not apply to any claim alleging interference with an aboriginal right or title by the Company, its employees, agents or contractors provided the claim does not relate to a breach by the Company, its employees agents or contractors of this Agreement or the approved forest management plan or annual operating plans during the period of the alleged interference.
- 50 (1) The Company shall submit, in confidence, to the Minister, when required, any information, data, or documents the Minister may reasonably request in respect of matters relating to this Agreement for the purpose of verifying the Company's continued compliance with the terms of this Agreement.
- (2) Where any information, data or documents are provided to the Minister in confidence under this Agreement, that confidentiality is subject to any restriction on disclosure or obligation to disclose imposed on the Minister by law including, without limitation, the *Freedom of Information and Protection of Privacy Act* (Alberta).
- 51 Any notice required to be given under this Agreement shall be deemed to be well and sufficiently given if delivered to the addresses set out below or if mailed at any post office in Canada by prepaid registered mail addressed as follows:
- 51 (1) to the Company:

Weyerhaeuser Company Limited  
11553 - 154 Street  
Edmonton, Alberta  
T5M 3N7

(2) to the Minister:

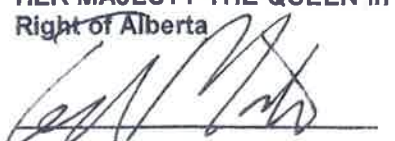
Minister of Sustainable Resource Development  
Legislature Building  
Edmonton, Alberta  
T5K 2B6

or to such other address either party may from time to time inform the other party in writing, and any such notice shall be deemed to have been received on the fourth business day after the mailing thereof, or if delivered, when delivered; provided that if mailed should there be between the time of mailing and the actual receipt of the notice a mail strike, slow down or other labour dispute which might affect the delivery of such notice then such notice shall only be effective if and when actually delivered.

- 52 This Agreement is made subject to its approval by the Lieutenant Governor in Council.
- 53 This Agreement inures to the benefit of and is binding upon the Crown and Her assigns, and the Company and its successors and assigns if approved by the Minister in accordance with the provisions of this Agreement.
- 54 This Agreement shall be construed as having been made in the Province of Alberta and the laws of the Province of Alberta shall be applied in the event of any action or arbitration mutually agreed to, respecting any dispute arising from this Agreement, its formulation, interpretation, and each and every other aspect pertaining to or resulting from its entire contents.

**IN WITNESS WHEREOF** the party of the first part executes this Agreement under the hand of the Minister subscribed hereunder at Edmonton, Alberta, Canada this 16<sup>th</sup> day of December, 2009.

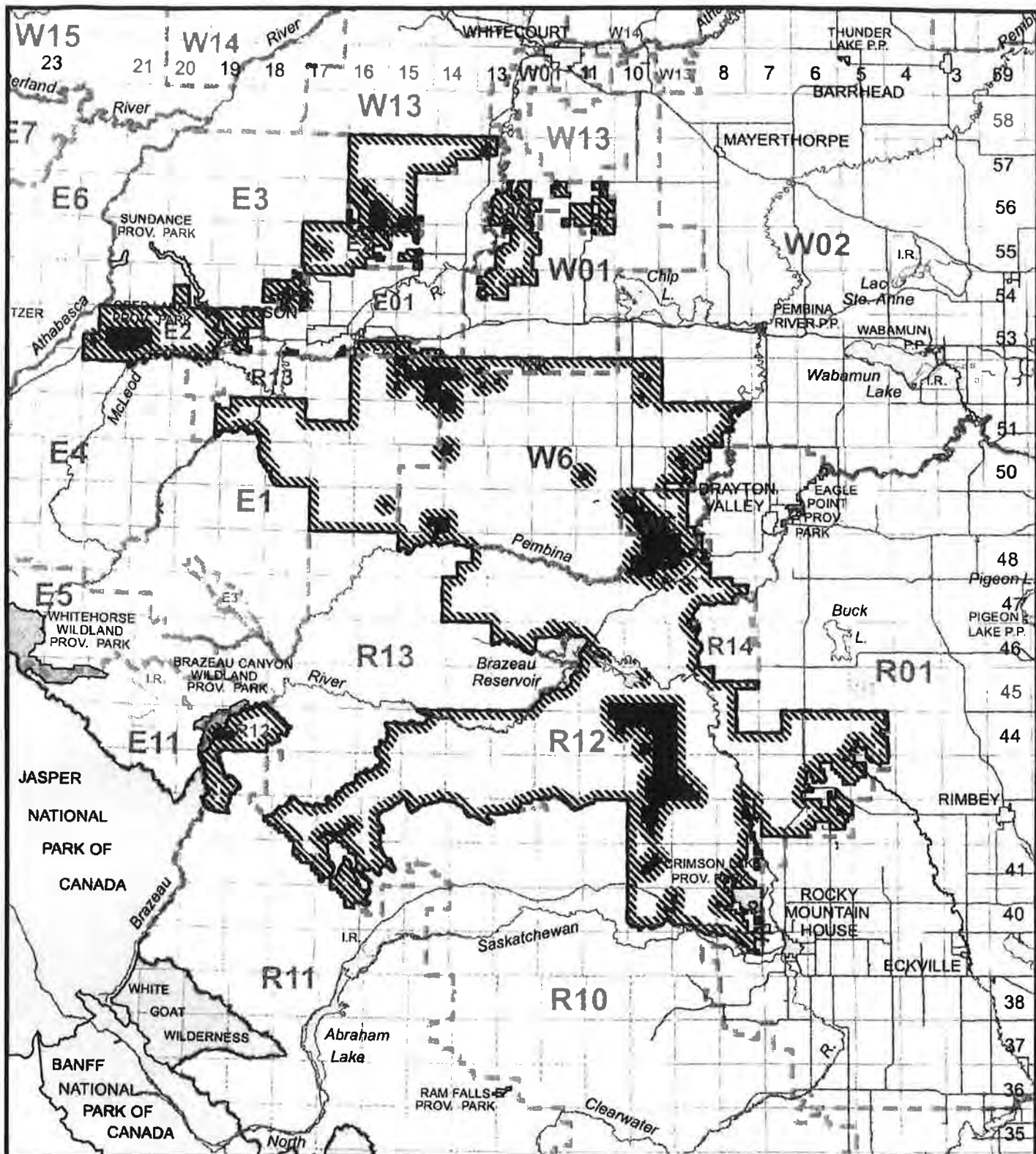
  
\_\_\_\_\_  
Witness

**HER MAJESTY THE QUEEN in  
Right of Alberta**  
  
\_\_\_\_\_  
Minister of Sustainable  
Resource Development

and the party of the second part executes this Agreement by subscribing hereunder the signatures of its duly authorized corporate officers at Vancouver BC, Canada this 11 day of December, 2009.

  
\_\_\_\_\_  
Witness

**Weyerhaeuser Company  
Limited**  
  
\_\_\_\_\_



**WEYERHAEUSER COMPANY LIMITED  
(PEMBINA TIMBERLAND)  
FOREST MANAGEMENT AREA  
APPENDIX "A"**

This is Appendix "A" to the memorandum of agreement dated *December 16, 2009* between HER MAJESTY, THE QUEEN, in right of the Province of Alberta and WEYERHAEUSER COMPANY LIMITED (PEMBINA TIMBERLAND).

 Forest Management Area  
 Area Deleted from FMA

 G6 Forest Management Unit

## **APPENDIX "B"**

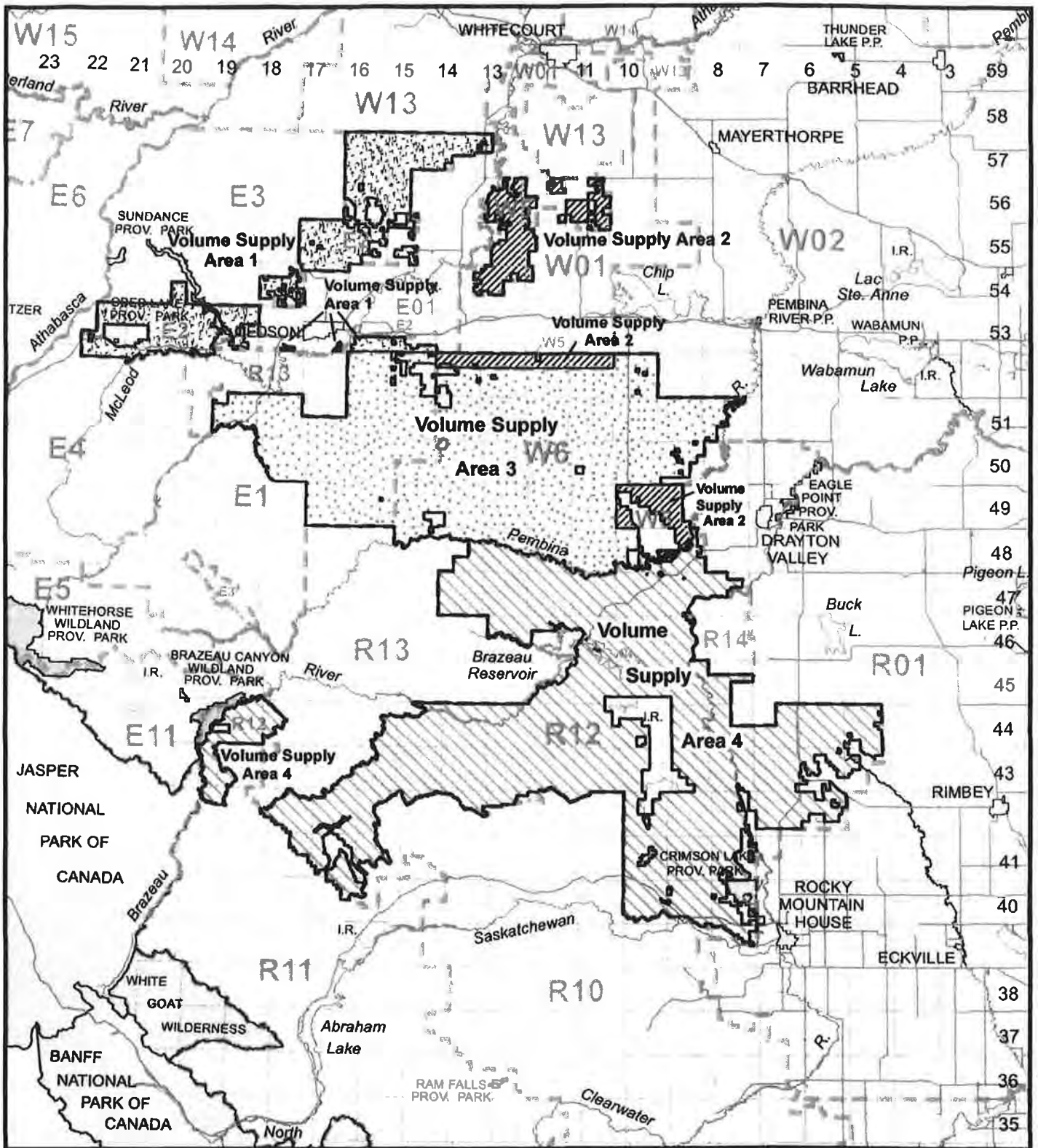
### **WEYERHAEUSER COMPANY LIMITED**

#### **LIST OF HOLDERS OF CONIFEROUS TIMBER QUOTA CERTIFICATES ISSUED WITHIN THE FOREST MANAGEMENT AREA**

1. Edson Timber Products Ltd. CTQE01F005
2. Edfor Co-operative Ltd. CTQE020002
3. Millar Western Forest Products Ltd. CTQW060002
4. ANC Timber Ltd. CTQW060011
5. Blue Ridge Lumber (1981) Ltd. CTQW060010
6. Cold Creek Timber Ltd. CTQW060012
7. Tall Pine Timber Co. Ltd. CTQR120002
8. Tall Pine Timber Co. Ltd. CTQR120003
9. Tall Pine Timber Co. Ltd. CTQR120004
10. Dale Hansen CTQR120001

The following clause shall apply to the list of quotas in Appendix "B":

- (a) Where a coniferous quota listed in Appendix B is merged with one or more quotas, the new quota shall be deemed to be listed in Appendix "B" for the purpose of paragraph 8(2)(a) of this Agreement.



**WEYERHAEUSER COMPANY LIMITED  
(PEMBINA TIMBERLAND)  
VOLUME SUPPLY AREAS  
APPENDIX "C"**

This is Appendix "C" to the memorandum of agreement dated December 16, 2009 between HER MAJESTY, THE QUEEN, in right of the Province of Alberta and WEYERHAEUSER COMPANY LIMITED (PEMBINA TIMBERLAND).

 Forest Management Area

 Forest Management Unit

## **APPENDIX "D"**

### **WEYERHAEUSER COMPANY LIMITED**

#### **DESCRIPTION OF COMMUNITY TIMBER PERMIT PROGRAM WITHIN THE FOREST MANAGEMENT AREA BY VOLUME SUPPLY AREA:**

1. Supply Area 1 (6.49% coniferous annual allowable cut plus 1,500 cubic metres of deciduous timber)
2. Supply Area 2 (100% of the coniferous annual allowable cut and 100% of the incidental coniferous timber production, and 4,000 cubic metres of deciduous timber from pure deciduous stands and 100% of the incidental deciduous timber)
3. Supply Area 3 (18,252 cubic metres of coniferous timber and 17,591 cubic metres of deciduous timber)
4. Supply Area 4 (4,000 cubic metres of coniferous timber)

The following clause shall apply to the list of permits in Appendix "D".

- (a) The approved forest management plan may alter the percentages and Annual Allowable Cuts.







Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Annex II: Terms of Reference

March 19, 2018



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## 1 2016 FMP Terms of Reference and Approval Letter



File: 06332-F02-02

August 8, 2014

Mr. Paul Scott, RPF  
Strategic Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company Limited  
2509 Aspen Drive  
Edson, Alberta T7E 1S8

**Subject: APPROVAL – WEYERHAEUSER PEMBINA TIMBERLANDS  
2016 FOREST MANAGEMENT PLAN TERMS OF REFERENCE**

Dear Mr. Scott:

Thank you for the July 18, 2014 Weyerhaeuser Pembina Timberlands 2016 Forest Management Plan (FMP) Terms of Reference (ToR).

The ToR is approved.

We look forward to working with you on the development of the FMP.

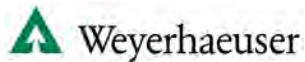
If you have any questions, or require further information, please contact Liana Luard, Lead, Forest Planning and Performance Monitoring at (780) 427-0395.

Yours truly,



Robert J. Popowich, RPF  
Senior Manager, Forest Resource Management Section

cc: Dave Hugelschaffer, Approvals Manager, Edson, Upper Athabasca Region  
Stephen Mills, Area Forester, Edson, Upper Athabasca Region



Pembina Timberlands, 2509 Aspen Drive · Edson, AB, Canada T7E 1S8 · Tel (780) 723.5677 · Fax (780) 723.3841

July 18, 2014

**Robert Popowich**

Senior Manager

Forest Resource Management Section

Alberta Environment and Sustainable Resource Development

8<sup>th</sup> Floor, Great West Life Building

9920-108<sup>th</sup> Street, Edmonton, AB

T5K 2M4

Dear Robert:

**Subject: Terms of Reference for the Weyerhaeuser Pembina 2016-2026  
DFMP**

Please find enclosed a copy of Weyerhaeuser Pembina's Terms of Reference for the development of the 2016 DFMP submission. Weyerhaeuser is requesting review and approval of this document.

If you have any question, please call me.

Regards,

A handwritten signature in blue ink that reads 'Paul Scott'.

Paul Scott

Strategic Planning Coordinator

Pembina Timberlands

Weyerhaeuser Company Limited

2509 Aspen Drive

Edson, Alberta

T7E 1S8

1-780-712-6886

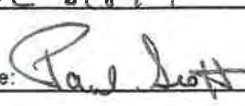
paul.scott@weyerhaeuser.com



## Senior Company Regulated Forestry Professional (RFP) Validation<sup>1</sup>

**Forest Management Agreement Name:**

Forest Management Planning Standards (FMPS) <i>(Validation<sup>1</sup> of this summary by the Senior Company RFP indicates he/she has reviewed the completed FMP, believes it meets Alberta Standards<sup>2</sup> listed herein, and has agreement from appropriate Company authorities to provide the resources necessary to ensure the FMP's successful implementation.)</i>	Initials of Senior RFP
<b>Section 1 - Interpretation of CSA Z809-02 Standards</b>	
5.4 Content	
5.5 Communications	
<b>Section 2 - FMP Process and Content Standards</b>	
<b>1.0 Terms of Reference (ToR)</b>	
1.1 Content ( <i>Continuity between plans, management direction, future work, monitoring and reporting</i> )	PS
<b>2.0 Forest Management Plans</b>	
<b>2.1 Preliminary Forest Management Plan (where applicable)</b>	
2.2 The Detailed Forest Management Plan ( <i>addresses all components of CSA-Z809-02 standard 7.3.7</i> )	
2.2.1 A Comprehensive Description of the DFA	
2.2.1.1 Corporate Overview	
2.2.1.2 Forest Management Approach	
2.2.1.3 Landscape Assessment	
2.2.2 A Summary of Any Previous Forest Management Plan and the Management Outcomes Including the Learning Associated with Management Review	
2.2.3 A Statement of Values, Objectives Indicators and Targets	
2.2.4 Current Status and Forecasts for Each Indicator, Including a Description of the Assumptions and Analytical Methods for Forecasting	
2.2.5 A Description of the Chosen Strategy Including All Significant Actions to be Undertaken and their Associated Implementation Schedule	
2.2.6 A Description of the Monitoring Program and the Associated Evaluation of Actual and Expected Outcomes	
2.2.7 A Demonstration of the Linkages between Short Term and Operational Plans and the SFM Plan	
<b>Annex 1 - Timber Supply Analysis (TSA) and Growth &amp; Yield (G&amp;Y)</b>	
<b>5.0 Forecasting Standards</b>	
5.5 The submission includes a detailed explanation of the decision-making process used to select the preferred scenario.	
5.6 The submission includes a description of the forecasts completed (see standard 5.4) and the rationale used in the review and analysis of each scenario.	
5.7 The Spatial Harvest Sequence (SHS) has been selected considering key issues	
5.9.2 Silviculture regimes have been developed for all FMP strata.	
5.9.3 Landbase assignments for coniferous and deciduous timber have been established	
5.12 Table 1 has been completed for all forest operators and included in the FMP	

Senior Company RFP Information		RFP# or Seal <small>(e.g. CAPF RPF xxx, CAPFT RPFT xxxx)</small>
Printed Name	Title	
PAUL SCOTT	Forest Management Coord.	# 398
Signature: 		Date: July 18/2014

Notes: 1 - RFP Validation constitutes applying initials to each standard summarized and completing the Senior Company RFP information section  
 - Interpretive words appear in italics



# Weyerhaeuser Pembina Timberlands

Terms of Reference

For the 2016-26

Detailed Forest Management Plan

For

FMA#0900046

And FMUs:

E15\E2\W5\W6\ R12

July 18, 2014

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## 1.0 Introduction

The primary goal of this Terms of Reference (ToR) is to provide a framework that details the process for development of the next (2016 – 2026) Detailed Forest Management Plan (DFMP or Plan) for the Weyerhaeuser Pembina Forest Management Agreement (FMA or the Area) Area and associated non-FMA areas within Forest Management Units (FMUs) E15, E2, W5, W6 and R12 in accordance with the *Alberta Forest Management Planning Standard V4.1 – April 2006*<sup>1</sup>. The combined FMA/non-FMA areas are defined as the planning ‘Unit’ for the purposes of this Plan. In addition to ESRD requirements, Weyerhaeuser’s own policy will influence the development of the DFMP which include Weyerhaeuser’s Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser’s commitment to certification under the Sustainable Forestry Initiative. This TOR is intended to ensure a timely submission of the DFMP that is acceptable to Weyerhaeuser Company, has engaged key stakeholders appropriately in its development, and is suitable for approval by Alberta Environment and Sustainable Resource Development (ESRD).

The Terms of Reference outlines a progressive review of all plan components through to final submission and approval of the entire plan.

## 2.0 Background

The current FMA #0900046 represents an amalgamation and renewal of two former FMA Areas completed in 2009. This next DFMP submission will represent the first Plan for the new FMA. The Drayton Valley DFMP was approved effective May 1, 2006, and the Edson DFMP was approved effective May 1, 2007. Subsequently both DFMPs were amended effective May 1, 2007 to facilitate the Provincial Healthy Pine Strategy. These DFMPs cover Forest Management Units (FMUs) E2, E15, R12, W5 and W6.

The Unit serves as the main wood supply for Weyerhaeuser’s Drayton Valley Lumber and Edson OSB businesses. As well as Weyerhaeuser, there are a number of other timber operators embedded in the FMA Area as overlapping Quota holders. This includes Alberta Newsprint Ltd., Blue Ridge Lumber Ltd., Edson Timber Products, EDFOR Cooperatives, Dale Hansen Ltd., Millar Western Industries and Tall Pine Timber Ltd. There are also 4 Community Timber Permit Programs (CTPP) active in the FMA Area.

The Plan incorporates a number of smaller Weyerhaeuser Quotas located in Green public lands immediately adjacent to the FMA Area boundary. These Quotas represent residual allocations of Crown timber as a result of having former Weyerhaeuser Quotas amalgamated into the current FMA Area less those lands that were under Crown grazing disposition (i.e. Grazing Leases) that legislation prevented from inclusion in FMAs.

The following Table 1 summarizes the distribution of Annual Allowable Cut between Weyerhaeuser and the other timber allocations, and the impact of the application of the Healthy Pine Strategy.

---

<sup>1</sup> <http://srd.alberta.ca/LandsForests/ForestManagement/ForestManagementPlanning/Default.aspx>



Table 1 – Summary of Pembina FMA Area and non-FMA Area MPB AAC

<b>Timber Operator</b>	<b>Coniferous AAC</b>	<b>Deciduous AAC</b>
Weyerhaeuser	1,103,001	575,894
Quota Holders	309,754	0
CTPP	56,402	31,142
<b>Total MPB AAC</b>	<b>1,469,157</b>	<b>607,036</b>
<b>Total Pre-MPB AAC</b>	<b>904,000</b>	<b>603,589</b>

### **3.0 Area Description**

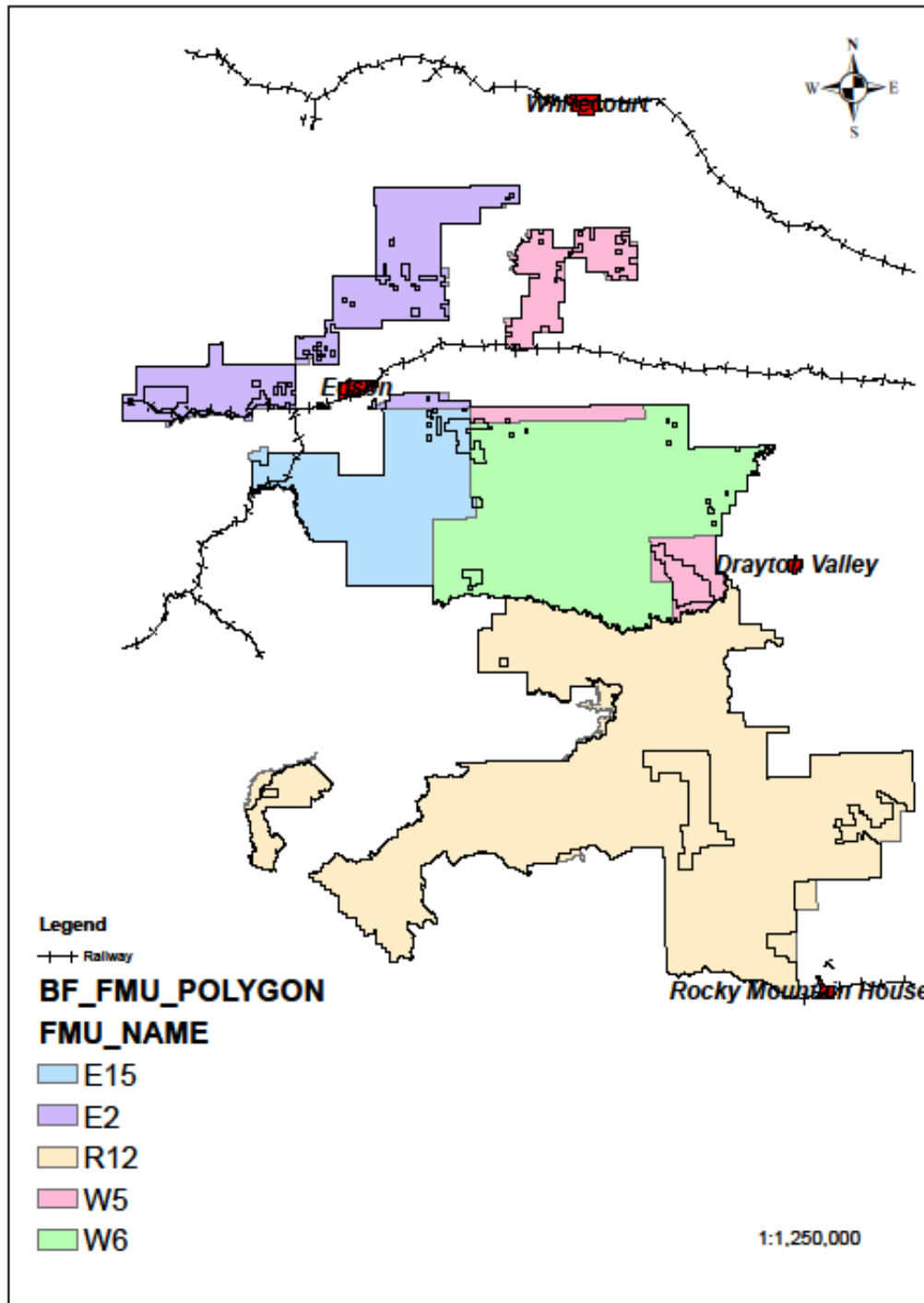
The Unit covers approximately 1.1 million hectares of Crown land in West Central Alberta – see attached map next page. The Area stretches north to south from the Whitecourt area through Drayton Valley down to the Rocky Mountain House area, loosely defining the Green Area boundary on the east side and the Foothills region to the west.

The Unit currently covers five Forest Management Units (E15, E2, W5, W6 and R12), 16 land management units (LMUs), and 90 harvest design areas. .

Oilfield developments are extensive across the Unit, and continue to have a major impact on the landbase and forest management. The Unit is also becoming increasingly popular for recreational use due to its proximity to major urban centers.

The Unit is also biologically diverse covering five Natural Sub-Regions: Upper and Lower Foothills, Alpine, Sub-Alpine and Dry Mixedwood. Elevation changes from 750 meters Above Sea Level (ASL) in the east to 2600 meters ASL in the west. A feature wildlife species focus will be on grizzly bear habitat and anthropogenic impacts.

## Weyerhaeuser Pembina FMA and FMU boundary Map



## 4.0 Forest Resource Management Issues

One requirement of the Terms of Reference is the need for Weyerhaeuser and ESRD to identify key issues that will require resolution prior to proceeding with components of the plan (i.e. Timber Supply Analysis, Yield Curve development). Weyerhaeuser and ESRD will, in a separate document, address key issues of interest to each party in the ‘Issues and Management Direction Summary’ that will be signed by the Executive Director, Forest Management Branch.

## 5.0 Timelines

The process for the Plan development is complex and will require a detailed, coordinated schedule of that will follow an orderly fashion in order to ensure the timelines are met. Table 2 provides a brief summary of the timelines for the major components of the DFMP. See appendix 1 for a comprehensive Gaant chart outlining the entire process in detail. As stated previously, the Terms of Reference outlines a progressive review of all plan components through to final submission and approval of the entire plan.

Table 2: Sequence of development for the DFMP

<b>FOREST MANAGEMENT PLAN MILESTONE</b>	<b>EXPECTED COMPLETION DATE</b>	<b>ESRD REVIEW TIMELINES*</b>	<b>APPROVED BY</b>
Terms of Reference	June 1, 2014	30 days	Senior Manager, Forest Resource Management
Issues and Plan Direction	June 1, 2014	30 days	Executive Director, Forest Management Branch
Public Involvement Plan	June 1, 2014	30 days	Approvals Manager, Upper Athabasca Region
First Nations Consultation Plan	June 1, 2014	30 days	Approvals Manager, Upper Athabasca Region
New AVI 2.1	April 1, 2015	30 days	Executive Director, Forest Management Branch
Net Landbase Determination	July 1, 2015	30 days	Senior Manager, Forest Resource Management
Yield Curve Development	July 1, 2015	30 days	Senior Manager, Forest Resource Management
Growth and Yield Monitoring Program	July 1, 2015	30 days	Senior Manager, Forest Resource Management
Timber Supply Forecasting	January 1, 2016	30 days	Senior Manager, Forest Resource Management
Spatial harvest sequence	January 1, 2016	30 days	Senior Manager, Forest Resource Management
Forest Conditions Assessments	January 1, 2016	30 days	Senior Manager, Forest Resource Management
Performance Monitoring – VOITs	March 1, 2016	30 days	Senior Manager, Forest Resource Management
Final Plan Submission	April 1, 2016	100 days	Executive Director, Forest Management Branch
Operating Ground Rules	September 1, 2016	NA	Executive Director, Forest Management Branch
Stewardship Reporting	November 1, 2021	NA	NA
Next TofR	May 1, 2024	30 days	Senior Manager, Forest Resource Management

\*working days

## 6.0 Roles, Responsibilities and Obligation of Participants

### 6.1 Plan Development Team Members

The Plan Development Team (PDT) has been formed to resolve the technical details of the DFMP. PDT members are expected to attend all PDT meetings so that all discussions, decisions and/or disputes can be documented in a timely manner. The PDT is to reach agreement-in-principle on all components of the Plan prior to its completion. Tracking of decisions will be as per Table 3. Meeting proceedings will be recorded utilizing the PDT tracking sheet.

Table 3: Tracking sheet for issue and decisions of the PDT

Date	In Attendance	Tracking Number	Topic Category	Action Item or Decision Made	Completion date as required
		2014-01			

Individuals on the Plan Development Team represent Weyerhaeuser and ESRD. The Team will be in place for the duration of the development of the Detailed Forest Management Plan. Table 4 outlines the individuals involved in the development of the Plan. The ‘Leads’ will manage their respective organizations input into the DFMP, and clearly represent this input to the other PDT members.

Table 4 Plan Development Team members

TEAM MEMBER	ORGANIZATION	DESIGNATION
Paul Scott	Weyerhaeuser - Pembina	Lead, Forest Management Coordinator
Kerri MacKay - Second	Weyerhaeuser - Pembina	Strategic Informatics Forester
Liana Luard	ESRD - Edmonton	Lead, Forest Planning and Performance Monitoring
Stephen Mills	ESRD - Foothills	Area Planning Forester
Dave Hobson	Fish and Wildlife – Foothills	Biologist

Other participants will be brought in as required. This would include additional Weyerhaeuser, AESRD, other Provincial or Federal government staff, and any experts deemed necessary by the PDT. They will provide input to help the PDT make decisions

Table 5 below identifies some of the advisers expected to participate in the development of the DFMP, however this list is not all-inclusive.



Table 5 Advisers to the PDT.

<b>TEAM MEMBER</b>	<b>ORGANIZATION</b>	<b>DESIGNATION</b>
Bob Winship	Weyerhaeuser - Pembina	Strategic Team Coordinator
Wendy Crosina	Weyerhaeuser - Canada	Canadian Forest Steward
Andrew Johnson	Forestry Corp	Senior consultant – TSA Analyst
Ted Gooding	Forestry Corp	Senior Partner, Strategic Planning
Bob Christian	Forestry Corp	Senior Partner, Senior Analyst
Gyula Guylas	TheXLWiz Consulting	Growth and Yield specialist
Greg Greidanus	ESRD – Edmonton	Resource Analyst
Cosmin Tansanu	ESRD - Edmonton	Growth and Yield Forester

It will be the responsibility of ESRD to act as the regulatory body that outlines regulations, planning standards and other needs as identified from time to time.

It will be the responsibility of the PDT to come to a consensus for agreement-in-principle for components of the Plan as it is developed.

## ***6.2 Quota Holder and Community Timber Permit Program***

Weyerhaeuser will have the responsibility to ensure that Quota Holders covered by the Plan have the opportunity to review, comment on, and where necessary, provide endorsement (see table 7).

Weyerhaeuser will track all documentation shared with or requested from Quota Holders, as well as all responses, as detailed in Table 6, with the PDT. It will be the responsibility of ESRD to provide input for the CTP Program during the development of the Plan.

Table 6 Weyerhaeuser Pembina 2016 DFMP Quota Holder document review tracking sheet headers.

<b>Document Reviewed</b>	<b>Submitted to</b>	<b>Date Sent Out</b>	<b>Review Period</b>	<b>Responses</b>	<b>How issues were addressed</b>
--------------------------	---------------------	----------------------	----------------------	------------------	----------------------------------

Table 7 below outlines the list of the Quota Holder/Community Timber Permit Program (CTPP) on the Unit.

Table 7. Quota Holder/CTPP Sub-group members

Organization	Main Contact
Alberta Newsprint Company	Ian Daisley
Blue Ridge Lumber	Mark Cookson
Edson Timber Products Ltd.	Dave Chaluk
EDFOR Cooperatives	David Cobb/John Nyssen
Millar Western Forest Products Ltd.	Bob Mason
Tall Pine Timber Ltd.	Jerry Baker
CTPP Foothills - ESRD	Krista Woods
CTPP Clearwater – ESRD	Bert Ciesielski
Dale Hansen	Dale Hansen

There will be two different methods to provide input into the plan: 1. Providing comments directly to Weyerhaeuser upon receipt of direct mail-outs of sections of the Plan (i.e. Terms of Reference), or individual meetings held at the request of either the Quota Holder or the Company (See “one-on-one” in Table 8 below) and/or 2. Participating in joint PDT-Quota Holder sessions where all Quota Holders are invited to attend. It is Weyerhaeuser’s intent to allow for full involvement in the development of the Plan, and address all issues as they arise.

Table 8 outlines the components of Plan that will include the opportunity for involvement by Quota Holders to their desired level.

Table 8: Quota Holder input into the Plan

FOREST MANAGEMENT PLAN SECTIONS	ONE-ON-ONE	JOINT with PDT	Review Period in days*	Endorsement Sign-off Required
Terms of Reference	X	-	15	No
Patchworks validation – Version 1	X	-	120	Yes
Patchworks validation – subsequent versions	X	-	15	Yes
ARIS Reconciliation	X	-	15	Yes
Net Landbase Determination	X	X	15	Yes
Yield Curve Development	X	X	15	No
Timber Supply Forecasting	X	X	15	Yes
Spatial harvest sequence	X	X	10	Yes
Forest Conditions Assessments	X	-	15	No
Performance Monitoring – VOITs	X	-	20	No
Silviculture Strategies Matrix	X	X	10	Yes
Final Plan Submission	X	-	20	Yes
Operating Ground Rules	-	X	20	Yes

**\*working days**

Tracking of outstanding issues and decisions made during the input sessions (either one-on-one or in joint PDT/Quota Holder sessions) will be consistent with the PDT tracking sheet shown in Table 3, and will be shared with the PDT.

### **6.3 Stakeholders and the General Public**

The Public Involvement Process will describe the involvement of the main stakeholder groups and the general public for input into development of the Plan, as will the First Nations Consultation Process. Each of these documents is approved under separate letter.

## **7.0 Communication and Submission Requirements**

### **7.1 Internal**

Communication within the Plan Development Team (PDT) will be through:

- Regular meetings
- Distribution of meeting proceedings (Tracking sheet)
- Distribution of documents, spatial data sets and any associated materials in support of the planning process

ESRD Lead, Forest Planning and Performance Monitoring – FMB, will have the responsibility to review the Plan internally with all necessary staff as the Plan is developed. Weyerhaeuser will ensure that Quota Holders on the FMA will be given the opportunity to review components of the Plan as they are developed and report the outcomes of same with the PDT. ESRD will manage input from the CTPP groups as they see fit.

### **7.2 External**

Weyerhaeuser will develop a public involvement process (to be submitted as a stand-alone document to the Upper Athabasca Region Approvals Manager) that records and summarizes public input and concerns as they occur throughout the development of the DFMP. This includes inquiries from the public and the press. Key elements for success in this public consultation process will be:

- ✓ Identifying who the key stakeholders are requiring involvement, and distinguishing such stakeholders from otherwise general public interests;
- ✓ Establishing supportive relationships with stakeholders and engaging them in a manner which is most convenient and appropriate for them;
- ✓ Recruiting those representatives of public interests who can offer capacity for quality input;
- ✓ Emphasizing facilitation, listening and feedback processes;
- ✓ Ensuring disclosure and ease of understanding of DFMP information.

The approved DFMP and associated approval documents will be posted on the ESRD website. Likewise the FMA Area Operating Ground Rules (OGRs) are posted on an associated ESRD website.

Weyerhaeuser will also develop a First Nations consultation process, to be consistent with the intent behind Alberta's consultation guidelines for First Nations.

Annual and Stewardship reports are made available to ESRD as they are compiled.

### **7.3 Submission Requirements**

The company will provide ESRD with the following at the date of submission;

- 2 paper and 2 digital copies of the DFMP
- 1 digital copy of technical files
- An RPF validated checklist describing the extent of compliance with applicable standards included with each submission

### **8.0 Resources**

Weyerhaeuser will be responsible for financing/resourcing the development of the FMP for the most part. Quota holders and AESRD will be responsible for any internal resources they may require as part of this plan's development. Some data sharing agreements may come about during the development of the plan. If extra-ordinary financial burdens are placed upon Weyerhaeuser for scenario development specific to individual operator's desires, then there may be an expectation by Weyerhaeuser for financial contributions to pay for said scenarios, with the idea that additional scenario development will not unduly delay DFMP submission timelines.

ESRD will provide input to the DFMP for all of the following:

- Grizzly Bear Assessment
- Watershed assessment
- Barred Owl modeling
- Wildfire Threat Assessment
- Old forest Guild Assessment

**Weyerhaeuser does not intend to undertake leaf-off imagery to enhance AVI understory inventory. AVI 2.1 will be the standard under which the AVI is to be completed.**

### **9.0 Conflict of Interest**

PDT members will represent the interests only of the organization they represent. Persons who may be in a conflict-of-interest must disclose this, and the PDT has the option of excluding such individual(s) from any further discussions on the matter. If it becomes apparent to the PDT that the individual is not representing the interests of their agency, the individual will be approached by the PDT leads and given the opportunity to address the situation. If the potential conflict is not addressed to the satisfaction of the PDT leads, the dispute resolution process as defined in section 14 may be invoked.

## ***10.0 Progressive Review of Plan Components and Final Approval of the DFMP***

The PDT will review all decisions regarding the technical details of the DFMP during the development of the Plan, taking into account input from Advisers, participating Quota Holder representatives, other stakeholders and the general public. Technical issues that the PDT will manage are centered on, but are not limited to, the following components of the plan:

- Net landbase determination,
- Yield curve development,
- Timber Supply Analysis, and
- VOITs.

As components of the Plan are completed, the PDT will recommend those components receive ESRD agreement–in-principle, with the understanding that agreement-in-principle is not final approval, but rather ESRD acceptance that the submission is acceptable to it.

Prior to final submission of the plan, the company will conduct a meaningful review of the entire FMP with Quota Holders, First Nations, the Advisory Group, major stakeholder groups, and the general public. The interaction between Weyerhaeuser and key stakeholder groups will be somewhat similar as that of the Quota Holders, where comments are solicited through One-on-One sessions or in a group session, by example a DFMP advisory committee.

Under this approach, when the final Plan is submitted, the 100 day review of the Plan by ESRD should be sufficient to allow for timely the approval and implementation of the Plan.

## ***11.0 Authority for Decisions***

All participants of the Plan Development Team, advisers, and participating Quota Holder representatives shall operate in full authority of their respective organizations. The individuals must have the authority to make decisions that are binding with a view to the final product. ESRD has final approval authority on the entire FMP process, including the new AVI, net land base determination, yield curve development and the timber supply analysis.

## ***12.0 Mechanism to Adjust the Process***

From time to time it may be necessary to amend the TofR to reflect new information or important changes that have occurred for the following reasons:

- Change in government policy
- Change in company management objectives or direction
- Issues that arise as a result of stakeholder involvement
- First Nation consultation process changes

- Directions from higher level plans, i.e. the Land Use Framework, or
- Opportunities to incorporate strategies from other planning initiatives

Any amendments will be made by consensus within the PDT

### ***13.0 Access to Information***

The flow of information within the PDT will be uninhibited, unless it is deemed by the Company to be proprietary (i.e. financial or business related). The PDT will share information with their respective organizations as necessary. Individual PDT members will own this.

The First Nations Consultation Process and the Public Involvement Process will outline what type of information will be shared among those stakeholders.

Information to be shared with Quota Holders is as per section 6.2.

### ***14.0 Dispute Resolution Mechanism***

The Company and stakeholders are able to express dissenting views during the development of the DFMP. It is the intent of the process to allow for meaningful discussions to occur throughout the DFMP planning process to resolve all issues before implementing a dispute resolution process. The following describes the process for dispute resolution:

Step #1: The Company and any Quota Holders or any major stakeholder group will attempt to come to some consensus on components of the FMP as they are developed

Step #2: If disputes arise that cannot be solved in step #1, the issue will be brought to the PDT for their review; if the PDT cannot resolve the dispute, or is unwilling to, continue on to step #3.

Step #3: If the issue is specific to a company or organization involved in the input or review of the Plan, that company, group of companies, or organization(s) can bring their issue to the attention of the Senior Manager, Forest Planning Section and the Area Approvals Manager for resolution

Step #4: If the issue is unresolved after step #3, then the issue will be brought to the attention of the Executive Director of the Forest Management Branch. The decision of the Executive Director will be binding upon all participants.

### ***15.0 Operating Ground Rules (OGRs)***

Upon approval of the DFMP, the current set of Operating Ground Rules (Sept. 2011) will be used as a baseline document that will be updated to reflect operating procedures that require amendment as a result of the DFMP. The ESRD OGR coordinator will manage the process, with the opportunity of all Quota Holders being involved in the process if they so desire.

### ***16.0 Annual and Stewardship Reporting***

Annual Report: The Annual Report (AR) will report on the current status of the indicators identified in the VOITs table, as well as any additional information the company may want to report on an annual basis. It is expected that no additional VOITs, other than the VOITs listed in the Planning



Standard, will be developed, unless deemed appropriate by the Company. Potential VOITs proposed through the Public Input Process or the First Nations Consultation Process will be reviewed on a case-by-case basis for acceptance or rejection, and must be acceptable to all contributors, where necessary. The annual report will be made available to ESRD on November 1<sup>st</sup> following the end of each operating year, up to the year prior to the next Plan submission (2017-2025), which is anticipated to be on April 1, 2026. Information required for annual reporting will be required to be provided by all timber operators, where relevant.

**Stewardship Report:** The Stewardship Report (SR) will summarize the first five years of annual reporting. The Stewardship Report will also include all information required as identified in the version of the ‘Stewardship Reporting Framework’ available at the time of DFMP approval. All timber operators are expected to contribute relevant information to the Stewardship report. The Stewardship Report will be submitted to ESRD no later than November 1<sup>st</sup>, 2021. Only one Stewardship report will be completed during the life of the Plan.

Paul Scott  
RPF #398

A handwritten signature in blue ink that reads "Paul Scott".

Management Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company  
[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)  
1-780-712-6886





## **2 2016 FMP Terms of Reference (Revision 1) and Approval Letter**



File: 06332-F02-02  
06332-010

November 9, 2015

Mr. Bob Winship  
Weyerhaeuser Company Ltd.  
Pembina Timberlands  
Box 7739  
Drayton Valley, Alberta T7A 1S8

Dear Mr. Winship:

**Subject: APPROVAL – WEYERHAEUSER COMPANY LTD. (PEMBINA TIMBERLANDS)  
2016 FOREST MANAGEMENT PLAN TERMS OF REFERENCE AMENDMENT #1**

Thank you for the amended Terms of Reference dated November 1, 2015 as requested by the department in the October 19, 2015 Forest Management Plan (FMP) extension approval letter.

The updated timelines reflecting the FMP extension from April 1, 2016 to April 1, 2017 have been reviewed and accepted.

The Terms of Reference is approved.

If you have any questions or require further information, please contact Liana Luard, Lead, Forest Planning and Performance Monitoring at (780) 427-0395.

Yours truly,



Robert J. Popowich, RPF  
Director, Forest Resource Management

cc: Dave Hugelschaffer, Approvals Manager, Upper Athabasca Region (Edson)  
Daryl Price, Director, Forest Resource Analysis



# Weyerhaeuser Pembina Timberlands

Terms of Reference

For the 2016-26

Detailed Forest Management Plan

For

FMA#0900046

And FMUs:

E15\E2\W5\W6\ R12

Revised

November 1, 2015



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## 1.0 Introduction

The primary goal of this Terms of Reference (ToR) is to provide a framework that details the process for development of the next (2016 – 2026) Detailed Forest Management Plan (DFMP or Plan) for the Weyerhaeuser Pembina Forest Management Agreement (FMA or the Area) Area and associated non-FMA areas within Forest Management Units (FMUs) E15, E2, W5, W6 and R12 in accordance with the *Alberta Forest Management Planning Standard V4.1 – April 2006*<sup>1</sup>. The combined FMA/non-FMA areas are defined as the planning ‘Unit’ for the purposes of this Plan. In addition to GoA requirements, Weyerhaeuser’s own policy will influence the development of the DFMP which include Weyerhaeuser’s Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser’s commitment to certification under the Sustainable Forestry Initiative. This TOR is intended to ensure a timely submission of the DFMP that is acceptable to Weyerhaeuser Company, has engaged key stakeholders appropriately in its development, and is suitable for approval by the Government of Alberta (GOA).

This ToR is a revised version to that submitted on July 14, 2014 and approved by GoA on August 8, 2014. Weyerhaeuser experienced a delay in the completion of a new Alberta Forest Inventory. It is now complete and awaiting GoA approval for use in the Forest Management Planning process to derive an annual allowable cut.

The Terms of Reference outlines a progressive review of all plan components through to final submission and approval of the entire plan.

## 2.0 Background

The current FMA #0900046 represents an amalgamation and renewal of two former FMA Areas completed in 2009. This next DFMP submission will represent the first Plan for the new FMA. The Drayton Valley DFMP was approved effective May 1, 2006, and the Edson DFMP was approved effective May 1, 2007. Subsequently both DFMPs were amended effective May 1, 2007 to facilitate the Provincial Healthy Pine Strategy. These DFMPs cover Forest Management Units (FMUs) E2, E15, R12, W5 and W6.

The Unit serves as the main wood supply for Weyerhaeuser’s Drayton Valley Lumber and Edson OSB businesses. As well as Weyerhaeuser, there are a number of other timber operators embedded in the FMA Area as overlapping Quota holders. This includes Alberta Newsprint Ltd., Blue Ridge Lumber Ltd., Edson Timber Products, EDFOR Cooperatives, Dale Hansen Ltd., Millar Western Industries and Tall Pine Timber Ltd. There are also 4 Community Timber Permit Programs (CTPP) active in the FMA Area.

The Plan incorporates a number of smaller Weyerhaeuser Quotas located in Green public lands immediately adjacent to the FMA Area boundary. These Quotas represent residual allocations of Crown timber as a result of having former Weyerhaeuser Quotas amalgamated into the current FMA Area less those lands that were under Crown grazing disposition (i.e. Grazing Leases) that legislation prevented from inclusion in FMAs.

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<sup>1</sup> <http://srd.alberta.ca/LandsForests/ForestManagement/ForestManagementPlanning/Default.aspx>

The following Table 1 summarizes the distribution of Annual Allowable Cut between Weyerhaeuser and the other timber allocations, and the impact of the application of the Healthy Pine Strategy.

Table 1 – Summary of Pembina FMA Area and non-FMA Area MPB AAC

<b>Timber Operator</b>	<b>Coniferous AAC</b>	<b>Deciduous AAC</b>
Weyerhaeuser	1,103,001	575,894
Quota Holders	309,754	0
CTPP	56,402	31,142
<b>Total MPB AAC</b>	<b>1,469,157</b>	<b>607,036</b>
<b>Total Pre-MPB AAC</b>	<b>904,000</b>	<b>603,589</b>

### **3.0 Area Description**

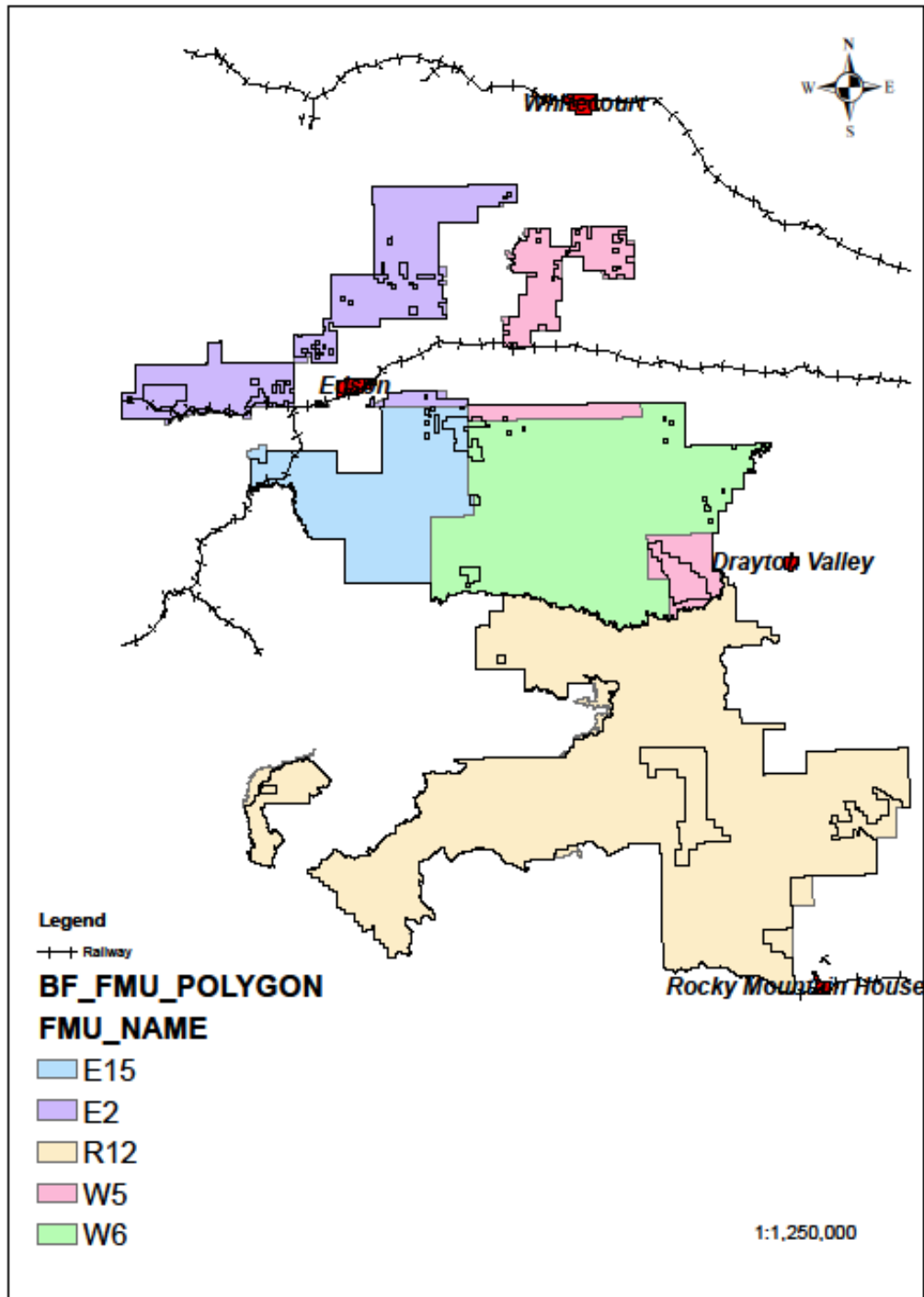
The Unit covers approximately 1.1 million hectares of Crown land in West Central Alberta – see attached map next page. The Area stretches north to south from the Whitecourt area through Drayton Valley down to the Rocky Mountain House area, loosely defining the Green Area boundary on the east side and the Foothills region to the west.

The Unit currently covers five Forest Management Units (E15, E2, W5, W6 and R12), 16 land management units (LMUs), and 90 harvest design areas. .

Oilfield developments are extensive across the Unit, and continue to have a major impact on the landbase and forest management. The Unit is also becoming increasingly popular for recreational use due to its proximity to major urban centers.

The Unit is also biologically diverse covering five Natural Sub-Regions: Upper and Lower Foothills, Alpine, Sub-Alpine and Dry Mixedwood. Elevation changes from 750 meters Above Sea Level (ASL) in the east to 2600 meters ASL in the west. A feature wildlife species focus will be on grizzly bear habitat and anthropogenic impacts.

## Weyerhaeuser Pembina FMA and FMU boundary Map





## 4.0 Forest Resource Management Issues

One requirement of the Terms of Reference is the need for Weyerhaeuser and GOA to identify key issues that will require resolution prior to proceeding with components of the plan (i.e. Timber Supply Analysis, Yield Curve development). Weyerhaeuser and GOA will, in a separate document, address key issues of interest to each party in the ‘Issues and Management Direction Summary’ that will be signed by the Executive Director, Forest Management Branch.

## 5.0 Timelines

The process for the Plan development is complex and will require a detailed, coordinated schedule of that will follow an orderly fashion in order to ensure the timelines are met. Table 2 provides a brief summary of the timelines for the major components of the DFMP. See appendix 1 for a comprehensive Gaant chart outlining the entire process in detail. As stated previously, the Terms of Reference outlines a progressive review of all plan components through to final submission and approval of the entire plan.

Table 2: Sequence of development for the DFMP

FOREST MANAGEMENT PLAN MILESTONE	EXPECTED COMPLETION DATE	GOA REVIEW TIMELINES*	APPROVED BY
Terms of Reference - revised	November 1, 2015	30 days	Senior Manager, Forest Resource Management
Issues and Plan Direction	June 1, 2014	30 days	Executive Director, Forest Management Branch
Public Involvement Plan - revised	November 1, 2015	30 days	Approvals Manager, Upper Athabasca Region
First Nations Consultation Plan - revised	November 1, 2015	30 days	Approvals Manager, Upper Athabasca Region
New AVI 2.1	December 1, 2015	30 days	Executive Director, Forest Management Branch
Net Landbase Determination – Effective date = May 1, 2015	May 1, 2016	30 days	Senior Manager, Forest Resource Management
Yield Curve Development	May 1, 2016	30 days	Senior Manager, Forest Resource Management
Forest Conditions Assessments by GoA	August 1, 2016	NA	No approval required
Growth and Yield Monitoring Program	October 1, 2016	30 days	Senior Manager, Forest Resource Management
Timber Supply Forecasting	November 1, 2016	30 days	Senior Manager, Forest Resource Management
ECA Analysis by GoA	October 15, 2016	NA	No approval required
Spatial harvest sequence	November 1, 2016	30 days	Senior Manager, Forest Resource Management
Performance Monitoring – VOITs	October 1, 2016	30 days	Senior Manager, Forest Resource Management
Final Plan Submission	April 1, 2017	100 days	Executive Director, Forest Management Branch
Operating Ground Rules	November 1, 2017	NA	Executive Director, Forest Management Branch
Stewardship Reporting	November 1, 2022	NA	NA
Next ToFR	May 1, 2024	30 days	Senior Manager, Forest Resource Management

\*working days

## 6.0 Roles, Responsibilities and Obligation of Participants

### 6.1 Plan Development Team Members

The Plan Development Team (PDT) has been formed to resolve the technical details of the DFMP. PDT members are expected to attend all PDT meetings so that all discussions, decisions and/or disputes can be documented in a timely manner. The PDT is to reach agreement-in-principle on all components of the Plan prior to its completion. Tracking of decisions will be as per Table 3. Meeting proceedings will be recorded utilizing the PDT tracking sheet.

Table 3: Tracking sheet for issue and decisions of the PDT

Date	In Attendance	Tracking Number	Topic Category	Action Item or Decision Made	Completion date as required
		2014-01			

Individuals on the Plan Development Team represent Weyerhaeuser and GOA. The Team will be in place for the duration of the development of the Detailed Forest Management Plan. Table 4 outlines the individuals involved in the development of the Plan. The 'Leads' will manage their respective organizations input into the DFMP, and clearly represent this input to the other PDT members.

Table 4 Plan Development Team members

TEAM MEMBER	ORGANIZATION	DESIGNATION
Paul Scott	Weyerhaeuser - Pembina	Lead, Forest Management Coordinator
Kerri MacKay - Second	Weyerhaeuser - Pembina	Strategic Informatics Forester
Liana Luard	GOA - Edmonton	Lead, Forest Planning and Performance Monitoring
Stephen Mills	GOA - Foothills	Area Planning Forester
Dave Hobson	Fish and Wildlife – Foothills	Biologist

Other participants will be brought in as required. This would include additional Weyerhaeuser, AGOA, other Provincial or Federal government staff, and any experts deemed necessary by the PDT. They will provide input to help the PDT make decisions

Table 5 below identifies some of the advisers expected to participate in the development of the DFMP, however this list is not all-inclusive.

Table 5 Advisers to the PDT.

<b>TEAM MEMBER</b>	<b>ORGANIZATION</b>	<b>DESIGNATION</b>
Bob Winship	Weyerhaeuser - Pembina	Strategic Team Coordinator
Wendy Crosina	Weyerhaeuser - Canada	Canadian Forest Steward
Andrew Johnson	Forestry Corp	Senior consultant – TSA Analyst
Ted Gooding	Forestry Corp	Senior Partner, Strategic Planning
Bob Christian	Forestry Corp	Senior Partner, Senior Analyst
Gyula Guylas	TheXLWiz Consulting	Growth and Yield specialist
Greg Greidanus	GOA – Edmonton	Resource Analyst
Cosmin Tansanu	GOA - Edmonton	Growth and Yield Forester

It will be the responsibility of GOA to act as the regulatory body that outlines regulations, planning standards and other needs as identified from time to time.

It will be the responsibility of the PDT to come to a consensus for agreement-in-principle for components of the Plan as it is developed.

## ***6.2 Quota Holder and Community Timber Permit Program***

Weyerhaeuser will have the responsibility to ensure that Quota Holders covered by the Plan have the opportunity to review, comment on, and where necessary, provide endorsement (see table 7).

Weyerhaeuser will track all documentation shared with or requested from Quota Holders, as well as all responses, as detailed in Table 6, with the PDT. It will be the responsibility of GOA to provide input for the CTP Program during the development of the Plan.

Table 6 Weyerhaeuser Pembina 2016 DFMP Quota Holder document review tracking sheet headers.

<b>Document Reviewed</b>	<b>Submitted to</b>	<b>Date Sent Out</b>	<b>Review Period</b>	<b>Responses</b>	<b>How issues were addressed</b>
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Table 7 below outlines the list of the Quota Holder/Community Timber Permit Program (CTPP) on the Unit.

Table 7. Quota Holder/CTPP Sub-group members

Organization	Main Contact
Alberta Newsprint Company	Ian Daisley
Blue Ridge Lumber	Mark Cookson
Edson Timber Products Ltd.	Dave Chaluk
EDFOR Cooperatives	David Cobb/John Nyssen
Millar Western Forest Products Ltd.	Bob Mason
Tall Pine Timber Ltd.	Jerry Baker
CTPP Foothills - GOA	Krista Woods
CTPP Clearwater – GOA	Bert Ciesielski
Dale Hansen	Dale Hansen

There will be two different methods to provide input into the plan: 1. Providing comments directly to Weyerhaeuser upon receipt of direct mail-outs of sections of the Plan (i.e. Terms of Reference), or individual meetings held at the request of either the Quota Holder or the Company (See “one-on-one” in Table 8 below) and/or 2. Participating in joint PDT-Quota Holder sessions where all Quota Holders are invited to attend. It is Weyerhaeuser’s intent to allow for full involvement in the development of the Plan, and address all issues as they arise.

Table 8 outlines the components of Plan that will include the opportunity for involvement by Quota Holders to their desired level.

Table 8: Quota Holder input into the Plan

FOREST MANAGEMENT PLAN SECTIONS	ONE-ON-ONE	JOINT with PDT	Review Period in days*	Endorsement Sign-off Required
Terms of Reference	X	-	15	No
Patchworks validation – Version 1	X	-	120	Yes
Patchworks validation – subsequent versions	X	-	15	Yes
ARIS Reconciliation	X	-	15	Yes
Net Landbase Determination	X	X	15	Yes
Yield Curve Development	X	X	15	No
Timber Supply Forecasting	X	X	15	Yes
Spatial harvest sequence	X	X	10	Yes
Forest Conditions Assessments	X	-	15	No
Performance Monitoring – VOITs	X	-	20	No
Silviculture Strategies Matrix	X	X	10	Yes
Final Plan Submission	X	-	20	Yes
Operating Ground Rules	-	X	20	Yes

**\*working days**

Tracking of outstanding issues and decisions made during the input sessions (either one-on-one or in joint PDT/Quota Holder sessions) will be consistent with the PDT tracking sheet shown in Table 3, and will be shared with the PDT.

### **6.3 Stakeholders and the General Public**

The Public Involvement Process will describe the involvement of the main stakeholder groups and the general public for input into development of the Plan, as will the First Nations Consultation Process. Each of these documents is approved under separate letter.

## **7.0 Communication and Submission Requirements**

### **7.1 Internal**

Communication within the Plan Development Team (PDT) will be through:

- Regular meetings
- Distribution of meeting proceedings (Tracking sheet)
- Distribution of documents, spatial data sets and any associated materials in support of the planning process

GOA Lead, Forest Planning and Performance Monitoring – FMB, will have the responsibility to review the Plan internally with all necessary staff as the Plan is developed. Weyerhaeuser will ensure that Quota Holders on the FMA will be given the opportunity to review components of the Plan as they are developed and report the outcomes of same with the PDT. GOA will manage input from the CTPP groups as they see fit.

### **7.2 External**

Weyerhaeuser will develop a public involvement process (to be submitted as a stand-alone document to the Upper Athabasca Region Approvals Manager) that records and summarizes public input and concerns as they occur throughout the development of the DFMP. This includes inquiries from the public and the press. Key elements for success in this public consultation process will be:

- ✓ Identifying who the key stakeholders are requiring involvement, and distinguishing such stakeholders from otherwise general public interests;
- ✓ Establishing supportive relationships with stakeholders and engaging them in a manner which is most convenient and appropriate for them;
- ✓ Recruiting those representatives of public interests who can offer capacity for quality input;
- ✓ Emphasizing facilitation, listening and feedback processes;
- ✓ Ensuring disclosure and ease of understanding of DFMP information.

The approved DFMP and associated approval documents will be posted on the GOA website. Likewise the FMA Area Operating Ground Rules (OGRs) are posted on an associated GOA website.

Weyerhaeuser will also develop a First Nations consultation process, to be consistent with the intent behind Alberta's consultation guidelines for First Nations.

Annual and Stewardship reports are made available to GOA as they are compiled.

### **7.3 Submission Requirements**

The company will provide GOA with the following at the date of submission;

- 2 paper and 2 digital copies of the DFMP
- 1 digital copy of technical files
- An RPF validated checklist describing the extent of compliance with applicable standards included with each submission

### **8.0 Resources**

Weyerhaeuser will be responsible for financing/resourcing the development of the FMP for the most part. Quota holders and AGOA will be responsible for any internal resources they may require as part of this plan's development. Some data sharing agreements may come about during the development of the plan. If extra-ordinary financial burdens are placed upon Weyerhaeuser for scenario development specific to individual operator's desires, then there may be an expectation by Weyerhaeuser for financial contributions to pay for said scenarios, with the idea that additional scenario development will not unduly delay DFMP submission timelines.

GOA will provide input to the DFMP for all of the following:

- Grizzly Bear Assessment
- Watershed assessment
- Barred Owl modeling
- Wildfire Threat Assessment
- Old forest Guild Assessment

**Weyerhaeuser does not intend to undertake leaf-off imagery to enhance AVI understory inventory. AVI 2.1 will be the standard under which the AVI is to be completed.**

### **9.0 Conflict of Interest**

PDT members will represent the interests only of the organization they represent. Persons who may be in a conflict-of-interest must disclose this, and the PDT has the option of excluding such individual(s) from any further discussions on the matter. If it becomes apparent to the PDT that the individual is not representing the interests of their agency, the individual will be approached by the PDT leads and given the opportunity to address the situation. If the potential conflict is not addressed to the satisfaction of the PDT leads, the dispute resolution process as defined in section 14 may be invoked.

### **10.0 Progressive Review of Plan Components and Final Approval of the DFMP**

The PDT will review all decisions regarding the technical details of the DFMP during the development of the Plan, taking into account input from Advisers, participating Quota Holder representatives, other stakeholders and the general public. Technical issues that the PDT will manage are centered on, but are not limited to, the following components of the plan:

- Net landbase determination,
- Yield curve development,
- Timber Supply Analysis, and
- VOITs.

As components of the Plan are completed, the PDT will recommend those components receive GOA agreement–in-principle, with the understanding that agreement-in-principle is not final approval, but rather GOA acceptance that the submission is acceptable to it.

Prior to final submission of the plan, the company will conduct a meaningful review of the entire FMP with Quota Holders, First Nations, the Advisory Group, major stakeholder groups, and the general public. The interaction between Weyerhaeuser and key stakeholder groups will be somewhat similar as that of the Quota Holders, where comments are solicited through One-on-One sessions or in a group session, by example a DFMP advisory committee.

Under this approach, when the final Plan is submitted, the 100 day review of the Plan by GOA should be sufficient to allow for timely the approval and implementation of the Plan.

### ***11.0 Authority for Decisions***

All participants of the Plan Development Team, advisers, and participating Quota Holder representatives shall operate in full authority of their respective organizations. The individuals must have the authority to make decisions that are binding with a view to the final product. GOA has final approval authority on the entire FMP process, including the new AVI, net land base determination, yield curve development and the timber supply analysis.

### ***12.0 Mechanism to Adjust the Process***

From time to time it may be necessary to amend the TofR to reflect new information or important changes that have occurred for the following reasons:

- Change in government policy
- Change in company management objectives or direction
- Issues that arise as a result of stakeholder involvement
- First Nation consultation process changes
- Directions from higher level plans, i.e. the Land Use Framework, or
- Opportunities to incorporate strategies from other planning initiatives

Any amendments will be made by consensus within the PDT

### ***13.0 Access to Information***

The flow of information within the PDT will be uninhibited, unless it is deemed by the Company to be proprietary (i.e. financial or business related). The PDT will share information with their respective organizations as necessary. Individual PDT members will own this.

The First Nations Consultation Process and the Public Involvement Process will outline what type of information will be shared among those stakeholders.

Information to be shared with Quota Holders is as per section 6.2.

### ***14.0 Dispute Resolution Mechanism***

The Company and stakeholders are able to express dissenting views during the development of the DFMP. It is the intent of the process to allow for meaningful discussions to occur throughout the DFMP planning process to resolve all issues before implementing a dispute resolution process. The following describes the process for dispute resolution:

Step #1: The Company and any Quota Holders or any major stakeholder group will attempt to come to some consensus on components of the FMP as they are developed

Step #2: If disputes arise that cannot be solved in step #1, the issue will be brought to the PDT for their review; if the PDT cannot resolve the dispute, or is unwilling to, continue on to step #3.

Step #3: If the issue is specific to a company or organization involved in the input or review of the Plan, that company, group of companies, or organization(s) can bring their issue to the attention of the Senior Manager, Forest Planning Section and the Area Approvals Manager for resolution

Step #4: If the issue is unresolved after step #3, then the issue will be brought to the attention of the Executive Director of the Forest Management Branch. The decision of the Executive Director will be binding upon all participants.

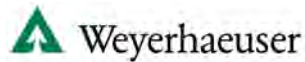
### ***15.0 Operating Ground Rules (OGRs)***

Upon approval of the DFMP, the current set of Operating Ground Rules (Sept. 2011) will be used as a baseline document that will be updated to reflect operating procedures that require amendment as a result of the DFMP. The GOA OGR coordinator will manage the process, with the opportunity of all Quota Holders being involved in the process if they so desire.

### ***16.0 Annual and Stewardship Reporting***

Annual Report: The Annual Report (AR) will report on the current status of the indicators identified in the VOITs table, as well as any additional information the company may want to report on an annual basis. It is expected that no additional VOITs, other than the VOITs listed in the Planning Standard, will be developed, unless deemed appropriate by the Company. Potential VOITs proposed through the Public Input Process or the First Nations Consultation Process will be reviewed on a case-by-case basis for acceptance or rejection, and must be acceptable to all contributors, where necessary. The annual report will be made available to GOA on November 1<sup>st</sup> following the end of each operating year, up to the year prior to the next Plan submission (2017-2025), which is





anticipated to be on April 1, 2026. Information required for annual reporting will be required to be provided by all timber operators, where relevant.

**Stewardship Report:** The Stewardship Report (SR) will summarize the first five years of annual reporting. The Stewardship Report will also include all information required as identified in the version of the ‘Stewardship Reporting Framework’ available at the time of DFMP approval. All timber operators are expected to contribute relevant information to the Stewardship report. The Stewardship Report will be submitted to GOA no later than November 1<sup>st</sup>, 2021. Only one Stewardship report will be completed during the life of the Plan.

Paul Scott  
RPF #398

A handwritten signature in blue ink that reads "Paul Scott".

Management Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company  
[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)  
1-780-712-6886



### **3 2016 FMP Terms of Reference (Revision 2) and Approval Letter**



File: 06332-F02-02  
06332-010

April 6, 2017

Mr. Paul Scott, RPF  
Strategic Planning Co-ordinator  
Weyerhaeuser Company Ltd. (Pembina Timberlands)  
2509 Aspen Drive  
Edson, Alberta T7E 1S8

Dear Mr. Scott:

**Subject: APPROVAL – WEYERHAEUSER COMPANY LTD. (PEMBINA TIMBERLANDS)  
2016 FOREST MANAGEMENT PLAN TERMS OF REFERENCE AMENDMENT #2**

Thank you for the amended Terms of Reference dated April 5, 2017 as requested by the department in the March 21, 2017 Forest Management Plan (FMP) extension approval letter.

The updated timelines reflecting the FMP extension from April 1, 2017 to December 1, 2017 have been reviewed and accepted.

The Terms of Reference is approved.

If you have any questions or require further information, please contact Liana Luard, Lead, Forest Planning and Performance Monitoring at (780) 427-0395.

Yours truly,



Robert J. Popowich, RPF  
Director, Forest Resource Management

cc: Kevin Vander Haeghe, Forest Area Manager, Edson  
Daryl Price, Director, Forest Resource Analysis  
Stephen Mills, Area Forester, Edson Forest Area  
Trisha Stubbings, Area Forester, Rocky Mountain House Forest Area



# Weyerhaeuser Pembina Timberlands

Terms of Reference

For the 2016-26

Detailed Forest Management Plan

For

FMA#0900046

And FMUs:

E15\E2\W5\W6\R12

Revision#2

April 5, 2017



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Table 1 – Summary of Pembina FMA Area and non-FMA Area MPB AAC

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<b>Total Pre-MPB AAC</b>	<b>904,000</b>	<b>603,589</b>

### **3.0 Area Description**

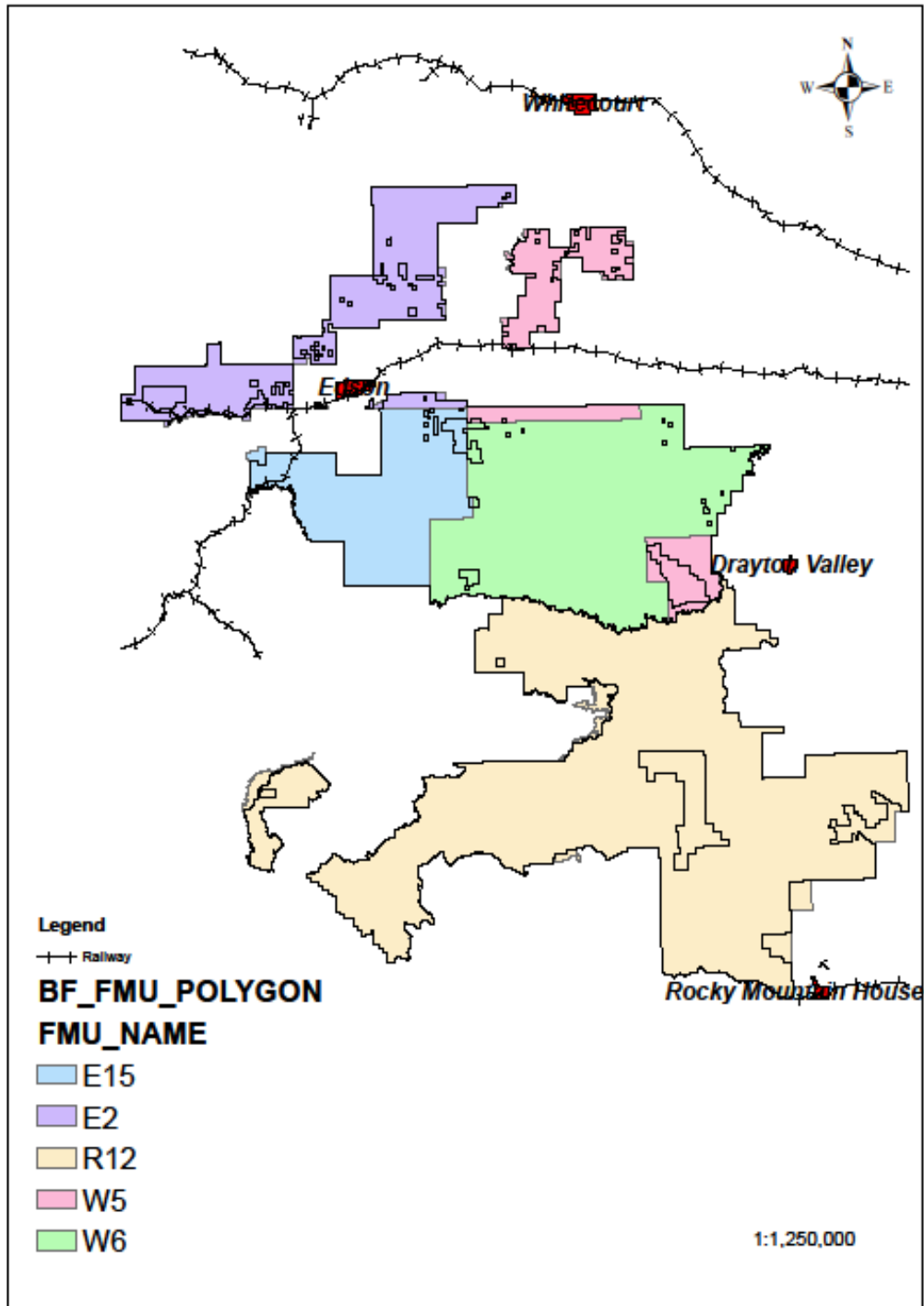
The Unit covers approximately 1.1 million hectares of Crown land in West Central Alberta – see attached map next page. The Area stretches north to south from the Whitecourt area through Drayton Valley down to the Rocky Mountain House area, loosely defining the Green Area boundary on the east side and the Foothills region to the west.

The Unit currently covers five Forest Management Units (E15, E2, W5, W6 and R12), 16 land management units (LMUs), and 90 harvest design areas. .

Oilfield developments are extensive across the Unit, and continue to have a major impact on the landbase and forest management. The Unit is also becoming increasingly popular for recreational use due to its proximity to major urban centers.

The Unit is also biologically diverse covering five Natural Sub-Regions: Upper and Lower Foothills, Alpine, Sub-Alpine and Dry Mixedwood. Elevation changes from 750 meters Above Sea Level (ASL) in the east to 2600 meters ASL in the west. A feature wildlife species focus will be on grizzly bear habitat and anthropogenic impacts.

## Weyerhaeuser Pembina FMA and FMU boundary Map



## 4.0 Forest Resource Management Issues

One requirement of the Terms of Reference is the need for Weyerhaeuser and GOA to identify key issues that will require resolution prior to proceeding with components of the plan (i.e. Timber Supply Analysis, Yield Curve development). Weyerhaeuser and GOA will, in a separate document, address key issues of interest to each party in the 'Issues and Management Direction Summary' that will be signed by the Executive Director, Forest Management Branch.

## 5.0 Timelines

The process for the Plan development is complex and will require a detailed, coordinated schedule of that will follow an orderly fashion in order to ensure the timelines are met. Table 2 provides a brief summary of the timelines for the major components of the DFMP. See appendix 1 for a comprehensive Gaant chart outlining the entire process in detail. As stated previously, the Terms of Reference outlines a progressive review of all plan components through to final submission and approval of the entire plan.

Table 2: Sequence of development for the DFMP (completed at time of revision2)

FOREST MANAGEMENT PLAN MILESTONE	EXPECTED COMPLETION DATE	GOA REVIEW TIMELINES*	APPROVED BY
Terms of Reference – second revision	May 1, 2017	30 days	Senior Manager, Forest Resource Management
Issues and Plan Direction	Approved Sept. 23, 2014	30 days	Executive Director, Forest Management Branch
Public Involvement Plan – revision#2	Approved on Jan. 23, 2017	30 days	Approvals Manager, Upper Athabasca Region
First Nations Consultation Plan – revision#2	Approved on Mar. 24, 2016	30 days	Approvals Manager, Upper Athabasca Region
New AVI 2.1	Approved on March 7, 2016	30 days	Executive Director, Forest Management Branch
Net Landbase Determination – Effective date = May 1, 2015 - revised	Agreement-in-Principle on March 20, 2017	30 days	Senior Manager, Forest Resource Management
Yield Curve Development	Agreement-in-Principle on March 20, 2017	30 days	Senior Manager, Forest Resource Management
Landscape Assessment	August 1, 2016	NA	No approval required
Growth and Yield Monitoring Program	October 1, 2017	30 days	Senior Manager, Forest Resource Management
Timber Supply Forecasting	Sept. 1, 2017	30 days	Senior Manager, Forest Resource Management
ECA Analysis – in TSA Model	Sept. 1, 2017	NA	No approval required
Spatial harvest sequence - Patchworks	Sept. 1, 2017	30 days	Senior Manager, Forest Resource Management
Performance Monitoring – VOITs	Sept. 1, 2017	30 days	Senior Manager, Forest Resource Management
Final Plan Submission	Dec. 1, 2017	100 days	Executive Director, Forest Management Branch
Operating Ground Rules	September 1, 2018	NA	Executive Director, Forest Management Branch
Stewardship Reporting	November 1, 2022	NA	NA
Next ToFR	May 1, 2024	30 days	Senior Manager, Forest Resource Management

\*working days

## 6.0 Roles, Responsibilities and Obligation of Participants

### 6.1 Plan Development Team Members

The Plan Development Team (PDT) has been formed to resolve the technical details of the DFMP. PDT members are expected to attend all PDT meetings so that all discussions, decisions and/or disputes can be documented in a timely manner. The PDT is to reach agreement-in-principle on all components of the Plan prior to its completion. Tracking of decisions will be as per Table 3. Meeting proceedings will be recorded utilizing the PDT tracking sheet.

Table 3: Tracking sheet for issue and decisions of the PDT

Date	In Attendance	Tracking Number	Topic Category	Action Item or Decision Made	Completion date as required
		2014-01			

Individuals on the Plan Development Team represent Weyerhaeuser and GOA. The Team will be in place for the duration of the development of the Detailed Forest Management Plan. Table 4 outlines the individuals involved in the development of the Plan. The ‘Leads’ will manage their respective organizations input into the DFMP, and clearly represent this input to the other PDT members.

Table 4 Plan Development Team members

TEAM MEMBER	ORGANIZATION	DESIGNATION
Paul Scott	Weyerhaeuser - Pembina	Lead, Forest Management Coordinator
Kerri MacKay - Second	Weyerhaeuser - Pembina	Strategic Informatics Forester
Liana Luard	GOA - Edmonton	Lead, Forest Planning and Performance Monitoring
Stephen Mills	GOA - Foothills	Area Planning Forester – primary
Trisha Stubbings	GOA - Clearwater	Area Planning Forester - second
Mike Blackburn	Fisheries biologist – Foothills	Biologist
Dave Hobson	Wildlife biologist – Foothills	Biologist

Other participants will be brought in as required. This would include additional Weyerhaeuser, AGOA, other Provincial or Federal government staff, and any experts deemed necessary by the PDT. They will provide input to help the PDT make decisions

Table 5 below identifies some of the advisers expected to participate in the development of the DFMP, however this list is not all-inclusive.

Table 5 Advisers to the PDT.

<b>TEAM MEMBER</b>	<b>ORGANIZATION</b>	<b>DESIGNATION</b>
Bob Winship	Weyerhaeuser - Pembina	Strategic Team Coordinator
Wendy Crosina	Weyerhaeuser - Canada	Canadian Forest Steward
Andrew Johnson	Forestry Corp	Senior consultant – TSA Analyst
Ted Gooding	Forestry Corp	Senior Partner, Strategic Planning
Gyula Guylas	TheXLWiz Consulting	Growth and Yield specialist
Greg Greidanus	GOA – Edmonton	Resource Analyst
Cosmin Tansanu	GOA - Edmonton	Growth and Yield Forester

It will be the responsibility of GOA to act as the regulatory body that outlines regulations, planning standards and other needs as identified from time to time.

It will be the responsibility of the PDT to come to a consensus for agreement-in-principle for components of the Plan as it is developed.

## ***6.2 Quota Holder and Community Timber Permit Program***

Weyerhaeuser will have the responsibility to ensure that Quota Holders covered by the Plan have the opportunity to review, comment on, and where necessary, provide endorsement (see table 7).

Weyerhaeuser will track all documentation shared with or requested from Quota Holders, as well as all responses, as detailed in Table 6, with the PDT. It will be the responsibility of GOA to provide input for the CTP Program during the development of the Plan.

Table 6 Weyerhaeuser Pembina 2016 DFMP Quota Holder document review tracking sheet headers.

<b>Document Reviewed</b>	<b>Submitted to</b>	<b>Date Sent Out</b>	<b>Review Period</b>	<b>Responses</b>	<b>How issues were addressed</b>
--------------------------	---------------------	----------------------	----------------------	------------------	----------------------------------

Table 7 below outlines the list of the Quota Holder/Community Timber Permit Program (CTPP) on the Unit.

**Table 7. Quota Holder/CTPP Sub-group members**

Organization	Main Contact
Alberta Newsprint Company	Ian Daisley/James Norman
Blue Ridge Lumber	Shane Sadoway/Tracy Courser
BRISCO Woods Products	Brett Salmon
EDFOR Cooperatives	David Cobb
Millar Western Forest Products Ltd.	Bob Mason/Ken Anderson
Tall Pine Timber Ltd.	Shelby Jorgensen
CTPP Foothills - GOA	Krista Woods
CTPP Clearwater – GOA	Rebecca Heemeryck
Dale Hansen	Dale Hansen

There will be two different methods to provide input into the plan: 1. Providing comments directly to Weyerhaeuser upon receipt of direct mail-outs of sections of the Plan (i.e. Terms of Reference), or individual meetings held at the request of either the Quota Holder or the Company (See “one-on-one” in Table 8 below) and/or 2. Participating in joint PDT-Quota Holder sessions where all Quota Holders are invited to attend. It is Weyerhaeuser’s intent to allow for full involvement in the development of the Plan, and address all issues as they arise.

Table 8 outlines the components of Plan that will include the opportunity for involvement by Quota Holders to their desired level.

**Table 8: Quota Holder input into the Plan (completed at time of revision2)**

FOREST MANAGEMENT PLAN SECTIONS	ONE-ON-ONE	JOINT with PDT	Review Period in days*	Endorsement Sign-off Required
Terms of Reference	X	-	15	No
Patchworks validation – Version 1	X	-	120	Yes
ARIS Reconciliation	X	-	15	Yes
Net Landbase Determination	X	X	15	Yes
Landscape Assessment	X	-	15	No
Yield Curve Development	X	X	15	No
Timber Supply Forecasting	X	X	15	Yes
Patchworks validation – subsequent versions	X	-	15	Yes
Spatial harvest sequence	X	X	10	Yes
Performance Monitoring – VOITs	X	-	20	No
Silviculture Strategies Matrix	X	X	10	Yes
Final Plan Submission	X	-	20	Yes
Operating Ground Rules	-	X	20	Yes

**\*working days**

Tracking of outstanding issues and decisions made during the input sessions (either one-on-one or in joint PDT/Quota Holder sessions) will be consistent with the PDT tracking sheet shown in Table 3, and will be shared with the PDT.

### **6.3 Stakeholders and the General Public**

The Public Involvement Process will describe the involvement of the main stakeholder groups and the general public for input into development of the Plan, as will the First Nations Consultation Process. Each of these documents is approved under separate letter.

## **7.0 Communication and Submission Requirements**

### **7.1 Internal**

Communication within the Plan Development Team (PDT) will be through:

- Regular meetings
- Distribution of meeting proceedings (Tracking sheet)
- Distribution of documents, spatial data sets and any associated materials in support of the planning process

GOA Lead, Forest Planning and Performance Monitoring – FMB, will have the responsibility to review the Plan internally with all necessary staff as the Plan is developed. Weyerhaeuser will ensure that Quota Holders on the FMA will be given the opportunity to review components of the Plan as they are developed and report the outcomes of same with the PDT. GOA will manage input from the CTPP groups as they see fit.

### **7.2 External**

Weyerhaeuser will develop a public involvement process (to be submitted as a stand-alone document to the Upper Athabasca Region Approvals Manager) that records and summarizes public input and concerns as they occur throughout the development of the DFMP. This includes inquiries from the public and the press. Key elements for success in this public consultation process will be:

- ✓ Identifying who the key stakeholders are requiring involvement, and distinguishing such stakeholders from otherwise general public interests;
- ✓ Establishing supportive relationships with stakeholders and engaging them in a manner which is most convenient and appropriate for them;
- ✓ Recruiting those representatives of public interests who can offer capacity for quality input;
- ✓ Emphasizing facilitation, listening and feedback processes;
- ✓ Ensuring disclosure and ease of understanding of DFMP information.

The approved DFMP and associated approval documents will be posted on the GOA website. Likewise the FMA Area Operating Ground Rules (OGRs) are posted on an associated GOA website.

Weyerhaeuser will also develop a First Nations consultation process, to be consistent with the intent behind Alberta's consultation guidelines for First Nations.



Annual and Stewardship reports are made available to GOA as they are compiled.

### **7.3 Submission Requirements**

The company will provide GOA with the following at the date of submission;

- 2 paper and 2 digital copies of the DFMP
- 1 digital copy of technical files
- An RPF validated checklist describing the extent of compliance with applicable standards included with each submission

### **8.0 Resources**

Weyerhaeuser will be responsible for financing/resourcing the development of the FMP for the most part. Quota holders and AGOA will be responsible for any internal resources they may require as part of this plan's development. Some data sharing agreements may come about during the development of the plan. If extra-ordinary financial burdens are placed upon Weyerhaeuser for scenario development specific to individual operator's desires, then there may be an expectation by Weyerhaeuser for financial contributions to pay for said scenarios, with the idea that additional scenario development will not unduly delay DFMP submission timelines.

GOA will provide input to the DFMP for all of the following:

- Grizzly Bear Assessment
- Watershed assessment
- Barred Owl modeling
- Wildfire Threat Assessment
- Old forest Guild Assessment

**Weyerhaeuser does not intend to undertake leaf-off imagery to enhance AVI understorey inventory. AVI 2.1 will be the standard under which the AVI is to be completed.**

### **9.0 Conflict of Interest**

PDT members will represent the interests only of the organization they represent. Persons who may be in a conflict-of-interest must disclose this, and the PDT has the option of excluding such individual(s) from any further discussions on the matter. If it becomes apparent to the PDT that the individual is not representing the interests of their agency, the individual will be approached by the PDT leads and given the opportunity to address the situation. If the potential conflict is not addressed to the satisfaction of the PDT leads, the dispute resolution process as defined in section 14 may be invoked.

### **10.0 Progressive Review of Plan Components and Final Approval of the DFMP**

The PDT will review all decisions regarding the technical details of the DFMP during the development of the Plan, taking into account input from Advisers, participating Quota Holder representatives, other stakeholders and the general public. Technical issues that the PDT will manage are centered on, but are not limited to, the following components of the plan:

- Net landbase determination,

- Yield curve development,
- Timber Supply Analysis, and
- VOITs.

As components of the Plan are completed, the PDT will recommend those components receive GOA agreement-in-principle, with the understanding that agreement-in-principle is not final approval, but rather GOA acceptance that the submission is acceptable to it.

Prior to final submission of the plan, the company will conduct a meaningful review of the entire FMP with Quota Holders, First Nations, the Advisory Group, major stakeholder groups, and the general public. The interaction between Weyerhaeuser and key stakeholder groups will be somewhat similar as that of the Quota Holders, where comments are solicited through One-on-One sessions or in a group session, by example a DFMP advisory committee.

Under this approach, when the final Plan is submitted, the 100 day review of the Plan by GOA should be sufficient to allow for timely the approval and implementation of the Plan.

### ***11.0 Authority for Decisions***

All participants of the Plan Development Team, advisers, and participating Quota Holder representatives shall operate in full authority of their respective organizations. The individuals must have the authority to make decisions that are binding with a view to the final product. GOA has final approval authority on the entire FMP process, including the new AVI, net land base determination, yield curve development and the timber supply analysis.

### ***12.0 Mechanism to Adjust the Process***

From time to time it may be necessary to amend the ToIR to reflect new information or important changes that have occurred for the following reasons:

- Change in government policy
- Change in company management objectives or direction
- Issues that arise as a result of stakeholder involvement
- First Nation consultation process changes
- Directions from higher level plans, i.e. the Land Use Framework, or
- Opportunities to incorporate strategies from other planning initiatives

Any amendments will be made by consensus within the PDT

### ***13.0 Access to Information***

The flow of information within the PDT will be uninhibited, unless it is deemed by the Company to be proprietary (i.e. financial or business related). The PDT will share information with their respective organizations as necessary. Individual PDT members will own this.

The First Nations Consultation Process and the Public Involvement Process will outline what type of information will be shared among those stakeholders.

Information to be shared with Quota Holders is as per section 6.2.

### **14.0 Dispute Resolution Mechanism**

The Company and stakeholders are able to express dissenting views during the development of the DFMP. It is the intent of the process to allow for meaningful discussions to occur throughout the DFMP planning process to resolve all issues before implementing a dispute resolution process. The following describes the process for dispute resolution:

Step #1: The Company and any Quota Holders or any major stakeholder group will attempt to come to some consensus on components of the FMP as they are developed

Step #2: If disputes arise that cannot be solved in step #1, the issue will be brought to the PDT for their review; if the PDT cannot resolve the dispute, or is unwilling to, continue on to step #3.

Step #3: If the issue is specific to a company or organization involved in the input or review of the Plan, that company, group of companies, or organization(s) can bring their issue to the attention of the Senior Manager, Forest Planning Section and the Area Approvals Manager for resolution

Step #4: If the issue is unresolved after step #3, then the issue will be brought to the attention of the Executive Director of the Forest Management Branch. The decision of the Executive Director will be binding upon all participants.

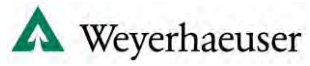
### **15.0 Operating Ground Rules (OGRs)**

Upon approval of the DFMP, the current set of Operating Ground Rules (Sept. 2011) will be used as a baseline document that will be updated to reflect operating procedures that require amendment as a result of the DFMP. The GOA OGR coordinator will manage the process, with the opportunity of all Quota Holders being involved in the process if they so desire.

### **16.0 Annual and Stewardship Reporting**

Annual Report: The Annual Report (AR) will report on the current status of the indicators identified in the VOITs table, as well as any additional information the company may want to report on an annual basis. It is expected that no additional VOITs, other than the VOITs listed in the Planning Standard, will be developed, unless deemed appropriate by the Company. Potential VOITs proposed through the Public Input Process or the First Nations Consultation Process will be reviewed on a case-by-case basis for acceptance or rejection, and must be acceptable to all contributors, where necessary. The annual report will be made available to GOA on November 1<sup>st</sup> following the end of each operating year, up to the year prior to the next Plan submission (2017-2025), which is anticipated to be on April 1, 2026. Information required for annual reporting will be required to be provided by all timber operators, where relevant.

Stewardship Report: The Stewardship Report (SR) will summarize the first five years of annual reporting. The Stewardship Report will also include all information required as identified in the version of the 'Stewardship Reporting Framework' available at the time of DFMP approval. All timber operators are expected to contribute relevant information to the Stewardship report. The Stewardship Report will be submitted to GOA no later than November 1<sup>st</sup>, 2022. Only one Stewardship report will be completed during the life of the Plan.



Paul Scott  
RPF #398

A handwritten signature in blue ink that reads "Paul Scott".

Management Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company  
[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)  
1-780-712-6886



## **4 FMP Issues and Management Direction and Approval Letter**





File: 06332-F02-04  
06332-010

September 23, 2014

Mr. Paul Scott, RPF  
Strategic Planning Co-ordinator  
Weyerhaeuser Company Limited  
Pembina Timberlands  
2509 Aspen Drive  
Edson, Alberta T7E 1S8

Dear Mr. Scott:

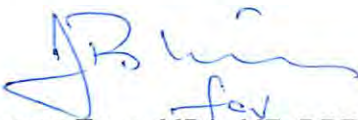
**Subject: APPROVAL – WEYERHAEUSER COMPANY LIMITED (PEMBINA TIMBERLANDS)  
FOREST MANAGEMENT PLAN ISSUES AND MANAGEMENT DIRECTION SUMMARY**

The Forest Management Planning process can generate issues that have the potential to impede progress without clear management direction. Current known issues have been identified by Alberta Environment and Sustainable Resource Development and Weyerhaeuser Company Limited (Pembina Timberlands) and have been listed with corresponding management direction.

Please ensure the identified management direction is incorporated into the Forest Management Plan.

If you have any questions or require further information, please contact Liana Luard, Lead, Forest Planning and Performance Monitoring at (780) 427-0395.

Yours truly,



Darren Tapp, MBA, MF, RPF  
Executive Director

Enclosure (1)

cc: Dave Hugelschaffer, Approvals Manager, Upper Athabasca Region (Edson)  
Stephen Mills, Area Forester, Upper Athabasca Region (Edson)

## Weyerhaeuser Pembina 2016 Forest Management Plan - *Issues and Management Direction*

Issue	Weyerhaeuser Pembina <i>Interest</i>	Alberta Environment and Sustainable Resource Development <i>Interest</i>	Alberta Environment and Sustainable Resource Development <i>Management Direction</i>
<b>Mountain Pine Beetle Prevention (Pine) Strategy</b>	Reduce the opportunity for mountain pine beetles (MPB) to spread further into our pine forests, particularly throughout the watersheds of the eastern slopes and further into the boreal forest.	Reduce the opportunity for MPB to spread further into Alberta's pine forests, particularly throughout the watersheds of the eastern slopes and further into the boreal forest.	Maintain current Prevention (Pine) Strategy, while considering non-timber values.
<b>Coniferous Post Surge Annual Allowable Cut Levels</b>	Develop mid and long term timber supply strategies in the Forest Management Plan (FMP) that fulfill the Drayton Valley sawmill requirements and attempt to address other timber operator requirements.	Ensure long-term sustainability of local communities and the Forest Management Agreement (FMA) area.	Develop feasible options for the mid-term timber supply and long-term sustainability.
<b>Unused Volume</b>	Model unused volume estimated as of May 1, 2016. Modelling the unutilized FMA volume over one period during the modelling exercise.	Ensure the sustainability of Alberta's timber resource.	If unused volume is anticipated in the current quadrant it must be modelled, represent the profile and be spatially available. Unused volume requests are separate from the FMP process and must be approved by the Executive Director, Forest Management Branch.
<b>Healthy deciduous strategy</b>	Implement a deciduous surge cut to minimize losses due to the rapid deterioration of the deciduous resource re: deciduous senescence	Ensure the sustainability and health of Alberta's forests.	Propose options and opportunities to increase utilization of the deciduous resource, while considering non-timber values.
<b>Single Landbase</b>	Determine a single conifer and a single deciduous annual allowable cut (AAC) from the FMA consistent with the management of R12 and avoid complexities of managing two systems.	The Plan Development Team (PDT) and Quota Holders agree to moving to a single landbase.	Work with the PDT and Quota Holders to ensure everyone is fully informed and in agreement regarding moving to a single landbase. All Quota Holders must sign off on a single landbase, prior to moving forward with the Timber Supply Analysis.
<b>Forest Management Unit Amalgamation</b>	Create one FMU to replace current 5 Forest Management Units (FMU)s to maximize forest management opportunities and reduce the administrative burden of multiple AACs.	The PDT and Quota Holders agree to moving to a single FMU.	Work with the PDT and Quota Holders to ensure everyone is fully informed and in agreement regarding moving to a single FMU. Quota Holder sign off is required prior to submitting a request to the department. Approval by the Executive Director, Forest Management Branch is required prior to moving to a single FMU.





Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Annex III: Public Involvement

March 19, 2018



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# 1 Public Involvement Plan Approval Letter



October 27, 2014

Weyerhaeuser Company Ltd.  
2509 Aspen Drive  
Edson, Alberta  
T7E 1M3

Dear Paul Scott - Planner:

Re: Weyerhaeuser Pembina Ltd. Public Involvement Plan for the 2016 Forest Management Plan

The Department has reviewed your Public Involvement Plan of October 15, 2014 for the proposed Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan and it is hereby approved.

As per the Alberta Forest Management Planning Standard and the Canadian Standards Association CSA Z809-02 a high standard of public involvement is required. The responsibilities of ESRD include:

- Determining which public interests and stakeholders to consult with
- Reviewing and approving Weyerhaeuser Pembina Ltd.'s public involvement plan
- Overseeing the consultation process by ensuring issues raised in the public involvement process are addressed
- Making a final decision on consultation completeness and adequacy
- Arbitrate disagreements where, in Alberta's opinion, agreement is not feasible

All consultation activities related to the Public Involvement Plan must be carried out in the manner described and proceed according to the approved consultation plan.

ESRD recommends that you share your Public Involvement Plan with the stakeholders that you have been directed to consult. ESRD may require Weyerhaeuser Pembina Ltd. to undertake further consultation based on new or additional information at any time during development of the Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan or during the regulatory approval process.

Please contact me if you have any questions concerning the procedures outlined in this letter.

Sincerely,



Dave Hugelschaffer  
Approvals Manager  
Upper Athabasca Region, South District

Cc: Graham Legaarden – Senior Forester, Upper Athabasca Region South, Alberta  
Environment and Sustainable Resource Development

Bert Ciesielski – Senior Forester, Red Deer - North Saskatchewan Region,  
Alberta Environment and Sustainable Resource Development

Liana Luard – Lead Forest Planning and Performance Monitoring, Forestry and  
Emergency Response Division, Forest Resource Management Section, Alberta  
Environment and Sustainable Resource Development

## 2 Public Involvement Plan

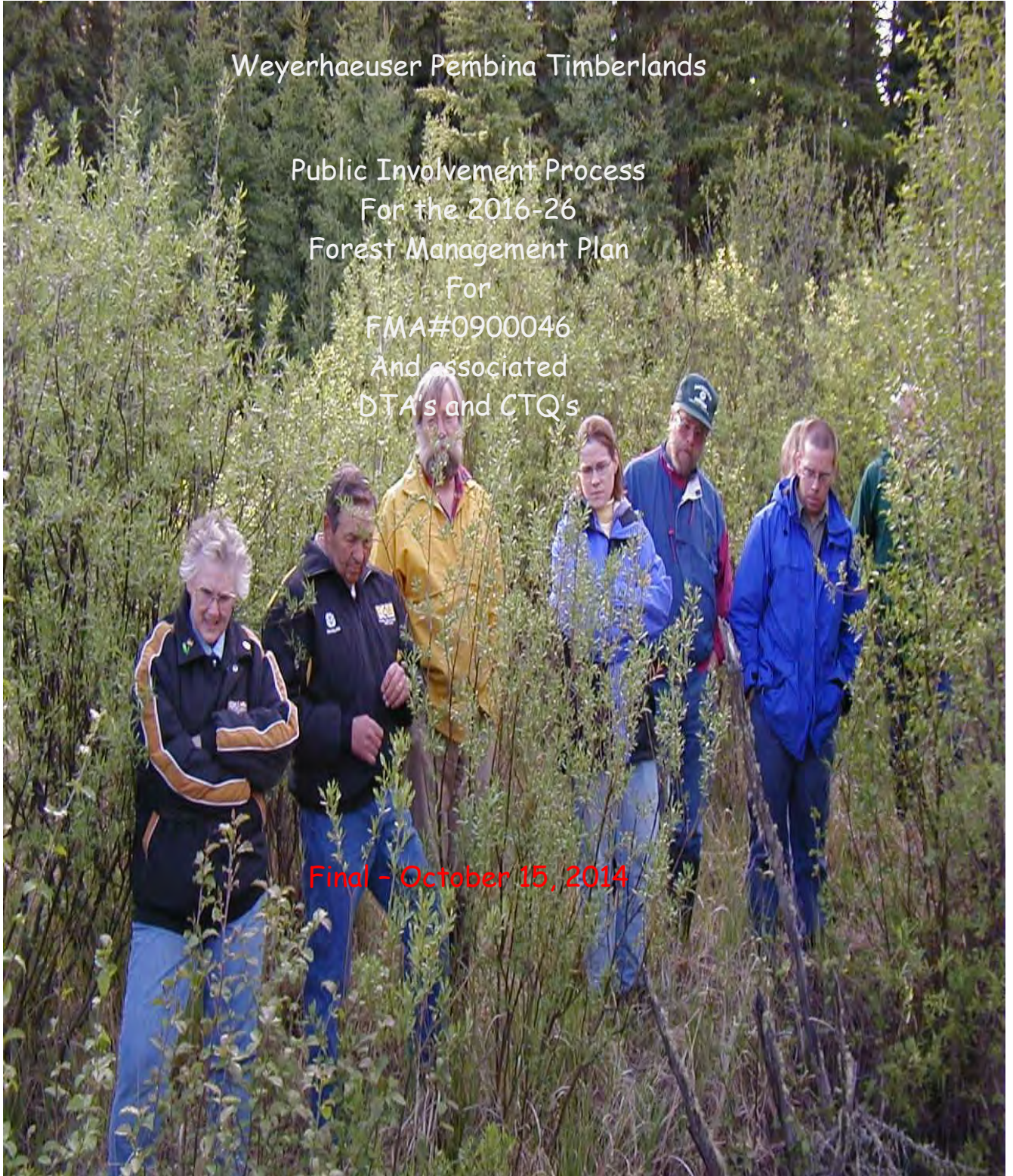




Weyerhaeuser Pembina Timberlands

Public Involvement Process  
For the 2016-26  
Forest Management Plan  
For  
FMA#0900046  
And associated  
DTA's and CTQ's

Final - October 15, 2014



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## **1.0 Introduction**

The purpose of this Public Involvement Process (PIP) is to provide a framework to solicit stakeholder and general public input into the development of the next (2016 – 2026) Detailed Forest Management Plan (DFMP or Plan) for the Weyerhaeuser Pembina Forest Management Agreement (FMA or the Area) Area and associated non-FMA areas. Weyerhaeuser’s own policies will influence the development of the DFMP which include Weyerhaeuser’s Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser’s commitment to certification under the Sustainable Forestry Initiative. All input will be shared with the Plan Development Team (PDT). The PIP is intended to show that Weyerhaeuser has engaged all stakeholders appropriately in its development of the FMP, tracked all responses accordingly, and has attempted to address all issues in the Plan itself.

## **2.0 Scope**

The Area represented by FMA#0900046 is the main focus of this process (refer to figure 1). However, individuals or organizations adjacent to the FMA (i.e. public land owners, Grazing Lease Operators) may also be interested in providing input into the planning process.

A separate process has been developed for First Nations in the area, a process that will follow the Provincial Consultation Guidelines. Quota holders on the FMA will be involved in a process outside of the PIP that is clearly defined in the Terms of Reference for the Plan.

Weyerhaeuser will develop a public consultation process that records and summarizes all input and concerns as they occur at the major milestones identified. These major milestones include: the VOIT table to be submitted for approval, the 20-year Spatial Harvest Sequence, and the final version of the plan for submission to ESRD. Other components of the plan will be used as background information in regards to development of the Plan. Key elements for success in this public consultation process will be:

- ✓ Identifying which stakeholder groups are likely to provide meaningful input into the Plan,
- ✓ Establishing supportive relationships with these stakeholder groups and engaging them in a manner which is most convenient and appropriate for them;
- ✓ Recruiting representatives of some of these stakeholder groups who can offer capacity for quality input to review components of the Plan as they are developed; and
- ✓ Recording and tracking of input received and how such input was addressed in the development of the Plan.

## Weyerhaeuser Pembina FMA and FMU boundary Map

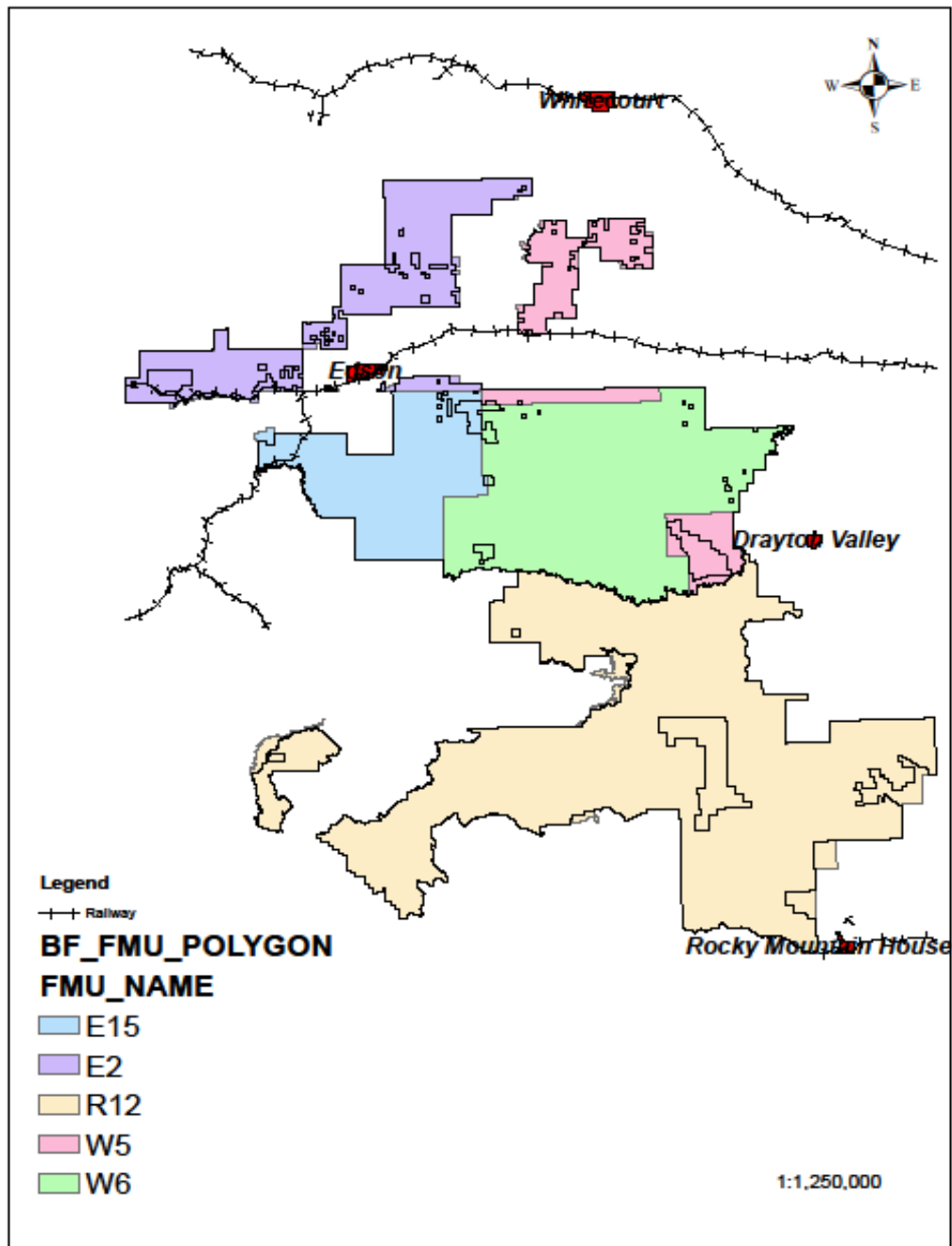


Figure 1: Map of FMA 0900046 and associated Forest Management Units.

### 3.0 Stakeholders

There are a number of stakeholder groups that may be impacted by forest management plan implications on the Unit. These stakeholder groups can be separated into three categories: Primary, Secondary, and the General Public. Additionally, there are other public input processes occurring concurrently with this process that will likely impact some of this plans goals, objectives, and/or strategies moving forward. Each of these groups will be offered different opportunities for input into the Plan.

Weyerhaeuser will meet with any other stakeholder group or individual not currently identified if they express a desire to meet with us.

#### 3.1 Primary Stakeholders

Primary stakeholder groups are those that are part of a local or provincial association and may be directly impacted by forest management activities. These include:

- grazing operators/local forage association
- trappers/ trapper associations
- ATV clubs
- snowmobile clubs
- fish and game clubs, and
- oil and gas operations representation

Weyerhaeuser will undertake the following:

- Mail-outs will be sent out in the fall of 2014 to overlapping trappers and grazing operators with a brief description of the Forest Management planning and Public Involvement processes, asking that they contact either Weyerhaeuser or ESRD if they have any concerns they may want to be addressed during the planning process.
- Mail-outs will be sent out in the fall of 2014 to associations or clubs, identified above, with a brief description of the Forest Management planning and Public Involvement processes, asking that they contact either Weyerhaeuser or ESRD if they have any concerns they may want to be addressed during the planning process.
- Establish a small, dynamic group of representatives from the primary stakeholder groups in early 2015 as an advisory committee that will be in place during the development of the Plan. This group will provide Weyerhaeuser with its primary strategy in seeking involvement from the public in the development of the FMP. Individuals representing primary stakeholder groups will have to represent their respective interests. Weyerhaeuser will strive to get membership for this committee from across the entire geographic area if possible. This advisory committee will only be in place up to Plan approval; however it may continue under a different format throughout the life of the plan. Weyerhaeuser will also record the decision of organizations that decline to be part of the committee.

The Company will conduct meaningful reviews at appropriate intervals during the development of the Plan with the advisory group. These intervals will become shorter as the planning process approached completion (i.e. submission). The Company will also include members of the general

public (members-at-large) who understand forestry and forestry related issues and will be able to effectively provide input into the Plan. ESRD representation at these meetings will be required.

Membership of the advisory group is considered public information, therefore contact information for these individuals will be made available upon request.

The following items will be reviewed for input during development of the Plan:

- VOITs
- 20-year SHS
- Final plan to be submitted to ESRD

Background information (i.e. net landbase determination, yield curve development, landscape assessment) will also be reviewed as the development of the plan occurs.

Minutes of these meetings will capture all concerns/issues brought forward, and the Company’s response to these concerns/issues. A compilation of the minutes and Weyerhaeuser’s responses will be submitted as part of the Plan detailing all input into the plan. Tracking of action items and decisions will be as per Table 1.

Table 1: Tracking sheet for issue and decisions of the Advisory Committee.

Date	In Attendance	Tracking Number	Topic Category	Action Item or Decision Made	Completion date as required
		2014-01			

### 3.2 Secondary Stakeholders

Secondary stakeholders are those that may be indirectly impacted by forest management activities. These include:

- Municipal entities
  - ❖ Edson
  - ❖ Drayton Valley
  - ❖ Rocky Mountain House
  - ❖ Yellowhead County
  - ❖ Clearwater County
  - ❖ Brazeau County
  
- Tourism Outfitters, by example
  - ❖ Skadi Wilderness Adventures
  - ❖ Rose Creek Recreation Trails Association

Weyerhaeuser will do the following:

- Mail-outs will be sent out in 2015 to the secondary stakeholders identified above, with a brief description of the Forest Management planning and Public Involvement processes, asking



that they contact either Weyerhaeuser or ESRD if they have any concerns they may want to be addressed during the planning process.

As a follow-up to the above, the following will be sent out for input during development of the Plan:

- VOITs

The company will record all concerns brought forward, and the Company's response to these concerns, in writing. A compilation of the concerns and Weyerhaeuser's responses will be submitted as part of the PIP detailing all input into the plan. All concerns will be tracked using the Silvacom Consultation Tracker.

### **3.3 General Public**

This includes any other group or individual not currently listed as being either a primary or secondary stakeholder, and may be indirectly impacted by the Plan. Weyerhaeuser will do the following: hold open houses to provide the opportunity for input into components of the plan that have been developed to date. These open houses will be held in both 2015 and 2016.

The open houses will be held in at least the following communities: Edson, Drayton Valley and Rocky Mountain House at appropriate intervals in Plan development. These include, but are not limited to the following: landscape assessments, VOITs, and final Spatial Harvest Sequence maps. Other open houses may be scheduled in smaller, outlying communities (i.e. Fulham, Lodgepole, or Mackay) if and when deemed necessary by the company or a desire to do such is expressed openly to the Company by these smaller communities. Open houses will be advertised in local papers at least twice, one week and two weeks prior to any event.

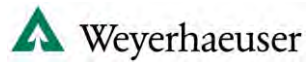
The company will record all concerns brought forward, and the Company's response, in writing, to these concerns. A compilation of the concerns and Weyerhaeuser's responses will be submitted as part of the PIP detailing all input into the plan. All concerns will be tracked using the Silvacom Consultation Tracker.

### **3.4 Other Public Involvement Processes**

The North Saskatchewan Regional Land Use Plan and the North Saskatchewan Integrated Watershed Management Plan have their own public input processes. The Company will continue to monitor these processes to insure that regional issues, where appropriate, are addressed during the development of the Plan.

## ***4.0 Input tracking and reporting***

Weyerhaeuser will record all comments as they arise during the public input process as described in section 3 above. Some of these comments may be re-directed to ESRD, where appropriate. All comments will be reviewed with the PDT, and will be addressed in the Plan where appropriate. The



Company will track all comments (by who and when received), and how each issue was addressed. A summary report of all public input into the FMP will be provided as a component of the final Plan submission.

### ***5.0 Issue Resolution Process***

Weyerhaeuser will attempt to address all input brought forward during the development of the plan. Outstanding issues that cannot be resolved will be forwarded to the PDT for its review. If consensus cannot be reached by the PDT concerning outstanding issues, the dispute resolution process as outlined in the Terms of Reference shall be followed.

Where an issue calls for resolution, each issue and associated resolution to be identified separately.

### 3 Public Involvement Plan Approval Letter (Revision 1)





January 23, 2017

Weyerhaeuser Company Ltd.  
2509 Aspen Drive  
Edson, Alberta  
T7E 1M3

Dear Paul Scott - Planner:

Re: Weyerhaeuser Pembina Ltd. Public Involvement Plan for the 2017 Forest Management Plan

The Department has reviewed your Public Involvement Plan of March 11, 2016 for the proposed Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan and it is hereby approved.

As per the Alberta Forest Management Planning Standard and the Canadian Standards Association CSA Z809-02 a high standard of public involvement is required. The responsibilities of Alberta Agriculture and Forestry (AAF) include:

- Determining which public interests and stakeholders to consult with
- Reviewing and approving Weyerhaeuser Pembina Ltd.'s public involvement plan
- Overseeing the consultation process by ensuring issues raised in the public involvement process are addressed
- Making a final decision on consultation completeness and adequacy
- Arbitrate disagreements where, in Alberta's opinion, agreement is not feasible

All consultation activities related to the Public Involvement Plan must be carried out in the manner described and proceed according to the approved consultation plan.

AAF recommends that you share your Public Involvement Plan with the stakeholders that you have been directed to consult. AAF may require Weyerhaeuser Pembina Ltd. to undertake further consultation based on new or additional information at any time during development of the Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan or during the regulatory approval process.

Please contact me if you have any questions concerning the procedures outlined in this letter.

Sincerely,



Kevin Vander Haeghe  
Forest Area Manager  
Edson Forest Area

Cc: Tracy Parkinson – Senior Forester, Edson Forest Area, Alberta Agriculture and Forestry  
Bert Ciesielski – Senior Forester, Rocky Mountain Forest Area, Alberta Agriculture and Forestry  
Trisha Stubbings – Forester, Rocky Mountain Forest Area, Alberta Agriculture and Forestry  
Liana Luard – Lead, Forest Planning and Performance Monitoring, Forestry Division, Alberta  
Agriculture and Forestry

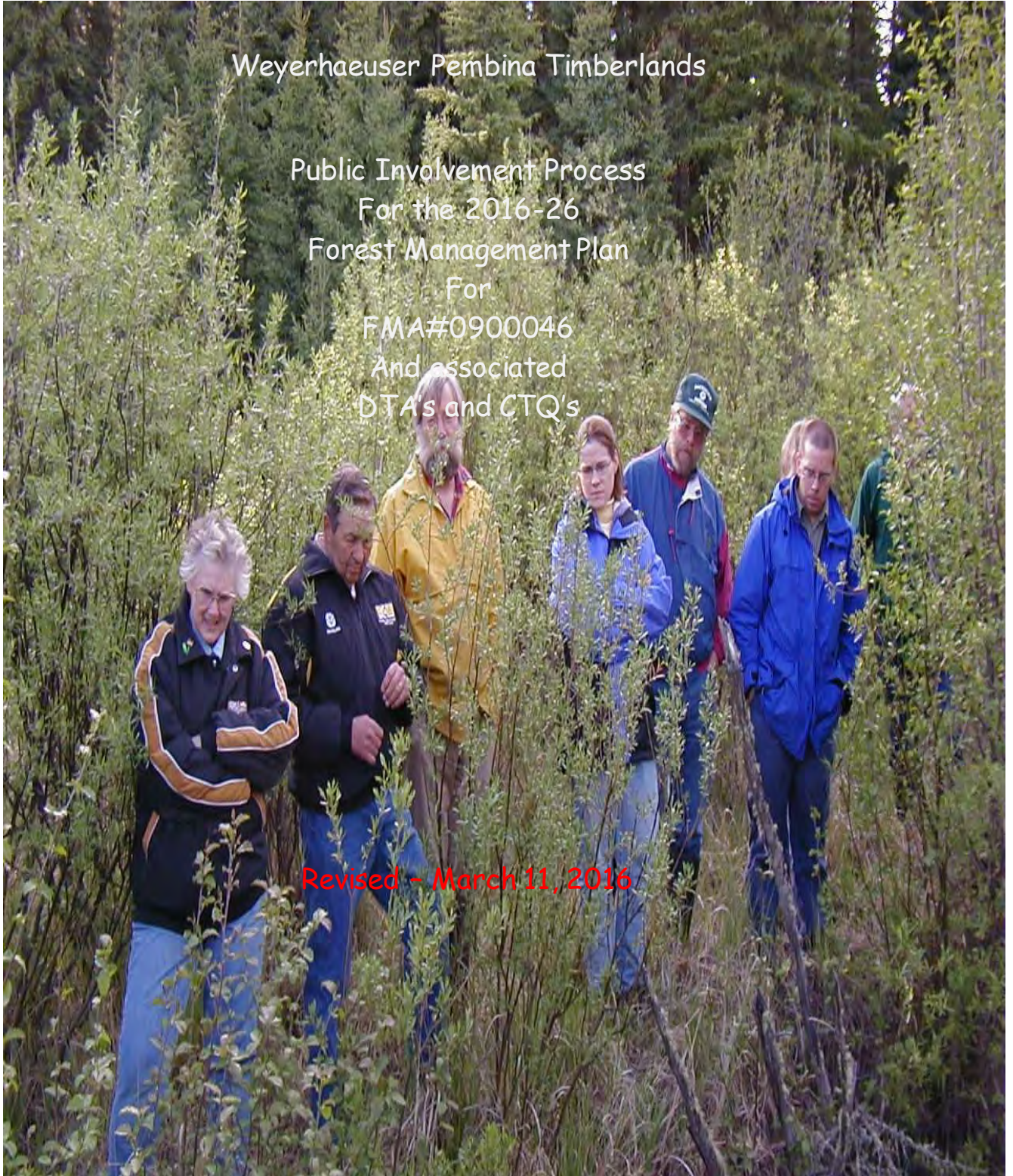
## 4 Public Involvement Plan (Revision 1)



Weyerhaeuser Pembina Timberlands

Public Involvement Process  
For the 2016-26  
Forest Management Plan  
For  
FMA#0900046  
And associated  
DTA's and CTQ's

Revised - March 11, 2016





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## 1.0 Introduction

The purpose of this Public Involvement Process (PIP) is to provide a framework to solicit stakeholder and general public input into the development of the next (2016 – 2026) Detailed Forest Management Plan (DFMP or Plan) for the Weyerhaeuser Pembina Forest Management Agreement (FMA or the Area) Area and associated non-FMA areas. Weyerhaeuser's own policies will influence the development of the DFMP which include Weyerhaeuser's Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser's commitment to certification under the Sustainable Forestry Initiative. All input will be shared with the Plan Development Team (PDT). The PIP is intended to show that Weyerhaeuser has engaged all stakeholders appropriately in its development of the FMP, tracked all responses accordingly, and has attempted to address all issues in the Plan itself.

## 2.0 Scope

The *geographic scope Area* represented by FMA#0900046 is the main focus of this process (refer to figure 1). However, individuals or organizations adjacent to the FMA Area (i.e. public land owners, Grazing Lease Operators) may also be interested in providing input into the planning process.

The *interest's scope* for the Plan is defined by First Nations traditional use, overlapping timber tenures, other natural resource use stakeholders, and general public. A separate process has been developed for First Nations in the area, a process that will follow the Provincial Consultation Guidelines. Quota holders on the FMA will be involved in a process outside of the PIP that is clearly defined in the Terms of Reference for the Plan.

The *temporal scope* for public involvement begins with the development of the Plan through to its final submission to Government, followed by opportunities for ongoing public input to all forest management activities. The process will begin with the acquisition of all necessary data and information for resource evaluations, followed by the sharing of analysis and modeling work, and then with the sharing of final drafts of all Plan submission elements.

Weyerhaeuser will maintain a public consultation process that records and summarizes all input and concerns as they occur at the major Plan milestones identified. These major milestones include: the VOIT table to be submitted for approval, the 20-year Spatial Harvest Sequence, and the final version of the plan for submission to GOA. Other components of the plan will be used as background information in regards to development of the Plan. Key elements for success in this public consultation process will be:

- ✓ Identifying which stakeholder groups are likely to provide meaningful input into the Plan,
- ✓ Establishing supportive relationships with these stakeholder groups and engaging them in a manner which is most convenient and appropriate for them;
- ✓ Recruiting representatives of some of these stakeholder groups who can offer capacity for quality input to review components of the Plan as they are developed; and
- ✓ Recording and tracking of input received and how such input was addressed in the development of the Plan.



## Weyerhaeuser Pembina FMA and FMU boundary Map

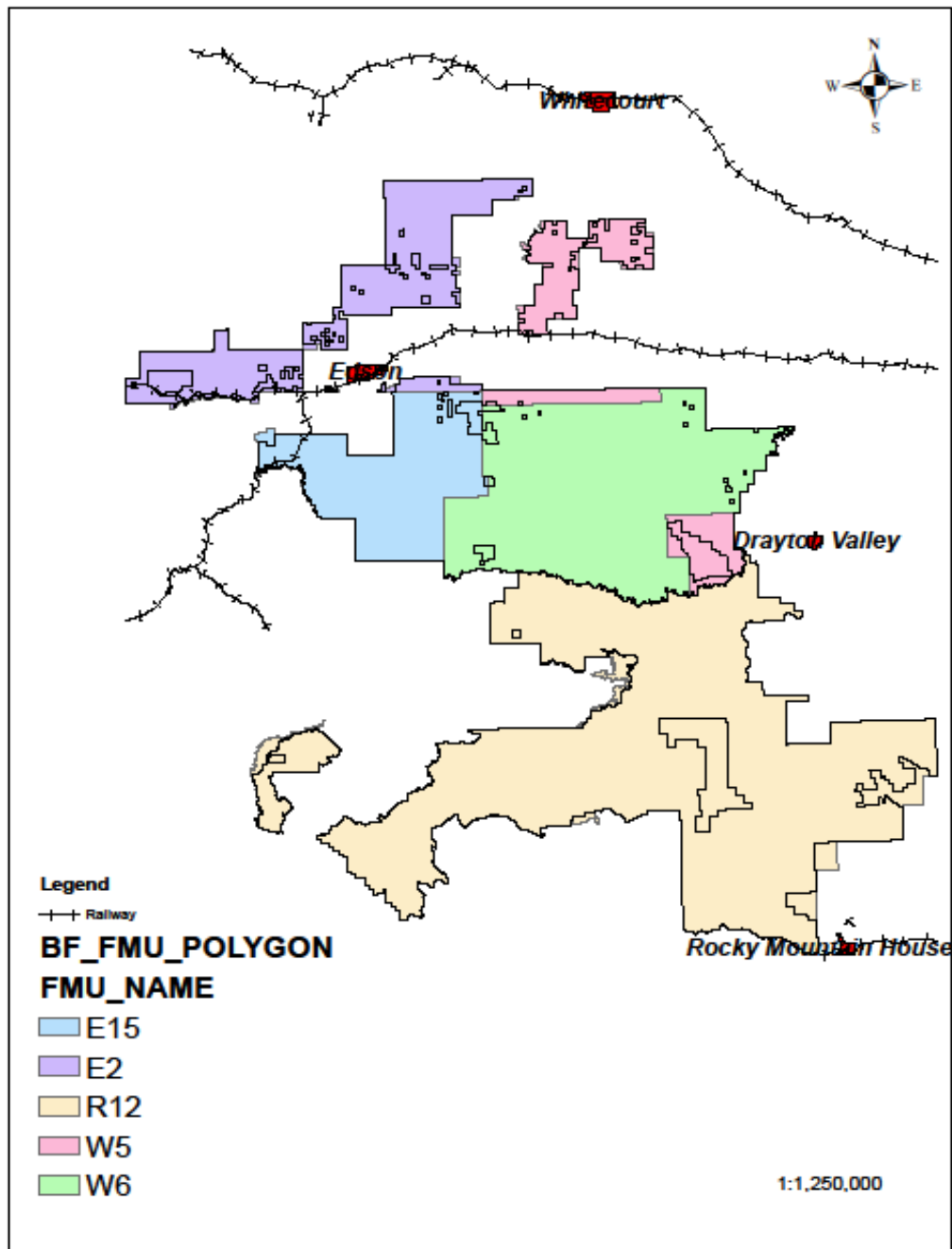


Figure 1: Map of FMA 0900046 and associated Forest Management Units.

### 3.0 Principles

All public engagement will be guided by the following basic principles:

- All information shared shall be done so in a manner to gain understanding from stakeholders and public interests, and will use a range of methods and media to encourage broad access to information;
- Weyerhaeuser shall proactively seek out stakeholders and public interests;
- Weyerhaeuser will report on all input and questions received, and their responses;
- Weyerhaeuser will seek to be interactive and interfacing directly with stakeholders and general public whenever possible.

### 4.0 Strategies

*Advisory Committee* – Weyerhaeuser will establish a group of knowledgeable persons from the defined stakeholder interest groups for this plan. The intention is to solicit advice and direction from those stakeholder interests by seeking out “experts” in those interests as representative examples of such resource users on the FMA Area. By working through a committee process it is hoped that there will be further synergies and alignment between the different stakeholder advisors on the more complex integrated resource management challenges.

*Stakeholder groups* – Weyerhaeuser will attempt to establish communications with a broader membership of stakeholder interests by seeking out formal organizations and affiliations for such interests. The intent is to be able provide information, seek input and generally increase awareness of forest management activities to larger populations beyond just executive representations of formal stakeholder groups. Increasing awareness of forest management will be pursued through opportunities for special presentations, discussions, activities, events, sponsorships, and partnerships.

*General public* – The intent is to ensure any individual citizen who has an interest or issue with forest management activities on the FMA Area is aware of, and has access to, information about those activities and furthermore has a facilitated means of engaging forest management staff – Weyerhaeuser or Government. Basic strategies to be employed include creating easily understood information products, use of internet and online media, integration with common public information media, and proactively promoting awareness (e.g. activities, tours, events)

### 5.0 Stakeholders

There are a number of stakeholders groups that may be impacted by forest management plan implications on the Unit. These stakeholder groups can be separated into three categories: Primary, Secondary, and the General Public. Additionally, there are other public input processes occurring concurrently with this process that will likely impact some of this plans goals, objectives, and/or strategies moving forward. Each of these groups will be offered different opportunities for input into the Plan.

Weyerhaeuser will meet with any other stakeholder group or individual not currently identified if they express a desire to meet with us.

## 5.1 Primary Stakeholders

Primary stakeholder groups are those that are part of a local or provincial association and may be directly impacted by forest management activities. These include:

- grazing operators/local forage association
- trappers/ trapper associations
- ATV clubs
- snowmobile clubs
- fish and game clubs, and
- oil and gas operations representation

Weyerhaeuser will undertake the following:

- Establish a small, dynamic group of representatives (to be known as the Forest Advisory Committee (FAC)) from the primary stakeholder groups in winter of 2015/16 as an advisory committee that will be in place during the development of the Plan, with an initial meeting occurring in May of 2016. This group will provide Weyerhaeuser with its primary strategy in seeking involvement from the public in the development of the FMP. Individuals representing primary stakeholder groups will have to represent their respective interests. Weyerhaeuser will strive to get membership for this committee from across the entire geographic area if possible. This advisory committee will only be in place up to Plan approval; however it may continue under a different format throughout the life of the plan. Weyerhaeuser will also record the decision of organizations that decline to be part of the committee.
- Based on comments from the representative members of the FAC, Weyerhaeuser may do mail-outs will be sent out in the spring of 2016 to overlapping trappers and grazing operators with a brief description of the Forest Management planning and Public Involvement processes, asking that they contact either Weyerhaeuser or GOA if they have any concerns they may want to be addressed during the planning process.
- Based on comments from the representative members of the FAC, Weyerhaeuser may do mail-outs in the spring of 2016 to associations or clubs, identified above, with a brief description of the Forest Management planning and Public Involvement processes, asking that they contact either Weyerhaeuser or GOA if they have any concerns they may want to be addressed during the planning process.

The Company will conduct meaningful reviews at appropriate intervals during the development of the Plan with the advisory group. These intervals will become shorter as the planning process approached completion (i.e. submission). The Company will also include members of the general public (members-at-large) who understand forestry and forestry related issues and will be able to effectively provide input into the Plan. GOA representation at these meetings will be required.

Membership of the advisory group is considered public information, therefore contact information for these individuals will be made available upon request.

The following items will be reviewed for input during development of the Plan:

- VOITs
- 20-year SHS
- Final plan to be submitted to GOA

Background information (i.e. net landbase determination, yield curve development, landscape assessment) will also be reviewed as the development of the plan occurs.

Minutes of these meetings will capture all concerns/issues brought forward, and the Company's response to these concerns/issues. A compilation of the minutes and Weyerhaeuser's responses will be submitted as part of the Plan detailing all input into the plan. Tracking of action items and decisions will be as per Table 1.

Table 1: Tracking sheet for issue and decisions of the Advisory Committee.

Date	In Attendance	Tracking Number	Topic Category	Action Item or Decision Made	Completion date as required
		2014-01			

## 5.2 Secondary Stakeholders

Secondary stakeholders are those that may be indirectly impacted by forest management activities. These include:

- Municipal entities
  - ❖ Edson
  - ❖ Drayton Valley
  - ❖ Rocky Mountain House
  - ❖ Yellowhead County
  - ❖ Clearwater County
  - ❖ Brazeau County
- Tourism Outfitters, by example
  - ❖ Skadi Wilderness Adventures
  - ❖ Rose Creek Recreation Trails Association

Weyerhaeuser will do the following:

- Mail-outs will be sent out in the spring of 2016 to the secondary stakeholders identified above, with a brief description of the Forest Management planning and Public Involvement processes, asking that they contact either Weyerhaeuser or GOA if they have any concerns they may want to be addressed during the planning process.

As a follow-up to the above, the following will be sent out for input during development of the Plan:

- VOITs

If interest is shown regarding the Spatial Harvest Sequence (SHS), maps outlining the SHS will be provided to secondary stakeholders.

The company will record all concerns brought forward, and the Company's response to these concerns, in writing. A compilation of the concerns and Weyerhaeuser's responses will be submitted as part of the PIP detailing all input into the plan. All concerns will be tracked using the Silvacom Consultation Tracker.

### **5.3 General Public**

This includes any other group or individual not currently listed as being either a primary or secondary stakeholder, and may be indirectly impacted by the Plan. Among other activities, Weyerhaeuser will at a minimum, hold open houses to provide the opportunity for input into components of the plan that have been developed to date. These open houses will be held in 2016.

The open houses will be held in at least the following communities: Edson, Drayton Valley and Rocky Mountain House at appropriate intervals in Plan development. These include, but are not limited to the following: landscape assessments, VOITs, and final Spatial Harvest Sequence maps. It is anticipated that at least two open houses will be held at each location.

Other open houses may be scheduled in smaller, outlying communities (i.e. Fulham, Lodgepole, or Mackay) if and when deemed necessary by the company or a desire to do such is expressed openly to the Company by these smaller communities. Open houses will be advertised in local papers at least twice, one week and two weeks prior to any event.

The company will record all concerns brought forward, and the Company's response, in writing, to these concerns. A compilation of the concerns and Weyerhaeuser's responses will be submitted as part of the PIP detailing all input into the plan. All concerns will be tracked using the Silvacom Consultation Tracker.

Weyerhaeuser is committed to maintaining opportunities for the general public providing input into operational plans once the FMP process has been completed. This will include open houses in Drayton Valley and Edson, and involvement in community events such as trade fairs, National Forestry Week, etc.

### **5.4 Other Public Involvement Processes**

The North Saskatchewan Regional Land Use Plan and the North Saskatchewan Integrated Watershed Management Plan have their own public input processes. The Company will continue to monitor these processes to insure that regional issues, where appropriate, are addressed during the development of the Plan.

## **6.0 Input tracking and reporting**

Weyerhaeuser will record all comments as they arise during the public input process as described in section 3 above. Some of these comments may be re-directed to GOA, where appropriate. All comments will be reviewed with the PDT, and will be addressed in the Plan where appropriate. The Company will track all comments (by who and when received), and how each issue was addressed. A summary report of all public input into the FMP will be provided as a component of the final Plan submission.

## ***7.0 Issue Resolution Process***

Weyerhaeuser will attempt to address all input brought forward during the development of the plan. Outstanding issues that cannot be resolved will be forwarded to the PDT for its review. If consensus cannot be reached by the PDT concerning outstanding issues, the dispute resolution process as outlined in the Terms of Reference shall be followed.

Where an issue calls for resolution, each issue and associated resolution to be identified separately.



## 5 Communications and Public Participation Summary





Weyerhaeuser Pembina  
2016 – 2026 Forest Management Plan  
PDT – Updated to September 14, 2017

**Communications and Public Participation Summary**

**PREVIOUSLY REVIEWED**

**Prior to November 18, 2015:** PDT kept up to date on process verbally.

**November 18, 2015 PDT meeting:**

- October 13, 2015: Paul Scott met with representatives of the Alberta Trappers Association (Rick Stelter, Chapter President) and Jim Toner (Conservation Committee Chair, Edson Fish and Game Club). Explained scope and purpose of the new Forest Advisory Committee. Rick agreed to participate. Jim to take it back to the Club and discuss this further at their next meeting in early November.
- Bob Winship made first rounds of contacts with Talisman/Repsol and Penn West over the latter part of October for an FAC representative, where both candidates declined at this time. A local grazing representative was also contacted but was not available at this time. Common feedback offered was that there the length of time for the meeting schedule was too long i.e. over 1 year, but that 4 – 6 meetings was reasonable i.e. could the task be compressed into a shorter calendar window.
- Weyerhaeuser Pembina has asked for, and received approval from Alberta Agriculture & Forestry on, an extension to the DFMP submission date to April 2017. This will allow for a better Plan submission due to delays in the new forest inventory completion. Subsequently this will allow for a larger / delayed window of public involvement. Based on the feedback received from some FAC candidates, it was decided to start the FAC in 2016 Q1 which will be closer to when Weyerhaeuser would be able to begin providing information sets for their review, and Weyerhaeuser would be able to offer a more concise flow of discussion on planning topics.

**January 14, 2016 PDT meeting:**

- On December 2, 2015, Weyerhaeuser notified that Ron Moss would represent the Edson Fish and Game Association on the FAC; Package originally sent to the Assn. resent to Ron on December 8<sup>th</sup>

**March 17, 2016 PDT meeting:**

- Nothing to review; PIP still under review by Foothills AAF

**May 20, 2016 PDT meeting:**

- Nothing to review; PIP still under review by Foothills AAF
- First Stakeholder Advisory Group (SAG) meeting scheduled for May 25th

**September 22, 2016 PDT meeting:**

- Resubmission of PIP to reflect post FMP public involvement
- Stakeholder Advisory Group (SAG) initial meeting held July 6, 2016
  - Introduction to process, Terms of Reference
  - Review of Weyerhaeuser
  - Review of Forest Legislation, policy and tenure
  - Presentation of sustained yield
  - Issues hi-lited – develop curriculum based on issued identified
  - Review of stakeholder engagement
- SAG meeting 2 on August 24, 2016
  - Review of curriculum
  - Presentation of Forest Management and impacts on Watersheds - #1 issue
  - Review of consultation and engagement opportunities for WY
- SAG meeting 3 on September 14, 2016
  - Review of updated curriculum based on previous meeting input
  - Report on consultation with the Public and First Nations since start of the process to bring up to speed
  - Presentation on cumulative effects: Policy, NRV, Integrated Land Management, Landbase review from draft NLB doc
- Letter from Rob Popowich outlining concerns about process – June 30<sup>th</sup>, 2016
- WY response to concerns – September 8<sup>th</sup>, 2016

**December 13, 2016 PDT meeting:**

- SAG meeting #4 - field trip on October 14<sup>th</sup>; toured active logging area, recently reforested cutblock; helicopter trip
- SAG meeting #5 – November 10<sup>th</sup>, 2016
  - Reviewed field trip
  - Habitat and Protection/conservation
    - Research and monitoring – Wendy Crosina
    - Strategic plan considerations – i.e. modelling of non-timber values

- Operational plan considerations
- Open houses held
  - Individual mail outs to 95 trappers and 115 grazing operators
  - Emails to municipalities, mill managers, AAF contacts,
  - Face book page links
  - November 22 in Edson – 3 attendees
  - November 23 in RMH – 9 attendees
  - November 24 in Drayton – 6 attendees
  - Comments – 3 requests for maps from operational planers; use of Hog fuel for energy; R12 CTPP volumes
- Social media efforts
  - Pembina Timberlands Facebook page established in an effort to reach out to the general public on a contemporary platform.
  - Research into community support Facebook page reach compiled and open houses advertised on the pages with largest membership, approximate reach of over 30 000 people of the general public.
  - Post were shared and promoted by membership increasing the reach
- Synergy Meetings attended where FMP discussed: Pembina SG - September 22, 2016, Pembina and Yellowhead SGs individually on November 24, 2016
- Bob meet with Brazeau ATV club on November 21, 2016
- Presentations to Municipalities
  - November 24 – Town of Drayton Valley
  - December 5 – Response to reporter’s questions re DV town council presentation
  - December 13 – Clearwater County

**January 17, 2017 PDT meeting:**

- SAG meeting on December 15<sup>th</sup> – opportunity to bring forward concerns, issues that they want WY to address in the FMP
  - Stakeholder consultation as early as possible
  - ILM Planning Opportunities for footprint, ATV use, etc.
- Bob made a presentation to Brazeau County on Dec. 20
- Bob attended Town of Edson Council meeting on January 10<sup>th</sup>, 2017

**February 14, 2017 PDT meeting:**

- Bob met with the Alberta OHV Association in RMH on February 10<sup>th</sup>, 2017

**April 11, 2017 PDT meeting:**

- Bob attended Yellowhead County meeting on February 21<sup>st</sup>

**May 11, 2017 PDT meeting:**

- May 11<sup>th</sup> PDT – nothing to report

**June 15, 2017 PDT meeting:**

- SAG Draft Report sent out May 16th for comments – no comments received to date (June 15, 2017)
- Kerri met with Brazeau ATV club representative Dennis to go over some mapping we have helped them with and a plan for some more; Kerri has committed to continue the mapping project adding more base data to the trail gps data he has provided me, and to meet again to review and attribute and potentially identify some potential expansion options.
- Newsletter #1 sent out to Primary and Secondary Stakeholders (June 2, 2017)
- Website set up at Forcorp that makes draft versions of FMP components available to the public

**July 27, 2017 PDT meeting:**

- On July 11 – Newsletter No. 2 mailed out and posted in Facebook
- On July 13 – SAG meeting to present final report, SHS, VOITs table

**NEW – September 14, 2017**

- Newsletter No.3 August sent out on August 21<sup>st</sup>.
- SAG report and VOITs table given to SAG on July 13<sup>th</sup> for their comments by September 1<sup>st</sup>; nothing received for either document

## **UPCOMING**

- Open house late summer/early fall



## 6 Stakeholder Advisory Group Feedback Opportunities Prior to Final Report





## Nicole Luchanski

---

**From:** Winship, Bob [bob.winship@weyerhaeuser.com]  
**Sent:** Tuesday, May 16, 2017 3:16 PM  
**To:** Ron Moss; Rick Stelter; c\_or\_c@telusplanet.net; Denis Poissant; eric.berg@aer.ca; Mary Ellen Shain; Kara Westerlund  
**Cc:** Scott, Paul; MacKay, Kerri  
**Subject:** Weyerhaeuser Stakeholder Advisory Group  
**Attachments:** Draft Advisory Group report Apr 17.docx; DFMP presentation notes Municipal Councils.docx; Advisory Group meeting 6 notes Dec 15-16.docx; Presentation to Pembina Area Synergy Sept 22-16.docx; Pembina Area Synergy mtg notes Nov 24 2016.docx

### *Hello Folks*

Trust this email finds you all well. At this point in time, we just want to say thank you again for all of your valuable perspectives and input to our forest management plan development to this point. We also want to provide you with an update as to where we are in the process, as follows.

We have spoken to the following Plan components in our meetings with you, but we are now at a point of offering actual analyses and modeling results if you are so interested in seeing. The amount of time to get this work completed and aligned with Government reviewers has taken much longer than we expected, which is why we haven't reached out to you for a while now. We will contact each of you individually for further inquiries or input on these or any other topics.

### **Work on the Forest Management Plan itself:**

- ✓ We have agreed on a final inventory of the forest area with Government that shows all land uses, and exactly what parts of the forest will be set aside for conservation versus forest management (i.e. harvesting and reforestation) – again about half of the forested areas will be managed for timber. In addition to establishing where we can practice forest management, this information also provides the most detailed look at cumulative land effects for this landscape at this point in time. And again, our Plan only forecasts long term changes to the forest from **our** activities, but not other large scale activities or events, natural or man-made.
- ✓ Following the above, we have begun to map exactly where we will be harvesting over the long term, which we call the Spatial Harvest Sequencing. This will show how we will incorporate spatial constraints on timber harvesting over larger periods of time across the landscape, and will also allow any interested stakeholders to identify site-specific concerns well in advance of actual operations.
- ✓ We have aligned with the Province on our forecasts of how the next forest we establish will grow, which we call Growth & Yield forecasts. These are important in that how fast the next forest grows constrains how much forest we can harvest over time – again we manage for a long term sustainable level of timber supply.
- ✓ Following the above, we are at the point of being able to start modeling exactly what our next levels of timber harvesting and reforestation should be under an all-things-considered sustainable forest management regime.

- ✓ We have analyzed the long term effect of timber harvesting and reforestation on a number of habitat types as defined by certain indicator species. The intent here is to look at long term (200 year) trends on the amount of habitat that would occur across the landscape over time, based on the assumptions of no other large scale impacts (e.g. fire, other land use) at this point. This modeling is done in collaboration with Government staff representing the management of fish & wildlife resources for the Province, who establish levels of concern or limitation. Indicator species' habitat supplies looked at include that for the bay-breasted warbler, brown creeper, black-throated warbler, Canada warbler, ovenbird, varied thrush and marten. Other species habitat modeling that may be looked at includes barred owl, and rainbow & bull trout.
- ✓ We have taken our long term look at where we plan to harvest on the landscape (Spatial Harvest Sequencing), and stratified that by watershed mapping to evaluate where we might need to constrain harvesting levels so we do not exceed acceptable levels of mid-term impacts on water yield – you may recall we called this an Equivalent Clear-cut Area (ECA) analysis.

### **Report on the Strategic Advisory Group – you folks!**

At this point, we felt it appropriate to draft a report on what we heard from you folks, so if you could please find some time to review the attached it would be appreciated. The importance of such a report is that it provides the basis for us to report to other stakeholders, and Government folks reviewing our Plan, what we heard from this select group of consultations and how well our Plan *may* address your input. To be clear, we are not asking for you folks as a group to author this report, but conversely it is important that the report a) does a reasonable job of capturing your questions, concerns and input, and b) adequately captures our responses. So at your convenience please, and we expect to do another draft of this report based on your comments, following which we will consult with you again. *Please not that the final report on our discussions with you folks will also include an overview of what we presented, information made available, group membership, meeting dates and curriculum, Government attendees and review, acknowledgements and thank you's, etc. This would then be available to other stakeholders and publics for the record.*

Kerri reminded me we never did send out our last meeting notes – our apologies, please see attached for our notes on that last meeting on December 15, which was intended to be a summary of sorts.

We continue our efforts to engage our regional Indigenous communities on the longer term forest management scenario. An exec summary of this effort would say the responses have been quite varied from none to very sophisticated. As much of our experience has been, these communities have big challenges and concerns which they are interested in seeing how we can help, but less interested so in the structured Forest Management Plan stakeholder engagement process prescribed by Alberta Agriculture & Forestry. As well, our actual detailed records of such ongoing consultations are routinely shared with Government for their adjudication on the adequacy of our efforts.

Also attached for your interest are some notes on our forest management plan presentations to regional municipal governments. As you are probably aware, these are typically 10 – 15 minute time slots for general Council presentation and Q&A.

As for other public involvement efforts, we held public open houses in Edson Nov 22, Drayton Valley Nov 24, and Rocky Mountain House Nov 23. Prior to these events, we promoted it with all local municipal governments, Weyerhaeuser employees, and AA&F local staff; we posted the event on our Facebook site; and we had mail-outs to 95 trappers and 115 grazing operators, making them aware of these opportunities. To be

honest the turnout was bare at best, only 3 - 9 folks at each but interested people nonetheless. Most of the questions or discussions were around people who had a site-specific concern for nearby logging operations, but we also had some interested in how we support the local small logger programs of Government, and one person interested in what we plan to do about wood waste. We have also made presentations and Q&A with the Pembina Synergy Group as well (a regional oil & gas stakeholder relations effort). Attached are the notes from these sessions last fall. We have otherwise had negligible comments or input to date from other means such as email, social media, calls, etc.

On the topic of recreational trails and Off Highway Vehicle (OHV) use, you should be aware that Alberta Environment & Parks has undertaken a project to inventory potential recreational trails for the North Saskatchewan Planning Region. Intent and details are not clear at this time, but we are in contact with the Government staff involved, who have also contacted Dennis from the Group, as well as some municipal governments. We understand this is being done to establish a basis for future Government work on planning for increasing OHV recreational needs in the Region. It is not clear how stakeholders (including forest management) will be involved in such a planning process at this time, and Weyerhaeuser has expressed the need to do so.

On the subject of working with oil & gas reclamation, Weyerhaeuser held a workshop on May 12 with a number of service providers who work on upstream oil & gas reclamation, where the intent was to establish the relationships and means to get more land reclamation efforts growing the forest back (Eric – let me know if you would like to know more).

**Going Forward:**

Our intent is to submit a draft Forest Management Plan to Government sometime this fall, which is a few months behind our original schedule that we shared with you last year as we began our presentations. Between now and then, we will continue to keep you informed of our progress towards that end. As always, we would welcome any more questions, input or discussions. Thanks again.

Kerri Mackay, Paul Scott, Bob Winship

## Nicole Luchanski

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**From:** MacKay, Kerri [Kerri.MacKay@weyerhaeuser.com]  
**Sent:** Tuesday, July 18, 2017 10:46 AM  
**To:** Ron Moss; Rick Stelter; c\_or\_c@telusplanet.net; Kara Westerlund; Denis Poissant; Percy Campbell; eric.berg@aer.ca; Mary Ellen Shain  
**Cc:** Trisha Stubbings; Stephen Mills; Scott, Paul; Winship, Bob  
**Subject:** FW: Follow up items from SAG Wrap up meeting

Hello all,

Again a huge thank you for not only your contributions to date, but your continued commitment to adding value to the process. We hope that you have all benefited from experiencing each other's perspective on complex topics.

As promised, I will be mailing out hard copies of the report on our discussions for your review and comment, and we ask that your comments if any be submitted to us by no later than Sept 1, 2017. Once all comments have been received, we will adjust and send out a final copy of the report. We politely ask that you keep this first draft confidential, and once we have received your final comments, we will compose a final copy for the general public shortly thereafter. Thank you in advance for your cooperation.

Again, we provided you copies of the so-called VOITs table (Values, Objectives, Indicators, Targets) which is used by the Province to ensure forest management plans adhere to a framework for sustainable forest management as defined by international certification schemes. An effort was made to help you understand those that were covered in our presentations (highlighted in pink) versus what was not covered. We invite you to contact us if you want to review, or need help understanding, the content of this document.

Some information requests came up during last week's meeting, so also in the mail package will be:

- a map of the historical harvesting that has occurred as per our recently reconciled landscape assessment.
- an example report of our watercrossing inspection process.
- a list of acronyms used in the various documents you have received to date

The spatial harvest sequence was introduced at a conceptual level, and we recognize that some of you may have localized stand level interests. This information can be used to identify any site-specific concerns or recommendations you may have with respect to our long term forecast of timber harvesting locations. If you do see any locations of concern, we encourage you to reach out to us to do a more detailed review of your location of interest by the September 1 deadline.

We will be contacting you in the future to reconvene the Group as we commence implementation of the Plan, so we ask that you send us any feedback or ideas on how to improve our efforts with you as we move forward. We are considering periodic meetings of the Group for the purposes of reviewing implementation of the Plan to date, and providing updates on relevant current happenings. As well, we will keep up regular contacts via email, and hopefully a networking opportunity for you folks.

Thanks again, you have made a difference in our forest management efforts.

## **Kerri MacKay, RPF** **Strategic Informatics Forester**

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## 7 Stakeholder Advisory Group Final Report (July 2017)





## **Stakeholder Advisory Group**

**FINAL REPORT**  
**July 2017**



Final report of the proceedings of the Stakeholder Advisory Group established in support of the development of the 2017 Weyerhaeuser Pembina Timberlands Detailed Forest Management Plan



## ACKNOWLEDGMENT

Weyerhaeuser Pembina Timberlands would like to extend its sincere appreciation to all those who contributed to the completion of this report.

A special thanks to the representatives of Alberta Agriculture and Forestry for their support of our proposed format and execution of process.

This report would not have been possible without the input and involvement of the representatives from various stakeholder groups whose strategic interest in representing their constituents provided the content for meaningful and constructive discussion.

Collectively the Stakeholder Advisory Group maintained alignment to its jointly developed objective and curriculum. Through an investment of considerable time and full effort, the group achieved its goal of formulating recommendations that may help guide forest management activities and stakeholder consultation as we move forward together into the future.

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## EXECUTIVE SUMMARY

The Weyerhaeuser Pembina Timberland Forest Management Plan has been under development since 2012. In the spring of 2016, Weyerhaeuser established a Stakeholder Advisory Group, which was comprised of a number of knowledgeable people who represented defined stakeholder interests. The intent of establishing the group was to solicit advice and direction on forest management issues, with the focus on issues brought forward from the group itself. The interests represented by the group included: Off-highway vehicles (in particular, ATV's), grazing, petroleum resources, trapping, hunting, fishing, and municipal government. The group had six members, as well as representatives from Weyerhaeuser and Alberta Agriculture and Forestry (AAF) that acted as resources to the group.

A total of six meetings were held, with a seventh final meeting at the end of the process to share this report. The primary meeting introduced the company to the Stakeholder Advisory Group, and familiarized the group with the intent of the process. One field trip was taken to show some on the ground examples of forest management activities.

Main topics discussed included: forest management and watershed values; cumulative effects and Natural Range of Variability (NRV); Net Land Base determination results; Wildlife ecology and habitat protection.

## INTRODUCTION

A public involvement process was initiated by Weyerhaeuser in the summer of 2016 to solicit input from stakeholders and the general public to help guide the development of the 2017 Forest Management Plan for the Weyerhaeuser Pembina Forest Management Agreement Area (FMA) and associated non-FMA areas.

One component of gathering public input was the establishment of a primary Stakeholder Advisory Group (hereinafter referred to as the Advisory Group), made up of knowledgeable persons representing the various identified primary stakeholder interests. The intent was to establish a committee of experts who would provide advice and direction on behalf of the various resource users on the FMA Area. By working through a committee process it was hoped that there would be further synergies and alignment between the different stakeholder advisors on the more complex and integrated resource management challenges.

As well as the Stakeholder Advisory Group, the company solicited input from Secondary Stakeholders, including municipal governments and the general public. This was accomplished through a series of presentations and open houses in 2016 and 2017. A summary of events to date can be found in this document under the heading Additional Efforts.

One of Weyerhaeuser's primary goals was to create a plan that not only met the needs of the business and satisfied provincial regulatory requirements, but also fostered and improved stakeholder and public interest in the science and art of forest management.

The process Weyerhaeuser guided the Advisory Group through remained aligned to the provincial regulatory requirements, but was purposefully driven towards improving Weyerhaeuser Pembina Timberlands Forest Management Plan and the implementation of that plan looking into the future.

# THE STAKEHOLDER ADVISORY GROUP

## PURPOSE

The Advisory Group was established to improve the manner by which forest management is performed with respect to better supporting all represented interests. The company wished to encourage a critical review of the presented forest management plan components through a group dynamic and committee process. This encouraged constructive high value discussion resulting in a strengthened forest management plan. The Advisory Group members worked together with Weyerhaeuser to

- Review presented available information related to the preparation of the Forest Management Plan
- Provide an effective channel for directing concerns, questions, and communications on plan components
- Discuss, understand, and share the forest management considerations from the various representatives' perspectives

At the start of the process, Weyerhaeuser asked that each member bring their interests to the table and tell us how it could better execute forest management decisions. Weyerhaeuser was seeking critical review of our plan from the perspective of their representation.

Weyerhaeuser feels that our plan will benefit from opportunities to synergize, strengthen, and enhance our methodologies via this process.

## SCOPE

The Weyerhaeuser Pembina Timberlands Forest Management Plan Stakeholder Advisory Group is an advisory body that operates on the understanding that Weyerhaeuser will seriously consider and respond to all Advisory Group recommendations on matters that fall within its sphere of influence as it relates to Timberlands. Any recommendations concerning the regulatory environment, under which it operates, including primary land-use decisions will be shared with the appropriate level of government.

The Advisory Group will have the opportunity to review and comment on the company's 2016-2026 Forest Management Plan as it is developed for submission to the Government of Alberta in 2017.

Weyerhaeuser will present a framework to guide discussions, but ultimately members will guide the agenda and schedules allowing emphasis to be placed on the areas of greatest interest to membership. Weyerhaeuser's commitment to the membership is to educate,

inform, listen, record and respond to the feedback provided. We will be looking to the group for prioritizing issues and recommendations preferably with consensus.

## **MEMBERSHIP**

Membership of the Stakeholder Advisory Group was designed to reflect those with an identified interest on the public lands on which Weyerhaeuser operates. Representation was sought from the following groups.

- Grazing Operators – Cecil Anderson
- Trapline Owners – Rick Stelter
- Fish and Game Associations – Ron Moss
- ATV and/or Snowmobile Associations – Dennis Poissant/Percy Campbell
- Oil and Gas Sector representation – Eric Berg
- Brazeau County – Kara Westerlund
- North Saskatchewan Watershed Alliance – Mary Ellen Shain
- Alberta Agriculture and Forestry – Stephen Mills and Trisha Stubbings

The process that the Advisory Group underwent was facilitated and supported by following Weyerhaeuser Pembina Timberlands staff.

- Bob Winship, Strategic Manager
- Paul Scott, Strategic Planning Forester
- Kerri MacKay, Informatics Forester/Operational Planner
- Wendy Crosina, Wildlife Biologist – Subject Matter Expert
- Victor Fobert, Contract Administrator – Field Tour Guide
- Jeff Struth, Contract Administrator – Field Tour Guide

# STAKEHOLDER ADVISORY GROUP ACTIVITIES

## SCHEDULE

Meetings were held on the following dates:

- Meeting #1 - July 6, 2016
- Meeting #2 - August 24, 2016
- Meeting #3 - September 14, 2016
- Meeting #4 - October 12, 2016
- Meeting #5 - November 10, 2016
- Meeting #6 - December 15, 2016
- Meeting #7 - July 13, 2017

## CURRICULUM

The curriculum was compiled from membership input gathered during a facilitated session led by Bob Winship. The resulting areas of interest and chosen topics would come together to form a curriculum summarized as follows:

1. Initial meeting – Introductions; review of Forest Management, forestry legislation, policy and tenure
2. Water in forestry
3. Cumulative effects
4. Field Tour
5. Habitat and protection\conservation
6. Review of presentations and recommendations

The curriculum served as a guide to ensure coverage of desired content as indicated by the Advisory Group membership. It was a priority of Weyerhaeuser to deliver value to the members at the same time as seeking the advice needed to inform the Forest Management Plan. Subject matter experts and front line leaders were brought in to assist where needed. Open high value discussion was encouraged and meeting agendas were designed to incorporate the flexibility required to accommodate.

## DISCUSSION TOPICS

Each of the six meeting topics came together to form a single meeting's content. In this section the content which was covered is summarized to provide background and understanding for the discussion and recommendations described later on in the document. Some of the topics are lengthy and are rather technical in nature. Every attempt has been

made to provide adequate detail for understanding. If you require full details, please contact Weyerhaeuser staff.

## Meeting #1: Review of Forest Management, Forestry legislation, policy and tenure

The content of this session was designed to provide a sufficient amount of technical background on the environment and processes that guide forest management in the province of Alberta. The following information was presented in the form of a digital presentation and also in hard copy to the membership.

### FOREST MANAGEMENT

The government of Canada defines forest management as:

*“Forest management in Canada is supported by laws, regulations and policies; a rigorous forest management planning process; and a science-based approach to decision-making, assessment and planning. Independent third-party certification of sustainable forest practices in Canada’s forests is further evidence of our success in meeting internationally accepted standards for sustainable forest management.” Natural resources Canada definition*

Weyerhaeuser divides the responsibility of applying forest management into five main functional groups within our business which includes forest planning, roads management, harvesting, silviculture and monitoring.

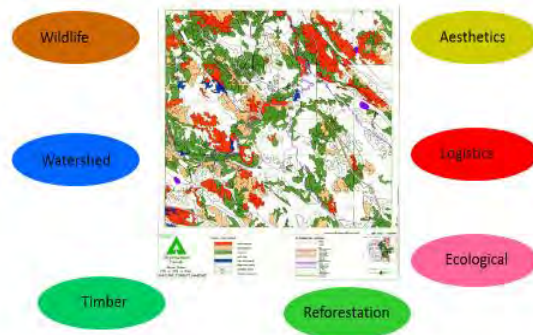
### PLANNING

- Planning the forest landscape for a sustained level of timber harvesting, including a complete inventory and assessment of the forested landscape
- Wildlife habitat considerations are used in designing harvest areas, e.g. size, configuration, and connectivity.
- Ecological values are planned to replicate what fire may have done, e.g. structure retention, retention of down woody debris, etc.
- Watershed impacts are maintained within acceptable levels.
- Aesthetics decisions are incorporated into the design of the harvest areas.
- Forest management is integrated with other resource users, e.g. oil & gas, trappers, recreation.



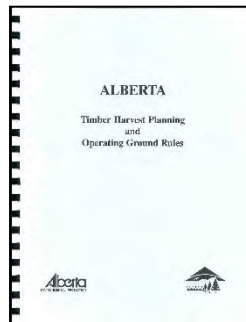


## Harvest Design - Criteria



## HARVESTING

Harvesting operations is the application of the forest management plans on the landscape. The harvesting operations are guided by approved annual operating plans (AOP) approved provincial operating ground rules, and our third party environmental certification regime. Harvest operations are inspected and monitored by both the company and



provincial regulator for adherence to the plan and expectations and also as part of Weyerhaeuser's assessment of environmental performance. This team also oversees the load and haul portion of our business, ensuring the safe and on time delivery of harvested timber to our facilities.



## ROAD MANAGEMENT

Access management to harvesting areas and main travel routes is a major component of ensuring success and managing environmental risk for our operations. Weyerhaeuser staff plan for and oversee the maintenance and construction of permanent, temporary, all weather and winter only class roads. This team also guides road reclamation activities on the landbase.



## SILVICULTURE

Silviculture is the process of reforesting the harvested land base. This is a multi-faceted process which includes site preparation, reforestation, stand tending, establishment surveys, and performance monitoring. The silviculture program is guided by provincial regulatory requirements for reforestation which is viewed as the minimum standard to which Weyerhaeuser will reforest the land base. Often exceeding the standard, Weyerhaeuser's primary objective is to improve the timber growing capacity of the land base and ensure the resource is not only sustainable but improved. All harvested areas are reforested to the same forest that existed prior to harvest. Reforested areas are monitored for a minimum of 15 years to ensure success. Weyerhaeuser Pembina Timberlands plants over 4 million seedlings annually.



## MONITORING

Monitoring the forest operations not only includes monitoring forest operations to regulatory and environmental expectations, but also monitoring the forest resource against growth expectations. Weyerhaeuser maintains a population of over 500 permanent monitoring sample plots in both natural and regenerating forest stands. These plots are measured on a recurring basis every 5 years. Monitoring programs are executed using a science based statistically sound and peer reviewed protocol. Protocols are reviewed regularly to ensure new science and information may be accommodated.

Annual establishment surveys are performed on sites two years post reforestation to ensure there are no failures and the intent of the treatment was met. At 12-14 years after reforestation stands are monitored for performance. At this point the future stand condition can be predicted and stand growth trajectory to maturity forecasted. It is this measurement that is used to forecast future stand timber growth capacity. Sustainable harvest level forecasting utilizes all the survey and monitoring program results to inform sophisticated models used to determine harvest levels.



## FOREST TENURE, POLICY AND LEGISLATION

Forest Tenure is an interest in the forest resource granted by the Crown to a third party. In 1930, ownership and administration of Alberta natural resources transferred to the Province of Alberta. The Forests Act and Timber Management Regulation enable the award and administration of forest tenure on public forest land. Under the forest act the Minister of Forests may

- Make regulation pertaining to the preparation of plans related to the Forest Act
- Administer and manage timber on public land
- Divide the land into Forest Management Units
- Determine Annual Allowable Cuts
- Dispose of timber pursuant to different tenures

There are a different types of tenure separated by duration, responsibility level and timber security which include:



- Forest Management Area
  - *Area based*
  - *Negotiated between government and the company*
  - *20 year term renewable every 10 years*
  - *Tenure holder responsible for forest management planning*
- Timber Quotas
  - *Can be area or volume*
  - *Can be conifer or deciduous based*
  - *Issued through competitive sales*
  - *20 year terms with renewal opportunity*
- Timber Permits
  - *Commercial Timber Permit (CTP)*
  - *Coniferous Community Timber Permit (CCTP)*
  - *Local Timber Permit (LTP)*
  - *TM66 (firewood permit)*

Weyerhaeuser Pembina Timberlands is the holder of a Forest Management Area Agreement and therefore takes on the responsibility of Forest Management Planning. The planning process is informed by higher level planning processes which include land use framework, regional plans, and sub-regional plans. This graphic has been included to better understand this hierarchy.

## THE BASICS OF A FOREST MANAGEMENT PLAN

Forest management plans will define, quantify, and establish monitoring protocol for

- Long term management of forest vegetation and minimizes impacts of forestry operations on other values and users



- Establishment of sustainable forest management, including long term sustained timber yields, based on Government of Alberta standards and international environmental certifications
- Forecasting future forest development at 200 years with spatially sequenced harvest patterns for twenty years
- Revision every 10 years



Forest management plans build on a key concept in the science of forestry called sustained yield. There are three key components to understanding sustained yield as it is applied to the forest management plan.

- Forests are dynamic, forests in the Boreal region are of fire origin meaning that the natural process is to see stand replacing fires cycle the forest structure from mature to regenerating.
- Landscape level thinking is required. Forests are complex, and strategies and objectives must be applicable at a landscape level.
- Harvest only what the forest can regenerate. Application of this concept allows for the forest to provide perpetual value. The number that represents this is Annual Allowable Cut or (AAC)

Combining the concepts above with a suite of non-timber values, stakeholder input, and other biological considerations forms the basis for a forest management plan.

### **Alberta Agriculture & Forestry – Forest Management Planning Standard**

The Government of Alberta has established a Planning Standard (i.e. manual) for forest management planning for Alberta. A key component of that manual is the requirement for forest management plans to meet a given set of values, objectives, indicators and targets otherwise known by the acronym VOITs. This format is derived from a Canadian environmental certification program, and attempts to establish the Province's requirements for the integration of other resource values in forest management plans.

Weyerhaeuser incorporated those VOITs from the Planning Standard into the various meeting curriculums as warranted by the topics chosen by the Advisory Group. As part of the overall information sharing, all of the Provincial VOITs were shared with the group as well.

## Meeting #2: Water in Forestry & Public Consultation

### FOREST MANAGEMENT AND WATERSHED VALUES

A brief historical perspective outlined the history of forestlands management in Alberta, from the creation of the Dominion Lands Act of Canada, which excluded timberlands from sale or development due to the shrinking timberlands available to the Country and their importance, to the establishment of the Green Zone in 1948, which reserves the land from settlement and introduced the modern era of forest management.



Green zone activities include a multitude of activities, some natural, and some not. Natural activities include forest succession, and natural disturbances like fire, insects and disease, flood events, etc.. Forestry management activities include fire protection, harvesting and reforestation. Other uses include Indigenous Peoples uses, oil and gas exploration and development, developments for gravel extraction, grazing and recreational uses, and community expansions.

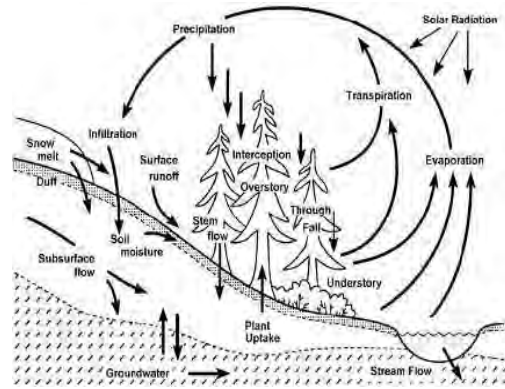
A number of generalities about the Foothills Forests are:

- The area is a diverse eco-region, covering the subalpine, upper and lower foothills, and dry central mixedwood natural subregions.
- Fire had predominantly shaped the forest in the past with nature fire cycles of 35 to 80+ years, but the introduction of fire prevention in the 1940's has shifted the forest to be older; currently 1/3 of the forest is mature (80-120) and 1/3 is overmature (121+), which research has defined as outside of natural variability.
- Of the total landbase, only 52% is actively managed for timber production.
- Approximately 6.4% of the landbase is being managed for grazing of cattle.
- There are thousands of well sites and oil or gas infrastructures.
- Linear developments average 0.8 km/ km<sup>2</sup>; added to this is seismic line development of 1.3 km/km<sup>2</sup>.
- Ongoing land withdrawals for oil and gas development accounts for an additional 1000 to 2000 hectares per year.

### RESEARCH ON FOREST DISTURBANCES AND WATERSHEDS

There has been a multitude of research done on the impacts of disturbances on watersheds. One primary disturbance is logging. The effects of logging have been shown to be

- Increased precipitation run-off, increased sources of sediment and nutrients, changes in snow retention, and impacts to fish habitat.
- Hard to model and predict due to relationships between landform, soil type, wetlands contributions, weather variability, and recovery periods.
- Highly variable when expressed as a percentage change relative to undisturbed
- Dependent on size and amount of disturbance events
- Mitigated by prompt, successful reforestation efforts



## FORESTRY IMPACTS ON WATER YIELD

The impacts of timber harvesting on water yield are

- Reduced evapotranspiration and interception of rain and snow, with increases in run-off/stream flow
- Felt immediately after timber harvesting, where hydrologic recovery follows forest regeneration as measured by leaf area.
- Influence is greater on smaller watersheds where watershed response depends of percent of area harvested

Watersheds will recover from a disturbance provided that the disturbance is within an allowable threshold and a forest cover grows back. Forest harvesting and reforestation assumptions can be modelled for watersheds over a period of time to determine the maximum level of disturbance impact, both temporally and spatially. To determine this, the ECA (Equivalent Clearcut Area) model is used most often in Alberta FMPs. The GoA has established targets for ECA outputs. These targets cannot be exceeded without compensatory activity occurring.

The long-term spatial harvest sequence (SHS) of the FMP is linked to watershed information to determine when (temporally) and where (spatially) harvest levels need to be constrained to meet maximum levels of sub-watershed impacts.

## WATERSHED MANAGEMENT – FORESTRY IMPACTS ON WATER QUALITY

The impacts of timber harvesting on water quality are:

- Sedimentation
- Stream flow
- Habitat alteration – water temperature, substrate, dissolved oxygen, nutrients
- Fishing pressures through increased access



## WATER QUALITY PROTECTION

There are a number of practices that will help to provide water quality protection, such as:

- Minimize the number of stream crossings and their associated soil disturbances
- Improved design and construction of crossings
- Improved soil disturbance and erosion control methods
- Ongoing monitoring of crossings to ensure they are effective
- Ongoing maintenance plans for permanent roads and crossings
- Maintenance of undisturbed vegetation adjacent to watercourses and water source areas, and
- Use of advanced tools to plan locate of future roads and crossings, e.g. wet area mapping

## FUTURE OPPORTUNITIES FOR WATERSHED MANAGEMENT

There are a number of ways to provide better protection to watershed resources, such as, but not limited to:

- Better methods to map watersheds and water source areas
- Increased research into modelling capabilities that can more closely reflect anthropogenic or natural influences
- Understanding the impact of natural disturbance events such as Mountain Pine Beetle, fire, severe weather
- Understanding the impact of climate change and changes to forest cover as a result
- Involvement in large scale cooperative research projects or programs – e.g. Foothills Stream Crossing Association, FP Innovations, critical fish habitat inventories, Foothills Research Institute.
- Integrating land management to manage cumulative footprints.



## Meeting #3: Cumulative Effects – What is Natural? and Net Landbase Determination

### What is Natural?

Considerable complexity exists around the extent of man's cumulative interactions on the landscape. Three perspectives were presented: **Government of Alberta – Landuse Planning; Forestry – natural disturbance versus forest management; and Footprint/ footprint – anthropogenic impacts.**



### GOVERNMENT OF ALBERTA

Land use planning is completed under the Alberta Land Stewardship Act, which provides direction on the development and authority of Regional Land Use Plans. These plans are binding and override other high level plans such as a Forest Management Plan. These Regional Plans deal with land use conflicts and issues, and will set measureable objectives and targets. The planning is completed under the guidance of the Land Use Framework (LU Framework).

The Vision of the Land Use Framework is to have “*Albertans work together to respect and care for the land as the foundation of our economic, environmental and social well-being*”.

The desired outcomes of this vision is to provide for

- A Healthy economy supported by our land and natural resources
- Healthy ecosystems and the environment, and
- People-friendly communities with ample recreation and cultural opportunities
- The LU Framework also has a number of principles that will drive plans. These principles include:
  - Accountability
  - Are supported by a land stewardship ethic
  - Are collaborative and transparent
  - Are Integrated with all the pieces
  - Are knowledge based
  - Are responsive to changes over time
  - Are fair, equitable and timely, and
  - Respect property and Aboriginal Rights

The LU Framework operates under a number of strategies for each of the 7 Regional Land Use Plans. These strategies include:

- The Land Use Secretariat and Regional Advisory Councils
- Cumulative effects management
- Conservation and stewardship on all lands

- Efficient use of land and minimize footprint
- Provision of information, knowledge, monitoring and adjustments where or when necessary
- Inclusion of Aboriginal Peoples.

## **THE NORTH SASKATCHWAN REGIONAL PLAN**

A number of key issues were identified during the development of this plan. They were to

- Maintain the industrial heartland while balancing environmental impacts
- Maintain of viable agriculture land base versus expanding rural areas and reducing the rural populations
- Manage biodiversity impacts and the human footprint
- Have healthy lakes and wetland management
- Allow for recreation and tourism priorities.

Each regional plan has a set of Environmental Management Frameworks: Air Quality, Surface Water and Biodiversity. The presentation expanded on the Biodiversity MF.

## **BIODIVERSITY MANAGEMENT FRAMEWORK**

The Biodiversity Management Framework is intended to provide

- A systematic, credible approach to biodiversity management
- Support for continued economic and community growth in all Regions
- Improved practices for industry and other land users to minimize the extent and duration of human footprints
- Assistance in preventing new 'species-at-risk' through a proactive system for biodiversity management
- Ability to adapt to ecosystem change

Objectives of the Biodiversity Management Framework are to

- Maintain terrestrial and aquatic biodiversity
- Maintain long-term ecosystem health and resiliency
- Promote recovery of species-at-risk and minimize new species entering this designation
- Provide for biodiversity and healthy, functioning ecosystems that continue to provide a range of benefits to communities in the Region and to all Albertans

Indicators are developed for each objective. As biodiversity is complex, so are the indicators. The indicators for biodiversity are

- Specific elements of biodiversity that provide scientific information on the state or condition of that element
- Broad enough to provide information that has the capacity to represent a broader suite of biodiversity in the region

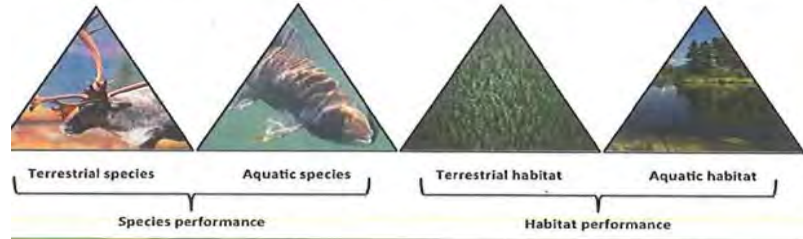
- Helpful to determine whether we are meeting the biodiversity objectives set for each region

There are 4 tiers of indicators:

- Tier 1 – composite indicators to report on overall state of biodiversity
- Tier 2 – Key indicators of regional biodiversity
- Tier 3 – Numerous indicators that complement Tiers 1 and 2 and are important to people
- Tier 4 – Supporting data

### Indicators

- Indicators help determine whether we're meeting the biodiversity objectives established for the region
- Biodiversity pressures – habitat loss, human use, altered hydrology



Triggers will be established for each indicator. These triggers are used as a management warning system that signals that a change in biodiversity has occurred and a response may be required. Triggers focus on the current condition and are used to manage future levels of biodiversity. They do not attempt to replicate pre-European landscapes, but must consider past development effects on current biodiversity levels.

### FORESTRY

The major disturbance pattern on the landscape pre-European settlement was fire. Prior to effective application of fire prevention techniques, fires burned across the landscape uninhibited.

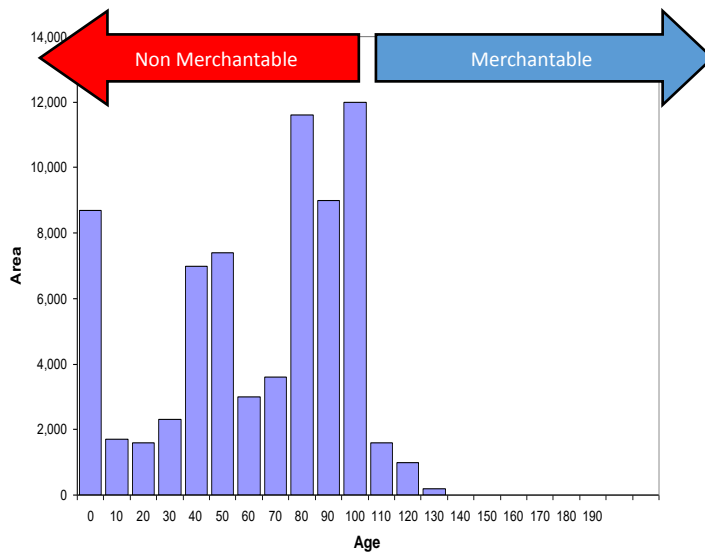
Timber harvesting has attempted to emulate fire at the landscape and stand level by:





- Maintaining the diversity of disturbance sizes across the landscape
- Retaining some minor levels of trees / woody material in harvested areas
- Maintaining a forest age class diversity over time
- Maintaining the current range of species distribution over the landscape

Timber harvesting will remove older timber first before it dies or is destroyed by fire, Mountain Pine Beetle infestation, etc. As areas are harvested they are replaced with regenerating area of younger age class that will be the future forest.



### NATURAL RANGE OF VARIABILITY ASSESSMENT

Forest fires have been the main natural disturbance on the landscape, but this is changing. Fires, with a few exceptions, do influence the landscape like they had pre-fire suppression. Therefore managers of both protected and working forests want to approximate natural forest dynamics.

Fires have been analyzed to determine their frequency, size and shape, duration on the landscape, severity, and relationship to location of occurrence, vegetation, etc.

### FOOTPRINT ON THE LANDSCAPE

Since the 1950's and the discovery of oil in Alberta, the industrial foot print has been exponential across the landscape. This footprint is directly related to exploration and the development and removal of natural resources, be it oil, gas, coal or timber.



With the access provided by commercial development came the use of the land for recreational use as well. Footprints create a number of impacts on the landscape.

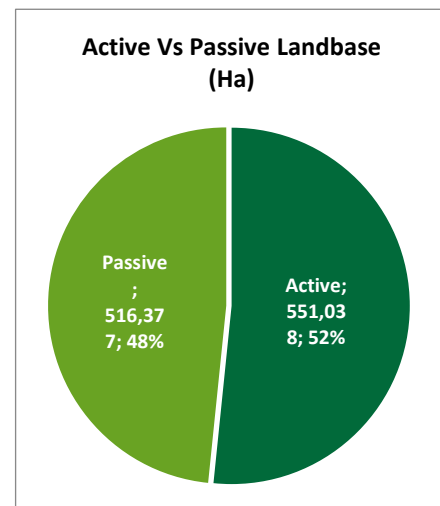
To mitigate some of the impacts of industrial footprint, a number of tactics have been employed, to some level of success. The following lists each tactic in order of effectiveness:

Disturbances	Impacts
<ul style="list-style-type: none"> <li>• Logging – timber removal progressing to reforested</li> <li>• Roads</li> <li>• Well sites</li> <li>• Pipelines</li> <li>• Trails</li> <li>• Hunting, trapping, fishing</li> <li>• Noise, activity</li> </ul>	<ul style="list-style-type: none"> <li>• Habitat fragmentation</li> <li>• Increased predation</li> <li>• Barriers to wildlife movement</li> <li>• Increased wildlife disturbance &amp; mortality</li> <li>• Soil, watershed disturbance</li> <li>• Less forest growth</li> </ul>

1. Access rollback
2. Stream crossing removal
3. Excavation or road deactivation
4. Manned gates
5. Berms
6. Unmanned gates

### Net Land Base Determination

The intent behind this process is to identify and classify lands that contribute to either the Active (timber producing) or Passive (non-timber producing) land base, or in other words what lands will be eligible for timber harvesting and what areas will be managed for other values. The Active land base is then used, along with yields assigned to the Active land base, to determine Annual Allowable Cut levels. In general terms, the process begins with the identification and accumulation of different data sets that cover the extent of the forest management area. The data is sourced from Weyerhaeuser, the government of Alberta, or from overlapping tenure holders and stakeholders. Some examples of the data sets utilized are municipal boundaries, parks, natural areas, ecoregions, watersheds, vegetation inventory, previously harvested areas, oil and gas infrastructure, and fire history. These two graphs detail the draft breakdown of the Active





versus Passive land base, and the different types of deletions that contributed to the Passive land base. It is important to note that this is only a snapshot in time used for the purposes of the forest management plan. The face of the landscape is ever changing and monitored throughout the life of the plan.

### Meeting #4: Field Trip

The intent of the field trip was to introduce forestry concepts on the ground. SAG members spent a day visiting different sites to see some of the following:

- Crossing and buffers
- Water sources and wetlands
- Habitat avoidance
- Reforestation efforts
- Recreational trails
- Current harvesting, and structure retention

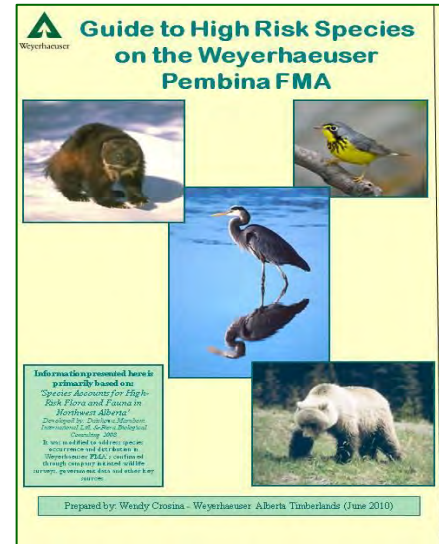


## Meeting #5: Wildlife and Ecology

### SPECIES-AT-RISK-WHY ARE THESE THINGS IMPORTANT?

There are expectations to meet requirements with regard to species-at-risk and other wildlife values. Weyerhaeuser also abides by a stewardship policy that includes the protection of threatened and endangered species.

There are four species-at-risk on the forest area: Grizzly Bear, Trumpeter Swan, Peregrine Falcon, and Canada Warbler. However there are more species of high value as well. For all, forest management plans and forecasts critical habitat supply over the landscape and large periods of time. In the short term, forestry operations monitor for populations of important species and their habitat conditions.



### MIGRATORY BIRDS

Migratory birds are protected under Federal law. This law prohibits the disturbance, destruction, or take of a nest, egg or nest shelter of a migratory bird. To help manage this, the company is involved in the development of a Risk Assessment tool to help in managing this issue across the forest area. The tool helps to determine the level of risk for nesting birds during the summer nesting season, and informs forest management on timing and location of harvest to best avoid these sites. In addition, individual



blocks with a high risk rating will be surveyed by experts prior to harvesting as a check.

### IN BLOCK RETENTION STRATEGY

In-block retention can be described as merchantable trees left in any configuration that would normally be harvested without any retention strategy in place. Retention amounts vary block by block, with the current target approximating 4%. Retention practices take into account the following: the amount to be retained; the configuration to be left (singly, patches, islands); the connectivity of patches to the exterior of the block or to anchor point such as wetlands, unmerchantable areas; and representative of the timber being harvested.





## GRIZZLY BEAR PROJECT

The company has been involved in Grizzly Bear research for over a decade. Currently the company is supporting research such as:

- Investigating population size for this area (Yellowhead BMA 3)
- Hair snag samples
- Scat collection and analysis
- How are grizzly bears currently using this area and how will new forest harvesting activities impact the local bear population (before harvest, during harvest, and 3 years post-harvest)
- GPS collars



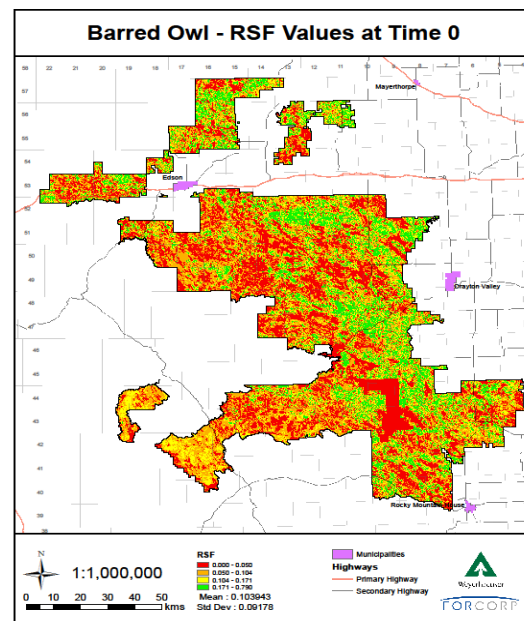
Preliminary Results of the research:

- Appears to be an eastward shift in bear distribution – project will try to understand why (food models, disturbance etc.)
- Models revealed grizzly bears avoided main/secondary roads, and avoided areas of relatively high road density.
- Findings support the suggestion that bears are using forestry cutblocks primarily for foraging, whereas roads could be used for both foraging and travel
- A small population increase in BM3 since 2004

## HABITAT PROTECTION MONITORING IN THE FOREST MANAGEMENT PLAN

The FMP will define the values (biodiversity), objectives (maintain habitat), and measurables (Habitat, Resource Value, Sustainability index) to be considered during the development of the preferred forest management strategy on the Defined Forest Area. It will also describe the measurables over the planning horizon resulting from the application of different forest management scenarios. Habitat protection and monitoring is within that suite of variables and is considered in several areas of the plan.

Two main forest management approaches: Coarse Filter approach and Fine Filter approach





## **COARSE FILTER APPROACH**

Forest management at a landscape level aimed at maintaining a range of stand characteristics (species composition, size, age) to provide habitat for all species. This covers a wide range of species: birds, mammals, insects, etc.

## **FINE FILTER APPROACH**

Specific habitat management for a single or a few species to maintain habitat availability for that selected species of concern.

The following species will be analyzed: Barred Owl, Grizzly Bear, Old Forest Songbirds, and Cold Water Fish Species. The models for the most part utilize a Resource Selection Function that will indicate habitat preferred for each species. For the cold water fish species, a fish sustainability index will be used.

## **PLAN IMPLEMENTATION**

The link to the FMP for timber harvesting operations will be to follow what is called the Preferred Spatial Harvest Sequence (PSHS) which will dictate the pattern and exact location of timber harvesting to occur over the next 20 years, or until the next FMP is approved. Operating Ground Rules will be developed to implement other parts of the plan, such as: utilization, habitat management, debris management, structure retention, fisheries and aquatic environment, and species of special management concern.

## **Meeting #6: Review of Presentations and Recommendations**

The final working meeting was aimed at reviewing feedback received to date and at capturing any additional information that the membership was wanting to offer to Weyerhaeuser. Bob Winship facilitated a session reviewing the topics of discussion, the feedback received, and Weyerhaeuser's response. This information is included in the report section entitled Summary of Group Discussions.

## ADDITIONAL EFFORTS

- Open House Invitations
  - Individual mail outs to 95 trappers and 115 grazing operators
  - Emails to municipalities, mill managers, AAF contacts,
  - Face book page links
  - November 22<sup>nd</sup>, 2016 in Edson – 3 attendees
  - November 23<sup>rd</sup>, 2016 in RMH – 9 attendees
  - November 24<sup>th</sup>, 2016 in Drayton – 6 attendees
  - Comments – 3 requests for maps from operational planers; use of Hog fuel for energy; R12 CTPP volumes
- Social media efforts
  - Pembina Timberlands Facebook page established in an effort to reach out to the general public on a contemporary platform.
  - Research into the reach of Facebook and other community support compiled, and open houses advertised on the pages with largest membership, approximate reach of over 30,000 members of the general public.
  - Posts shared and promoted by membership increasing the reach
- Synergy Meetings attended where FMP discussed: Pembina SG - September 22<sup>nd</sup>, 2016, Pembina and Yellowhead Synergy Groups individually on November 24<sup>th</sup>, 2016
- Meeting with Brazeau ATV club on November 21<sup>st</sup>, 2016
- Presentations to Municipalities
  - November 24<sup>th</sup>, 2016 – Town of Drayton Valley
  - December 5<sup>th</sup>, 2016– Response to media questions pertaining to Drayton Valley town council presentation
  - December 13<sup>th</sup>, 2016– Clearwater County
- Presentation made to Brazeau County Council on Dec. 20<sup>th</sup>, 2016
- Attendance at Town of Edson Council meeting on January 10<sup>th</sup>, 2017
- Met with the Alberta OHV Association in RMH on February 10<sup>th</sup>, 2017
- Attended Yellowhead County Council meeting on February 21<sup>st</sup>, 2017



## SUMMARY OF GROUP DISCUSSIONS AND RECCOMENDATIONS

The following presents a summary of the discussions between the Advisory Group members and Weyerhaeuser during the series of meetings held. Authored by Weyerhaeuser, this summary is intended to capture the essence of the discussions, and to be conclusive at this point in time. The Group has been invited to comment on this summary for the record, following which it will be available to other interested publics.

### 1. What are the issues and topics that the Advisory Group wants to look at? What does Weyerhaeuser want advice on?

From the beginning of the opportunity with the Advisory Group, it was always Weyerhaeuser’s intent to leave the scope of topics and issues to be determined by the Group itself, providing there was relevance to our local forested landscapes. Weyerhaeuser then provided overviews of the topics raised by the Group (i.e. the Curriculum), which became the basis for discussions. These discussions in turn generated questions and recommendations that Weyerhaeuser and Alberta Agriculture & Forestry responded to. Integrated with this process was the alignment of the discussions with Weyerhaeuser’s Forest Management Plan development, including explanations of Government requirements.

In order to prompt and facilitate topic identification, Weyerhaeuser shared a summary of the types of issues and topics we have heard from our collective experience, and presented that from the perspectives of different stakeholder groups as follows:

#### From the perspective of others who use, work in, or recreate in the forest:

Topic	Issues, Concerns
Logging	<ul style="list-style-type: none"> <li>• Change from old forest to young/new forest</li> <li>• Change forest over the landscape</li> <li>• Is it reforested, is it sustainable?</li> <li>• Wood fibre “waste”</li> </ul>
Roads, pipelines, wells, etc.	<ul style="list-style-type: none"> <li>• Removes forest cover / soil, fragments habitat</li> <li>• Brings people (hunting, disturbance)</li> <li>• Crosses watercourses / water sources</li> </ul>
Motorized recreational vehicle use	<ul style="list-style-type: none"> <li>• Brings people (hunting, disturbance)</li> <li>• Crosses watercourses / water sources</li> </ul>
Herbicide	<ul style="list-style-type: none"> <li>• Enviro hazard</li> </ul>
Grazing	<ul style="list-style-type: none"> <li>• Forest cover change</li> <li>• Domestic animals</li> <li>• Brings people</li> </ul>

**From the perspective of the Regulator(s):**

Legislation / Regulation / Policy	Management Challenges
Public Lands, Forests, Minerals, PNG, Water, Fish & Wildlife	<ul style="list-style-type: none"> <li>Increasing use of Crown land (commercial &amp; recreational)</li> <li>Increasing use &amp; conservation of natural resources</li> <li>Ensuring a renewable, sustainable forest</li> <li>Forest protection (fire, insects, disease)</li> </ul>
Environmental protection	<ul style="list-style-type: none"> <li>Soil conservation</li> <li>Water, watersheds</li> <li>Pollution, contamination, hazardous waste</li> </ul>
Endangered, threatened species	<ul style="list-style-type: none"> <li>Adequate habitat</li> <li>Protection from people</li> <li>Terrestrial &amp; aquatic</li> </ul>
Migratory birds	<ul style="list-style-type: none"> <li>Nest &amp; habitat protection</li> </ul>
Historical resources	<ul style="list-style-type: none"> <li>Protection (temporary &amp; permanent)</li> </ul>

**From the perspectives of our First Nations communities:**

Impacts of Others' Use of the Forest
<ul style="list-style-type: none"> <li>Fish &amp; Wildlife Resources:</li> <li>Decreasing and/or unhealthy populations of important game species</li> <li>Loss of habitat for consumptive species</li> <li>Increasing hunting pressures from others</li> </ul>
<ul style="list-style-type: none"> <li>Harm, degradation of, or diminishing important cultural sites</li> </ul>
<ul style="list-style-type: none"> <li>Inadequate consultation and/or avoidance, mitigation and accommodation</li> </ul>
<ul style="list-style-type: none"> <li>Lack of socio-economic participation</li> </ul>
<ul style="list-style-type: none"> <li>Cumulative effects of all industrial development and recreational activities</li> </ul>

Weyerhaeuser has been seeking other public input parallel to the consultations with the Group, but it was Weyerhaeuser's intent early on to get advice from the Group as to how best go about reaching out to theirs and other's stakeholder groups. The Group concurred with Weyerhaeuser that this is an ongoing challenge, but nonetheless offered advice and facilitation with their respective interests and experiences.

## 2. Watershed

- What is the science around determining the impact of logging on watersheds?
- What is monitored and inspected? How do you know your impacts? Does / would Weyerhaeuser monitor for water quality?
- How do you protect areas important for watershed and fisheries habitat? How do you cooperate with the oil & gas sector to minimize your cumulative impacts?
- Is forestry less regulated than oil & gas sector?

The Advisory Group was provided with a summary of Alberta-based research on the effects of disturbances on forested watersheds. The Group was also provided with information on how watershed management is integrated with forest management, covering landscape disturbances to stream crossings to individual watercourse/source protection requirements. Understanding the differences between anthropogenic versus historical natural disturbances is important to contextualize in the discussion.

With respect to logging impacts on watershed **yield**, because timber harvesting followed by prompt reforestation occurs over large landscapes and long periods of time, the greatest impact on increasing water yield from logging will occur on smaller watersheds. This is where Weyerhaeuser defers to guidelines established by Alberta which restrict the amount of timber harvesting permissible in a given sub-watershed based on thresholds for increased water yield based on allowable disturbance levels (i.e. generally <25%). These guidelines are incorporated into long term timber supply analyses, and are implemented in all site-specific plans for timber harvesting in all sub-watersheds where harvesting could have a significant impact.

With respect to efforts to look at the cumulative effects of all anthropogenic activities on watersheds in forested landscapes, the DFMP is restricted just to the impacts of forest management activities. However at present, there is no defined program to monitor and respond to any cumulative impact of various anthropogenic impacts on watersheds in the FMA Area. This will most likely be the scope of the anticipated regional land use planning process. Weyerhaeuser would support such an endeavor should it develop.

With respect to water **quality** protection, Weyerhaeuser defers to Alberta requirements for protection of water-source areas and important fisheries habitats via the establishment of undisturbed adjacent forested areas (buffers) during logging. Certain watercourses may be identified as having important fish species, which may require extra protection measures such as no crossings, larger buffers, or restriction of the timing of disturbances from crossing construction. Thus the potentially most important impact comes from permanent road crossings on permanent water courses. This is where Weyerhaeuser employs adherence to various Government regulatory requirements and industry best practices in the design and construction of crossings. Following crossing establishment, ongoing monitoring of crossing effectiveness is important. Weyerhaeuser does not employ water quality monitoring at its stream crossings, as the advice has been to focus more on the areas of disturbance that can lead to sedimentation. Also, establishing standards of water quality at crossings relative to natural disturbance levels is seen as problematic – but this does not

diminish in any way the concern or risk for sedimentation from crossings. In this regard, Weyerhaeuser looks to ongoing advice from experts on the latest application of best practices and research. Weyerhaeuser's records of permanent stream crossing conditions and temporary crossing reclamation are routinely shared with Government, and are included in the Company's subject matter for environmental certification programs. Weyerhaeuser is also a member of the Foothills Stream Crossing Program which is a voluntary organization providing a service of stream crossing inspection, standards and reporting.

In comparison to the oil & gas sector, both sectors have road development as a common disturbance thus both must comply with the same regulatory requirements. Beyond that, regulatory requirements for watershed protection during timber harvesting and forest management planning are unique to the disturbance types of forest management but still meet the intent of watershed protection inherent in all regulations – however there is an implicit distinction in that areas harvested for timber are reforested promptly therefore timber harvesting is deemed a temporary disturbance versus a permanent one associated with a longer term difference in land use often associated with oil & gas developments. Representatives from Alberta Agriculture & Forestry also provided a regulatory overview of how the forestry sector is managed for watershed values.

Weyerhaeuser is always receptive to advice with respect to more watershed-specific assessment and protection requirements if deemed necessary, and will continue to follow and support ongoing research into monitoring the effect of disturbances on watersheds (e.g. Foothills Research Institute Water Program, University of Alberta). Weyerhaeuser is also currently a member of the North Saskatchewan Watershed Planning and Advisory Council (also the North Saskatchewan Watershed Alliance).

*Weyerhaeuser will:*

- ✓ *Incorporate extra measures for watershed and fish habitat concerns (e.g. fish species recovery plans) in operational planning for those sub-watersheds where sequencing indicated an ECA threshold > 30%*
- ✓ *Continue to participate in and incorporate learnings from research, monitoring and planning entities such as the North Saskatchewan WPAC, Foothills Research Institute Water Program, forWater program, and the Alberta Regional Land Use Planning process*
- ✓ *Continue to use highest standards for monitoring of permanent crossings on permanent watercourses*
- ✓ *Continue to advocate for, and initiate when possible, Integrated Land Management with the energy sector on the FMA Area*

### 3. Cumulative Effects, Integrated Land Management

- **Do we know how much disturbance is on the landscape now?**

The forest management plan provides a detailed inventory of land use features, and present that in terms of geographic distribution and average densities. This information was presented to the Group, along with detailed landbase summaries of the FMA Area. Weyerhaeuser has a vested interest in the amount of landbase available for growing trees because it equates to determining sustainable harvest levels. The general trend has been a decline in available lands for dedicated forest management, and since the last forest management plan there has been a loss of 38,000 ha. to other land uses, primarily oil & gas development.

- **How do we determine how much is too much? What's "natural"?**

Weyerhaeuser and the Group discussed in detail how for those lands managed for timber production, the trend will be to creating a more even distribution of age classes of forest, and overall younger, in comparison to today's forest. However it was also presented that today's forests are also unnaturally older due to years of forest protection (from fire) from settlement history going forward. The Plan will provide for a minimum amount of older (old growth) forest in agreement with Government, but the Plan otherwise does not establish other references for natural conditions. Generally the same tree species will occur at the local and landscape level i.e. forest tree biodiversity species distribution is maintained, it's the age distribution that changes. As follow up, Weyerhaeuser will establish a means to evaluate the Plan in terms of natural ranges of variability in our forest region during the Plan implementation.

As forest cover represents habitat, the Plan will also evaluate via models the impact of long term projections of forest cover on habitat supply for a chosen list of indicator species (groups) with Government. These models will be used to constrain or adjust the Plan proposed timber supply analysis (harvest levels and distribution over long periods of time across the landscape).

- **What can be done to address cumulative effects? Forestry should be working with the other sectors to reduce those impacts.**

The short answer is that a Forest Management Plan will only look at the possible cumulative effects of forest management operations, and not those of other resource sectors or users in combination. That being said, forest management planning has been the default landscape planning process for Alberta's Green Zone for many years. Weyerhaeuser's Plan does take into account the total anthropogenic (man-made) footprint at the time of the Plan development, but does not forecast future land development.

Weyerhaeuser has experience working cumulative effects projects with the oil & gas sector in smaller landscapes involving critical habitats such as for caribou, the learnings from which could be applied to larger landscapes. This remains an important opportunity for



Alberta to truly achieve an integrated approach to resource development on an ongoing operational basis, and forest management has much to contribute.

Reductions in lands dedicated to forest cover, and linear disturbances through forest cover, can diminish its value for other environmental values. The Plan does not address the impacts of footprint other than that created by the forest sector. So the cumulative effects of other anthropogenic footprints and the loss of landbase is not addressed by the Plan in the longer term. It was put forth to the Group that this is the responsibility of the upcoming North Saskatchewan Regional Land Use Plan process under the Land Use Framework for Alberta (a summary was presented to the Group). That being said, the Plan can contribute to the eventual goals and targets of the Regional Land Use Plan when it comes into place. The Group reinforced the importance of cumulative effects on natural resources, and the need to address this. Weyerhaeuser will emphasize this feedback from the Group with Alberta Environment & Parks who are responsible for Regional Land Use Plans.

Integrated land management is generally the term used to address how those using natural resources and lands are managed to address cumulative impacts. The topic has been well developed in Alberta in terms of policy and problem identification, but not necessarily well developed in practice in the opinion of Weyerhaeuser. The Group emphasized the need for this, and offered recommendations and suggestions including:

- Find means to develop working relationships with the oil & gas sector e.g. participating in stakeholder groups (“Synergy”), sharing of development plans, possibly forming an ongoing group similar to the Group as “advisory” to industry and Government
  - Work with oil & gas sector to use common corridors and roads, habitat protection, watershed management, etc.
  - Develop “pilot” projects to leverage for other locations across the landscapes, where the pilot has definitive deliverables or targets in terms of footprint
  - Work with Government and other stakeholders to understand the landscape now, and set targets for acceptable footprint
  - Forestry should be more involved with restoring landscapes to forest cover
  - Weyerhaeuser should devote more time (staff or service providers) to developing and maintaining relationships with local stakeholders
- **Alberta Off Highway Vehicle (OHV) users are concerned that there is increasing or pending pressure to reduce access on public lands to their recreation activities. OHV users are also concerned about their reputation on environmental impacts, and are willing to work towards maintaining their access to public lands**

There is increasing concern by OHV owners that they will be limited to where they can ride on Crown lands, particularly in the Foothills region. Government is seeking more conservation areas that restrict OHV use, and industry is increasingly preventing or preferring no OHV use on their infrastructure. Forestry creates significant temporary access, but promptly reclaims access without any consideration for trail use.

There is a large number of people and economic input involved in this sport, and they want to continue to have access for OHV. At the end of the day it is a large industry that wants to maintain the sport, often associated with camping and hunting. The OHV users also recognize the need for better enforcement for those that unduly harm natural resources. Furthermore the Provincial OHV association has put forth a proposal to fund local clubs for improved trail development and maintenance.

Weyerhaeuser recognizes the importance of integrating OHV recreation on public lands. However like the other industrial sectors on the landscape, forestry is concerned about the safety of OHV users on industrial developments and their environmental impacts on natural resources, which include soil, watershed and wildlife disturbance. Forestry also has the objective of minimizing loss of land base for forest growth, as well as reducing the overall linear footprint as a key indicator for regional land use planning. Therefore a practice of simply leaving temporary roads open for potential OHV access is not compatible with Weyerhaeuser's forest management objectives. As well, such non-reforested areas can become an environmental concern (e.g. sedimentation, soil degradation, wildlife disturbance).

Alternatively though, Weyerhaeuser supports a strategy of designated trail routes to promote the recreational OHV opportunity in the Green Zone. OHV-specific use areas have a role (e.g. Brazeau Club trails), but will probably not satisfy the implicit expectation of such users having access to larger landscapes of public lands. This approach should provide a higher value experience for trail users, incent more responsible environmental protection and appropriate trail design, facilitate enforcement, and should align with the Provincial OHV associations' position of the need for an Alberta program to fund and authorize such a scenario. This should also incent the resource sector to participate and support as a means to direct OHV use away from susceptible infrastructure. Key to success will be Government policy and legislation that also addresses liabilities, notwithstanding the ultimate responsibility to practice due diligence by all stakeholders involved. Again though the implicit outcome is that OHV users will now be somewhat restricted as to where they can go on public lands, but there are examples of other locations in North America where this approach has been successful.

Weyerhaeuser acknowledges that the resource sector in effect creates most OHV routes coincidental to those sectors' land developments, temporary or otherwise. Therefore the resource sector has a vested interest in seeing more direction and control on OHV use on public lands, and will most likely be willing to assist in promoting a designated trail strategy providing costs, liabilities and enforcement issues can be addressed. Weyerhaeuser would recommend a concerted cooperative advocacy for a pilot ILM / access management project for the North Saskatchewan Region under the auspices of the forthcoming Regional Land Use Plan. This could align with the Regional Plan's forthcoming Biodiversity Management Frameworks. Weyerhaeuser will communicate its willingness to work with local OHV clubs on trail development with Alberta Government.

- **Grazing integration with forestry can be problematic. What is Weyerhaeuser doing for grazing integration, and what have they learned from their experiences to date?**
- **Weyerhaeuser needs to ensure enough advanced time to work with local ranchers, and that the responsibilities of both parties is understood.**

A significant portion of the FMA Area overlaps with public land grazing dispositions. The subject is complicated by the Province having a number of different types of public land grazing allocations that may or may not overlap with different types of forestry tenures and dispositions as well. For those holding public land grazing dispositions, it can be further complicated by having adjacent public lands that are dispositioned to other sectors such as oil and gas. And finally, further complexity results from having both Provincial and municipal government management involved, jointly managing for both Provincial regulation and municipal by-laws. Therefore a key recommendation is to ensure grazing disposition holders understand the rights and responsibilities for themselves and overlapping or adjacent disposition holders such as forestry. Also important is to establish this early before actual operations commence so as to allow the grazing interest enough time to arrive at a reasonable agreement for integration – this will help avoid conflicts.

A key challenge with overlapping grazing and forest management is the need to minimize damage from grazing to regenerating forests, without unduly impacting the grazing operator's opportunities. The means to plan for this integration is called a Grazing and Timber Agreement (GTA), which is developed between the two operators prior to timber harvesting occurring on a grazing disposition. For the most part, these are effective but are time consuming to arrive at from Weyerhaeuser's perspective, and more so when unreasonable expectations are in place to begin with. Like any other stakeholder category, it simply takes time to establish personal relationships which ultimately lead to agreement. It is recommended that Weyerhaeuser compile learnings from grazing and timber integration to date for the purposes of sharing with ranchers and Government staff to facilitate future integration.

An often contentious issue is that of noxious or invasive weed control. With both overlapping public land activities, and multiple adjacent ones, it is difficult to ascertain who the source of new discoveries of weeds. Yet the responsibility for effective removal and control generally rests with the disposition holder. Firstly, forest management operations need to ensure they do not introduce new infestations through controls such as cleaning of equipment prior to entry on grazing lands. Secondly, both operators need to establish an agreement on the costs and responsibilities for follow-up control within a reasonable period of time during the overlap of activities and following. A consequential issue then arises with the use of herbicides for weed control and/or reforestation in areas intended to be returned to grazing activity, where again it is important for both operators to establish early in the process, an agreed upon treatment plan that will address all concerns.

Other recommendations include:

- Improving communications with grazing interests in a means convenient to them e.g. personal invitations to attend conveniently located open houses, sharing of information via mail or on-line, longer term notification of harvest plans, etc.;

- Establishing a liaison service to increase grazing disposition holders' awareness and early planning for integration;
- Re-visit with Government establishing regional grazing plans which can among other things look for grazing opportunities that minimize integration issues and the impact on land use demands.

*Weyerhaeuser will:*

- ✓ *Develop a report on landbase indicators related to issues around loss of forested lands, land use trends, and other broad changes across the landscape of the FMA Area, and will incorporate such information with overall Stewardship Reporting*
- ✓ *Develop a Natural Range of Variability analysis for the FMA Area during the DFMP implementation*
- ✓ *Continue to advocate with Government of Alberta for sub-regional planning in the Green Zone for the North Saskatchewan Region, and specifically for Integrated Land Management between all stakeholders creating anthropogenic footprint and footprint. Regardless, Weyerhaeuser will continue to initiate cooperative planning with other industrial and recreational stakeholders with the explicit intent of reducing the overall impact of anthropogenic activity on the forest resource.*
- ✓ *Proactively assist and support the reclamation of FMA Area forested lands to productive forest cover*
- ✓ *Advocate for and participate in landscape-level recreational trail planning, and will work with organized OHV user groups and Government of Alberta to support designated trail development*
- ✓ *Enhance the integration of overlapping forest management operations with grazing interests through more advanced consultation (including information on basic rights of both disposition holders), more ongoing liaison with the grazing constituency in coordination with Government of Alberta, and advocate for the integration of grazing demand into a larger landscape context for regional planning in the forested areas*

#### 4. Habitat and Conservation

- **Clear cuts = loss of habitat for fur bearers. Habitat will recover only over large periods of time as cut areas regenerate, but may bring new species associated with early forest succession vegetation first, depending on size of cut area, the residual forest cover types, amount of edge, etc.**

The Detailed Forest Management Plan evaluates habitat supply over large time and landscape scales. The Plan presents a forecast of the future forest state that will identify the amount of the different forest cover types over time which allows for a forecast of the total amount of habitat for wildlife over those planning periods, independent of other impacts that may happen over time but are not predictable (e.g. major fires or insect outbreaks, increasing footprint from land alternate land development, changes in Government policy). Thus there will be immediate local impacts to habitat for fur bearers where timber harvesting occurs, but over large time scales and the whole landscape, such habitats will return based on the forest management assumptions.

As discussed, another key consideration is that the forest will be of a different age class distribution than the present point of time due to the unnatural build-up of older forest from past fire protection efforts. Weyerhaeuser has attempted long term habitat modeling integrated with timber supply analysis for fur bearers in the past, but does not do so anymore. It was somewhat problematic in terms of reaching agreement between experts and Government on how to do the modeling, and Government at present does not require it. However Weyerhaeuser will take this into consideration for a Plan analysis.

- **Harvest planners / forest managers need to get the trappers' perspectives on how to mitigate impacts from timber harvesting (e.g. important wildlife corridors, denning & nesting sites) – how much consultation does Weyerhaeuser do with trappers? It's important for trappers to have the right information in enough time to respond.**

Harvest planners consult with registered trappers (who are identified as per Government information) during the harvest design stage i.e. when decisions on where harvesting will occur – this is the best stage for trappers to provide input and influence where harvesting will occur, and how it can respect trails and cabins. Changes to harvest design can be made at this point prior to decisions being made for submissions to Government, for special habitat protection requirements known by the trapper. This stage of planning will typically take place at least 1 -2 years ahead of operations. Trappers are notified again just prior to actual harvesting for the purposes of giving trappers a chance to check and move any traps that may be impacted by the pending operations. Weyerhaeuser will review current practices and means of getting early trapper consultation, and our track record on trapper consultations, in order to improve and ensure successful trapper involvement.

- **What is the impact of residual habitat and populations for fur bearers from adjacent cut areas? Do we provide some connectivity between residual forest cover for wildlife movement?**

Habitat supply modeling for the Plan focuses on a selection of so-called indicator species, the factors of which for some species do incorporate habitat criteria assessing the quality of the habitat in terms of “intactness” or “interior” protection. Such modeling establishes the minimum size and shape of habitats, and their proximal location to other impacting factors. It is attempted to replicate such factors in actual harvest design on an ongoing basis, and as it applies both to areas harvested now and those remaining for future harvest.

There is currently no specific long term landscape analyses or strategy for habitat “corridors”, and subsequently there are generally no explicit specific targets or guidelines during timber harvest planning. However timber harvest planning does incorporate the retention of habitat corridors where local knowledge supports their conservation, or where habitat for special species of concern are integrated.

- **How do timber harvest patterns compare to those of natural fire disturbance? Weyerhaeuser suggests the current forest is not typical with respect to the predominance of older forest across the landscape, and that earlier forest landscapes were generally much younger due to no fire control. How do you know? What will the next forest landscape look like?**

The broad topic of how does forest management compare to an otherwise “natural” future forest state is predicated on comparisons to what would be the forest state without intervention or influence from people, which can further be looked at from times of settlement or prior times of Alberta’s Indigenous peoples’ presence. A common term used for modeling this question is called comparisons to a “natural range of variability” (NRV). As part of the Plan implementation, Weyerhaeuser is committed to undertaking such an analysis, which will answer in part this question, and may offer future direction in forest and land management.

The current Forest Management Plan provided a modeled look back on fire history based on research for the Foothills region of the FMA Area, which indicates a more frequent fire pattern than that experienced in more recent history (i.e. over last 50 years). This results in more old forest than would otherwise be expected without the intervention of fire control, and the comparative age distribution of the forest is presented in the Plan.

Another distinction is the pattern of timber harvesting in comparison to what fire disturbances would create. The topic remains one of ongoing study, but generally the range of sizes of logging disturbances (i.e. blocks) tends to be much narrower in comparison to natural fire size distribution. Fire disturbance patterns tend to be more of a few very large events, but also a large number of much smaller and varied intensity of disturbances. Therefore timber harvesting does not necessarily follow an otherwise natural pattern of fire disturbances at a landscape level over large periods of time.

The Plan provides both a long term quantitative and spatial forecast of forest cover over a 200 year period. This information is used to look at long term assessments of habitat supply and otherwise special age classes of forest (e.g. old growth). From this forecast, timber

harvesting is scheduled to meet potential targets for certain forest types serving other resource management needs over the long term.

- **It seems that some species use the edge between new harvest areas and residual forest cover. How is this considered in forest management? Some logging debris piles should be left for some residual cover for fur bearers, and preferably close to the edge of residual mature forest.**

There is much research over the years that supports the notion of the “edge effect” between different habitat types. General considerations for habitat changes from timber harvesting include:

- ✓ Planning boundaries of harvested areas to follow natural patterns of forest cover and/or other natural features, which in turn maximizes the amount and variability of habitat edges;
- ✓ Avoiding harvest patterns that provide long lines of sight from access points for game species that will use regenerating stands for browse material;
- ✓ Minimizing longer term on-road vehicle access in concentrations of timber harvesting;
- ✓ Retaining areas of mature forest cover integrated with areas of timber harvesting, in patterns that consider forest species mix, habitat corridors and continuity, important habitat features, etc.;
- ✓ Ensuring edges of logged areas are free of accumulations of logging debris so as to avoid woody fuel concentrations that might provide a continuity of fuel for fires spreading from the harvested areas to larger (treed) forest types;
- ✓ Leaving or retaining “patches” of standing mature timber in harvested areas (blocks) that can serve as small habitat refuges;

It is a standard practice to pile and dispose of logging debris accumulated at road-side from tree processing (i.e. topping and delimiting) by burning during winter periods. There is both research and much anecdotal evidence that supports such piles of debris may soon house certain types of wildlife such as fur bearers. Standards do allow for a small percentage of such piles to be left for habitat, however it is not desirable to leave such piles close to areas of residual forest cover due to the concern again for creating woody fuel accumulations that might provide a means of fire spread from low vegetation (i.e. grass) to a mature forest stand.

- **Does reforestation account for the current natural distribution of deciduous and coniferous tree species?**

The selection of areas to be harvested generally begins with a forest inventory that delineates the forest into groups of similar tree species and site conditions, otherwise known as stands. Such stands in turn become the basis for delineating harvest areas. Following timber harvesting, such stands are generally reforested to the same species composition as the original stand. Thus the general direction is to maintain the same amount and spatial distribution of deciduous versus coniferous forest cover as we see it



today, with only minor exceptions allowed spatially but not in terms of total area in balance. That being said, a common strategic issue for forest regeneration from timber harvesting is preventing a natural dominance of deciduous tree species in establishing new stands of coniferous tree species, as timber harvesting can often present conditions that are conducive to promoting deciduous species over coniferous establishment.

- **Some believe that smaller mammals will not use forest regenerating areas where herbicides were used for several years after application, and that such areas will see little diversity and animal use following the use of herbicides.**
- **Does herbicide use end up in water courses or water sources?**

Weyerhaeuser does apply herbicide to some reforestation areas early in the regeneration process to create a small window of opportunity for emerging tree seedlings to grow in height past that of competing grass lesser vegetation such as grasses. It is deemed to be a safe and cost effective practice to assist reforestation where appropriate. Research and experience that Weyerhaeuser references suggests this suppression of lesser vegetation is short term, and as the reforestation site recovers from such herbicide applications, so does the expected biodiversity associated with early succession vegetation. Again the practice is intended only to provide a temporary reprieve from vegetative competition for newly established tree growth.

The most common herbicide approved for use in reforestation efforts is generically known as glyphosate. Weyerhaeuser relies on regulations, research references and the manufacturer's requirements for its safe use. We are aware as applicators and users of this "tool" that it has restricted conditions for its use, including ensuring dry conditions before applying, so as to ensure its uptake by active vegetation and prevention of any trans-location of the herbicide in surface moisture on vegetation or ground. Spraying over watercourse areas is prohibited, which are carefully identified prior to applications. The handling and management of the spray program is completed by certified service providers with trained professionals, overseen by Weyerhaeuser staff. Also, all areas where herbicide was applied are surveyed after to ensure its application was only in appropriate areas.

- **Do harvest planners look for likely bear and other species' denning sites, or use some predictive methods? Local "active" trappers can be helpful identifying known or likely denning sites.**

Harvest planners first look for possible key habitat features that are identified or predicted from landscape-level type information sets. Actual specific locations of individual denning sites are usually only co-incidental with other field work i.e. there are no specific expert surveys conducted at a harvest location for denning sites. That being said, should such a site be discovered during field survey work prior to or during harvest operations, a buffer of undisturbed area would be established around the site for protection. If timber harvest operations disturb bears from a denning site during late winter or early spring periods, the response is to vacate operations from the immediate area with the intention of encouraging the disturbed animals to return to the site.

Weyerhaeuser does consult with local trappers affected by proposed timber harvesting operations before finalizing harvest plans. However, the specified topics are usually directed at the trapper's interests for the trapline per se, and may or may not include more consultation on a broader knowledge of other species' habitats in the trapline area. Weyerhaeuser could develop a more comprehensive list of potential inputs and advice from active trappers on their local knowledge of important sites such as that for denning.

- **Weyerhaeuser should not do any harvesting during the nesting season in order to avoid songbird mortality. Mixedwoods (i.e. deciduous and coniferous species in the same forest stand) are likely to have more species / numbers of individuals.**

Based on the consensus of research and experts, areas planned for harvest during the spring to early summer season comprising forest types likely to have a higher probability of nesting songbirds are identified. Typically, mixedwood forests at lower elevations **do** have a higher probability of nesting songbirds. Then such stands are further evaluated for the need for surveying by experts for the presence of bird species and their specific nesting requirements, and to locate any active nesting sites of songbirds. When any active nests are found, then a protective buffer of undisturbed forest will be maintained around the nesting sites, or harvesting will be deferred from the area entirely until a later time of year. In addition, all staff engaged in harvest planning, and all those conducting harvesting operations, also look for possible nesting sites and respond accordingly when discovered.

- **Does Weyerhaeuser have targets for habitat supply over time and the landscape? What is being done for species not of "special concern", such as ungulates?**

The Government of Alberta now works collaboratively with forest managers to model the potential impacts of habitat change over the long planning horizons of forest management plans. This generally uses a smaller list of threatened, endangered or "indicator" species, where the modeling looks at amount of habitat over time and its spatial arrangement, and otherwise uses various indices to constrain harvest scheduling. This is sometimes referred to as a "fine filter" approach to evaluating impacts of forest management on biodiversity over time.

The Plan does not evaluate ungulate habitat supply over time, although some previous forest management plans have, as it is not required by the Government. Neither does Weyerhaeuser or Government survey for ungulate population numbers on the FMA Area. Factors such as exposure to line-of-sight and distance to hiding cover for ungulates is loosely incorporated into timber harvest designs.

*Weyerhaeuser will:*

- ✓ *Incorporate habitat supply modeling as a constraint on the timber supply analysis (i.e. level of timber harvesting) as directed by Alberta Agriculture & Forestry*
- ✓ *Develop a Natural Range of Variability analysis for the FMA Area during the DFMP implementation so as to present a larger temporal scale of habitat supply scenarios for comparison to present distributions and quantities*
- ✓ *Continue to incorporate in operational planning:*
  - *habitat requirements for species at risk*
  - *migratory bird nesting risk assessments, pre-harvest monitoring and nest protection where identified as a result of timber harvesting scheduled during the summer*
  - *retention of mature forest cover in harvest areas*
  - *any ongoing advice or direction from Government of Alberta regarding site specific habitat conservation requirements*

## NEXT STEPS

Weyerhaeuser is developing a public communication strategy as part of the Detailed Forest Management Plan implementation that will span the life of the plan and beyond, and the company looks forward to continuing the work which began as part of the plan preparation. Ultimately Weyerhaeuser aims to create an environment of ongoing communication with stakeholders. Weyerhaeuser recognizes that traditional methodologies of creating interest and traction in our communication efforts may no longer be enough, we will continue to innovate in the area of consultation by utilizing new and creative ways of reaching out to those impacted by, or interested in, the science and art of forest management.



## 8 Open House Mailout (October 2017)



# OPEN HOUSES

## WEYERHAEUSER PEMBINA TIMBERLANDS INVITES YOU

TO PARTICIPATE IN PUBLIC CONSULTATION IN SUPPORT OF THE DEVELOPMENT AND  
IMPLEMENTATION

of the Weyerhaeuser 2017-2026 Pembina Forest Management Plan

### We are looking to hear from you!

Have an opinion, have a concern, have an interest in understanding how forest management is applied, want to understand what and how we do what we do?

We enjoy highlighting the progressive nature with which we apply forest management objectives on the landbase.

Join us at one of three of our scheduled open houses:

**Tuesday, Oct. 24 in Edson from 3 to 7 pm at the Galloway Station Museum**

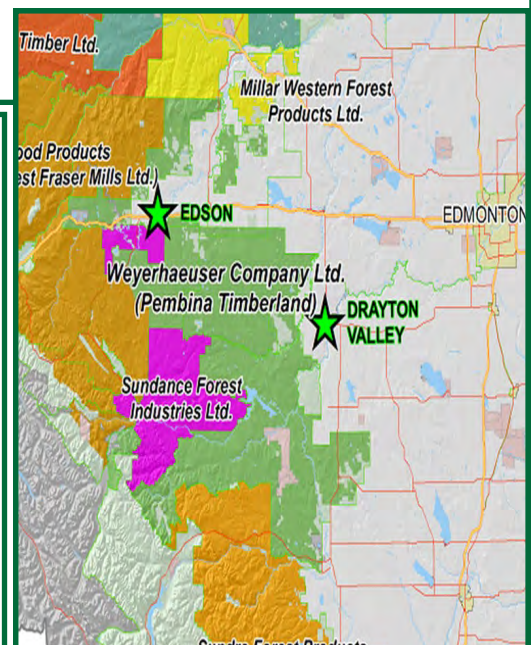
**Wednesday, Oct. 25 in Rocky Mountain House from 3 to 7 pm at the Rocky Mountain House Canalta Inn**

**Thursday, Oct. 26 in Drayton Valley from 3 to 7 pm at the Best Western Executive Residence Inn and Suites**

### What are Forest Management Plans?

Forest management plans have the following characteristics:

- Occur over large landscapes and are long-term strategic level forest growth forecasts,
- Establish goals, objectives and strategies in an effort to achieve sustainable forest management as defined by Alberta Government (GoA), environmental certification organizations, and Company policy,
- Contain extensive information and analysis on the forest resources
- Measure how forest management practices will enhance or protect other non-timber natural resources such as water, habitat, soil
- Ensure that forest management activities integrate with other forest users such as oil & gas, recreation, trapping, forest grazing, First Nations and Metis traditional uses – via public involvement in the review of the FMP, and
- Follow environmental certification requirements.



FOREST MANAGEMENT AREA MAP



## Public Input to the Plan

Public input into the development of the Forest Management Plan can occur through a variety of means, such as:

Direct contact of Weyerhaeuser representatives - Call or visit us at one of our two office locations in Drayton Valley or Edson, Alberta.

**Edson Office**  
2509 Aspen Dr  
Edson AB  
T7E1S8

**Drayton Valley Office**  
5802 34 Ave  
Hwy 22 South  
Drayton Valley, AB  
T7A 1S8

Visiting the Pembina Timberlands Facebook Page to review information and provide comments at [www.facebook.com/PembinaTimberlands](http://www.facebook.com/PembinaTimberlands).

## Other Ways We Gather Input

Weyerhaeuser utilizes a suite of processes to gather input into forest management and operating plans seeking input from defined stakeholder groups including but not limited to the following:

- First Nations
- Trappers
- ATV and /or snowmobile clubs
- Fish and Game clubs, and
- Energy companies
- Grazing operators
- Municipal Government



## Contact Us

Paul Scott, Edson

[Paul.scott@Weyerhaeuser.com](mailto:Paul.scott@Weyerhaeuser.com)

1-780-712-6886

Or

Kerri MacKay, Drayton Valley

[Kerri.mackay2@Weyerhaeuser.com](mailto:Kerri.mackay2@Weyerhaeuser.com)

Visit us on the web at  
[www.forcorp.com\weyerhaeuser\\_fmp](http://www.forcorp.com\weyerhaeuser_fmp)

*"It is Weyerhaeuser's policy to manage its forests for the sustainable production of wood and wood products"*

## 9 Open House Trifold (November 2016)



# Weyerhaeuser Pembina Timberlands INVITES YOU

to participate in public consultation in support of the  
development and implementation  
of the Weyerhaeuser Pembina forest management plan.



We are looking  
to hear from  
you!

Have an opinion, have a concern, have an interest in understanding how forest management is applied, want to understand what and how we do what we do?

We enjoy highlighting the progressive nature with which we apply forest management objectives on the landbase.

Join us at one of three of our scheduled open houses:

Nov. 22 in Edson from 3 to 7 pm at the Best Western Highroad Inn

Nov. 23 in Rocky Mountain House from 3 to 7 pm at the Walking Eagle Inn

Nov. 24 in Drayton Valley from 3 to 7 pm at the Best Western Executive Residence Inn and Suites

Weyerhaeuser Pembina Timberlands  
5802 34th Ave Hwy 22 South  
Drayton Valley, AB  
T7A1S8



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- Ensure that forest management activities integrate with other forest users such as oil & gas, recreation, trapping, forest grazing, First Nations traditional uses – via public involvement in the review of the FMP, and
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Direct contact of Weyerhaeuser representatives, call or visit us at one of our two office locations in Drayton Valley or Edson, Alberta

Edson Office      Drayton Valley Office  
 2509 Aspen Dr      5802 34 Ave  
 Edson AB            Hwy 22 South  
 T7E1S8                Drayton Valley, AB  
                                  T7A 1S8

Visiting the Pembina Timberlands Facebook Page to review information and provide comments

[www.facebook.com/PembinaTimberlands](http://www.facebook.com/PembinaTimberlands)

Contacting the local Alberta Agriculture and Forestry

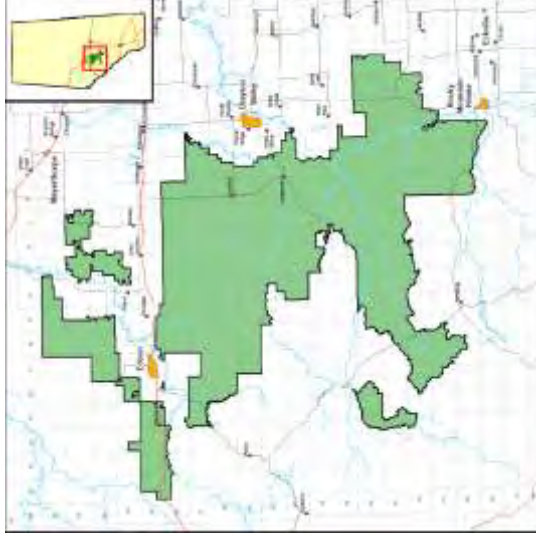
[www.agric.gov.ab.ca](http://www.agric.gov.ab.ca)

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Weyerhaeuser utilizes a suite of processes to gather input into forest management and operating plans seeking input from defined stakeholder groups including but not limited to the following:

- First Nations
- Trappers
- ATV and /or snowmobile clubs
- Fish and Game clubs, and
- Energy companies
- Grazing operators
- Municipal Government

Below is a map representing our forest management area



### Contact Us

Paul Scott, Edson  
[Paul.scott@Weyerhaeuser.com](mailto:Paul.scott@Weyerhaeuser.com)  
 1-780-712-6886

Or

Kerri Mackay, Drayton Valley  
[Kerri.mackay2@Weyerhaeuser.com](mailto:Kerri.mackay2@Weyerhaeuser.com)

## 10 Open House Advertisement (November 2016)







**Pembina Timberlands  
Public Input Opportunity for Weyerhaeuser's  
Detailed Forest Management Plan**

**What:** Weyerhaeuser Pembina Timberlands undergoing the development of a new Detailed Forest Management Plan for FMA.

**Where:** Drayton Valley, Rocky Mountain House, Edson

**When:** November 22, 2016 – Edson, Alberta  
Best Western High Road Inn - 3pm-7pm

November 23, 2016 – Rocky Mountain House, Alberta  
Walking Eagle Inn – 3pm-7pm

November 24, 2016 – Drayton Valley, Alberta  
Best Western Executive Residence Inn and Suites – 3pm-7pm

**Open houses will be held as listed above. Should you have any questions or wish to provide input to the above mentioned project, please attend the information session or contact:**

**Edson Office**  
2509 Aspen Drive  
Edson, Alberta  
T7E 1S8

Paul Scott  
Phone: 780-712-6886  
[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)

**Drayton Valley Office**  
Hwy 22 and 34<sup>th</sup> St  
Drayton Valley, Alberta  
T7A 0B9

Kerri MacKay  
Phone: 780-621-5537  
[kerri.mackay2@weyerhaeuser.com](mailto:kerri.mackay2@weyerhaeuser.com)







## 11 Newsletter Number 1 – June 2017



## Forest Management Plan Pembina Timberlands

PEMBINA TIMBERLANDS

ISSUE NO. 1 JUNE 2017

### In This Issue

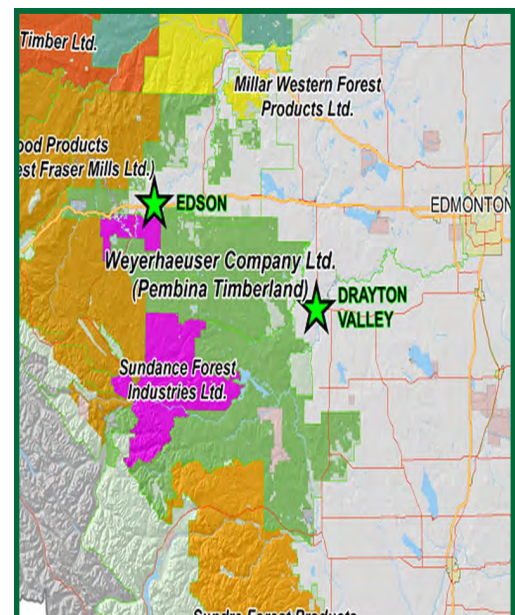
- Forest Management Plan Update
- Public Input into the Plan
- Components of the Plan

A forest management plan is a technical document that turns sustainable forest management commitments into plans that can be actioned in the field. A plan summarizes the current state of the forest, as well as the values, objectives, indicators and targets of sustainable forest management developed through consultation with the public, First Nations and other stakeholders. The Forest management plan is prepared by the company, other embedded operators, and the Provincial government through an iterative process of incorporating knowledge from research, new policy and legislative changes, and an ongoing review of performance.

### Components of the Plan

Forest management plans are highly technical documents aimed at achieving the main objectives noted below. In order to do so the plan is divided up in chapters and distinct deliverables that build upon one another to drive towards the final plan submission. Forest management plans aim to:

- ◆ Be transparent and organized in their approach to completing the forest management plan by compiling a Terms of Reference that describes the process from commencement of work til completion and implementation
- ◆ Look beyond sustained timber yield, by accounting for non-timber values
- ◆ Embrace the concept of sustainable forest management by undertaking detailed forest inventories that classify both forested and non-forested areas allowing them to facilitate multiple value modelling
- ◆ Recognize other resource users and including their requirements in the modelling
- ◆ Explain how the harvesting plan will be delivered through stakeholder, first nations and public consultation
- Explain how performance will be measured using predefined targets.



FOREST MANAGEMENT AREA MAP

## Performance Monitoring

In order to monitor performance to the plans objectives and specific components related to sustainability and non-timber values, a suite of quantitative targets must be developed. In an effort to standardize, the provincial government provides the companies with a mandatory set of VOITs (Values, Objectives, Indicators and Targets) that define the minimum acceptable performance standard. While the value and the objective are set by the province and considered final, the objective and the target are open to some element of negotiation providing they still get at the intent of the value and the objective. This latitude is available to recognize the uniqueness of each company's business and operational practices. There are defined timelines agreed to in the plan whereby the VOITs are reported upon and made available to the public, the process is referred to as Stewardship Reporting. For an opportunity to view the draft VOIT development for the plan reach out the contacts noted in this newsletter, or use the following website: [www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp).



## Public Input to the Plan

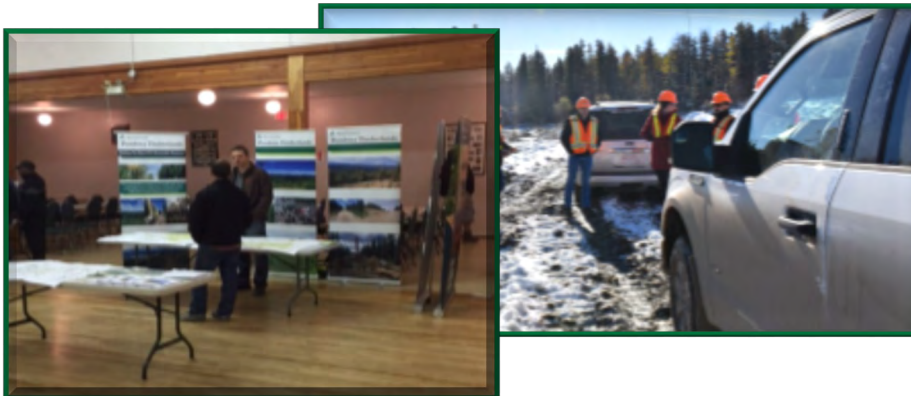
One of the initial steps to developing a plan is the development of a framework to solicit stakeholder and general public input into the development of the next (2017 – 2026) Forest Management Plan for the Weyerhaeuser Pembina Forest Management Agreement Area. This approved document is called Public Input Plan, or PIP. Fulfillment of the commitments in the PIP is intended to confirm that Weyerhaeuser has engaged all stakeholders appropriately in its development of the FMP, tracked all responses accordingly. In an attempt to gather as much input as possible, Weyerhaeuser has identified multiple methods for input to be presented including but not limited to the following:

- Stakeholder Advisory Group
- Open Houses
- Presentations to municipal councils
- Ad hoc presentations
- Social media

Weyerhaeuser would like to encourage folks to reach out should they feel none of the abovementioned methods will work for them. The representatives maintain an open door policy to ensure each and every one with the desire to provide input has the opportunity to do so.

## Accessing draft components of the forest management plan

As draft components of the plan are completed, they will be placed on the website indicated to the right. The target date for submission of the Forest Management Plan is December 1, 2017. Upon submission, Alberta Agriculture and Forestry will review of plan for compliance to the Forest Management Planning Standard, with the effective date of the plan being May 1, 2017.



## Contact Us

Give us a call for more information about the Forest Management Plan

Paul Scott  
2509 Aspen Drive  
Edson, AB

780-712-6886

[paul.scott@weyerhaeuser.com](mailto:paul.scott@weyerhaeuser.com)

Visit us on the web at  
[www.forcorp.com/  
weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp)

***“It is Weyerhaeuser’s policy to manage its forests for the sustainable production of wood and wood products to meet our customers’ needs without compromising the ability of future generations to meet their needs.”***



## 12 Newsletter Number 2 – July 2017







## Forest Management Plan Update

### In This Issue

- Forest Management Plan Update
- Available Plan Components for Review
- Stakeholder Advisory Group Update
- Community Outreach
- Future Opportunities for input
- Get Technical: A little more about the VOITs

*Weyerhaeuser has been working with stakeholders and tenure holders to review the plan components that are currently in a draft format. As the plan progresses all components are made available in a DRAFT format for review and comment. We have made these available digitally to aid in the ease of access. These can be found at [www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp) or in person at our office locations. Considerable effort is currently being placed on reviewing potential future harvest areas for the next several decades by not only Weyerhaeuser but also by our 8 overlapping license holders and stakeholder groups. We are targeting early fall for a draft version to become available for review and comment. However input is always welcome. Contact us if interested.*

*We hope you found the first newsletter informative, for additional copies contact us*

### Currently Available Plan Components

Currently available draft plan components for review:

- Landscape Assessment
- Yield Curve Development
- Net Land Base Determination
- Spatial Harvest Sequence Maps
- Glossary and Acronyms List

These products make up chapters of the final plan for submission and tend to be rather technical in nature. We are happy to explain and review with any interested parties.



## Stakeholder Advisory Group Update

The stakeholder advisory group (SAG) has had a total of 6 sessions which included a field tour., A wrap-up session with the SAG is scheduled for July 13, 2017. The content of the sessions was determined through a facilitated process with the group and presented in the form of a jointly agreed upon curriculum. Topics of interest that formed the curriculum included:

Review of Forestry Legislation, Policy and Tenure  
Water in forestry  
Cumulative Effects  
Field Trip  
Habitat and Protection\Conservation  
Review of presentations and Recommendations

The final SAG meeting will review the progress of the plan preparation to date, highlight opportunities for continued involvement, and presentation of the final report authored by Weyerhaeuser. The report to be presented will highlight the content covered throughout the process, the feedback received from the group and the companies response to the feedback. This report will be publicly available on the website mentioned earlier as well as in print form at our future public events and at any of our Pembina Timberlands offices.



***“It is Weyerhaeuser’s policy to manage its forests for the sustainable production of wood and wood products to meet our customers’ needs without compromising the ability of future generations to meet their needs.”***

## Community Outreach

Since the early stages of plan development Weyerhaeuser has been seeking the input and review by members of identified stakeholder groups as well as the general public. A variety of approaches have been utilized to attract attention of those interested parties and provide multiple options and venues for anyone to get access to information and our people directly.

**Open houses** have been held in Drayton Valley, Rocky Mountain House and Edson in November 2016

**Individual Mail** outs sent to identified stakeholder groups send out in November 2016

**Local Interest Group Meetings** have been held with Brazeau ATV club and Alberta OHV, and are available for any interested clubs or groups operating on the landbase.

**County and Municipal Council Meetings** have provided us opportunities to present on our process and objectives for the plan. Presentations have been made at Town of Drayton Valley, Brazeau County, Town of Edson and Yellowhead County.

**Social Media** efforts include a Pembina Timberlands facebook page that is being used to advertise events and information sessions. Increased usage of this tool is expected.

**Energy Sector Synergy Group Meetings** have provided the opportunity to share information and opportunities with other industrial users on the landbase.

*“Our company vision is supported by five core values: safety, integrity, citizenship, sustainability and innovation. Our values are not just words on a page — our people really do live them every day. As a company with more than 100 years under our belt, we've been at this a long time. Sustainability, quite simply, is the way we do business. But we understand it's not enough to say we are sustainable; we must be able to prove it to our stakeholders by setting the right goals and transparently reporting on our progress toward meeting them.”*

## Future Input Opportunities

As noted the company plans to continue offering an open door policy to input however formally the next set of open houses will be held in the fall of 2017.

We would like to encourage anyone interested to contact our Pembina Timberlands team to get involved.

Please remember that documents and products in draft format are available on the website :

[www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp)

## Get Technical: A little more about VOITS

Forest Management can get very technical, in this section we will attempt to break down a technical topic, important to the process to something more understandable.

### VALUE—OBJECTIVE—INDICATOR—TARGET

This concept is utilized by the forest industry to monitor performance against a suite of expectations and demonstrate not only their regulatory but social license to operate. The Canadian Council of Forest Ministers (CCFM) developed a series of criterion and elements to be used as measures of sustainability of the forest resource. Based on them a series of base provincial VOITs were established to create consistency. Although some elements are company specific much is maintained consistent to this standard. Below are the CCFM criterion:

- **Criterion 1:** Biological Diversity—SFM element :Ecosystem Diversity, Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that occur Naturally in the FMA; SFM Element: Species Diversity—conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained throughout time; SFM Element: Genetic Diversity: conserve genetic diversity by maintaining the variation of genes within species.
- **Criterion 2:** Ecosystem Productivity—SFM Element: Ecosystem Resilience
- **Criterion 3:** Soil and water resources—SFM Element: Soil quantity and quality—Conserve soil resources by maintaining soil quality and quantity; SFM Element: Water quality and quantity—conserve water resources by maintaining water quality, flow regime and water quantity
- **Criterion 4:** Global Ecological Cycles—SFM Element: Carbon uptake and storage
- **Criterion 5:** Multiple Benefits to Society—SFM Element :Timber and non-timber benefits; SFM Element: Communities and sustainability
- **Criterion 6:** Accepting Society's Responsibilities for Sustainable Development—SFM Element: Aboriginal and Treaty Rights and Aboriginal Values

To see a the complete list of VOITs being proposed in their DRAFT format visit the website to access and please send any comments to us.

## Contact Us

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## In The Next Issue

- Forest Management Plan Updates
- Review of the Final Stakeholder Advisory Group Meeting
- Update on Non Timber Assessments
- What is new to review
- Get Technical - Non Timber Assessments

Next Issue Available  
Aug 7, 2017

## 13 Newsletter Number 3 – August 2017







## Forest Management Plan Update

### In This Issue

- Forest Management Plan Update
- Available Plan Components for Review
- Community Outreach
- Future Opportunities for input
- Get Technical: Non Timber Assessments

*Weyerhaeuser has been working with stakeholders and tenure holders to review the plan components that are currently in a draft format. As the plan progresses all components are made available in a DRAFT format for review and comment. We have made these available digitally to aid in the ease of access. These can be found at [www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp) or in person at our office locations. Considerable effort is currently being placed on reviewing potential future harvest areas for the next two decades (2017-2036) by not only Weyerhaeuser but also by our eight overlapping license holders and stakeholder groups. The draft version is available for review and comment in the Map folder on the site indicated by the link above.*

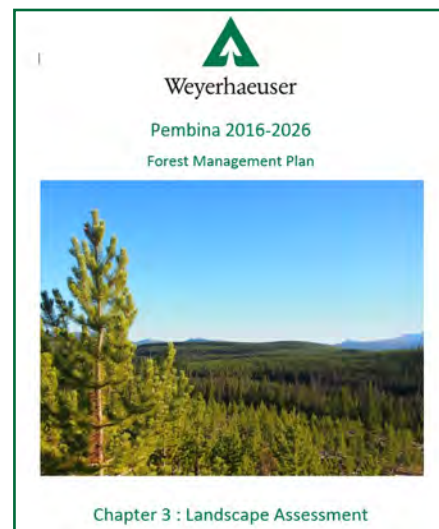
***Want more information on a specific topic, please submit suggestions !***

### Currently Available Plan Components

Currently available draft plan components for review:

- Chapter 3—Landscape Assessment
- Chapter 4—Previous FMP
- Chapter 5—VOITs
- Chapter 6—Preferred Forest Management Plan
  - Landscape Assessment
  - Yield Curve Development
  - Net Land Base Determination
- Maps
- Glossary and Acronyms List
- Public Involvement

These products make up chapters of the final plan for submission and tend to be rather technical in nature. We are happy to explain and review these components





## Stakeholder Advisory Group Update

The stakeholder advisory group (SAG) has had a total of 7 sessions which included a field tour, and a wrap-up session with the SAG on July 13, 2017. The content of the sessions was determined through a facilitated process with the group and was presented in the form of a jointly agreed upon curriculum. Topics of interest that formed the curriculum included:

**Review of Forestry Legislation, Policy and Tenure**

**Water in Forestry**

**Cumulative Effects**

**Field Trip**

**Habitat and Protection\ Conservation**

**Review of Presentations and Recommendations**

The final SAG meeting reviewed the progress of the plan preparation to date, highlight opportunities for continued involvement, and shared the draft final report. The report highlighted the content covered throughout the process, the feedback received from the group, and the company's response to the feedback. This report will be publicly available on the website mentioned earlier as well and in print form at our future public events and at any of our Pembina Timberlands offices.



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## Community Outreach

Since the early stages of plan development Weyerhaeuser has been seeking the input and review by members of identified stakeholder groups as well as the general public. A variety of approaches have been utilized to attract attention of those interested parties and provide multiple options and venues for anyone to get access to information and our people directly.

**Open houses** were held in Drayton Valley, Rocky Mountain House, and Edson in November 2016. Another open house will be held in early fall of 2017 in the same communities.

**Individual Mail-outs** were sent to identified stakeholder groups in November 2016. These groups also received this newsletter.

**Local Interest Group Meetings** have been held with Brazeau ATV club and Alberta OHV, and are available for any interested clubs or groups operating on the land base.

**Town and County Council Meetings** have provided us opportunities to present on our process and objectives for the plan. Presentations have been made to Towns of Drayton Valley and Edson, and the Counties of Brazeau County, Clearwater and Yellowhead.

**Social Media** efforts include a Pembina Timberlands Facebook page that is being used to advertise events and information sessions. Increased usage of this tool is expected.

**Energy Sector Synergy Group Meetings** have provided the opportunity to share information and opportunities with other industrial users on the land base.

**Academic Events** have provided an opportunity to speak to both students and faculty of varying levels of the academic community.

*“Our company vision is supported by five core values: safety, integrity, citizenship, sustainability and innovation. Our values are not just words on a page – our people really do live them every day. As a company with more than 100 years under our belt, we’ve been at this a long time. Sustainability, quite simply, is the way we do business. But we understand it’s not enough to say we are sustainable; we must be able to prove it to our stakeholders by setting the right goals and transparently reporting on our progress toward meeting them.”*

## Future Input Opportunities

As previously noted, the company plans to continue offering an open door policy to input however formally the next set of open houses will be held in the fall of 2017.

We would like to encourage anyone interested to contact our Pembina Timberlands team to get involved.

Please remember that documents and products in draft format are available on the website :

[www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp)

## Get Technical: Non Timber Assessments

Forest Management can get very technical, and in this section we will attempt to break down a technical topic important to the process to something more understandable.

### NON TIMBER ASSESMENTS

Non timber assessments are used by the forest industry to evaluate the impacts of a proposed spatial harvest on the habitat of certain species and other specific ecosystem attributes not otherwise identified by higher level objectives. Assessments are performed prior to the final version of the spatial harvest sequence being approved to allow for adjustments to be made if required. For this management plan the following assessments are being included as directed by Alberta Agriculture and Forestry.

**Forest Songbirds**

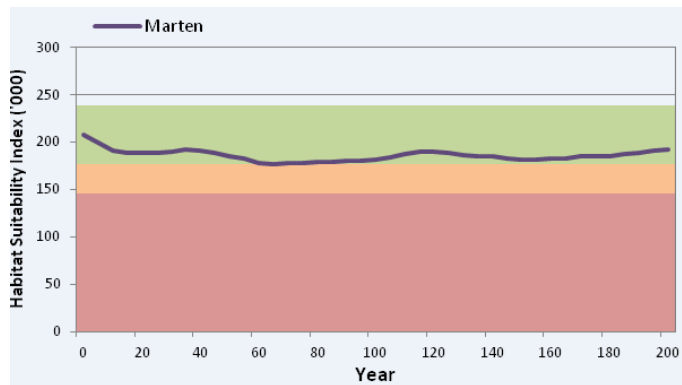
**Barred Owls**

**American Marten**

**Cold Water Fish Species**

Assessments are completed using models developed and distributed by Alberta Agriculture and Forestry. Data sets used in defining the net landbase are further used to drive the models. The models aim to provide baseline quantification as well as temporal forecasts based on the proposed spatial harvest pattern being proposed. Different metrics are used as quantifiers of status for each model. Below is an example of an early assessment completed on Marten, using habitat suitability as the metric. The Observation points are graphed against predetermined zones of risk. If all observation points exist in the green zone, there is no

forecasted risk to the status, yellow zone would indicated a cautionary drop, and the red would be significant drop in the quantity of suitable habitat on the



landbase. As indicated by the graph early results show a positive trend as it relates to suitable marten habitat. For more information or additional results please contact us using the contact information above.

## Contact Us

Give us a call for more information about the Forest Management Plan

**Paul Scott**  
2509 Aspen Drive  
Edson, AB

780-712-6886

paul.scott@weyerhaeuser.com

Visit us on the web at  
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## In The Next Issue

- Forest Management Plan Updates
- Schedule for completion of the plan
- Update on Spatial Harvest Sequencing
- What is new to review
- Get Technical - Spatial Harvest Sequence

Next Issue

Available Sept, 2017

## 14 Summary of October 2017 Open Houses



## Summary of the October 2017 Open Houses

### Attendance:

Edson: Nov 2016: 2 participants; Oct 2017: 8 participants  
Drayton Valley: Nov 2016: 6 participants; Oct 2017: 11 Participants  
Rocky Mountain House: Nov 2016: 9 participants; Oct 2017: 12 participants

Totals: Nov 2016: 17 participants; Oct 2017: 32 participants

### Participant Interest:

Edson: General Interest: 3  
Mill Manager: 1  
SAG Member (trapper): 1  
Timber Operator: 1  
Town Planner: 1  
Trapping: 1

Issues to Address: SAG member issue was related to the SAG final report, not the open house material

Drayton Valley: Alberta Agriculture and Forestry: 2  
General Interest: 3  
Grazing: 2  
Logging Contractor: 2  
Municipal Government: 1  
Weyerhaeuser Forestry Contractor: 1

Issues to Address: None for the FMP. Operational planners will address any operational issues during the FHP/GTA development

Rocky Mountain House: Alberta Agriculture and Forestry: 2  
General Interest: 2  
Logging Contractor: 2  
Off Highway Vehicles (OHV): 4  
Media (Reporter): 1  
Trapping: 2

Issues to address: None for the FMP. Maps for trapper are to be provided by operational planner. AAF contact information for OHV users was provided.

Email requests after Outreach to General Public (names redacted to keep inquiries anonymous).

**Wednesday, October 25, 2017 4:11 PM**

**RE: Request to Weyerhaeuser regarding FMP information**

Hello Mr Scott, I live in the part of W5 that is in Weyerhaeuser's FMA on the East side of the McLeod along twp rd 55. Responding to your outreach pamphlet of a week or so ago. A couple of questions regarding harvest plans for north of twp 55 up to the baseline in W5.

Are the SHS s completed for that area? If so is there an arcmap layer or pdf available to the public?

Who gets the SPF in that area, do you take that down to Drayton or is it traded?

The maps in your forest management plan are very large scale, are there more detailed maps available to the public

Thanks so much,

-----

**Friday, October 27, 2017 8:56 AM**

**From: Scott, Paul**

**RE: Request to Weyerhaeuser regarding FMP information**

Hi: I will get a map to you next week that focuses on just the part of W5 where you live. It will be a pdf, and will be put on the public site as well incase others are interested.

See my responses to all your questions below.

Paul

Are the SHS s completed for that area? If so is there an arcmap layer or pdf available to the public? **Yes, it is located on the following link indicated in Annex X on our mailout:**

[www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp)

Who gets the SPF in that area, do you take that down to Drayton or is it traded? – **The conifer in the area is set up to go to the W5 CTPP program, which is managed from the Edson AG. And Forestry office. For the most part Weyerhaeuser logs on pure deciduous in the area.**

The maps in your forest management plan are very large scale, are there more detailed maps available to the public? – **Will provide map next week of Beaver Meadows compartment at a better scale; will also be posted in the same location as the other SHS is**

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**Sunday, October 29, 2017 2:25 PM**

**From: Scott, Paul**

**FW: Request to Weyerhaeuser regarding FMP information**

See attached PDF you requested last week.

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Friday, October 27, 2017 10:04 AM

From: Scott, Paul

Subject: FW: Request to Weyerhaeuser regarding FMP information

Kerri forwarded your voicemail to me regarding Weyerhaeuser's forest management plan. I have attached a link that will provide you access to all the draft components of the FMP. All pieces will be in place by next Wednesday, November 1<sup>st</sup>.

Thanks for your interest.

Paul

[www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp) (note: there is an underscore \_ between Weyerhaeuser and fmp)

my office number is 1-780-712-6886

[paul.scott@weyerhaeuser.com](mailto:paul.scott@weyerhaeuser.com)

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## 15 Quota Holder Document Submission Tracking Sheet



Updated November 24, 2017

Document Reviewed	Submitted To/In attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
<b>Terms of Reference (ToR) V1</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Greg Branton, Jerry Baker, Mark Cookson, Dale Hansen	4/4/2014	14 days	Ian Daisley - In intro, plan should be acceptable to QH	Plan talks about timely submission of the DFMP that is acceptable to Weyerhaeuer. Text was left as is.	email records from QH to draft version
				Bob Mason - concerned about make-up of PDT; would like to see at least one QH on the PDT	Beefed up Quota Holder section 6.2 in revised ToR	
				Mark Cookson - acceptable	No issues identified	
				Dave Cobb, Dave Chaluk, Dale Hansen, Jerry Baker	No responses received within allotted time	
<b>First Review of Patchworks validation process</b>	Krista Woods, Tracy Courser, Ian Daisley,	4/30/2016	NA	No comments recorded	No issues identified	see below
<b>Second Review of Patchworks validation process for those who missed first review</b>	Bob Mason, Jerry Baker, Dave Cobb	6/18/2014	NA	No comments received	No issues identified	Presentation and minutes email record of June 25, 2014
<b>ARIS request (AAF)</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway	7/4/2014	End of July - forward to Elisha Cahoon at Silvacom and Andrew Johnson at Forcorp	Bob Mason (Tim McCreedy)	ARIS received July 22	could not locate email record
				Ian Daisley (Garry Mitchell)	ARIS received Aug. 8	
				Dave Challuk	No response	
				Dave Cobb	No response	
				Jerry Baker	ARIS received July 22	
				Shane Sadoway	ARIS received July 8	
				FRIAA and CTPP	ARIS received June 10	
<b>Terms of Reference (ToR) - V3</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Greg Branton, Jerry Baker, Mark Cookson, Dale Hansen	7/8/2014	by July 15	Bob Mason	No Response	Email record
				Ian Daisley	July 9th - no concerns	
				Dave Challuk	No Response	
				Dave Cobb	No Response	
				Dale Hansen (mailed out)	No Response	
				Jerry Baker	No Response	
				Shane Sadoway	No Response	
					No Response	
<b>Utilization Request</b>	Bob Mason, Ian Daisley, Shane Sadoway (Mark Cookson)	6/17/2014	No specific date	Bob Mason	15/10/15; CTL and TL	email records
				Ian Daisley	15/10/15; 50% CTL	
				Mark Cookson		
					15/11/15	
<b>ToR - final Version</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Greg Branton, Jerry Baker, Mark Cookson, Dale Hansen	7/21/2014	25-Jul	Bob Mason	No response	could not locate email record
				Ian Daisley	No response	
				Dave Challuk	No response	
				Dave Cobb	No response	
				Dale Hansen (mailed)	No response	
				Jerry Baker	No response	
				Shane Sadoway	No response	
					No response	
<b>Utilization Request Revised</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Greg Branton, Jerry Baker, Mark Cookson, Dale Hansen	7/23/2014	1-Aug	Bob Mason	July 31 - 15/10; CTL and TL	email records
				Ian Daisley	July 28, no concerns	
				Dave Challuk	No Response	
				Dave Cobb	July 23, no concerns	
				Dale Hansen (mailed)	No Response	
				Jerry Baker	No Response	
				Shane Sadoway	No Response	
<b>Scheduled meeting at Forcorp on September 15th, 2014</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Greg Branton, Jerry Baker, Mark Cookson, Dale Hansen	August 6, 2014; resent August 25th	NA	Bob Mason	Attended	Email records
				Ian Daisley	Attended	
				Dave Challuk	Did not Attend	
				Dave Cobb	Attended	
				Dale Hansen	Did not Attend	
				Jerry Baker	Did not Attend	

Weyerhaeuser Pembina 2016 DFMP Qhota Holder  
Document Review Tracking Sheet

Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
				Shane Sadoway	Attended	
<b>ARIS second request</b>	Dave Cobb, Dave Chaluk, Dale Hansen	8/13/2014	ASAP	Dave Cobb	Sept. 2, 2014	Email Record
				Dave Challuk	Sept. 29, 2014	
				Dale Hansen	No Repsonse	
<b>Approved ToFR sent out</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Mark Cookson, Dale Hansen	9/16/2014	NA	NA	NA	Email record
<b>Approved FN sent out</b>	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Mark Cookson, Dale Hansen	9/16/2014	NA	NA	NA	Email record
<b>September 15, 2014 technical session#1 with Quota Holders</b>	Bob Mason, Shane Sadoway, Ian Daisley, rebecca Heemeryck, Ken Anderson, Tracey Courser, Dave Cobb,	9/15/2014	NA	NA	NA	See minutes
Power Point Presentation from Sept. 15 at Forcorp	<u>Quota Holder TSA Group</u> : Bob Mason, Ken Anderson, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Tracy Courser, Dale Hansen <u>ESRD TSA group</u> : Liana Luard, Greg Greidanus, Stephen Mills, Darcy Evanochko, Rebecca Heemeryck	9/17/2014	NA	NA	NA	Email record
Notes from Sept. 15th Forcorp meeting	<u>Quota Holder TSA Group/ESRD TSA group</u>	9/22/2014	NA	NA	NA	Email Record
LB-002 - Siemic line resolution	<u>Quota Holder TSA Group/ESRD TSA group</u>	9/26/2014	NA	NA	NA	Email record
Approved Issues Summary from AAF	<u>Quota Holder TSA Group/ESRD TSA group</u>	9/29/2014	NA	NA	NA	Email record
<b>TSA-004 Combined Landbase</b>	Dave Chaluk, Dave Cobb, Bob Mason, Shane Sadoway, Ian Daisley	10/20/2014	by Nov. 3	ANC - Oct. 24	Hesitant to support proposal, and offer two options; 1) run both models to see the impact to the conifer cut, or 2) maximize conifer cut as a goal in combined landbase.	Email records
				EDFOR - Nov. 3	Will review proposal at Nov. 12th EDFOR directors meeting	
				BRL - Nov. 3	Wy to address the following: 1) Comparison of conifer aac between two approaches; 2) Sequencing will be consistent with section 3 and be validated thru the SHS process, and 3)spheres-of-interest will be maintained unless otherwise agreed to	
				MWI	Dec. 16 reply; no issues with proposal	
				ETL	no reply	

Weyerhaeuser Pembina 2016 DFMP Qhota Holder  
Document Review Tracking Sheet

Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
AIP on scale cull from AAF	Dave Chaluk, Dave Cobb, Bob Mason, Shane Sadoway, Ian Daisley	Dec. 16, 2014	NA	NA	Approval-In-Principle to use in Yield curve development	Email record
TSA-004 Combined Landbase revised Dec. 22	Dave Chaluk, Dave Cobb, Bob Mason, Shane Sadoway, Ian Daisley	Dec. 23, 2014	by Jan. 15, 2015	ANC - Dec. 23, 2014; if Weyerhaeuser willing to maximize conifer (Scenario 3) then they are ok with proposal	Ok with Run 3 that maximizes conifer at expense of deciduous	Email records
				BRL	Ok with the revised proposal	
				EDFOR	Will seek 3rd party review with the Board of Directors. Dave Cobb reviewed with Ken Anderson MWI. Issue to be reviewed at Edfor Board Meeting first part of April	
				Brisco	Prefer to maximize confer AAC - see March 27 email	
				MWI	no reply	
				ETP	no reply	
ARIS Extract request	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015		Bob Mason	16-Mar	Email records
				Ian Daisley	12-Mar-15	
				Brett Salmon	13-Mar-15	
				Dave Cobb	outstanding	
				Jerry Baker	12-Mar-15	
				Shane Sadoway	13-Mar-15	
				Dale Hansen	outstanding	
GY-006 RSA Linework overlap	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason	No Comments received	Email records
				Ian Daisley	No Comments received	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	
				Jerry Baker	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
LB-002 Seismic Line Width	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason	No Comments received	Email records
				Ian Daisley	No Comments received	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	
				Jerry Baker	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
LB-007 Streams Layer	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason	No Comments received	Email records
				Ian Daisley	No Comments received	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	
				Jerry Baker	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
LB-008 Roads Layer	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason	No Comments received	Email records
				Ian Daisley	No Comments received	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	
				Jerry Baker	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
LB-009 Combine Watersheds	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 30, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason	No Comments received	Email records
				Ian Daisley	No Comments received	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	
				Jerry Baker	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
LB-013 Seral Stage and Ecological Unit Definitions	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31,	3/11/2015	by April 17, 2015	Bob Mason	no reply	Email records
				Ian Daisley	no reply	
				Brett Salmon	March 27th email - no concerns	
				Dave Cobb	No Comments received	

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Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
	Brett Salmon			Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received	
TSA-002 Non-FMA AACs	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/11/2015	by April 17, 2015	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received March 23; clarified impact on QHs, comments sent to all March 27th email - no concerns No Comments received No Comments received No Comments received No Comments received	Email records
Utilization Matrix	Brett Salmon, Dale Hansen -resent March 31	3/24/2015	by April 17, 2015	Brett Salmon Dale Hansen	15/11/15 utilization standard No Comments received	Email record
LB-001 Conversion of Patchworks to new AVI	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	3/24/2015		Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received March 27th email - no concerns No Comments received No Comments received No Comments received No Comments received	Email record
GY001 - Cull	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	5/5/2015	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
GY001 - Agreement-In-Principle ESRD	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	5/5/2015	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
GY002 - Utilization Standards	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	5/5/2015	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
GY002 - Agreement-In-Principle ESRD	Bob Mason, Ian Daisley, Dave Chaluk, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen -resent March 31, Brett Salmon	5/5/2015	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
Cut block shapes for those block harvested between May 1 2012 and April 30, 2015	Bob Mason, Ian Daisley, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen, Brett Salmon	6/24/2015	by July 15	Bob Mason Ian Daisley Brett Salmon Dave Cobb Jerry Baker Shane Sadoway Krista Woods - CTP Rebecca Heemeryck - CTP Dale Hansen	Received Received no new harvest Received Received Received Received Received no new harvest	Email records
Sept. 9, 2015 agenda and documents to review GY-001 Cull; GY-002 YC; GY-005 RSP; GY-006 RSA linework; LB-001 Patchworks Conversion; LB-002 Seismic Line width LB-005 RSA linework; LB-007 Streams; LB-008 Roads LB-009 Watersheds; LB-010 AVI/RSA LB-013 Seral/Ecological TSA-001 FMU amalgamation TSA- 002 Non-fma aac TSA-004 Combined landbases TSA-005 Addressing seismic lines	Bob Mason, Ian Daisley, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	8/26/2015	NA	No comments received	NA	Email records

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Document Reviewed	Submitted To/In attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
September 9, 2015 Technical session #2 with Quota Holders	Ken Anderson, Tracy Courser, Dave Cobb	9/9/2015	NA	NA	NA	See minutes
Sept. 9, 2015 minutes and PPT	Bob Mason, Ian Daisley, Dave Cobb, Jerry Baker, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	9/17/2015	NA	No comments received	NA	Email record
Approved Revision of ToR	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	11/9/2015	NA	No comments received	NA	Email record
Request for planned block shape files post May 1, 2015	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	11/17/2015	ASAP	Bob Mason	Received from Ken Andersen	Email record
				Ian Daisley	supplied November 23	
				Brett Salmon	get from Ian Kwantes	
				Dave Cobb	Paul used Silacom planned layer	
				Paul King	Get from Bill Taylor	
				Shane Sadoway	supplied on November 18th	
				Krista Woods - CTP	supplied on November 18th	
				Rebecca Heemeryck - CTP	Supplied from Ian Kwantes	
PDT documents with Agreement In Principle GY-010 Managed stand YC LB-005 Addressing Seismic lines	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	11/23/2015	NA	Bob Mason	No Comments received	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	No Comments received	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
					No Comments received	
January 13, 2016 technical session #3 with Quota Holders	Bob Mason, Paul King, James Norman, Ken Anderson, Tracy Courser, Dave Cobb, Dale Hansen, Cynthia Lebrecque,	1/13/2016	NA	NA	Na	See minutes
VOITs table: Review of accepted voits as of Nov. 18th, with the exception of the following: 2, 3,14 and 34; review at technical session on January 13th at Forcorp.	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	1/4/2016	NA	Bob Mason	No Comments received	Email record
				Ian Daisley	Email received January 15, 2016 from James Norman "Value – 1.1.2 Local/stand scale biodiversity - ANC would prefer a mixed approach to retention that recognizes the residual differences between conifer and deciduous dominated stands after a fire. ANC is operating in PI dominated stands during a surge to reduce MPB susceptibility and long term AAC implications, increasing the retention requirement on these stands now seems counter-productive."	
				Brett Salmon	No Comments received	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
Shane Sadoway	No Comments received					



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Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
				Dale Hansen	No Comments received	
<b>Documents sent after AIP by PDT on January 13th; LB 005, LB 014; LB 015</b>	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	Jan. 14, 2016	NA		No Comments received	Kerri to confirm - Paul in Australia
<b>ARIS to AVI reconciliation spreadsheet and shapefiles for blocks exceeding tolerance limits of .5/5%</b>	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon, Tracy Corser	2/25/2016		Bob Mason/Ken Andersen	Reviewed on March 17; two blocks to be reviewed by Tim to confirm; all other acceptable	Email records
				Ian Daisley	Meet with ANC on March 22 to review entire list	
				Brett Salmon	Reviewed with Brett on Phone on March 14; all AIP	
				Dave Cobb	Review on March 9th at EDFOR office; shape files and scanned maps sent to Forcorp on all outstanding blocks with issues	
				Paul King	Review on March 3rd in DV, more to do; second meeting on March 23 to review outstanding issues	
				Byron Gronberg, Pete Gommerud	Reviewed with Peter Gommerud on March 8th; scanned maps of blocks sent to Forcorp to edit	
				Steve Mills and Darcy Evanocho	Reviewed lists and maps supplied by Stephen and Darcy at the march 17 PDT meeting; follow-up required to finalize list.	
				Shane Sadoway	Review at Blue Ridge on March 7th; scanned maps sent to Forcorp for edits	
				Dale Hansen	AIP on March 10th all blocks	
<b>April 26 Technical session#4 with Quota Holders</b>	Bob Mason, Shane Sadoway, Ian Daisley,	4/26/2016	NA	NA	NA	See minutes
<b>Minutes and associated documents from Technical session held April 26, 2016: Minutes, LB-018, NLB summary, TSA-003</b>	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	5/3/2016	NA	Bob Mason	No Comments received	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	No Comments received	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
VOITS, GY_010a, GY_004	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	24-May-16	NA	Bob Mason	No Comments received	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	No Comments received	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
					No Comments received	
SST	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	27-Jun-16	15-Jul-16	Bob Mason	OK - Tim McCreedy	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	OK	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
				Shane Sadoway	No Comments received	
				Dale Hansen	No Comments received	
					No Comments received	
SST - edits to columns 3 and 4	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	6-Jul-16	15-Jul-16	Bob Mason	OK - Tim McCreedy	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	No Comments received	
				Dave Cobb	No Comments received	
				Paul King	No Comments received	
				Shane Sadoway	Additons to PL and PL mixed wood establishment tactic for direct seeding; addition of site prep for D strata as well as LFN; increase upper range of mixedwood seedlings to 1600/ha.	
				Dale Hansen	No Comments received	
SST - updated with comments from Shane Sadoway	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett	12-Jul-16	25-Jul-16	Bob Mason	OK - Tim McCreedy	Email record
				Ian Daisley	No Comments received	
				Brett Salmon	No Comments received	

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Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
	Salmon			Dave Cobb Paul King Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received	
SST comment received from Marty O'Byrne et al	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	Aug. 23, 2016	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Paul King Shane Sadoway Dale Hansen	Reviewed at Sept. 15 session Reviewed at Sept. 15 session No Comments received Reviewed at Sept. 15 session Reviewed at Sept. 15 session Reviewed at Sept. 15 session Reviewed at Sept. 15 session	Email Record
Draft Yield Curve document	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	Sept. 7, 2016	Sept. 28, 2016	Bob Mason Ian Daisley Brett Salmon Dave Cobb Paul King Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
Chpt. 3 - Landscape Assessment	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	Sept. 8, 2016	NA	Bob Mason Ian Daisley Brett Salmon Dave Cobb Paul King Shane Sadoway Dale Hansen	PDT to review and agree PDT to review and agree PDT to review and agree PDT to review and agree PDT to review and agree PDT to review and agree PDT to review and agree	Email record
NLB draft document	Bob Mason, Ian Daisley, Dave Cobb, Paul King, Shane Sadoway, Dale Hansen, Brett Salmon	Sept. 9, 2016	Sept. 30, 2016	Bob Mason Ian Daisley Brett Salmon Dave Cobb Paul King Shane Sadoway Dale Hansen	No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received No Comments received	Email record
September 15 technical session #5 to review draft NLB, YC, SST and ARIS reconciliation with Quota Holders	Bob Mason, Ken Anderson, Tracy Courser, Ian Daisley, Paul King, Dave Cobb, Dale Hansen, Rebecca Heemeryck, Dana Williams,	15-Sep-16	NA	Need to forward seed polygons to Quota Holders to review	Send out shape files on September 29th	Minutes from meeting
Minutes from Technical session #5 held September 15, 2016	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Ken Anderson, Paul King, Shane Sadoway, Tracey Courser.	9/19/2016	NA	NA	NA	Email record
Under-production table for TSA	Ian Daisley, Shane Sadoway, Bob Mason, Dave Cobb, Paul King, Dale Hansen	9/28/2016	12/1/2016	Ian Daisley Shane Sadoway Bob Mason Brett Salmon Dave Cobb Dale Hansen Paul King	Oct. 5 - 3000 underproduction Sept. 30 - 2 x AAC supplied on November 24th by Ken Anderson; both quota to be filled this year Oct. 25 - no under or over production Dec. 12, 2016 No reply Received by phone on November 10th	Email record
Power Point Presentation from Sept. 15 at Forcorp - Yield Curves and Net land base	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Ken Anderson, Paul King, Shane Sadoway, Tracey Courser.	9/29/2016	NA	NA	NA	Email record
SHS seed polygons from validation of Patchworks P10005	Ian Daisley	9/28/2016	11/1/2016; extended to Nov. 30th	James Norman - shape files returned on October 14th, 2016	Shape file forwarded to Forcorp	Email record
SHS seed polygons from validation of Patchworks P10005	Paul King	9/29/2016	11/1/2016; extended to Nov. 30th	Paul King	Paul worked with Bill Taylor in DV office	Email record
SHS seed polygons from validation of Patchworks P10005	Dave Cobb	9/29/2016	11/1/2016; extended to Nov. 30th	Dave Cobb	Competed on Nov. 23; files sent to Forcorp	Email record
SHS seed polygons from validation of Patchworks P10005	Bob Mason	NA	11/1/2016; extended to Nov. 30th	Bob Mason	Ian working with Cynthia L to complete task	Email record
SHS seed polygons from validation of Patchworks P10005	Shane Sadoway	9/29/2016	11/1/2016; extended to Nov. 30th	Shane Sadoway	Task completed by Nov. 24; files sent to Forcorp	Email record

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Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
SHS seed polygons from validation of Patchworks P10005	Krista Woods	NA	11/1/2016; extended to Nov. 30th	Dana Williams	Dana worked with Ian Kwantes in Edson WY office on 3D computer	Email record
ARIS reconciliation sign-off	Garry Mitchell	Oct. 4, 2016		Oct. 13, 2016 - signed	Signed copy sent to Popowich	Email records
	Tim McCready	Oct. 4, 2016		Oct. 12, 2016 - signed	Signed copy sent to Popowich	
	Shane Sadoway	Oct. 4, 2016		Oct. 17, 2016 - signed	Signed copy sent to Popowich	
	Karalee Brennan	Oct. 4, 2016		Oct. 12, 2016 - signed	Signed copy sent to Popowich	
	Dave Cobb	Oct. 4, 2016		Oct. 20, 2016 - signed	Signed copy sent to Popowich	
	Dale Hansen	Oct. 4, 2016		Oct. 21, 2016 - signed	Signed copy sent to Popowich	
	Brett Salmon	Oct. 4, 2016		Oct. 17, 2016 - signed	Signed copy sent to Popowich	
	Paul King	Oct. 4, 2016		Oct. 17, 2016 - signed	Signed copy sent to Popowich	
	Stephen Mills	Oct. 4, 2016		Oct. 21, 2016 - signed	Signed copy sent to Popowich	
	Trisha Stubbings/Darcy Evanochko	Oct. 4, 2016		Oct. 13, 2016 - signed	Signed copy sent to Popowich	
	Clyde Corser	Oct. 4, 2016		No signed agreement	one block in passive landbase	
	Paul Scott	Oct. 4, 2016		Oct. 25, 2016 - signed	Signed copy sent to Popowich	
	Diane Renaud	4-Oct-16		Nov. 28, 2016 - signed	Signed copy sent to Popowich	
	Tanya Norman	4-Oct-16		Nov. 30, 2016 - signed	Signed copy sent to Popowich	
Byron Crundberg	Oct. 4, 2016		Oct. 18, 2016 - signed	Signed copy sent to Popowich		
Link sent to download NLB/YC drafts from AAF walk through on October 26th	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Paul King, Shane Sadoway	Oct. 28, 2016	NA	NA	NA	email record
Meeting requested by EDFOR to clarify issues about Single land base and sequencing	Dave Cobb, John Nyssen, Chad Dickson	Dec. 20, 2016	NA	NA	3 questions posed to WY and answers provided prior to meeting via email reviewed at the meeting	email record
Meeting Notice for starting OGR review	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	Dec. 23, 2016	NA	NA	NA	email record
Meeting Notice for FMP Tech. session on Feb. 9, 2017	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	Dec. 23, 2016	NA	NA	NA	email record
Copy of OGR Template received from Darren Fearon	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	Jan. 5, 2017	NA	NA	NA	email record
FMP update	Shelby Jorgensen, Liane Nicol (representing Tall Pine Timber)	Jan. 9, 2017	NA	NA	NA	email record
OGR Development Session#1 - Edson High Road Inn	Bob Mason, Ken Anderson, Ian Daisley, Dave Cobb; Not in attendance: Shane Sadoway, Dale Hansen, Brett Salmon, Shelby Jorgensen	27-Jan-17	NA	NA	NA	Darren Fearon copy of draft OGRs
Carry Forward Table review	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	21-Mar-17	31-Mar-17	NA	NA	email record
OGR Development Session#2 - Edson High Road Inn	Bob Mason, Ken Anderson, Ian Daisley, Dave Cobb, Shane Sadoway, Brett Salmon; Not in attendance: Dale Hansen, Shelby Jorgensen	31-Mar-17	NA	NA	NA	Darren Fearon copy of draft OGRs
AIP of NLBV5 and associated document	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	3-Apr-17	NA	NA	NA	email record
AIP of YC and associated document	Bob Mason, Brett Salmon, Dale Hansen, Dave Cobb, Ian Daisley, Shelby Jorgensen, Shane Sadoway	3-Apr-17	NA	NA	NA	email record

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Document Reviewed	Submitted To/in attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
Review of PLO2/PL10 shapes	Bob Mason, Brett Salmon, Dave Cobb, James Norman for Ian Daisley, Bob Baker, Shane Sadoway, Becky Hamerlik, Dana Williams	12-Apr-17	ASAP		James Norman - April 11, shp files	email record
					Dave Cobb - April 12, excel file	
					Ken Anderson - April 18, shp files	
					Shane Sadoway - April 12, shp files	
					Brett Salmon - April 13, ok acknowl. Bob Baker	
Meeting date for Technical Session at Forestry Corp on May 4, 2017	Bob Mason, Brett Salmon, Dave Cobb, James Norman for Ian Daisley, Bob Baker, Shane Sadoway, Becky Hamerlik, Dana Williams	6-Apr-17	NA	NA	NA	email record
Carry forward request to AAF	Bob Baker	19-Apr-17	15-May-17		Is expected to do	email record
	Ian Daisley		1-May-17		Yes	
	Dale Hansen		1-May-17		Will do at some point	
Send NLB5 and YC document and associated AIP letters from AAF	Bob Mason, Brett Salmon, Dave Cobb, Ian Daisley, Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	3-May-17	NA	NA	NA	email record
FMP Technical Session	Bob Mason, Dave Cobb, Ian Daisley, Shane Sadoway, Dave Cobb; not present: Bob Baker, Dale Hansen, Brett Salmon	4-May-17	NA	NA	NA	Meeting
Technical Session Presentation and notes from May 4, 2017	Bob Mason, Brett Salmon, Dave Cobb, Ian Daisley, Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	9-May-17	NA	NA	NA	email record
Issue documents sent out include: TSA006, TSA012, LB017, LB021, GY011	Bob Mason, Dave Cobb, Ian Daisley, Shane Sadoway, Dave Cobb; not present: Bob Baker, Dale Hansen, Brett Salmon	17-May-17	NA	NA	NA	Meeting
SHSV1 review initiation	Bob Mason (Cynthia Lebreque), Brett Salmon, Dave Cobb, Ian Daisley (James Norman), Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	24-May-17	3 weeks to June 14, 2017	NA	Forcorp tool will capture suggested changes to the SHS	email record
Seed Inventory request	Ian Daisley	6-Jun-17		seedlot information supplied	NA	Email records
	Bob Mason	6-Jun-17		seedlot information supplied	NA	
	Shane Sadoway	6-Jun-17		seedlot information supplied	NA	
	Peter Gommerud	6-Jun-17		seedlot information supplied	NA	
	Dave Cobb	6-Jun-17		seedlot information supplied	NA	
	Bob Baker	6-Jun-17		seedlot information supplied	NA	
	Dale Hansen	6-Jun-17		seedlot information supplied	NA	
	Brett Salmon	6-Jun-17		seedlot information supplied	NA	
SHSV2 review initiation	Bob Mason (Cynthia Lebreque), Brett Salmon, Dave Cobb, Ian Daisley (James Norman), Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	18-Jul-17	3 weeks to August 09, 2017	NA	Forcorp tool will capture suggested changes to the SHS	email record
SHSV2 review reminder	Bob Mason (Cynthia Lebreque), Brett Salmon, Dave Cobb, Ian Daisley (James Norman), Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	4-Aug-17	deadline of August 09, 2017	Edits completed on schedule using the on-line tool; exception is Bob Baker for TPTL	Forcorp tool will capture suggested changes to the SHS	email record
SHSV2 review extension	Perm Sieusahai for Tall Pine Timber (Bob Baker)	18-Aug-17	deadline of August 18, 2017	Edits completed on August 18th in on-line tool	Forcorp tool will capture suggested changes to the SHS	email record
ARIS reconciliation of blocks outside of acceptable variance	Peter Gommerud/Byron	21-Aug-17	ASAP			email record
	Tim Mcready			Tim Mcready	AIP on blocks - August 21	
	Dave Cobb			Dave Cobb	Two shapes requested by Dave from silvacom	
	Shane Sadoway			Shane Sadoway	AIP on blocks - August 23	

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Document Reviewed	Submitted To/In attendance	Date Sent Out or Requested	Review Period	Comments/Replies Received From:	How issues were addressed	Documentation
FMP Newsletters	Bob Mason, Brett Salmon, Dave Cobb, Ian Daisley, Bob Baker, Shane Sadoway, Dave Cobb, Dale Hansen	Sept. 1, 2017	NA	NA	NA	email record
Seedlot Tables 7-5	Garry Mitchell, Ian Daisley	Sept. 25, 2017	25-Sep	will seek varinace when needed		email record
	Shane Sadoway		Setp 25	OK		
	Dave Cobb		27-Sep	OK		
	Tim McCreedy, Bob Mason, Ken Anderson					
	Dale Hansen					
	Brett Salmon					
	Byron Grundberg		26-Sep	OK		
Perm Sieusahai/ Bob Baker						
Final SHS for Signoff	Ian Daisley/James Norman	Sept. 25, 2017; reminder sent October 10, 2017; reminder sent Oct. 31	3 weeks	sign-off dated Oct. 23, 2017		email record
	Shane Sadoway			Sign-off dated Oct. 25, 2017		
	Dave Cobb			Sign-off dated Oct. 31, 2017		
	Bob Mason, Ken Anderson					
	Dale Hansen			Sign-off dated Oct. 31, 2017		
	Brett Salmon			Sign-off dated Oct. 31, 2017		
	Stephen Mills			Sign-off dated Oct. 25, 2017		
	Trisha Stubbings			Sign-off dated Oct. 25, 2017		
	Perm Sieusahai/ Bob Baker			Sign-off dated Oct. 24, 2017		
ARIS reconciliation signoff	Garry Mitchell	Oct. 4, 2017; reminder sent out on Oct. 20th to those operators still outstanding; resent to MW, EDFOR and FRIAA on Oct. 31	ASAP	Signoff received on Oct. 6, 2017		email record
	Tim McCreedy			Signoff received on Oct. 23, 2017		
	Shane Sadoway			Signoff received on Oct. 13, 2017		
	Byron Grundberg			Signoff received on Oct. 31, 2017		
	Dave Cobb			Signoff received on Oct. 31, 2017		
	Perm Sieusahai/ Bob Baker			Signoff received on Oct. 27, 2017		
	Dale Hansen					
	Brett Salmon			Signoff received on Oct. 19, 2017		
	Karalee Brenneis SFPI			Signoff received on Oct. 6, 2017		
	Tanya Norman/Diane Renauld			Signoff received on Oct. 10, 2017		
	Stephen Mills			Signoff received on Nov. 3, 2017		
	Trisha Stubbings			Signoff received on Oct. 26, 2017		
Draft FMP	Ian Daisley	Nov. 1, 2017	Nov. 24			email record
	Bob Mason					
	Shane Sadoway					
	Brett Salmon					
	Dave Cobb					
	Perm Sieusahai/ Bob Baker					
	Dale Hansen					
AIP on FMP Input	Ian Daisley	Nov. 3, 2017	ASAP	Letter received Nov. 23		email record
	Bob Mason					
	Shane Sadoway					
	Brett Salmon					
	Dave Cobb					
	Perm Sieusahai/ Bob Baker					
	Dale Hansen			Letter received Nov. 2 - need to get a signed copy		

## 16 Quota Holder Meeting Notes (18 June 2014)



# Summary of 2<sup>nd</sup> Quota Holder Meeting

## Event Information

- Description:** 2016 – 2025 FMP : Quota Holder Meeting #2  
**Date & Time:** June 18, 2014; 10:00 AM to 2:00 PM  
**Location:** Weyerhaeuser's Edson Office  
**Organizer:** Paul Scott  
**Objective:** To discuss the creation of and validation process for the first 10 year SHS for the FMP.

## Invitees & Affiliation

Paul Scott, Weyerhaeuser	Ian Kwantas, Weyerhaeuser
Bob Mason, Millar Western	Jerry Baker, Tall Pine Timber Ltd.
Dave Cobb, EDFOR	Stephen Mills, ESRD - Foothills
Andrew Johnson, FORCORP (by phone)	Ken Andersen, Millar Western (joined at 10:20)

## Agenda Items

1. Introduction
2. TSA modeling - Woodstock/Stanley vs Patchworks
3. Patchworks operational model
  - Setup and assumptions
  - Outputs
4. SHS validation process
  - 3D machine demonstration

## Changes to Agenda

None.

## Supporting Documentation

Copy of presentation

## New Business

### Overview

Paul gave a brief overview of the FMP process:

- A Plan Development Team (PDT) has been established;
- While there are no Quota Holders on the PDT, the Terms of Reference has been modified to allow for more QH involvement in the process;
- Expected completion date for AVI remains at March 30, 2015.
- Landbase effective date : May 1, 2014.
- Target submission date for the FMP is April 1, 2016.

The main purpose of the meeting was to:



- Discuss the modeling and assumptions used to create an interim 10 year SHS for the 2016 – 2025 FMP ;
- Provide the opportunity to QHs to review and validate their respective SHS's before the TSA process begins so that the selected blocks can be “locked in” to the new plan.
- The intent is to complete the review process by the end of 2014.

### AVI

There was some discussion around AVI:

- The accuracy of the old AVI was questioned by some QH's;
- AVI 2.1 is the current standard being used; must be 80% or more accurate to be acceptable for use by ESRD; currently 18 townships have received approval status
- The technology has improved considerably since the old AVI was completed, so better results are expected this time around;
- Trends identified so far: Higher percentages of spruce being identified. Also, as expected, trends towards later seral stages are identified (eg CD -> C , DC -> CD)
- Lidar is being used to determine heights;
- There was some concern that stem counts are not being included in the AVI. While not a DFMP process, the technology to include stem counts is being examined, and may come in as an additional dataset at a later date.

### TSA Modeling

- A 20 year operational Patchworks model was used to develop the 20 year SHS; current model inputs provided for this presentation used the current AVI (1992-1998), Net Land Base (2001/2004) and tree list generator; the 2016 FMP TSA model will use the new AVI (2012 imagery), new NLB (May 1, 2014), and new yield curves based on 420 PSPs run through GYPSY.
- Patchworks will be used for the FMP as well – it is accepted by ESRD as TSA modeling platform;
- Woodstock will be used for sensitivity analysis.
- A single FMA and landbase will be used in the FMP.
- No forecasts for industrial activity will be included in the process. Any industrial activity over the life of the plan will be included in the next FMP.
- Spheres of interest will be maintained for the FMP. May need to review scheduling in HDAs where more than one operator is present, eg. Minnow Lake for ANC / BRL.
- Ken asked if the SHS would allocate stands to the 2<sup>nd</sup> decade - answered yes.
- 11 QH's – CCTL quota now included with Millar Western.
- In the FMP QH's will have to deal with any fir that they generate – will not go to Edson OSB.

### Cull

Various forms of cull will be built into the final yield curves:

- Field cull – studies were undertaken this past winter across the FMA.
- CTL losses – current analysis indicates <1% downfall from TL to CTL conifer.
- Scale data – decay etc
- Total cull will be monitored over the life of the plan, but the number we determine to apply to the yield curves will be in use for the life of the plan, or until the next plan is approved.

### Patches

In the operational model, following patch definitions used:

- Block – max 9m between stands (to allow seismic lines to be crossed);
- Patch/Package – max 300m between stands;
- Dave Cobb suggested that a min of 1000m<sup>3</sup> per block/patch be used.
- These type of decisions could affect AAC results.

### SHS Validation

- Weyerhaeuser would like this first validation (of this output) to be completed by end of 2014.



- Will re-run the model after this validation exercise to ensure decisions made are sustainable over the 200 year planning horizon of the FMP.
- Otherwise model outputs will provide future the SHS.

### Next Meeting

No date set

### Incomplete Task Summary

None



## 17 Quota Holder Meeting Notes (15 September 2014)



# Summary of 1<sup>st</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 1  
**Date & Time:** September 15, 2014; 10:00 AM to 3:00 PM  
**Location:** FORCORP Office, 101 - 11710 Kingsway NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Initial meeting to familiarize timber operators about Weyerhaeuser's FMA 0900046 2016 FMP planning process and current status.

## Invitees & Affiliation

Bob Mason, Millar Western	Ken Andersen, Millar Western
Shane Sadoway, Blue Ridge Lumber	Tracey Courser, Blue Ridge Lumber
Ian Daisley, ANC	Dave Cobb, EDFOR
Jerry Baker, Tall Pine Timber (Regrets)	Dave Chaluk, ETP (No response)
Stephen Mills, ESRD	Liana Luard, ESRD
Greg Greidanus, ESRD	Darcy Evanochko, ESRD
Rebecca Heemeryck, ESRD	Dale Hansen (No response)
Paul Scott, Weyerhaeuser	Kerri MacKay, Weyerhaeuser
Ian Kwantes, Weyerhaeuser	Gyula Gulyas, THEXLWIZ Consulting Ltd.
Ted Gooding, FORCORP	Andrew Johnson, FORCORP

## Agenda Items

1. Introduction
2. Confirm agenda items
3. FMP/AVI update and timelines
4. Yield curve development
5. Net landbase development
6. TSA process
7. Other items
8. Schedule follow-up session

## Changes to Agenda

None.

## Supporting Documentation

None

## New Business

### Introduction

- Purpose of the meeting was to familiarize timber operators on Weyerhaeuser Pembina's FMA with the 2016 FMP process and current status.
- A Plan Development Team (PDT) has been established;
- A Technical Team to complete the technical aspects of the FMP has also been established;
- Timber Operator Working Group is the process for input into the plan:
  - Will focus on timber supply aspects;
  - operators will be provided the opportunity to vet relevant items of the plan throughout the process;
  - operators will see the entire plan
  - Meeting notes will be limited to key points and action items only but operators will be provided the opportunity to review meeting notes.

### FMP Update

- Terms of Reference - submitted and approved by ESRD (Approval date - August 8, 2014);
- First Nations Consultation Plan - submitted and approved by ESRD (Approval date - August 25, 2014);
- Public Involvement Plan – version 2 submitted on July 25, 2014. Awaiting approval.
- AVI -  $\pm 40\%$  of townships are complete, with delineation largely completed working on interpretation for the 1.1 MM ha. Completion scheduled for April 1, 2015.
- VOITs – being reviewed by the PDT. 34 planning standard VOITs and  $\pm 3$  non-standard VOITs.
- Net landbase and yield curve submission scheduled for July 1, 2015.
- TSA and SHS submission scheduled for January 1, 2016.
- Final plan submission scheduled for April 1, 2016
  - Aggressive timeline, complete as much as possible before AVI is done;
  - Any extension request will require a formal letter to ESRD.

### Growth & Yield

- 4 different sets of yield curves will be developed:
  - Natural. For fire origin stands. These will be based on natural stand PSPs on the FMA;
  - Natural - Enhanced. For openings harvested prior to March 1, 1991. Natural curves adjusted for site index based on a 2009 RSP study. (ESRD approval of the methodology for the 2009 study still required).
  - RSA. For openings harvested after March 1, 1991, excluding any genetic gain. Based on RSA survey data (2009 – 2014) with sampling unit boundaries cut into the landbase.
  - RSA with genetic gain. As for RSA but includes genetic gain. Only applicable to Sw Region "1" below 1200m elevation.
- Stratification:
  - Natural stands. Based on storey of primary management (SOPM), overstorey will be used for the most part. Use SRD base 10 strata.
  - Managed stands. RSA strata – SRD base 10. After May 1, 2014 (effective date of the landbase), strata will be determined based on a transition matrix.
  - C-P(u) 'A' density pine with B, C or D understorey is difficult to manage, often good site but small wood. May be managed similar to Sb.
- Model
  - GYPSY (2009 version) will be used for the most part.
  - MGM could potentially be used for some mixedwood stands, but is not yet approved for use by ESRD.
- Utilization
  - GYPSY cannot account for all the desired utilization standards
  - Multiple utilization yield curves will be developed based on adjustments applied to curves developed using a baseline utilization.
  - Baseline utilizations are 15/11/15/366/TL (conifer) and 15/10/15/366/TL (deciduous).
  - Minimum stem length for conifer will be 3.66 m, reduced from 4.88m.
  - Adjustments will be made for harvest system (CTL) and minimum merchantable stem length as required.

- A matrix of utilization standards for each timber operator has been developed forwarded to each for review.
- Proposed adjustment methodology was submitted to ESRD in August 2014.
- Cull deductions
  - Field cull
    - Includes gross waste left in the bush due to butt flare, poor form etc, but excludes dead trees and CTL top losses
    - Data collected from processor production studies
    - Waste calculated : Conifer 1.2%, Aw (OSB) 1.9%
    - Methodology submitted to ESRD in July 2014
    - **Action item** : Liana to review and provide approval/direction on field cull methodology
  - Scale cull
    - 10 years (2004 – 2013) worth of scale data analyzed
    - Losses calculated : Aw 10%, Pb 5.3%, Bw 4.6%, Managed deciduous 7%, all conifer 1.2%.
    - Methodology and proposed scale cull factors submitted to ESRD in November 2013.
  - Cull deductions to be applied directly to the yield curves.
  - **Action item** : Gyula to create a single document outlining all cull proposals and submitted to ESRD for approval once field cull methodology approval obtained from ESRD.
- Deciduous stand decline
  - Gypsy doesn't do a good job of capturing deciduous decline with age.
  - New AVI and PSP data will be used to investigate trends.
  - To be implemented as an adjustment to the yield curves starting at 130 yrs.
- Regen lag
  - Regeneration lag is no longer required as it is incorporated into the RSA sampling protocols.
- SiteLogix ecosite
  - Will be incorporated into the new AVI.
  - NSR boundaries may need to be revised.
- Retention
  - Reductions will be applied to gross AAC, not included in yield curves.
- Genetic Gain
  - Official genetic gain numbers for Sw Region I are required
  - **Action item** : Liana to follow up with Lenard Bernard regarding genetic gain for Sw Region I.
- RSA survey data
  - 2013 survey data required from timber operators.
  - No RSA data has been received from Millar Western
  - 2014 data will not be used in the FMP, but should also be provided if available.
  - **Action item** : Kerri to send request to all Quota Holders for their RSA data.

#### Net Landbase

- Effective date : May 1, 2014
- Cutblocks
  - Opening numbers up to 2012 will be included in the AVI
  - Photo date is September 2012 so October blocks will not be in the AVI
  - Post-photo 2012 to 2014 blocks will be cut into the landbase
- ARIS Reconciliation
  - Cutblock boundaries and opening numbers are assigned in AVI. Weyerhaeuser intends to update final harvest area using the new AVI boundaries.
- Hydro layer
  - Unadjusted provincial hydro layer to be used
- Watershed layer
  - Weyerhaeuser would like to use the 4<sup>th</sup> order layer used in the previous FMP.
  - **Action item** : Paul to send a copy of the watershed layer to Liana for review.
  - **Action Item** : Liana to let Paul know what ESRD will require to complete ECA modeling.



- Seismic lines
  - Weyerhaeuser proposed using a 5m buffer width in the new FMP (previously 8m) due to forest ingress and growth in these areas.
  - Without a study to verify this, ESRD were of the opinion that it should not be changed.
  - **Decision** : Stay with the 8m width for the FMP.
- Planned blocks
  - The SHS validation process discussed at the previous meeting should be completed by December 2014.
- Spheres of Interest
  - The intent is that current spheres of interest will remain unchanged for the new plan.
  - ANC expressed a desire to have the spheres of interest reviewed :
    - Want to see a clear process on how timber is allocated
    - Would like to see indicators such as haul distance and tree size included in the process.
    - Shouldn't be based on history.

### Timber Supply Analysis

- Modeling platform
  - Woodstock will be used for aspatial analysis.
  - Patchworks will be used for spatial analysis and final AAC determination
- TSA parameters and assumptions
  - A summary of assumptions and parameters used in the previous FMPs is being assembled and will be used to facilitate the development of new parameters.
  - When complete, timber operators and ESRD will be provided the opportunity to review the document.
- TSA Issues (currently being reviewed by ESRD)
  - MPB Prevention (Pine) Strategy
    - ESRD stated that any MPB surge cut is to be based on the original MPB plan
    - Current MPB surge cut ends on April 30, 2025 in Edson and November 17, 2025 in DV.
    - The first 10 years (May 1, 2016 to April 30, 2025) of the new plan may therefore include a surge cut.
  - Coniferous Post Surge AAC Levels
    - Intent is to develop strategies to ensure that conifer requirements are met post-surge.
  - Reconciliation (unused) Volume
    - Any carry forward should be modeled in the first period (5 years)
    - ESRD approval must be obtained for all carry forward
    - Carry forward will have to be available within the spheres of interest
  - Healthy Deciduous Strategy
    - Intent is to develop a strategy to minimize deciduous losses due to rapid deterioration of the resource.
  - Single Landbase
    - Intent is to model a single combined landbase rather than having separate distinct coniferous and deciduous landbases for each FMU.
    - This will allow determination of a single conifer and a single deciduous AAC.
    - R12 already a single landbase.
    - Currently for Edson FMUs, all volumes are chargeable to AAC, however no cap on secondary volumes.
    - Discussed that operators may have to operate more mixedwood stands to realize their conifer AAC's.
    - Only Weyerhaeuser, EDFOR and CTPP have rights to secondary timber on the FMA.
    - Will result in improved management of deciduous timber flow for Weyerhaeuser.
    - Shouldn't be an issue as there is a deciduous operator (Weyerhaeuser) to accept the deciduous timber.
    - ANC/BRL/MWFP had no issues. EDFOR hesitant.
    - ESRD requires agreement from all Quota Holders.

- FMU Amalgamation
  - Some timber operators remain hesitant with regard to amalgamating all the FMU's.
  - **Action item** : Paul to assemble a package for ESRD explaining the rationale and implications of FMU amalgamation.
  - ESRD wants full agreement from all timber operators before approval will be given.
- Natural Range of Variation (NRV)
  - Bob Mason asked whether NRV targets were going to be modeled.
  - Paul responded that Weyerhaeuser is in the process of developing a strategy for this.

## Next Meeting

No date set



## 18 Quota Holder Meeting Notes (9 September 2015)



# Summary of 2<sup>nd</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 2  
**Date & Time:** September 9, 2015; 10:00 AM to 2:00 PM  
**Location:** FORCORP Office, 101 - 11710 Kingsway NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Second meeting to update timber operators about Weyerhaeuser's FMA 0900046 2016 FMP current status.

## Invitees & Affiliation

Bob Mason, Millar Western (Regrets)	Ken Andersen, Millar Western
Shane Sadoway, Blue Ridge Lumber (Regrets)	Tracey Courser, Blue Ridge Lumber
Ian Daisley, ANC (Regrets)	Dave Cobb, EDFOR
Jerry Baker, Tall Pine Timber (Regrets)	Brett Salmon, BRISCO (Regrets)
Stephen Mills, GoA Edson (Regrets)	Liana Luard, GoA Edmonton (Regrets)
Greg Greidanus, GoA Edmonton	Darcy Evanochko, GoA Drayton Valley (Regrets)
Rebecca Heemeryck, GoA Rocky (Regrets)	Dale Hansen - Dale Hansen Ltd. (Regrets)
Paul Scott, Weyerhaeuser	Andrew Johnson, FORCORP
Kerri MacKay, Weyerhaeuser	Gyula Gulyas, THEXLWIZ Consulting Ltd.
Ted Gooding, FORCORP (Regrets)	Dan Jensen, FORCORP
Krista Woods – GoA Hinton (Regrets)	

## Agenda Items

1. Introduction
2. Confirm agenda items
3. Review Sept. 15, 2014 minutes
4. General update to FMP process
  - a. Public Involvement Process
  - b. First Nations Involvement Process
  - c. VOITs development
  - d. AVI process
  - e. ARIS reconciliation process
5. Resolved issues documents
  - a. GY001 – Application of scale cull to Yield curves
  - b. GY002 – Yield curve adjustment methodology
  - c. GY005 – Regenerated Stand Productivity
  - d. GY006 – RSA linework overlaps
  - e. LB001 – Conversion of Patchworks P10005 SHS validated polygons to new AVI
  - f. LB002 – Seismic line widths
  - g. LB007 – Streams layer
  - h. LB008 – Roads layer
  - i. LB009 - Combine Watersheds
  - j. LB010 – AVI ARIS cutblock reconciliation
  - k. LB013 – Seral Stage and Ecological Unit Definitions

- I. TSA002- Non-fma AACs
- m. TSA004 – Combined landbases for Edson FMUs
- n. TSA005 – Addressing Seismic lines in the TSA
6. Outstanding issue documents
  - a. GY004 - Methodology of implementing stand decline to YC
  - b. GY007 – PSP plot data review
  - c. GY008 – GYM plot data review
  - d. GY009 - RSA data assembly
  - e. GY010 – Yield Curve Methodology
  - f. LB004 – Spatial Data Document
  - g. LB005 – RSA linework – reconciliation with AVI
  - h. TSA001 - FMU Amalgamation – Quota Allocations
7. Review QH document tracking sheet

## Changes to Agenda

None.

## Supporting Documentation

Copy of Powerpoint presentation  
Quota Holder document review tracking sheet  
Issue documents – emailed prior to meeting

## Review of Previous Meeting Action Items

1. Liana to review and provide approval/direction on field cull methodology.  
**Complete.**
2. Gyula to create a single document outlining all cull proposals and submitted to ESRD for approval once field cull methodology approval obtained from ESRD.  
**Complete.**
3. Liana to follow up with Lenard Bernard regarding genetic gain for Sw Region I.  
**Weyerhaeuser working with Dave Swindelhurst on this. Hope to achieve the go ahead to use the expected yield gain in the FMP.**
4. Kerri to send request to all Quota Holders for their RSA data.  
**Multiple requests sent. Have all photo data. Hansen and FRIAA (non-photo) still outstanding. Kerri to follow up with Hansen's service provider and ask FRIAA for permission to get the data from the GoA.**
5. Paul to send a copy of the watershed layer to Liana for review.  
**Complete.**
6. Liana to let Paul know what ESRD will require to complete ECA modeling.  
**Complete.**
7. Paul to assemble a package for ESRD explaining the rationale and implications of FMU amalgamation.  
**Sent on Oct 23, 2014. FMU amalgamation approved.**

## New Business

### FMP Update

- FMU Amalgamation
  - Notification to proceed received from GoA on July 22, 2015.
  - Effective date for quota allocation tracking is expected to be May 1, 2015.
  - New FMU named R15.
- Public Involvement Plan
  - Approved Oct 27, 2014.
  - First meeting for primary stakeholders scheduled for November 2015.
  - A mailout is planned for secondary stakeholders eg. municipalities
  - Open houses will be used for the general public. Still to be scheduled.
- First Nations Consultation Plan
  - Approved August 25, 2014
  - Mailout to set up initial meetings with FN's to be done soon.
- VOITs
  - Will include 34 planning standard VOITs and  $\pm$  3 non-standard VOITs
  - A few are still being reviewed eg. reforestation and special wildlife.
  - Millar Western and Sundre Forest Products VOITs have also been reviewed in an attempt to reach some consistency within the region.
  - Intent is to include NRV as well, however targets will only be available next summer (2016)
- AVI
  - Interpretation is now complete.
  - Final submission expected by late September, 2015.
  - Approval expected within 6 weeks of submission.
- ARIS Reconciliation
  - Weyerhaeuser is attempting to ensure that a one-to-one match exists between AVI and ARIS opening numbers prior to submission of the AVI.
- Net landbase
  - Effective date of the landbase will be May 1, 2015.
  - Waiting for completion of the AVI before proceeding with the netdown
  - Most of the required spatial data layers have been assembled
- Yield curve development
  - Waiting for completion of the AVI before proceeding with development of the yield curves
  - Most of the required data is available
- TSA
  - Not started – requires new landbase and yield curves.
  - TSA effective date will be May 1, 2016.
- Timelines
  - Official plan submission date remains as April 1, 2016
  - To be reviewed following AVI approval
  - Current expected timelines:
    - AVI approval – mid November 2015
    - Net landbase and yield curve submission – March 2016
    - TSA/SHS submission – October 2016
    - Final FMP submission – December 2016

### ARIS Reconciliation (LB010)

Weyerhaeuser has developed and implemented a process (with PDT approval) for reconciling ARIS opening numbers and areas with AVI (LB010). Greg G. mentioned that parts of this process are contravening current policy, ie:



1. Point I on page 1 of the LB010 document states that:  
*“Any AVI polygon identified with a modifier of ‘CC Clearcut’ that does not have an ARIS opening number but has a valid AVI forest label - natural stand yield curves will be used to represent their contribution to the timber producing landbase based on their AVI stratum.”*  
The GoA requires that all post-1991 blocks be linked to an ARIS opening number to be considered part of the contributing landbase. Even if the new AVI clearly shows regeneration on these areas with a valid AVI call, no ARIS number means that they will be deleted from the net landbase. This will impact final AACs. For pre-1991 blocks, natural stand yield curves may be used.
  
2. As far as area reconciliation is concerned, Weyerhaeuser’s process calls for tabulating the differences between ARIS and AVI areas by opening number and where the difference is outside tolerance (>5% for openings greater than or equal to 10 hectares, or > 0.5 hectares where an opening is less than 10 hectares) a block update to ARIS areas will be undertaken once the AVI is approved. Greg G. explained that the GoA expects the ARIS opening number to be linked to all components of the original block so that the area matches the current NHA (net harvested area) in ARIS. This will involve considerable effort and is counter to the process already agreed to and being implemented by Weyerhaeuser.

Weyerhaeuser will take these issues back to the PDT prior to making a decision on how to proceed.

#### **RSA/AVI linework reconciliation (LB005)**

In order to minimize sliver creation in the net landbase, Weyerhaeuser proposed the following options to resolve instances where RSA and AVI linework do not align:

- For areas with RSA surveys photos that date prior to 1 August 2012
  - AVI boundaries to supersede RSA
- For areas with RSA surveys that used photos dated after 1 August 2012
  - RSA boundaries to supersede AVI

Greg G. mentioned that the GoA preferred approach is as follows:

- Where the AVI is newer than the RSA
  - Choose the boundary (AVI or RSA) that best represents the actual harvest. The following will also apply:
    - The block area must still match the ARIS NHA
    - SU boundaries must be preserved – they may be snapped to the AVI boundaries if AVI is used
    - Need to justify which boundary used
- Where the RSA is newer than the AVI
  - Cut the RSA boundary into the landbase as per existing process.

#### **Next Meeting**

No date set

## 19 Quota Holder Meeting Notes (13 January 2016)



# Summary of 3<sup>rd</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 2  
**Date & Time:** January 13, 2016; 9:30 AM to 3:00 PM  
**Location:** FORCORP Office, Suite 200, 15015-123 Ave NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Third meeting to update timber operators about Weyerhaeuser’s FMA 0900046 2016 FMP current status.

## Invitees & Affiliation

Bob Mason, Millar Western	Ken Anderson, Millar Western
Shane Sadoway, Blue Ridge Lumber (Regrets)	Tracey Courser, Blue Ridge Lumber
Ian Daisley, ANC (Regrets)	Dave Cobb, EDFOR
Paul King, Tall Pine Timber	Brett Salmon, BRISCO (Regrets)
Stephen Mills, GoA Edson	Liana Luard, GoA Edmonton
Greg Greidanus, GoA Edmonton (morning only)	Darcy Evanochko, GoA Drayton Valley
Rebecca Heemeryck, GoA Rocky (Regrets)	Dale Hansen - Dale Hansen Ltd.
Krista Woods – GoA Hinton (Regrets)	Cosmin Tansanu, GoA Edmonton
James Norman, ANC	Cynthia Labrecque , Millar Western
Paul Scott, Weyerhaeuser	Ian Kwantes, Weyerhaeuser
Kerri MacKay, Weyerhaeuser	Bill Taylor, Weyerhaeuser
Ted Gooding, FORCORP	Gyula Gulyas, THEXLWIZ Consulting Ltd.
Andrew Johnson, FORCORP	Dan Jensen, FORCORP

## Agenda Items

1. Introduction
2. Confirm agenda items
3. FMP Update
  - Timeline
  - Public Involvement Process
  - First Nations Consultation
  - AVI
  - ARIS reconciliation
  - Net landbase development
  - Yield curve development
  - Genetic Gain
  - TSA
  - VOITs & reporting requirements
4. Review of shared documents
5. Issue documents finalized since last session (Sep 9, 2015)
6. Other

## Changes to Agenda

None.

## Supporting Documentation

Draft VOITs sent on January 4, 2016

## Review of Previous Meeting Action Items

None

## New Business

### FMP Update

- Timeline
  - AVI approval expected by January 15, 2016.
  - Net landbase and yield curve submission targeted for end of April 2016.
  - Plan submission targeted for March 1, 2017.
  - OGR's will be finalized after plan approval - fall of 2017.
- Public Involvement
  - Forest Advisory Committee to be resurrected – last met in 2011.
  - To include members of the Trappers Association and Fish & Game Association in Edson, as well as grazing operators and oil & gas operators from the Drayton Valley area.
  - May meet once per year after the FMP is completed, and expect to only meet 4-6 times during plan development.
  - 1<sup>st</sup> meeting expected to be this spring.
- First Nations Consultation
  - Initial packages sent out to six FN's
  - Only one (O'Chiese) has responded so far.
  - One continuous log will be run for each FN.
  - VOITs to be sent out once finalized by the PDT
- AVI
  - Final submission made on November 23, 2015.
  - Overall received good scores in the quality control process. Only 1 township failed initial audit.
  - Final approval expected by January 15, 2016.
  - Weyerhaeuser still to finalize strategy for sharing the AVI data with interested parties
  - Will continue to work with small operators to produce maps etc.
- ARIS Reconciliation
  - One-to-one matching between AVI and ARIS opening numbers essentially complete.
  - Only 18 post-91 blocks still need to be reconciled. Any post-91 blocks that cannot be reconciled will become part of the passive landbase.
  - Silvacom in process of comparing AVI and ARIS areas
  - Each operator will be provided a list of their blocks that are outside the allowed variance
  - Operators will have to update and sign off on all blocks outside variance; GoA would like a form letter from all QHs.
  - Weyerhaeuser will request a bulk update of ARIS once all operators have signed off on their blocks.
- Net landbase
  - Layers to be used to define the landbase were reviewed.
  - The current proposed R15 boundary is being used to define the DFA.
  - It was noted that compartment boundaries do not match the VSA boundaries. This is not expected to be an issue.
  - Some changes to compartment boundaries. SHS variance will be managed by compartment, not VSA.

- Deferral and deletion information was based on the old NLB and AVI. After reviewing how the deferral and deletion information aligns with the new AVI and NLB deletion rules, it became apparent that most of the deferrals and deletions have been incorporated into the new AVI. Therefore it is not necessary to cut the deferral and deletions into the new NLB.
- In response to a question regarding Jasper National Park, the southernmost HDA on Marshybank (Chungo Lookout) was treated as a deferral in the first 10 years of the current plan. This was based on a memorandum of understanding (MOU) only.
- No AVI was developed for the Aurora special land use area. While this is part of the passive landbase, AVI is required for gross landbase metrics. The old AVI will be clipped for this area and included in the landbase.
- A lot of effort has gone into developing a private land layer. This layer will be compared to the GoA private land layer once provided.
- Some PNT's still have to be digitized.
- Yield curve development
  - Managed Stands
    - To be based on RSA data, which is available for C, CD & DC stands only (D declared stands were not surveyed)
    - Of the 1,400 RSA blocks, only 7 FRIAA blocks have not been reconciled with ARIS
    - Methodology has been approved by the GoA
    - YC's can only be created once a draft net landbase is available
  - Natural Stands
    - Gypsy will be used to develop YC's based on PSP data
    - Proposed methodology has been submitted to the GoA
    - Stratification is based on the GoA's Base 10 strata. These will be further divided by natural subregions and possibly other attributes such as site index or crown closure.
    - Further analysis is required to determine how best to stratify A density overstorey stands with B, C, or D density understorey.
  - Cull
    - Yield curves will be adjusted for both field and scale cull, based on approved percentages and will be applied as reductions to the yield curves.
  - Utilization
    - Assumes TL only.
    - Base utilizations will be 15/11/15/366 for coniferous and 15/10/15/366 for deciduous species
    - A min merchantable height of 3.66m is being used as this is what Gypsy uses. The current plan uses 4.88m – OGRs will be amended accordingly.
    - Adjustment factors will be included for operators that use slightly different utilizations.
    - No adjustment for CTL losses will be allowed
  - Genetic Gain
    - No genetic gain is currently included as there is no official agreement to do so
    - A request to apply genetic gain to the FMP must be submitted
    - **Action item** : Cosmin to investigate what is required to obtain approval to include genetic gain in the YC's.
    - **Action item** : Kerri to request approval from the GoA to incorporate genetic gain in the YC's.
- TSA
  - Parameters used in the previous TSAs and suggestions for the new TSA were reviewed.
  - Woodstock will be used to determine theoretical, non-spatial AACs and for sensitivity analysis while Patchworks will be used for the PFMS and development of the SHS.
  - 4% structure retention to be included as either an upfront reduction to the AAC or as an annual AAC drain.
- VOITs
  - Current VOITs were sent to all Quota Holders on January 4, 2015.
  - Weyerhaeuser has not yet submitted an NRV strategy to the GoA. Landweb should be ready for this DFMP. David Andison has committed to supply by late summer of 2016.

- Quota Holders to review VOITs and provide written feedback to Weyerhaeuser as soon as possible.
- ANC and BRL questioned the structure retention VOIT; Paul asked them to send an email stating any issues, and he will share those with the PDT.

### Issue Documents Discussed

- TSA-005. Explains how seismic lines will be dealt with in the TSA process. PDT A-I-P on Nov 18, 2015.
- LB-005. Proposes how RSA openings and sub units will be included in the landbase. Waiting for approval.
- LB-014. Deals with resolution of boundary issues with the new R15 FMU boundary. The GoA proposed boundary will be used.
- LB-015. Lists which layers will be cut into the landbase and which will be applied as proxy only. To be discussed at the PDT on January 14<sup>th</sup>, 2016.
- GY-010. Outlines the methodology to be used for managed stand yield curve development. PDT A-I-P on Nov 18, 2015.
- GY-010a. Outlines the methodology to be used for natural stand yield curve development. Approval still to be obtained.
- GY-011. Proposes how to apply RSA survey information in pure hardwood stands.
- TSA-003. Proposes parameters, subject to change, to be used in the TSA modeling.

### Next Meeting

No date set – sometime in the summer.

### Outstanding Action Items

**Action item** : Cosmin to investigate what is required to obtain approval to include genetic gain in the YC's.

**Action item** : Kerri to request approval from the GoA to incorporate genetic gain in the YC's.

## 20 Quota Holder Meeting Notes (26 April 2016)





# Summary of 4<sup>th</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 4  
**Date & Time:** April 26, 2016; 10:00 AM to 3:30 PM  
**Location:** FORCORP Office, Suite 200, 15015-123 Ave NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Meeting to update timber operators about Weyerhaeuser's FMA 0900046 2016 FMP current status.

## Invitees & Affiliation

Bob Mason, Millar Western	Ken Anderson, Millar Western (Regrets)
Shane Sadoway, Blue Ridge Lumber	Tracey Courser, Blue Ridge Lumber (Regrets)
Ian Daisley, ANC	Dave Cobb, EDFOR (Regrets)
Paul King, Tall Pine Timber (Regrets)	Brett Salmon, BRISCO (Regrets)
Stephen Mills, GoA Edson	Liana Luard, GoA Edmonton
Greg Greidanus, GoA Edmonton	Darcy Evanochko, GoA Drayton Valley (Regrets)
Rebecca Heemeryck, GoA Rocky (Regrets)	Dale Hansen - Dale Hansen Ltd. (Regrets)
Krista Woods – GoA Hinton (Regrets)	Dave Hobson, GoA (Regrets)
Cosmin Tansanu, GoA Edmonton	Debi Weber, Weyerhaeuser
Paul Scott, Weyerhaeuser	Ian Kwantes, Weyerhaeuser
Kerri MacKay, Weyerhaeuser	Bill Taylor, Weyerhaeuser (Regrets)
Ted Gooding, FORCORP	Gyula Gulyas, THEXLWIZ Consulting Ltd.
Andrew Johnson, FORCORP	Dan Jensen, FORCORP

## Agenda Items

- Introduction
- Confirm agenda items
- Net landbase development
- Yield curve development
- TSA & Wildlife Models
- ARIS reconciliation
- Planned blocks starting May 1, 2015
- SHS determination and implementation schedule
- Application of new GoA retention strategy – including impact on fixed volume AAC's
- Silviculture Matrix
- Other

## Changes to Agenda

First Nations added.

## Supporting Documentation

LB-018 : Landbase rules

TSA-003 : TSA Parameters

## Previous Meeting Action Items

**Action item** : Cosmin to investigate what is required to obtain approval to include genetic gain in the YC's.  
March 16, 2016 : Approval for Region I Tree Improvement Program received from the GoA. **Task complete.**

**Action item** : Kerri to request approval from the GoA to incorporate genetic gain in the YC's.  
March 16, 2016 : Approval for Region I Tree Improvement Program received from the GoA. **Task complete.**

## New Business

### Landbase

- Issue document LB-018 – Landbase Rules was reviewed, particularly with regard to landbase deletions being applied to arrive at the net landbase.
- **Action item** : If operators are aware of any historical cabins or other historical sites that should be incorporated as landbase deletions, they are to forward the point data to Paul by May 1, 2016. Active cabins are not part of this request as they are addressed through other processes.
- Transitional streams are currently buffered by 10m on either side and are included as part of the passive landbase. As there may be some flexibility regarding the inclusion on these in the landbase, it was suggested that the buffers should be excluded.
- **Action item** : Dan to investigate the impact of the transitional buffers on the landbase and share with Paul to make a final decision regarding their inclusion/exclusion.
- SHS deferrals and deletions - after reviewing how the deferral and deletion information aligns with the new AVI and NLB deletion rules, it became apparent that most of the deferrals and deletions have been incorporated into the new AVI. Therefore SHS deletions are incorporated, not cut into the landbase. For the deferrals, they will be addressed through the operational review and development of the SHS. GoA wants some kind of flag in the NLB/TSA process that identifies how SHS deferrals are applied. The GoA will require an analysis and explanation of how deletions and deferrals have been dealt with.
- **Action item**: Dan to compare how many deletions, by area, represented in the May 1, 2015 SHS Manager, are currently being captured in the new passive landbase, and how may reside in the active landbase. Also compare the deferrals to the validated Patchworks 10005p.
- Ecosite deletions based on a new ecosite assignment from Greenlink have been included using the same rules as the previous FMP. Have just started investigating this so there could be changes.
- Low density Aw stand transition discussion. 'A' density Aw stands are currently deletions but Weyerhaeuser is considering an approach to harvest and convert a portion of these stands similar to that proposed in Millar's FMP.
  - Retain stands as passive landbase, set up rules in FMP to permit harvest and reforestation
  - Would count as variance, but a mechanism is required so that 50 m3/ha is not being exchanged for 200 m3/ha stands, could be "soft" not a "hard" deletion, need operator commitment to the approach and as part of the PFMS
  - GoA is willing to look into this, likely a better approach than including as normal active landbase, GoA needs to discuss
  - Ian noted that the same situation exists for A density pine stands
  - **Action item** : Paul to document a proposed approach for transitioning low density Aw and PI stands for GoA review.
- A summary of the current draft version of the NLB revealed that:
  - The gross FMU (R15) area has increased by 37,184 ha compared to the previous FMPs. This is largely due to parks, private land and grazing reserves that were previously excluded from the gross area.

- The net harvestable (active) landbase has decreased by approx. 52,000 ha, a ~10% reduction. This is largely due to increased water buffers and anthropogenic vegetated areas eg. wellsites.
- Anticipate submitting the NLB around June 2016.

### Yield curve development

- Yield curves are being developed to represent four different populations on the landbase:
  - NAT – fire origin natural stands – based on PSP data.
  - M91 – openings harvested prior to March 1, 1991. These are NAT yield curves adjusted for site index based on a 2007 Regenerated Stand Productivity (RSP) study.
  - MGD – openings harvested between March 1, 1991 and the landbase effective date (May 1, 2015). Based on RSA data.
  - FUT – future openings - after May 1, 2015. These are the same as MGD curves but will include genetic gain in the I1 seed zone and can only be applied to pure Sw Weyerhaeuser openings.
- Gypsy will be used to develop all yield curves.
- Yield curve development methodology has been approved by the GoA
- Yield curve development is approximately 80% complete. Can only be finalized once the final landbase is available.
- Genetic gains may be applied to Weyerhaeuser openings already planted with improved stock.
- Only Weyerhaeuser will deploy improved stock, none of the quota holders are interested in deploying improved stock.
- A tree improvement deployment schedule will be required as part of the FMP documentation and sequencing.
- There was some discussion on how best to deal with the “back-end” of yield curves from a TSA point of view, i.e. should stands die and be reset to age 0 or should they maintain a “capped” yield for the remaining life of the plan. This will be investigated during the TSA process and is related to both timber and non-timber values.
- **Action item** : Dan to forward a shapefile with pre91 cutblocks and ecosite information to Gyula.

### TSA & Wildlife Models

- Issue document TSA-003 - TSA Parameters was reviewed. This document outlines the main assumptions and parameters (subject to change) that will be used in the TSA modeling.
- The TSA model start date has been changed to May 1, 2017 to align with the anticipated approval of the FMP. This means that the current MPB surge will be continued until April 30, 2017.
- The impact of harvesting operations on a number of fine filter species is to be modeled as part of the FMP. The GoA has developed tools to model certain species with the intent to create a time 0 snapshot and then forecast habitat changes over the first 20 years. GoA's species are not the same as those present in the VOITs. GoA will honor the list in the approved VOITs. The following species may be modeled:
  - Songbirds. 5 different songbirds are to be modeled. Song bird constraints will be added into the TSA if GoA decides to go that route.
  - Barred Owl.
  - Grizzly Bear. The Foothills Research Institute (FRI) datasets developed as part of the Grizzly Bear Program (GBP) will be used in the analysis of grizzly bear habitat. The 20-year spatial harvest sequence (SHS) and associated road network are required to generate future conditions for the FMU. Current and future landscape conditions will be compared for the period of the SHS (10 years) at both the Grizzly Bear Watershed Unit (GBWU) and FMU levels.
  - East Slopes Cold Water Fish. The GoA will complete this modeling. The objective will be to maintain or increase current FSI scores over time.
  - Marten. While the GoA has developed tools to model this species, Weyerhaeuser is not required to model Marten.
- ECA analysis. ECA curves will be included in Patchworks to allow the impacts of harvesting on watersheds to be assessed throughout the TSA process.
- GoA asked what the focus on cutting pine will be as the MPB strategy ends? This is still to be determined.
- NRV – John Stadt and Wendy will meet to build an NRV strategy for the FMP as Dave Andison's products will not be available in time

- Greg asked what the strategy is for minimum harvest patch sizes as the TSA document identifies 'none'.

### ARIS Reconciliation

- Considerable time and effort has been spent on attempting to reconcile ARIS data with the new AVI.
- The Nov 24, 2015 ARIS download for all operators on the DFA includes 10,525 unique opening numbers. Of this 54% (5,714) are pre AVI imagery (2012) and post-1991 openings on the DFA that have to be reconciled. A further 521 openings are post-AVI imagery (2012 – 2015) that will be reconciled as part of the net landbase process.
- In addition, there are 182 openings in the AVI which are not in the ARIS data, the majority of which are pre-1991.
- Weyerhaeuser has reviewed all openings with discrepancies with relevant operators and obtained agreement to make the necessary changes to either cutblock boundaries or ARIS, as required.
- Weyerhaeuser approached FRIAA to review FRIAA cutblocks. However, GoA must sign off on LFS and FRIAA blocks. As the GoA apparently has an MOU with FRIAA whereby the regional GoA representatives would deal with this, the information will be passed on to the regional GoA offices, but it should not be necessary for them to re-review the information.
- **Action item** : Paul to send ARIS spread sheets for FRIAA and LFS blocks to GoA
- The GoA requires one final ARIS reconciliation spreadsheet (for all operators) to be submitted with the net landbase. This will be used to do a bulk update to ARIS. Individual operators should not submit changes from this process.
- Gyula asked about resolution of errors he noted in ARIS data when developing yield curves? These are to be submitted along with the ARIS reconciliation submission.
- There was some discussion regarding the calculation of the % area difference for area reconciliation. Depending on whether the ARIS reported area or the landbase area is used as the denominator, the result may be different. The current process has the denominator as the new AVI/NLB area, the difference in area between this and net harvest area being the numerator.
- **Action item** : Greg Greidanus to check the GoA procedures for calculating the % area difference in the ARIS reconciliation process.

### Planned Blocks

- Planned blocks for the period 2015 to at least 2017 are required as the TSA start date is May 1, 2017.
- **Action item** : All operators to review their planned blocks and ensure that Dan has the latest information for inclusion in the landbase by May 1, 2016.

### SHS Implementation

- There was some discussion around how to transition from the current SHS to planning future blocks to align with the new SHS. As blocks planned this summer will most likely only be cut after May 2017, they will result in an immediate SHS variance if not included in the new SHS.
- Stands that were selected by operators during the validation of Patchworks 10005p will be used as "seed" for the TSA process as they will most likely be included in the 20-year operational SHS. However, the GoA will not approve these for harvest as they will create a variance against the existing SHS. Layout for harvest must follow the existing 2006 MPB scenario until the new FMP is approved by GoA.

### Structure Retention Directive

- Weyerhaeuser currently has PDT agreement for 4% structure retention.
- It is not clear whether the latest directive will override the current agreement.
- Given the uncertainty around this issue, Weyerhaeuser should submit a structure retention strategy to the GoA as soon as possible to obtain clarity for the current planning process.
- The impact of the new directive on fixed volume AAC's was discussed. It was noted that if fixed volume AAC's are not impacted, the impact of the new structure retention targets will be even higher for operators without fixed volume AACs.
- **Action item** : Liana to check whether the new structure targets will be applied to fixed volume AACs.

### Silviculture Matrix

- Paul covered the highlights of his meeting with Marty O'Byrne on development the silviculture matrix for FMPs. This meeting was associated with Millar's FMP but Marty provided advice for both. Paul does not see this as a difficult exercise. Plan to transition 100% of Sb harvested to pine (only harvest the fringes of Sb stands)
- Quota holder sign off is required, may require another meeting to complete this
- The stand transition and silviculture matrix should ideally be submitted at the same time as the yield curve documentation.
- **Action item** : Paul to develop a stand transition and silviculture matrix for review and sign off by quota holders by June 1, 2016.

### First Nations

- VOITs were sent out to First Nations last week for their review and feedback.

### Next Meeting

No date set.

### Outstanding Action Items

**Action item** : If operators are aware of any historical cabins or other historical sites that should be incorporated as landbase deletions, they are to forward the point data to Paul by May 1, 2016. Active cabins are not part of this request as they are addressed through other processes.

**Action item** : Dan to investigate the impact of the transitional buffers on the landbase and share with Paul to make a final decision regarding their inclusion/exclusion.

**Action item**: Dan to compare how many deletions, by area, represented in the May 1, 2015 SHS Manager, are currently being captured in the new passive landbase, and how may reside in the active landbase. Also compare the deferrals to the validated Patchworks 10005p.

**Action item** : Paul to document a proposed approach for transitioning low density Aw and PI stands for GoA review.

**Action item** : Dan to forward a shapefile with pre91 cutblocks and ecosite information to Gyula.

**Action item** : Paul to send ARIS spread sheets for FRIAA and LFS blocks to GoA (Done - April 28<sup>th</sup>)

**Action item** : Greg Greidanus to check the GoA procedures for calculating the % area difference in the ARIS reconciliation process.

**Action item** : All operators to review their planned blocks and ensure that Dan has the latest information for inclusion in the landbase by May 1, 2016.

**Action item** : Liana to check whether the new structure targets will be applied to fixed volume AACs.

**Action item** : Paul to develop a stand transition and silviculture matrix for review and sign off by quota holders by June 1, 2016.



## 21 Quota Holder Meeting Notes (15 September 2016)





# Summary of 5<sup>th</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 5  
**Date & Time:** September 15, 2016; 10:00 AM to 2:30 PM  
**Location:** FORCORP Office, Suite 200, 15015-123 Ave NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Meeting to update timber operators on the status of Weyerhaeuser’s 2016 FMP.

## Invitees & Affiliation

Bob Mason, Millar Western	Ken Anderson, Millar Western (pm only)
Shane Sadoway, Blue Ridge Lumber (Regrets)	Tracey Courser, Blue Ridge Lumber
Ian Daisley, ANC	Dave Cobb, EDFOR
Paul King, Tall Pine Timber	Brett Salmon, BRISCO (Regrets)
Stephen Mills, GoA Edson	Liana Luard, GoA Edmonton
Greg Greidanus, GoA Edmonton	Dale Hansen - Dale Hansen Ltd.
Rebecca Heemeryck, GoA Rocky	Dave Hobson, GoA (Regrets)
Krista Woods – GoA Hinton (Regrets)	Bob Winship, Weyerhaeuser
Cosmin Tansanu, GoA Edmonton (Regrets)	Ian Kwantes, Weyerhaeuser (Regrets)
Paul Scott, Weyerhaeuser	Marty O’Byrne, GoA Peace River
Kerri MacKay, Weyerhaeuser	Trisha Stubbings, GoA Rocky (Regrets)
Dana Williams, GoA Edson	Gyula Gulyas, THEXLWIZ Consulting Ltd.
Ted Gooding, FORCORP	Dan Jensen, FORCORP
Andrew Johnson, FORCORP	

## Agenda Items

- Introduction
- Confirm agenda items
- Outstanding items from previous meeting
- Net land base presentation
- Yield curve presentation
- Lunch
- Continue with Yield curve presentation if necessary
- ARIS reconciliation presentation
- Silviculture Strategies Table (Matrix) discussion
- Landscape Assessment discussion
- Other
- Changes to Agenda

## Supporting Documentation

Draft net landbase development document  
Draft yield curve development document

## Chapter 3 : Landscape Assessment

### Previous Meeting Action Items

**Action item** : If operators are aware of any historical cabins or other historical sites that should be incorporated as landbase deletions, they are to forward the point data to Paul by May 1, 2016. Active cabins are not part of this request as they are addressed through other processes. **Task complete.**

**Action item** : Dan to investigate the impact of the transitional buffers on the landbase and share with Paul to make a final decision regarding their inclusion/exclusion. **Task complete.**

**Action item**: Dan to compare how many deletions, by area, represented in the May 1, 2015 SHS Manager, are currently being captured in the new passive landbase, and how may reside in the active landbase. Also compare the deferrals to the validated Patchworks 10005p. **Task complete.**

**Action item** : Paul to document a proposed approach for transitioning low density Aw and PI stands for GoA review. **Task complete.**

**Action item** : Dan to forward a shapefile with pre91 cutblocks and ecosite information to Gyula. **Task complete.**

**Action item** : Paul to send ARIS spread sheets for FRIAA and LFS blocks to GoA (Done - April 28<sup>th</sup>). **Task complete.**

**Action item** : Greg Greidanus to check the GoA procedures for calculating the % area difference in the ARIS reconciliation process. **Task complete.**

**Action item** : All operators to review their planned blocks and ensure that Dan has the latest information for inclusion in the landbase by May 1, 2016. **Task complete.**

**Action item** : Liana to check whether the new structure targets will be applied to fixed volume AACs.  
Sept 15, 2016: No specific direction has been received on this.

**Action item** : Paul to develop a stand transition and silviculture matrix for review and sign off by quota holders by June 1, 2016. **Task complete.**

### New Business

#### Landbase

- The draft net landbase development document was sent to all operators on September 9, 2016. Operators have until September 30, 2016 to review the document and provide any comments or concerns to Paul.
- Dan gave a presentation explaining the landbase development and netdown process.
- Greg suggested that, due to all the changes made to the AVI during the ARIS reconciliation process, the AVI should be re-submitted to GoA so that the changes become part of the official Weyerhaeuser Pembina AVI. This will not affect the landbase development process. Weyerhaeuser has yet to determine when this will be done, but suggested that it was their intent.

#### Yield curve development

- The draft yield curve development document was sent to all operators on September 7, 2016. Operators have until September 28, 2016 to review the document and provide any comments or concerns to Paul.
- Gyula gave a presentation explaining the yield curve development process.
- All yield curves have been created but can only be finalized once the final net landbase is available.

- MAIs for RSA curves are “substantially” higher than for natural curves. Peak MAI for the PI stratum is 3.6 for RSA curves and 2.55 for the PI(CD) natural curve. These MAI increases are similar to what has been seen in other FMPs.
- There was some discussion around risk of using the RSA curves based on this higher MAI, but the process to determine the curves is as per GoA protocols.

#### ARIS Reconciliation

- Considerable time and effort has been spent on attempting to reconcile ARIS data with the new AVI.
- Weyerhaeuser has reviewed all post91 openings with area discrepancies exceeding allowable levels with relevant operators and obtained agreement-in-principle (AIP) for rationale(s) behind the necessity to make changes to their ARIS records, if required.
- Once the ARIS reconciliation process has been completed, each operator will receive a copy of the ARIS spreadsheet, as well as a shapefile for all cutblocks associated with each operator. Each operator will be required to sign off on the proposed changes to be made to ARIS to align with the approved Net Landbase.
- The GoA requires one final ARIS reconciliation spreadsheet (for all operators) to be submitted with the net landbase. This will be used to do a bulk update to ARIS.

#### Silviculture Strategy Table

- Paul presented the latest version of the proposed silviculture strategy table (SST)
- All operators have had the opportunity to review and comment on the table. Final edits were reviewed and accepted.
- Marty explained that the SST describes the primary treatments required to achieve desired results. Different treatment can be requested, with justification, in the AOP process.
- A separate row should be included for the transition of Sb to PI.
- **Action item** : Paul to update the SST to include a separate row for the transition of Sb to PI stratum.

#### Landscape Assessment

- A copy of the landscape assessment (LA) was distributed to all operators on September 8, 2016.
- This is for information purposes only, operators are not required to sign off on the LA.
- Any comments or questions on the LA should be directed to Paul.
- The LA will be reviewed by the PDT.

#### SHS Implementation

- Ian requested that the “seed” stands selected for carry forward from the previous patchworks scenario (P10005) be sent to the operators for review.
- **Action item**: Dan to send a shapefile of P10005 seed stands to each operator for review.
- As discussed at the previous meeting, layout for harvest must follow the existing 2006 MPB scenario until the new FMP is approved by GoA. This is an issue as operators would prefer to layout blocks that will be included in the new SHS as identified in the review of the P10005 output. However, the GoA will not approve these for harvest as they could create a variance against the existing 2006 SHS. Operators to work within current variance levels available to them.

#### Next Meeting

No date set.

#### Outstanding Action Items

**Action item** : Liana to check whether the new structure targets will be applied to fixed volume AACs.  
Sept 15, 2016: No specific direction has been received on this.

**Action item** : Paul to update the SST to include a separate row for the transition of Sb to PI stratum.



**Action item:** Dan to send a shapefile of final P10005 seed stands to each operator for review.

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## 22 Quota Holder Meeting Notes (4 May 2017)



# Summary of 6<sup>th</sup> Timber Operator Working Group Meeting

## Event Information

**Description:** 2016 – 2025 FMP Timber Operator Working Group Meeting # 6  
**Date & Time:** May 4, 2017; 10:00 AM to 3:00 PM  
**Location:** FORCORP Office, Suite 200, 15015-123 Ave NW, Edmonton  
**Organizer:** Paul Scott  
**Objective:** Meeting to update timber operators on the status of Weyerhaeuser’s 2017 FMP.

## Invitees & Affiliation

Bob Mason, Millar Western	Ken Anderson, Millar Western
Shane Sadoway, Blue Ridge Lumber	Tracey Courser, Blue Ridge Lumber
Ian Daisley, ANC	Dave Cobb, EDFOR
Bob Baker, Tall Pine Timber (Regrets)	Brett Salmon, BRISCO (Regrets)
Stephen Mills, GoA Edson	Liana Luard, GoA Edmonton
Greg Greidanus, GoA Edmonton	Dale Hansen, Dale Hansen Ltd. (Regrets)
Rebecca Heemeryck, GoA Rocky	Trisha Stubbings, GoA Rocky (Regrets)
Dana Williams, GoA Edson	John Nyssen, EDFOR
Paul Scott, Weyerhaeuser	Ian Kwantes, Weyerhaeuser
Ted Gooding, FORCORP	Kerri MacKay, Weyerhaeuser
Andrew Johnson, FORCORP	Dan Jensen, FORCORP

## Agenda Items

- Introduction
- Confirm agenda items
- Outstanding items from meeting #5
- Review of information shared since meeting #5
- FMP status update – revised timelines
- Net landbase review – changes made to AIP NLBV5
- ARIS Reconciliation status update
- Tenure Allocation and Carry Forward
- TSA
  - Objectives
  - Inputs and Assumptions
  - Non-spatial modeling
  - Spatial modeling
- Non-timber assessments – Songbirds, Barred Owl, Grizzly Bear, Cold water fish
- Structure Retention
- Operating Ground Rules
- SHS Review Process
- Other



## Supporting Documentation

PowerPoint presentation (FMP2016\_TOWG\_May4\_20170504.pptx)

## Previous Meeting Action Items

**Action item:** Liana to check whether the new structure targets will be applied to fixed volume AACs.

Sept 15, 2016: No specific direction has been received on this.

May 4, 2017: Fixed volume AACs are assumed to be post structure retention. **Task Closed.**

**Action item:** Paul to update the SST to include a separate row for the transition of Sb to PI stratum.

May 4, 2017: Completed. **Task Closed.**

**Action item:** Dan to send a shapefile of final P10005 seed stands to each operator for review.

May 4, 2017: Completed. **Task Closed.**

## New Business

### Review of information shared since meeting #5

- Paul reviewed an excel spreadsheet that outlined all information shared with timber operators since the



QH\_Document\_Submission\_Tracking\_Sheet\_

previous meeting.

### FMP Status Update

- A-I-P received for the Landbase and Yield Curve Development on March 28, 2017.



First Nations  
Consultation Summary

- First Nation Consultation.



Communications and  
Public Participation Su

- Public Involvement.
- TSA progress
  - First SHS for review – mid May 2017
  - PFMS complete by September 1, 2017
- FMP Documentation – ongoing
- Submission deadline revised to December 1, 2017.

### Net Landbase Review

- Updates made to v5 since receiving A-I-P, include
  - PLAN2 (2015 – 2017) and PLAN10 (Decade 1) blocks updated
  - Seed stands (from old AVI) identified in the landbase
  - Hard linear (HLIN) features for songbird metrics included
  - Isolated and/or “halo” stands around Plan bocks deleted or deferred.
- The active landbase reduced by 1,299 ha (549,149 ha to 547,850 ha) as a result of the above.

### ARIS Reconciliation

- An initial GoA review of the ARIS information was received in January 2017.
- All GoA questions were reviewed and commented on by WY and provided back to AAF on March 20, 2017

- Awaiting final review.
- **Action Item:** Liana to follow up on the status of the ARIS review by the GoA.
  - Once agreement on all the changes to ARIS is received,
    - Agreement from each operator will be required again, and
    - Each operator will be required to update their ARIS records accordingly.

#### Tenure Allocation

- The process used to determine new allocations based on a single FMU (R15) and single landbase was reviewed briefly.
- The new allocations have yet to be confirmed by the GoA.
- A table indicating the new operator allocations is on Slide 11 on the PowerPoint presentation.

#### Carry Forward

- Coniferous carry forward will be included in the TSA process.
- Carry forward requests will be included as part of operator target volumes, but will not be available until applied for by affected operators and has to be approved by the GoA
- **Action Item:** Bert to look into Tall Pine carry forward numbers to confirm accuracy.
- No deciduous carry forward to be included in the TSA.

#### Timber Supply Analysis

- TSA effective date is May 1, 2017
- A single landbase will be assumed
- Temporary exclusion areas include additional area for the O'Chiese First Nation Reserve expansion area.
- **Action Item:** Liana to investigate whether the additional area requested by the O'Chiese First Nation should be treated as a landbase deletion.
- Non-spatial TSA model runs have been completed to provide targets for the spatial model
- A 10 year coniferous surge based on the current MPB surge level (if achievable) is planned
- The spatial model includes targets and spheres of interest for each operator.
- It also includes non-timber assessments where these can be integrated into the TSA model e.g. ECA and songbirds.
- Other non-timber assessments, such as barred owl and grizzly bear will be completed from TSA outputs
- Assessments for cold water fish, including bull trout, Athabasca rainbow trout and arctic grayling have not been completed as yet. Waiting for details from the GoA.
- The intent is to provide an initial SHS for review by each operator by mid May. Operators will have 3 weeks to review the SHS and supply comments back to WY/Forcorp.
- The online SHS review process developed by FORCORP will be used for the review. Shapefiles of the SHS will be provided on request.

#### Structure Retention

- 4% structure retention will be applied to all volumes post modeling. Retention reductions do not affect fixed volumes.

#### Operating Ground Rules

- The OGRs are under development and will reflect strategies contained in the FMP. Three sessions have been held to date, with at least two more anticipated. Could sign off on new OGRs in September if ready. New OGRs would be adjusted if needed resulting from approval of FMP.

#### Next Meeting

No date set.



## Outstanding Action Items

**Action Item:** Liana to follow up on the status of the ARIS review by the GoA.

**Action Item:** Bert to look into Tall Pine carry forward numbers. (Post Note: Numbers have been confirmed by Paul from Bob Baker and new numbers have been incorporated in the PP presentation.)

**Action Item:** Liana to investigate whether the additional area requested by the O'Chiese First Nation should be treated as a landbase deletion for the final NLB.

G:\Weyerhaeuser\Projects\P744\_FMP\AMge\_FMP\_Process\Meetings\Q HOLDERS\20170504\QHMeeting\_notes\_May4\_20170509.docx

## 23 Website Development

To encourage further engagement during the FMP process, a website was developed to provide drafts of documents that would be accessible to the public. This website was hosted by Forcorp at the following URL: [www.forcorp.com/weyerhaeuser\\_fmp](http://www.forcorp.com/weyerhaeuser_fmp) (Figure 3).

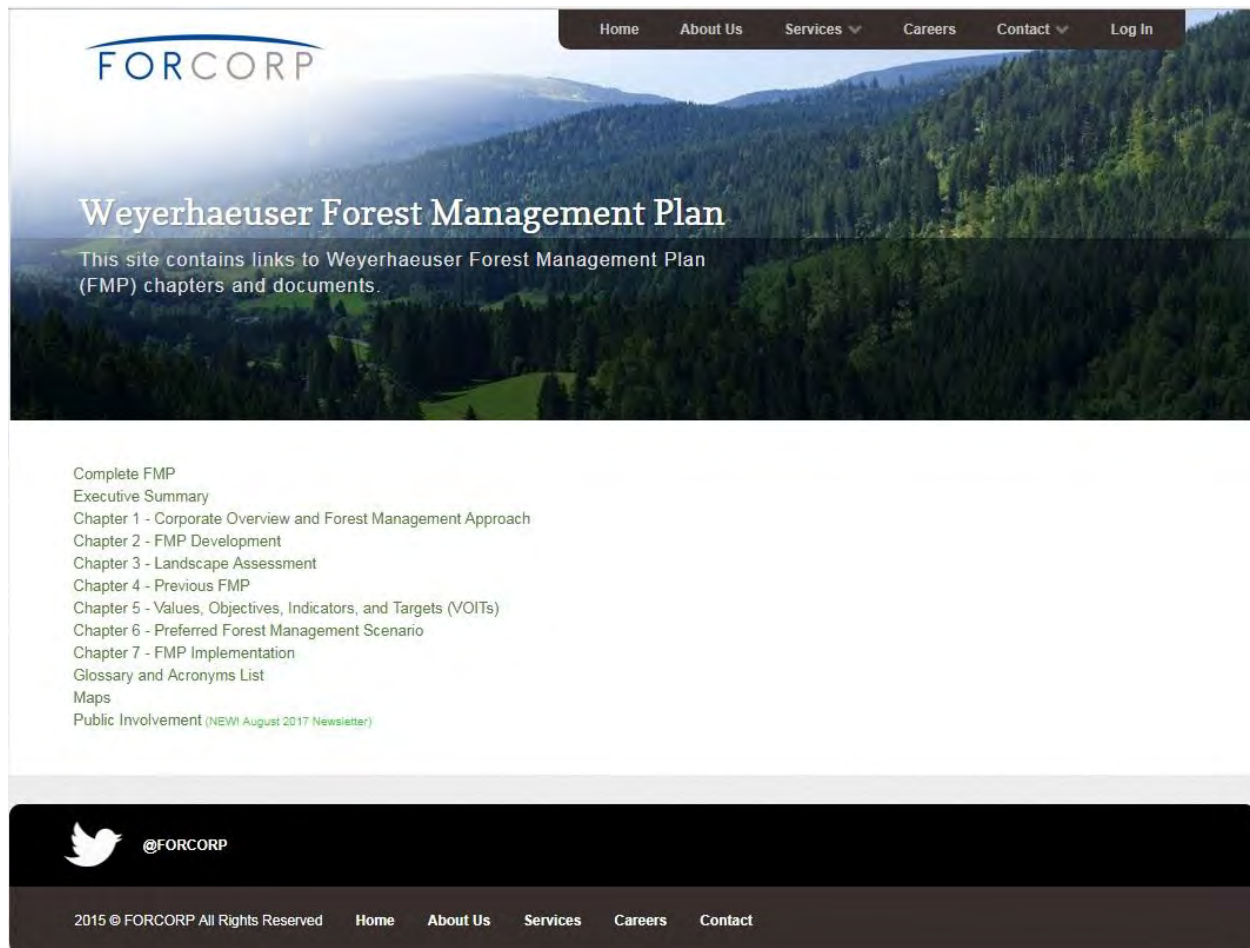


Figure 1: Screen shot of the Weyerhaeuser FMP homepage that hosted draft documents during the FMP development process.



## **24 Review of the Public Involvement Plan Implementation (July 2018)**



Review of the Public Involvement Plan Implementation 2018 and associated variance to the approved plan

PIP component	What was done	Variance to the PIP Comments
1.0 Introduction: Share input with the PDT	Develop a communication summary of public involvement events/ processes shared and discussed at each PDT; first iteration on Nov. 18, 2015	Consistent with PIP
3.1 Primary Stakeholders	Stakeholder groups were listed as potential participants in the Stakeholder Advisory Group:	
Grazing/forage	Cecil Anderson	Consistent with PIP
Trapper/Trapper Association	Rick Stelter, President of the Edson Chapter	Consistent with PIP
ATV clubs	Dennis Poissant	Consistent with PIP
Snowmobile clubs	No direct member	Yes – interest represented by ATV club members; Weyerhaeuser could not find a snowmobile representative from the DV area; Edson Snow Seekers are concerned with only one designated trail on the FMA and not appropriate for DFA strategic input, thus were not approached
Fish and Game Clubs	Ron Moss, Edson and District F&G Assn.	Consistent with PIP
Oil and Gas operations representation	Eric Berg, Alberta Energy Regulator (AER)	Consistent with PIP
	Kara Westerlund – Brazeau County Councilor	Yes - Added to group upon request from organization
	Mary Ellen Shain – North Saskatchewan Watershed Alliance	Yes - Added to group upon request from organization
3.1 Mailouts in the fall of 2014 to trapping operators and grazing operators describing FMP process and public involvement	Newsletters were sent out in June, July and August of 2017; notice of open houses sent to all operators	Yes; timing only
3.1 Mailouts in the fall of 2014 to associations and clubs describing FMP process and	Newsletters were sent out in June, July and August of 2017; notice of open houses sent to association contacts from the SAG	Yes; timing only



public involvement with point of contact for concerns			
3.1 Establish a small dynamic group of representatives from the primary stakeholder groups in early 2015	Weyerhaeuser held discussions with likely members in 2015 to describe the intent of the SAG process; initial meeting occurred on July 6, 2016	Consistent with PIP with the exception of timing	
3.1 Meaningful reviews at appropriate intervals	Curriculum was established with the SAG on major points of interest; NLB, Yield Curve, TSA, VOITs, were shared with the group	Consistent with PIP	
3.1 Items to review with SAG		Consistent with PIP	
VOITs	Selected voits shared with during appropriate presentations that best represented a VOIT; VOITs table shared with SAG at meeting 6 and meeting 7	Consistent with PIP	
20-year SHS	Shared with SAG at meeting 6	Consistent with PIP	
Final plan	Opportunity shared with SAG, but all declined; final FMP in excess of 2500 pages; SAG also able to access draft versions of chapters via the Forcorp website	Consistent with PIP	
Tracking sheet of issues and decisions of the advisory committee	Tracking sheet completed and included in Annex III Final report provides all issues and outcomes from SAG group, endorsed by the SAG	Consistent with PIP	
3.2 Mailouts in 2015 to secondary stakeholders describing FMP process and public involvement	Newsletters were sent out in June, July and August of 2017; notices of open houses sent; Forcorp link for draft component of the FMP	Yes; but timing only because it coincided with the eventual FMP development progress	
3.2 Sharing of VOITs table	Forcorp link to draft components of the FMP information made available to stakeholders	Yes; but timing only because it coincided with the eventual FMP development progress	
3.2 Concerns will be addressed in writing	No concerns were brought forward that required addressing	Consistent with PIP	
3.3 General Public –	Open houses held at the three communities in November 2016	Consistent with PIP	

<p>hold open houses in Edson, Drayton Valley and Rocky Mountain House at appropriate intervals in 2015 and 2016</p>	<p>and October 2017</p>	
<p>4.0 Input tracking and reporting – recording comments</p>	<p>Weyerhaeuser kept notes of the SAG meeting; comments forms were available at the open houses; notes kept of questions asked during presentations to secondary stakeholder groups</p>	<p>Consistent with PIP</p>
<p>4.0 Comments will be reviewed with PDT</p>	<p>Public involvement communication summary of events and issues brought forward shared with PDT,</p>	<p>Consistent with PIP</p>
<p>4.0 Issues will be addressed in the FMP where appropriate</p>	<p>Issues high-lighted in section 2 and any commitments made are identified in chapter 7.</p> <p>All issues brought forward were addressed in some fashion such as:</p> <ul style="list-style-type: none"> <li>• consideration in FMP or;</li> <li>• not for FMP scope and passed on to Government or other interest or;</li> <li>• consideration in other parts of forestry operations i.e. not FMP itself or;</li> <li>• Proposed FMP and/or current best practice/GOA regulations et al sufficiently addresses the concern;</li> <li>• recommendation not supported by Weyerhaeuser, but rationale provided.</li> </ul>	<p>Consistent with PIP</p>
<p>4.0 Summary report will be provided in FMP</p>	<p>Summary of Public Involvement in Chapter 2 and Annex III</p>	<p>Consistent with PIP</p>
<p>5.0 Issue Resolution Process</p>	<p>Process not required</p>	<p>Consistent with PIP</p>



## **25 Forest Management plan presentation to Brazeau County Council (December 2016).**



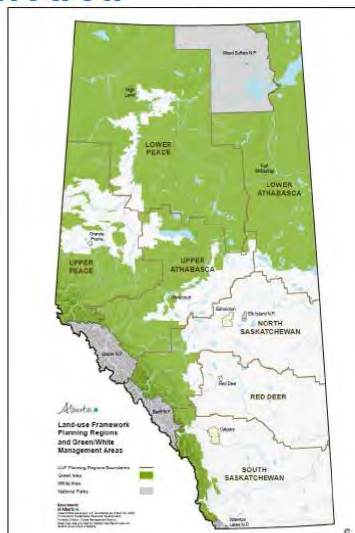


## Weyerhaeuser Pembina Timberlands

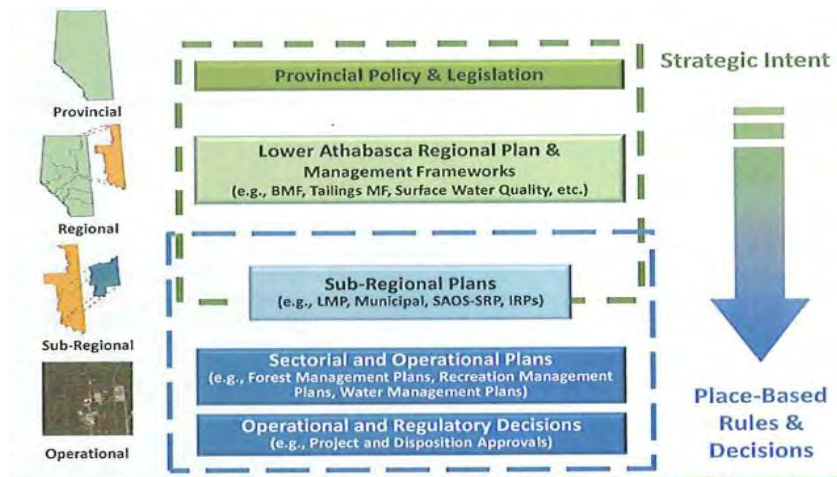


## Alberta's Green Area

- 35.1 million ha
- Shared management responsibility.
  - Land Manager (Environment and parks)
  - Forest Manager (Agriculture and Forestry)



## Alberta Land Use Framework Planning Hierarchy



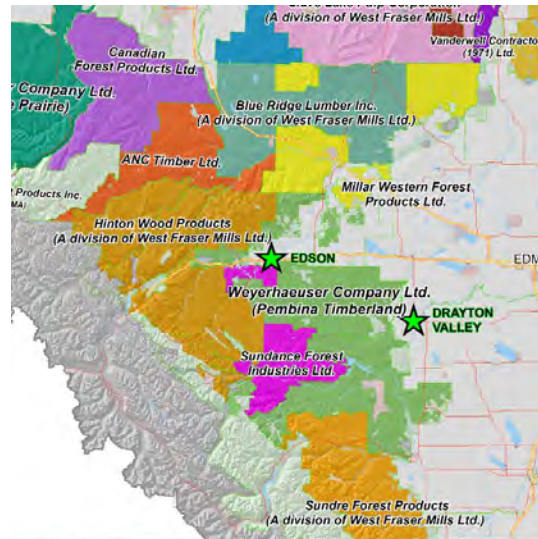
Weyerhaeuser Pembina Timberlands



### Land Use Framework - Regional Plans

- Main strategy under the Land-use Framework Policy
- Define economic, environmental, and social outcomes for a region in relation to land-use
- Align provincial policies related to land/ environment at a regional level
- Environmental Frameworks for each Region (Air, Surface Water, Groundwater, Biodiversity)
- *Addresses cumulative effects, and binds Government to act to thresholds*

## Forest Management Agreement (FMA) Areas



5

## Weyerhaeuser Pembina Timberlands



### Forest Tenure

#### Forest Management Agreement:

- Area based, surface rights agreement between Government and Weyerhaeuser (Order-In-Council)
- Rights to establish, grow and harvest forests
- 20 Year renewable agreement subject to terms and conditions
- Minimize impacts of forest management on other resource values and users
- Forecasts future development of the forest over 200+ years
- Indigenous communities, stakeholder and public engagement

6





### Forest Management Plan:

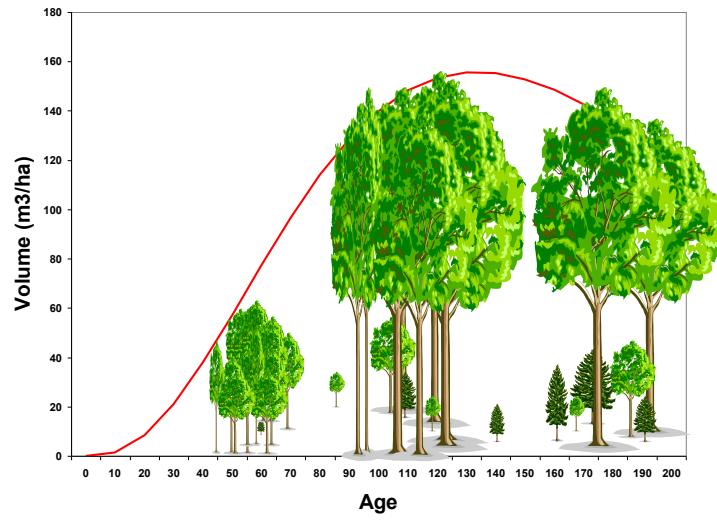
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- Forecasts future forest development at 200 years
- *Sets sustainable timber harvest levels* subject to Government approvals, and 20 year sequencing of where timber harvesting will occur
- Revised every 10 years

7



# Yield

## Stand Level





Weyerhaeuser Pembina Timberlands



**Guide to High Risk Species on the Weyerhaeuser Pembina FMA**

Information presented herein is primarily based on: *Species Accounts for High-Risk Flora and Fauna in Pembina Forest Management Plan*. It is intended to serve as an overview and not replace the Pembina FMA. Contact at least one of the species experts to learn more about the species and their status.

Prepared by: Wendy Coates - Weyerhaeuser Alberta Timberlands (June 2010)

# Wildlife Conservation & Protection

**Single Green Tree & Small Clump Retention**

**Single Green Tree Retention**  
 - Retain to sample trees left standing in the harvested area  
 - Used primarily where no other options exist  
 - Higher potential for blowdown but will have biodiversity value  
 - Patches and clumps are preferred  
 - After falling to the ground, large decaying logs can provide habitat for a wide range of organisms

**Small Clump Retention**  
 - Retain to small groups of trees (approx 20) growing together that are not standing, undisturbed, in the harvested area  
 - Clumps should be distributed throughout the block (where possible)

**Raptor and Songbird Nests**

- Avoid harvest of active songbird and raptor nests
- Follow regulatory guidelines for collection: **50% Rule** or **"Double"** double nests
- Prevent Nesting Season: **ONS Work Instruction**
- Follow retained buffer analysis

**In Block Retention Visual Examples of 6 - 10%**





## Integrated Land Management



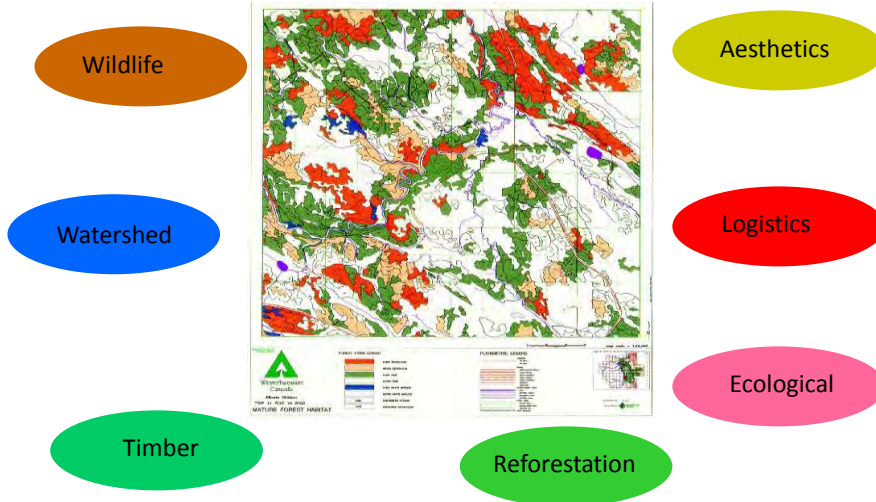
13

## Reforestation



- ✓ All harvested areas are reforested to regulated standards
- ✓ We reforest to the same forest types that are there today
- ✓ Reforestation is monitored for up to 15 years to ensure success
- ✓ We plant over 4 million seedlings annually

# Harvest Design - Criteria



Getting input & involvement from stakeholders, public and Indigenous communities



### Key Issues Overview

*From the perspective of those seeing what others do in the forest:*

Cause	Effect
Logging	<ul style="list-style-type: none"> <li>➤ Change from old forest to young/new forest</li> <li>➤ Change forest over the landscape</li> <li>➤ Is it reforested, is it sustainable?</li> <li>➤ Wood fibre "waste"</li> </ul>
Roads, pipelines, wells, etc.	<ul style="list-style-type: none"> <li>➤ Removes forest cover / soil, fragments habitat</li> <li>➤ Brings people (hunting, disturbance)</li> <li>➤ Crosses watercourses / watersources</li> </ul>
Motorized recreational vehicle use	<ul style="list-style-type: none"> <li>➤ Brings people (hunting, disturbance)</li> <li>➤ Crosses watercourses / watersources</li> </ul>
Herbicide	<ul style="list-style-type: none"> <li>➤ Enviro hazard</li> </ul>
Grazing	<ul style="list-style-type: none"> <li>➤ Forest cover change</li> <li>➤ Domestic animals</li> <li>➤ Brings people</li> </ul>

### Key Issues Overview

*From the perspective of regulators:*

Legislation / Regulation / Policy	Focus
Traditional Use by Aboriginal Peoples	<ul style="list-style-type: none"> <li>➤ Fishing, hunting, trapping, special uses</li> </ul>
Public Lands, Forests, Minerals, PNG, Water, Fish & Wildlife	<ul style="list-style-type: none"> <li>➤ Use of Crown land (commercial &amp; recreational)</li> <li>➤ Use &amp; conservation of natural resources</li> <li>➤ Renewable, sustainable forest resource</li> <li>➤ Forest protection (fire)</li> </ul>
Environmental protection	<ul style="list-style-type: none"> <li>➤ Soil</li> <li>➤ Water, watersheds</li> <li>➤ Pollution, contamination, hazardous waste</li> </ul>
Endangered, threatened species	<ul style="list-style-type: none"> <li>➤ Adequate habitat</li> <li>➤ Protection from people</li> <li>➤ Terrestrial &amp; aquatic</li> </ul>
Migratory birds	<ul style="list-style-type: none"> <li>➤ Nest protection</li> </ul>
Historical resources	<ul style="list-style-type: none"> <li>➤ Protection (temporary &amp; permanent)</li> </ul>

### Key Issues Overview

From the perspective of resource managers, scientists:

Topic	Focus
Biodiversity	<ul style="list-style-type: none"> <li>➤ How do you measure it?</li> <li>➤ How do you influence / manage for it?</li> <li>➤ Habitat – fragmentation, patch size, age/type of forest</li> </ul>
Conservation, natural range of variability	<ul style="list-style-type: none"> <li>➤ What can be “managed” vs. what needs to be protected? How much is enough?</li> <li>➤ What’s “natural”? How do we compare?</li> </ul>
Watersheds	<ul style="list-style-type: none"> <li>➤ What impacts do disturbances have?</li> <li>➤ How much is reasonable?</li> <li>➤ What are the best protection requirements?</li> </ul>
Cumulative effects	<ul style="list-style-type: none"> <li>➤ What are the effects of human developments?</li> <li>➤ How much is too much?</li> <li>➤ <b>How do we manage for multiple users impacts?</b></li> </ul>
Climate change	<ul style="list-style-type: none"> <li>➤ What’s going to change, how do we adapt?</li> </ul>

Weyerhaeuser Pembina Timberlands



### Forest Management:

- What further information would you like to know?
- What concerns, issues or questions do you have that can be addressed in forest management?
- Would you like to be kept informed over time, and if so, how?

## **26 Forest Management plan presentation to Clearwater County Council (December 13, 2016).**





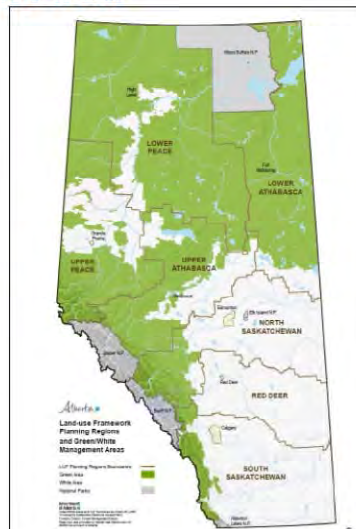


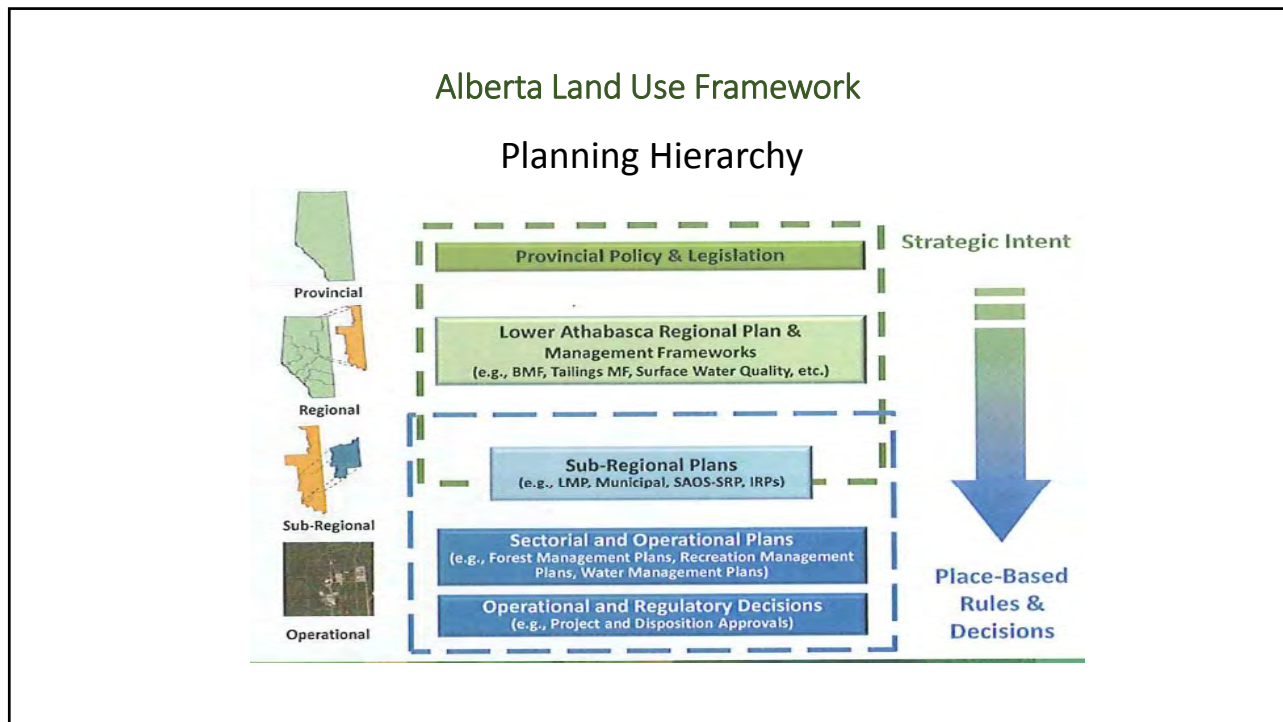
## Weyerhaeuser Pembina Timberlands



### Alberta's Green Area

- 35.1 million ha
- Shared management responsibility.
  - Land Manager (Environment and parks)
  - Forest Manager (Agriculture and Forestry)





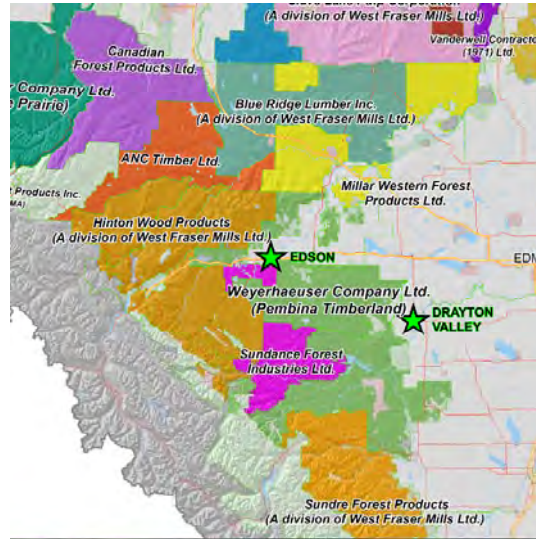
### Weyerhaeuser Pembina Timberlands



### Land Use Framework - Regional Plans

- Main strategy under the Land-use Framework Policy
- Define economic, environmental, and social outcomes for a region in relation to land-use
- Align provincial policies related to land/ environment at a regional level
- Environmental Frameworks for each Region (Air, Surface Water, Groundwater, Biodiversity)
- *Addresses cumulative effects, and binds Government to act to thresholds*

## Forest Management Agreement (FMA) Areas



5

## Weyerhaeuser Pembina Timberlands



### Forest Tenure

#### Forest Management Agreement:

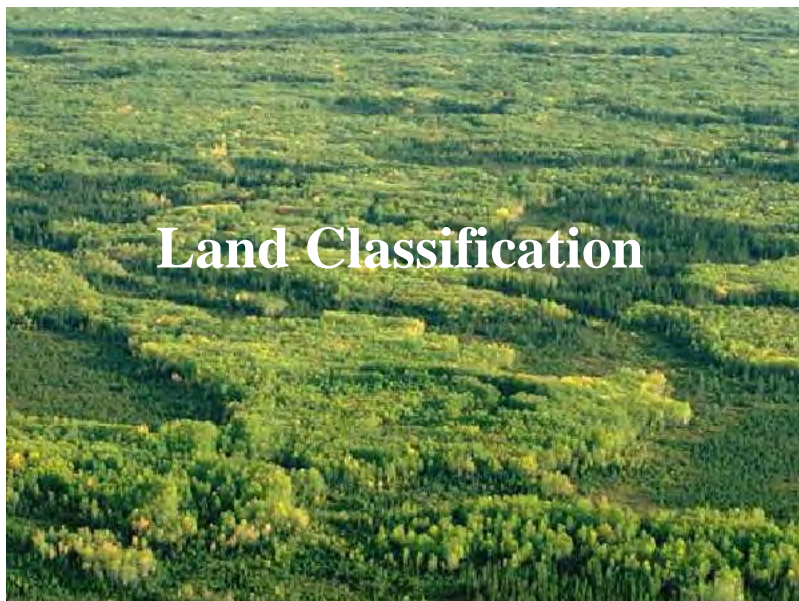
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6

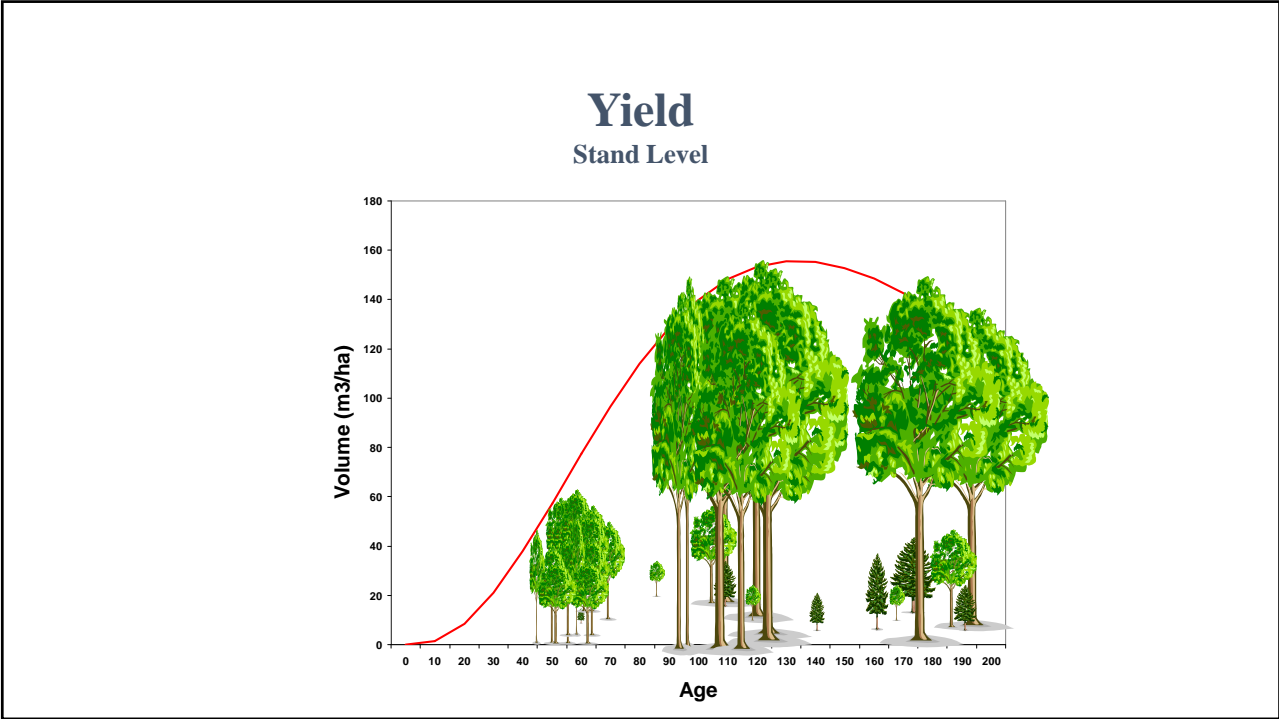
**Forest Management Plan:**

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7









Weyerhaeuser Pembina Timberlands



**Guide to High Risk Species on the Weyerhaeuser Pembina FMA**

*Deliverable environmental benefits primarily based on Greater Access to High Risk Areas and Forests in Northwest Alberta*

Prepared by Woody Coombs - Weyerhaeuser Alberta Timberlands (June 2016)

*Wildlife Conservation & Protection*

**Single Green Tree & Small Clump Retention**

Single Green Tree Retention

- Select to single trees left standing in the harvested area
- Used primarily where an other options exist
- Higher potential for economic loss and lower biodiversity value
- **Patches and clumps are preferred**
- After logging in the ground level showing trees and shrubs patches for a strong local community of organisms

Small Clump Retention

- Retain in **small groups of trees** (up to 100) showing landscape like the top remaining components in the harvested area
- **Clumps should be distributed throughout the block** rather than isolated

**Raptor and Songbird Nests**

- Avoid harvest of active songbird and raptor nests
- **Follow** *Canadian Guidelines for Harvesting "At Risk" "Sensitivity" Wildlife*
- **Monitor** "Active" Raptor "Risk" Work Instructions
- **Monitor** seasonal habitat quality

**In Block Retention Visual Examples of 6-10%**



## Weyerhaeuser Pembina Timberlands



## Integrated Land Management



13

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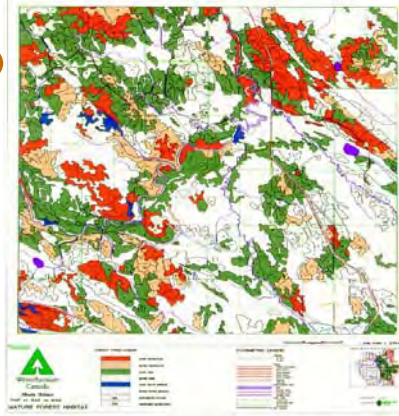


## Harvest Design - Criteria

Wildlife

Watershed

Timber



Aesthetics

Logistics

Ecological

Reforestation



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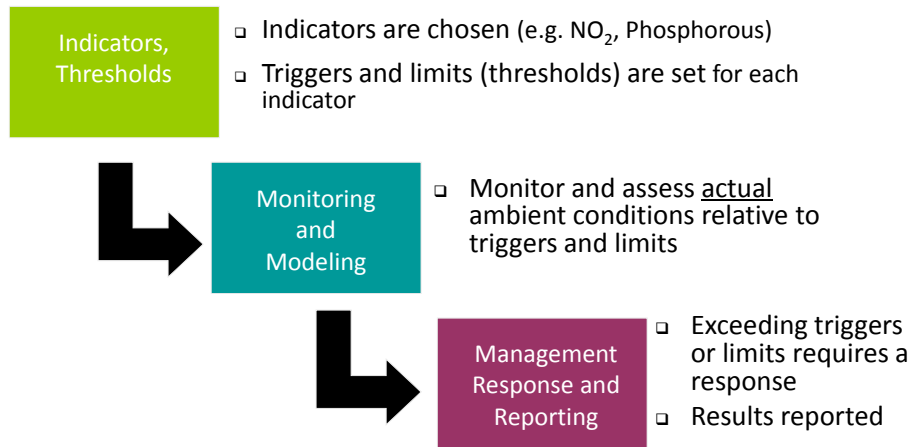
Weyerhaeuser Pembina Timberlands



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## Environmental Management Frameworks – Regional Approach to Cumulative Effects





## **27 Forest Management plan presentation to Drayton Valley Town Council (November 23, 2016).**



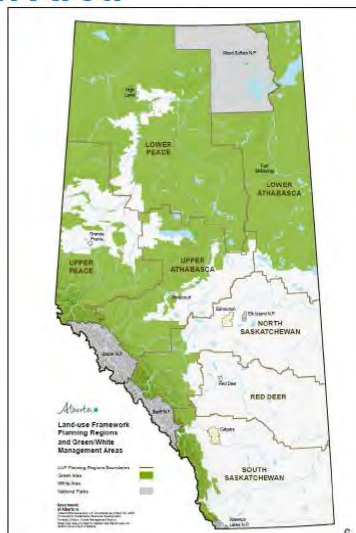


## Weyerhaeuser Pembina Timberlands



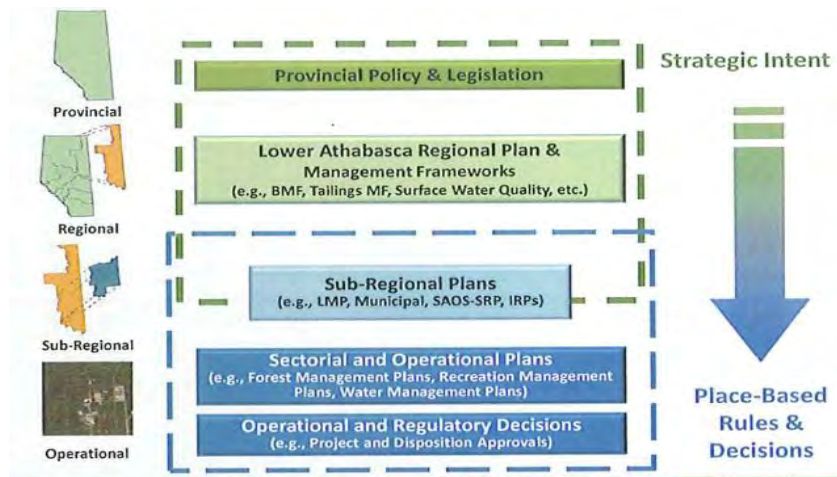
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Weyerhaeuser Pembina Timberlands



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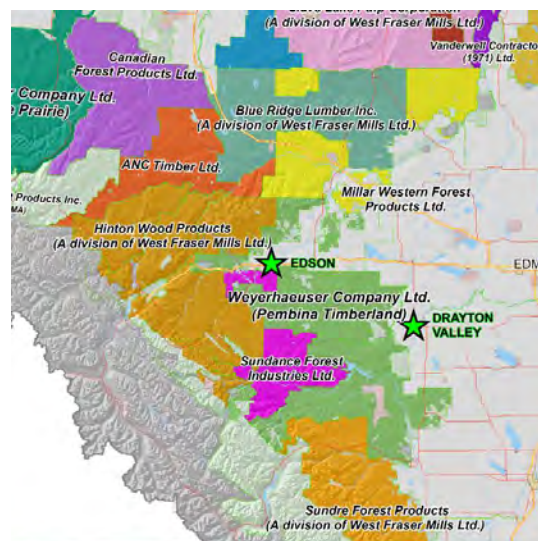
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## Forest Management Agreement (FMA) Areas



6



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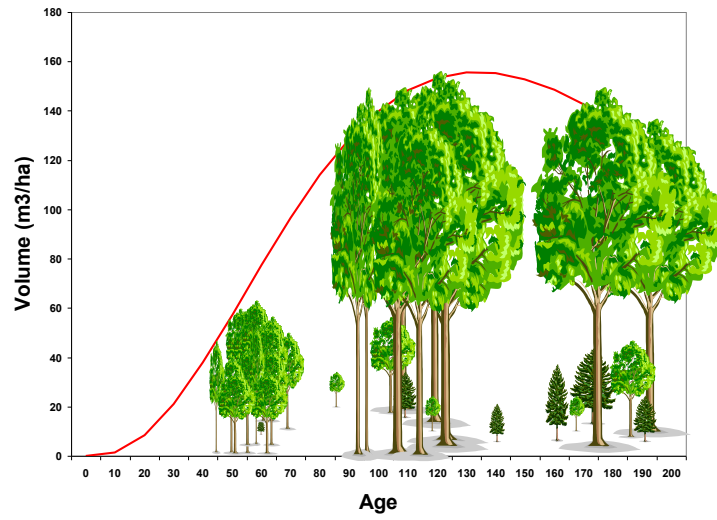
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# Yield

## Stand Level







Weyerhaeuser Pembina Timberlands



**Guide to High Risk Species on the Weyerhaeuser Pembina FMA**

Information presented herein is primarily based on: *Species Accounts for High-Risk Flora and Fauna in Pembina Forest Management Plan*. It is provided as a reference and does not constitute a warranty or any other form of assurance. Weyerhaeuser Pembina Forest Management Plan is subject to change without notice. Please refer to the most current version of the plan for the most up-to-date information.

Prepared by: Wendy Coates - Weyerhaeuser Alberta Timberlands (June 2010)

**Wildlife Conservation & Protection**

**Single Green Tree & Small Clump Retention**

**Single Green Tree Retention**  
 - Retain or salvage trees left standing in the harvested area.  
 - Used primarily where no other options exist.  
 - Higher potential for blowdown but will have biodiversity value.  
 - Patches and clumps are preferred.  
 - After falling to the ground, large decaying logs can provide habitat for a wide range of organisms.

**Small Clump Retention**  
 - Retain to small groups of trees (approx 20) growing together that are left standing, undisturbed, in the harvested area.  
 - Clumps should be distributed throughout the block (where possible).

**Raptor and Songbird Nests**

- Avoid harvest of active songbird and raptor nests.
- Follow regulatory guidelines for collection. See FMA or "Sawflies" section notes.
- Prevent Nesting Season: **ONS Work Instruction**
- Follow retained buffer analysis.

**In Block Retention Visual Examples of 6 - 10%**



## Integrated Land Management



13

## Reforestation



- ✓ All harvested areas are reforested to regulated standards
- ✓ We reforest to the same forest types that are there today
- ✓ Reforestation is monitored for up to 15 years to ensure success
- ✓ We plant over 4 million seedlings annually





### Key Issues Overview

*From the perspective of those seeing what others do in the forest:*

Cause	Effect
Logging	<ul style="list-style-type: none"> <li>➤ Change from old forest to young/new forest</li> <li>➤ Change forest over the landscape</li> <li>➤ Is it reforested, is it sustainable?</li> <li>➤ Wood fibre "waste"</li> </ul>
Roads, pipelines, wells, etc.	<ul style="list-style-type: none"> <li>➤ Removes forest cover / soil, fragments habitat</li> <li>➤ Brings people (hunting, disturbance)</li> <li>➤ Crosses watercourses / watersources</li> </ul>
Motorized recreational vehicle use	<ul style="list-style-type: none"> <li>➤ Brings people (hunting, disturbance)</li> <li>➤ Crosses watercourses / watersources</li> </ul>
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Grazing	<ul style="list-style-type: none"> <li>➤ Forest cover change</li> <li>➤ Domestic animals</li> <li>➤ Brings people</li> </ul>

### Key Issues Overview

*From the perspective of regulators:*

Legislation / Regulation / Policy	Focus
Traditional Use by Aboriginal Peoples	<ul style="list-style-type: none"> <li>➤ Fishing, hunting, trapping, special uses</li> </ul>
Public Lands, Forests, Minerals, PNG, Water, Fish & Wildlife	<ul style="list-style-type: none"> <li>➤ Use of Crown land (commercial &amp; recreational)</li> <li>➤ Use &amp; conservation of natural resources</li> <li>➤ Renewable, sustainable forest resource</li> <li>➤ Forest protection (fire)</li> </ul>
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### Key Issues Overview

*From the perspective of resource managers, scientists:*

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Biodiversity	<ul style="list-style-type: none"> <li>➤ How do you measure it?</li> <li>➤ How do you influence / manage for it?</li> <li>➤ Habitat – fragmentation, patch size, age/type of forest</li> </ul>
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Cumulative effects	<ul style="list-style-type: none"> <li>➤ What are the effects of human developments?</li> <li>➤ How much is too much?</li> <li>➤ <b>How do we manage for multiple users impacts?</b></li> </ul>
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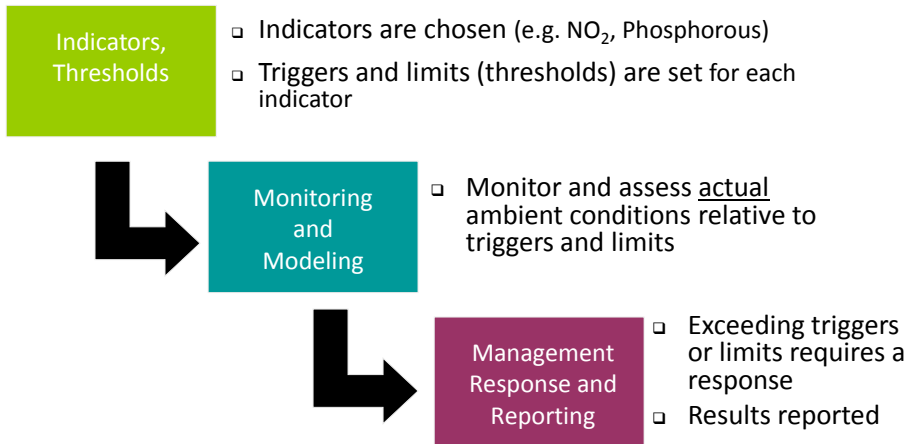
Weyerhaeuser Pembina Timberlands



### On Forest Management:

- What further information would you like to know?
- What concerns, issues or questions do you have that can be addressed in forest management?
- Would you like to be kept informed over time, and if so, how?

## Environmental Management Frameworks – Regional Approach to Cumulative Effects





## **28 Drayton Valley Western Review article summarizing presentation to town council (December 20, 2016)**





## News

# Forest Management Plan presented at Town Council meeting

Justine Kimoden  
Western Review

Strategic Team Lead at Weyerhaeuser Pembina Timberlands Bob Winship was at the Town of Drayton Valley regular council meeting on Nov. 23 as a delegate.

Winship spoke to council about Weyerhaeuser's long-term forest management plan and wanted to get input from town council.

"The purpose of our presentation was to inform the council about Weyerhaeuser company's current work in developing a new long-term Forest Management Plan for our Forest Management Agreement area. This plan will establish the latest goals and strategies to achieve sustainable forest management on the forested areas of public land near the community," said Winship in an e-mail interview. "The forested public lands in the region, also known as the Green Zone, provide many benefits to our local population for environmental, social, and economic purposes. It also represents the source of wood supply for Weyerhaeuser's Drayton Valley Lumber business which is an important employer and contributor to the local economy. Therefore, council may be interested in the Forest Management Plan as it sets forth how sustainable forest management will support these outcomes over the long term. As well, Weyerhaeuser is currently undergoing a public involvement process to ascertain what local stakeholders may have for issues, concerns, or general input."

According to Winship, the Forest Management Plan has three purposes including undertaking inventory, determining conservation and forest protection plans, and establishing a level of sustainable wood supply.

"The Forest Management Plan is a requirement of the province for Weyerhaeuser's Forest Management Area. It sets forth how the forest management area will be managed over the long-term to achieve sustainable forest management as defined by the province, Weyerhaeuser's policy, and an independent environmental certification program that Weyerhaeuser belongs to called the Sustainable Forestry Initiative," he said. "In order to complete the plan, Weyerhaeuser undertakes an extensive inventory of all natural and anthropogenic features on the forest area, determines how the forest is growing and forecasts forest development over 200 year timelines, determines how conservation and protection needs will be met for other resources such as fish, wildlife, water, and biodiversity, and how forest management will integrate with other forest users such as oil and gas, grazing, and recreational uses. And of course, it establishes the level of sustainable wood supply for Weyerhaeuser's manufacturing facilities in Drayton Valley and Edson."

for public members to be aware of Weyerhaeuser's Forest Management Plan as it will affect local municipalities like Drayton Valley.

"These regional plans are significant in that they address some of the biggest environmental, social, and economic challenges for Alberta including that of cumulative effects so it is important for all Albertans to be aware of this initiative and more so as it is supported by legislation," he said. "The province's Regional Land Use planning will look at what types of activities and development should be permitted on public lands in the North Saskatchewan Region over the longer term going forward. It will also establish frameworks for managing for biodiversity, water and land developments that will include how we will meet targets established by the Regional Plan. Thus it is important to our local communities as it will direct such things as natural resource development and municipal planning, while also establishing means to maintain environmental goods and services from public lands."

After the presentation, town council asked questions regarding mountain pine beetle problem, working with off-highway motorized vehicle users, utilization of

woody biomass, and softwood lumber trade issue which were all answered by Winship.

Anyone who may have questions regarding Weyerhaeuser's Forest Management Plan are encouraged by Winship to contact Kerri MacKay at (780)621-5537 or to attend open houses hosted by Weyerhaeuser.

"We would like to hear from those who are interested in, or impacted by, our forest management activities," said Winship. "We are holding public open houses and we have also established a specific stakeholder advisory group."

## FREE HOME EVALUATION



Roger MacKinnon, MRA



**FAMILY BI-LEVEL**  
1150 sq. ft., 4 bedroom, 3 bathroom bi-level located near walking paths and Olympics. 2nd kitchen in the basement. Fully fenced yard with deck.  
E4045836 \$255,000



**WONDERFUL HOME**  
This family home is located less than a block from Aurora School. Beautifully remodelled kitchen, living room with fireplace and massive backyard.  
E4044923 \$314,900



**GREAT HOME WITH SHOP**  
11.77 privately treed acres just 5 miles to town. 1658 sq. ft. home built in 2012. 5 bed, 3.5 bath. Open concept. Walk thru pantry. 54' x 7' shop, large attached garage & oversized triple detached.  
E4045842 \$575,000



**BUILD YOUR DREAM HOME**  
4.99 cleared acres just 5 miles to town off Cynthia Highway on Range Road 80. Perimeter fenced.  
E4045643 \$75,000



Please feel free to contact me anytime, seven days a week, at (780) 621-8900



### Acreage for sale

- Great location only minutes from town. 1.5 Km off pavement.
- 1160 sq ft Ranch Style home built in 2001. 5.05 acres
- 26x30 radiant heated shop
- Open floor plan with 2 bedrooms, 1 bath.
- Large Master and roomy 2nd bedroom.
- Laundry/Utility room
- Fridge, Stove fairly new, dishwasher, microwave, washer + dryer, and all window coverings included. Also large shed with power
- AdvanTex AX-RT sewer system (High Tech)
- This property is subdividable as well.
- A must see with plenty of room to build on as your family grows.

For More information or viewing

780-542-3097

\$334,900<sup>00</sup>

Since 1957  
"The Cattle Capital of Canada."  
**Vold, Jones & Vold Auction Co. Ltd.**  
4480 - Hwy 2A Ponoka AB, Canada T4J 1J8  
Phone 403-763-5521 Fax 403-763-4020 Email [info@vold.com](mailto:info@vold.com)

### Market Report DECEMBER 14, 2016

On Wednesday, December 14, 2016 2190 head of cattle went through our rings.  
TOTAL - 2190

#### SLAUGHTER CATTLE

D1 - D2 Cows .....	\$90.00-\$103.00
D3 - D4 Cows .....	\$80.00-\$91.00
Good Holstein Cows .....	\$80.00-\$88.00
Medium Holstein Cows .....	\$70.00-\$81.00
Heiferettes .....	\$95.00-\$120.00
Bologna Bulls .....	\$95.00-\$107.50
Feeder Bulls .....	\$100.00-\$120.00

#### REPLACEMENT CATTLE

Good Bred Cows .....	N/A
Older Bred Cows .....	\$1,300.00-\$1,500.00
Good Bred Heifers .....	N/A
Cow/Calf Pairs (Younger) .....	N/A
Cow/Calf Pairs (Older) .....	N/A

#### STOCKERS AND FEEDERS CATTLE

Weight	Steers	Heifers
1000 lbs Steers   Heifers .....	\$145.00-\$170.25	\$140.00-\$155.25
900 lbs Steers   Heifers .....	\$150.00-\$168.25	\$150.00-\$163.50
800 lbs Steers   Heifers .....	\$164.00-\$173.75	\$158.00-\$171.50
700 lbs Steers   Heifers .....	\$168.00-\$179.75	\$155.00-\$169.75
600 lbs Steers   Heifers .....	\$177.00-\$196.75	\$158.00-\$170.25
500 lbs Steers   Heifers .....	\$185.00-\$214.00	\$172.00-\$191.00
400 lbs Steers   Heifers .....	\$200.00-\$231.00	\$180.00-\$198.25
300 lbs Steers   Heifers .....	\$200.00-\$241.00	\$190.00-\$205.00

#### DAIRY & CALVES

Dairy Steers .....	\$95.00-\$113.00
Baby Calves (Dairy) \$/Hd .....	\$240.00
Baby Calves (Beef) \$/Hd .....	\$150.00-\$500.00

#### FEED

Hay: Sq. Bales .....	\$6.00 - \$9.50
Rd. Bales .....	\$75.00-\$87.00
Straw: Sq. Bales .....	\$3.00-\$3.25
Rd. Bales .....	N/A
GreenFeed: Sq. Bales .....	N/A
GreenFeed: Rd. Bales .....	N/A





## **29 Forest Management plan presentation to Edson Town Council (December 20, 2016)**





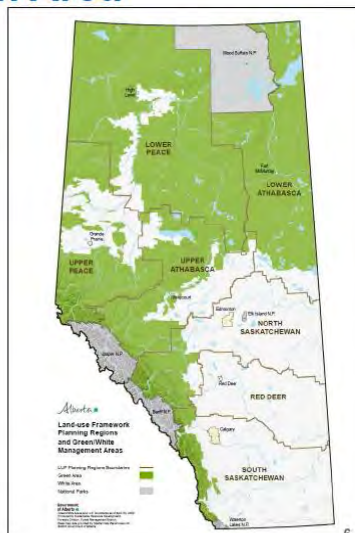


## Weyerhaeuser Pembina Timberlands

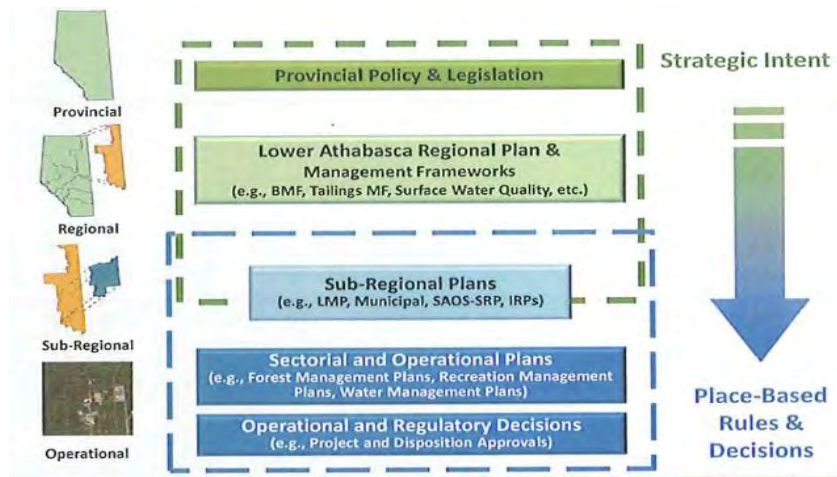


## Alberta's Green Area

- 35.1 million ha
- Shared management responsibility.
  - Land Manager (Environment and parks)
  - Forest Manager (Agriculture and Forestry)



## Alberta Land Use Framework Planning Hierarchy



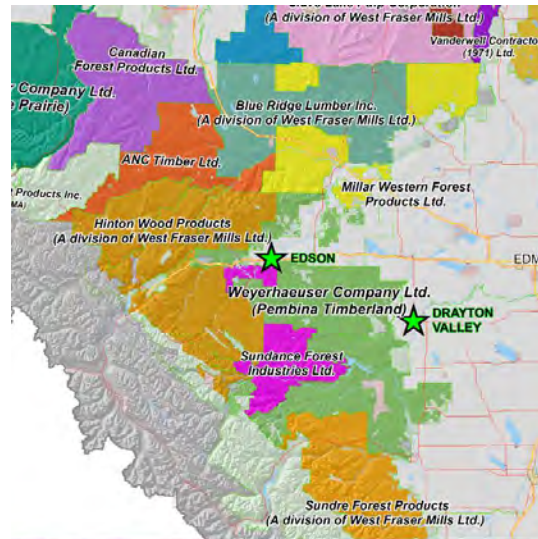
Weyerhaeuser Pembina Timberlands



### Land Use Framework - Regional Plans

- Main strategy under the Land-use Framework Policy
- Define economic, environmental, and social outcomes for a region in relation to land-use
- Align provincial policies related to land/ environment at a regional level
- Environmental Frameworks for each Region (Air, Surface Water, Groundwater, Biodiversity)
- *Addresses cumulative effects, and binds Government to act to thresholds*

## Forest Management Agreement (FMA) Areas



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## Weyerhaeuser Pembina Timberlands



### Forest Tenure

#### Forest Management Agreement:

- Area based, surface rights agreement between Government and Weyerhaeuser (Order-In-Council)
- Rights to establish, grow and harvest forests
- 20 Year renewable agreement subject to terms and conditions
- Minimize impacts of forest management on other resource values and users
- Forecasts future development of the forest over 200+ years
- Indigenous communities, stakeholder and public engagement

6



### Forest Management Plan:

- Long term management of forest vegetation and minimizes impacts of forestry operations on other values and users
- Establishes sustainable forest management, including long term sustained timber yields, based on Government of Alberta standards and international environmental certifications
- Forecasts future forest development at 200 years
- *Sets sustainable timber harvest levels* subject to Government approvals, and 20 year sequencing of where timber harvesting will occur
- Revised every 10 years

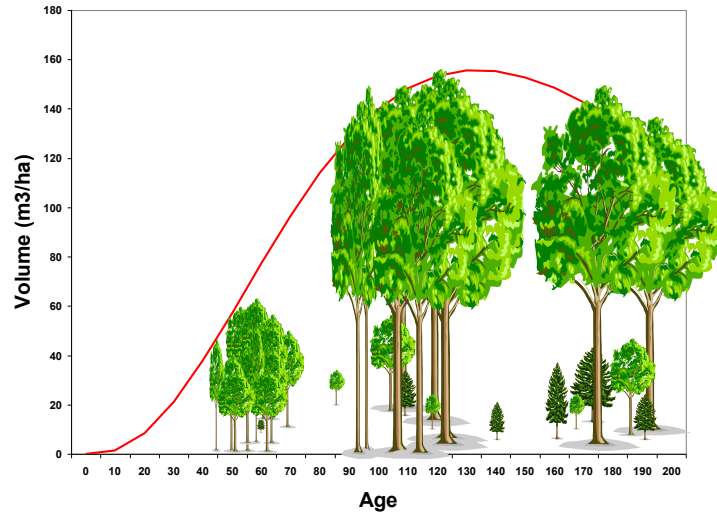
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# Yield

## Stand Level





Weyerhaeuser Pembina Timberlands



**Weyerhaeuser**

### Guide to High Risk Species on the Weyerhaeuser Pembina FMA

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Prepared by: Wendy Coates - Weyerhaeuser Alberta Timberlands (June 2010)

## Wildlife Conservation & Protection

### Single Green Tree & Small Clump Retention

**Single Green Tree Retention**

- Retain to sample trees left standing in the harvested area
- Used primarily where no other options exist
- Higher potential for blowdown but will have biodiversity value
- Patches and clumps are preferred
- After falling to the ground, large decaying logs can provide habitat for a wide range of organisms

**Small Clump Retention**

- Retain to small groups of trees (approx 20) growing together that are left standing, undisturbed, in the harvested area
- Clumps should be distributed throughout the block (where possible)

### Raptor and Songbird Nests

- Avoid harvest of active songbird and raptor nests
- Follow regulatory guidelines for collection: SEE FMA or "Sawflies" chapter page 10
- Follow Nesting Season: CWB Work Instruction
- Follow retained buffer analysis

### In Block Retention Visual Examples of 6 - 10%

Minimum retention: 6-10% (approx. 100 trees)

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## Integrated Land Management



13

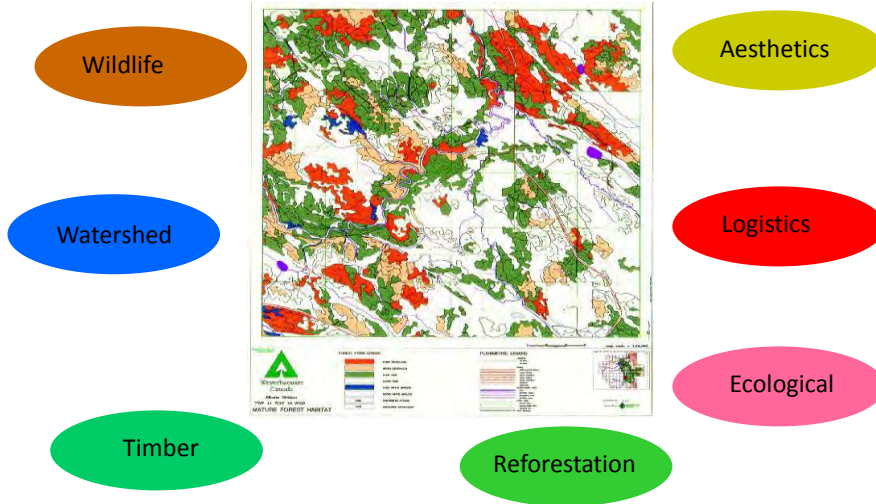
## Reforestation



- ✓ All harvested areas are reforested to regulated standards
- ✓ We reforest to the same forest types that are there today
- ✓ Reforestation is monitored for up to 15 years to ensure success
- ✓ We plant over 4 million seedlings annually



# Harvest Design - Criteria



Getting input & involvement from stakeholders, public and Indigenous communities



### Key Issues Overview

*From the perspective of those seeing what others do in the forest:*

Cause	Effect
Logging	<ul style="list-style-type: none"> <li>➤ Change from old forest to young/new forest</li> <li>➤ Change forest over the landscape</li> <li>➤ Is it reforested, is it sustainable?</li> <li>➤ Wood fibre "waste"</li> </ul>
Roads, pipelines, wells, etc.	<ul style="list-style-type: none"> <li>➤ Removes forest cover / soil, fragments habitat</li> <li>➤ Brings people (hunting, disturbance)</li> <li>➤ Crosses watercourses / watersources</li> </ul>
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*From the perspective of regulators:*

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### Key Issues Overview

From the perspective of resource managers, scientists:

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Biodiversity	<ul style="list-style-type: none"> <li>➤ How do you measure it?</li> <li>➤ How do you influence / manage for it?</li> <li>➤ Habitat – fragmentation, patch size, age/type of forest</li> </ul>
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Weyerhaeuser Pembina Timberlands



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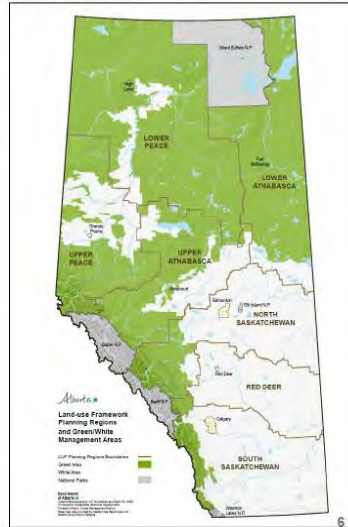
## **30 Forest Management plan presentation to Pembina Area Synergy Group (September 22, 2016)**





## Alberta's Green Area

- 35.1 million ha
- Shared management responsibility.
  - Land Manager (Environment and parks)
  - Forest Manager (Agriculture and Forestry)



1



## Forest Tenures

- **Forest Management Agreement (FMA)**
  - Area based agreement
  - Negotiated between Government and Company
  - 20 year term – can be renewed every 10 years
  - Company responsible for forest management planning.

2



## Forest Management Planning Hierarchy



3



### Forest Management Plan:

- Long term management of forest vegetation and minimizes impacts of forestry operations on other values and users
- Establishes sustainable forest management, including long term sustained timber yields, based on Government of Alberta standards and environmental certifications
- Forecasts future forest development at 200 years
- Sets timber harvest levels subject to Government approvals, and 20 year sequencing of where timber harvesting will occur
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4

Weyerhaeuser Pembina Timberlands – Pembina Area Synergy Group  
 Presentation on Forest Management Planning – Sept 22/17



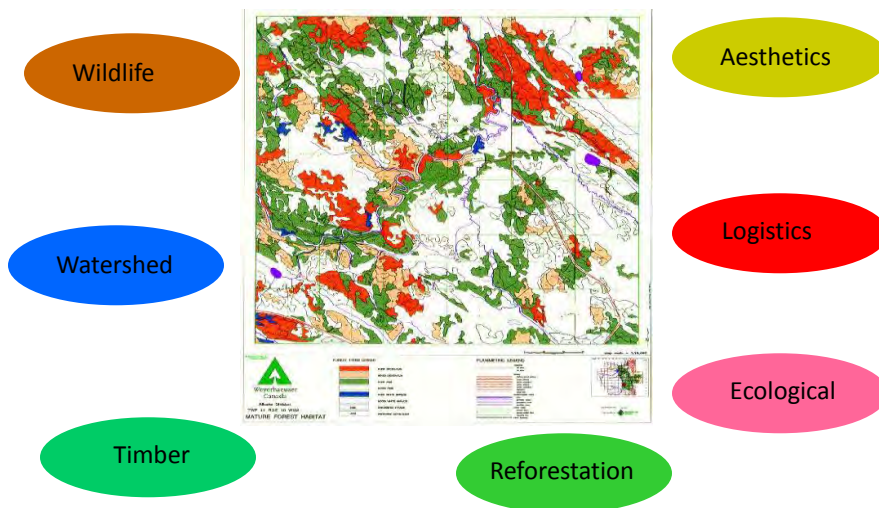
**Forest Management Planning Hierarchy**

The Planning Process includes four main components



5

How do we decide where & when to harvest timber?





Weyerhaeuser Pembina Timberlands – Pembina Area Synergy Group  
 Presentation on Forest Management Planning – Sept 22/17



**Public Participation Process**



- Broad representation of local public and interests groups
- Final proposed FMP is made available for review through the Public Participation Process

1908 – Regenerating Lodgepole Pine (Archive photo)



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Weyerhaeuser Pembina Timberlands – Pembina Area Synergy Group  
 Presentation on Forest Management Planning – Sept 22/17

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Weyerhaeuser Pembina Timberlands – Pembina Area Synergy Group  
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- 
- ❖ **How can we get input and involvement in forest management from upstream oil & gas developers and operators?**
  
  - ❖ **What are potential issues, concerns, or needs from upstream oil & gas operators related to forest management operations?**
  
  - ❖ **How can we maintain communications and relations with upstream oil & gas operations on forest management activities?**

## **31 Meeting notes from presentation to Pembina Area Synergy Group (September 22, 2016)**



Weyerhaeuser Pembina Timberlands  
Presentation on Forest Management Planning  
Presented by: Bill Taylor  
Presented to: Pembina Area Synergy Group  
Date: September 22, 2016  
Place: C.E.T.C, Drayton Valley, AB

Bill introduced himself to the group as one of the three operational planners in the Weyerhaeuser Pembina group, and he encouraged those present to feel free to ask questions throughout the presentation.

Bill opened the presentation by defining Alberta's green area, and then discussed forest tenures. The Forest Management Agreement (FMA) is an area based agreement between the Government of Alberta and a forestry company granted for a 20 year term, which can be renewed every ten years. Weyerhaeuser is one of many FMA holders in Alberta, and as an FMA holder, Weyerhaeuser is responsible for the forest management planning in its FMA on behalf of the province. This management process occurs through a hierarchical plan structure with four main components. The Forest Management Plan is a long term strategic level plan. The General Development Plan, the Forest Harvest Plan, and finally the Annual Operating Plan are all operational components. The AOP, once approved by the province, gives Weyerhaeuser the authority to harvest timber in that year. Bill pointed out that many people believe that the FMA is granted for a very long term, such as 100 years, and he reiterated that in reality the FMA tenure is for a much short period of 10 years but renewable.

Forest management planning focuses on the long-term management of forest growth, which includes minimizing the impact of logging operations and ensuring long-term timber yields. The annual operational planning starts 1 to 2 years in advance of the actual harvest. Approvals to build roads is another regulated process, so in effect there are two separate approval processes required through 2 separate governing bodies. Future forest development is forecast out for 200 years, and the industry has to understand how the forest grows so that it can ensure sustainability. Bill pointed out that the amount of forest growth cannot be reduced through logging operations. Every hectare cut must be reforested.

Bill added that the logging industry cannot always do what is the most economical in any given year because of long term modelling. For example, trees cannot all be taken from the closest blocks in one year as that would mean that in subsequent years all trees would come from further down the line, and so on. The planning of a harvest area involves many factors besides logistics, such as the impact on wildlife, watersheds, and the ecology. Further considerations are aesthetics, forest health concerns, and future reforestation.

Bill spoke to the impact of the amount of land taken out of production by other industry. Oil field roads, well-sites, and other oil & gas industry development have reduced timber producing land by about 1% annually. This has a significant impact on the annual allowable cut, particularly when the cumulative effects are considered over the years. So, oil and gas activity does impact forestry, and Bill suggested

that there is an opportunity for synergized efforts between the forestry and oil & gas when it comes to forest management planning and land use management in general.

Eric Berg (AER) said that the presentation has already dispelled “coffee shop” talk that says the forestry industry is not well-regulated. It is obvious that this is false. Bill agreed, and said that there is in fact rigorous planning and regulation involved in forestry. Bill is already working on 2017-2018 harvest plans. The public participation process, therefore, has to start in advance of the actual cut. Weyerhaeuser does have a public consultation process in place where the Forest Management Plan is made available for review. There is also a Stakeholder Advisory Group made up of a broad range of interest groups and primary stakeholders on the land base.

Shane Kos (Baytex) asked if First Nations are involved in the public consultation process at all. Bill said that the consultation process for First Nations peoples is a bit different, as it happens at the 5 year sub-regional plan level, where input is sought and areas of concern are addressed. He said that there can be a second round of consultation if specific issues crop up closer to harvest time. First Nations communities are also asked for input and insights to longer term forest management planning.

Shane Kos (Baytex) said that the perception is that the oil and gas industry does a better job at reclamation than does the forestry industry. He said that the big stumps left everywhere on a logged out site look messy, while reclaimed oil & gas sites planted with grass or grass-like materials do not. Bill explained that while reclaimed oil and gas sites may look better initially, and the planted materials do provide immediate erosion control, the replanted areas do not replicate the naturally occurring diversity of the original habitat. Grizzly bears, for example, do not like open areas and depend on forest cover. Reclaimed logging sites are designed to regrow what was originally there, and while the stumps may look messy, they provide the necessary bio-matter to support natural regrowth. He said that there is a staggering difference between a newly cut block and a block that has had five years to regenerate after being harvested.

Tim Garant (sp?) (Trican) asked how Weyerhaeuser decides where to reseed and whether the forestry industry ever leaves abandoned sites. Bill said all areas harvested for timber, and any related land disturbances, must be reforested by Weyerhaeuser. The amount of timber Weyerhaeuser is allowed to harvest is dependent on how well the next forest grows, so forest operators are incented to ensure a new forest is growing back promptly. How we reforest depends on the type of stand that was harvested, and the same type of forest stand will be replaced. It goes then that Weyerhaeuser would also like to see all abandoned land use sites be reclaimed to forest growth.

Mark Smith (MLA) asked if off-highway vehicles are a problem. Bill said that any degradation to forest soils impacting tree growth, potential sedimentation from stream crossings, and wildlife disturbances are issues with all people activities in the Green Zone. Weyerhaeuser supports a more landscape look at trail development to find the best locations for OHV use, and the subsequent management of users on designated trails. Alberta Environment and Parks offered to speak to the matter when the group reverts back to the regular meeting.

The main questions for consideration today are:

1. How can Weyerhaeuser get input and involvement in forest management from upstream oil & gas developers and operators?
2. What are potential issues, concerns, or needs from upstream oil & gas operators related to forest management operations?
3. How can Weyerhaeuser maintain communications and relations with upstream oil & gas operations on forest management activities?

As an example, Bill said that there had been a designed cut block that had been discovered to be a Grizzly bear habitat. This was taken into serious account when the harvest plan was designed. The design made use of lots of “edge effect” to provide forest cover for the bears. The access to the harvest area was also carefully planned to cause minimal upset, and the road was reclaimed as quickly as possible to prevent human intrusion into the area. However shortly after this, the oil & gas industry applied to go into this area and a road access was granted that ran straight through the block, after the forestry road had already been reclaimed. This makes the Grizzly more visible and susceptible to poachers, and a road was put in where one had just been taken out.

Bill said this would not have been the fault of the oil & gas industry, as approvals to operate in an area are granted through a different governmental entity. However, he did think that an opportunity for collaboration between oil & gas and forestry had been missed. This example illustrates the need to foster a relationship with the oil & gas industry, and it highlights the importance of working together on a more defined process as it relates to forest management activities.

Rick commented that this is a big topic to cover, which could use a couple of more hours of discussion. As the allotted time was up, he thanked Bill for the presentation, and said the group looks forward to connecting with Weyerhaeuser in the future. Bill thanked the Chairperson and said that Weyerhaeuser would be happy to come back for further discussion and interaction with the Pembina Area Synergy Group.





## **32 Meeting notes from presentation to Pembina Area Synergy Group (November 24, 2016)**



Presentation Notes re: Q & A

Bill Taylor had been invited back as a follow up to his presentation of September 22, 2016, which focused on the Detailed Forest Management Plan. Bill gave a further presentation overview of Forestry Management, and gave an opportunity for any remaining questions regarding the DFMP to be addressed. The following summarizes questions asked during the presentation, and the answers that were provided.

*Question: Trina Wakelin (...) asked how often the Detailed Forest Management Plan is prepared. Bill advised that the plan is revised every 10 years. She asked if she was correct in her understanding that stakeholder engagement is sought on the 1 year plan (Annual Operating Plan).*

There is one on one engagement on the AOP with affected stakeholders, such as trappers and land owners. There is also opportunity for stakeholder input on the Detailed Forest Management Plan, and there is an existing Stakeholder Advisory Group. Bill noted that there is also an Open House today at the Best Western Hotel in Drayton Valley from 3:00 p.m. to 7:00 p.m.

*Question: Charlie Martin (Landowner) asked if Pipeline Right of Ways are reforested.*

Weyerhaeuser has to work with the Alberta Energy Regulator to ensure that there is no chance the pipelines will be reused in the future before they are reforested.

*Question: (Rep, Secure Energy) asked if existing regulations allow for reclaimed leases that are grassed to be reforested, and who would grant permission for that to happen.*

It depends on who owns the lease. If there is an existing reclamation certificate, Weyerhaeuser would apply to the Province, otherwise Weyerhaeuser would deal with the owner of the lease. There can also be challenges if there is no record of ownership on older leases that have been sitting for many years.

*Question: (Rep, Secure Energy) asked how big the Permanent Sample Plot that is left in a harvested area would be.*

PSPs are 100 metres X 100 metres (1 hectare) in size.

*Question: Deb Bossert (Councillor, Town of Drayton Valley) asked why there is a requirement to leave 3% of a block unharvested.*

3 to 5 % is left to ensure as a reflection of how forest fires might leave islands of retained live trees, which in turn can become refuges for various organisms or small habitats. There

will be larger areas of cover left for special habitat concerns such as nesting sites or mineral licks.

*Question: Trina Wakelin (Community) asked how a buncher operator would know where not to fell trees within a block to accommodate the PSP and 5% Retention areas.*

The block is marked off with biodegradable ribbon to show where the PSP should be left, and the perimeter of the block is marked off, as well as any buffered areas. The retention patches in the DV area is chosen by the well trained buncher operators, and are generally left to protect water ways.

*Question: (...) asked what happens after a forest fire to a block that is planned to be harvested?*

The area would be surveyed and evaluated after a fire to see which stands are still harvestable. As much wood as possible would be salvaged, and any areas where salvaging was undertaken would be reforested. Industry and Government will also work together to ensure otherwise burned areas are reforested if nature is not doing so well.

*Question: Kirk Albertson (...) asked if Mountain Pine Beetle is an issue in this area.*

Yes, Mountain Pine Beetle has to be managed in this area, and the DMFP was amended in 2007 to reflect the healthy pine strategy. The area around DV has not been as badly affected as some other areas in the Province, such as Grande Prairie or Fox Creek.

*Question: (...) asked how trees are replanted.*

Cones are collected from an area, and they are sent away to a facility where the seeds are extracted. These seeds are germinated and planted at a greenhouse facility. Tree planters are then hired to hand plant the seedlings in the area where the seeds came from.

*Question: (Secure Rep) asked how the carbon tax will affect Weyerhaeuser's operations. Are enough trees planted to provide sufficient carbon offset?*

We don't know yet, but Weyerhaeuser planted just over 4 million trees in this area during the summer of 2016. At present, there is no model or policy to account for carbon off-sets from forest management.

*Question: Deb Bossert (Councillor, Town of Drayton Valley) asked how long Weyerhaeuser has to replant a cut block.*

Pembina Area Synergy  
Meeting Held November 24, 2016  
Trican Office, Drayton Valley, AB

Trees must be replanted within 2 years from the time a block is skid cleared. Brush piles must be burn within 12 months as per the new Prairie Protection Act, which came into effect a month ago.

*Question: Eric Berg (AER) asked what one or two issues would Weyerhaeuser like to see brought to the oil and gas industry representatives for discussion.*

Consultation to review the oil and gas industry's plans for roads and pipelines over the next upcoming 18 months would be beneficial, as there may be opportunities to collaborate and cost share on roads. It would also be beneficial to consult and collaborate on reclamation plans, and ultimately to reduce the overall footprint.

*Question: Benjamin Misener (Brazeau County) asked if Weyerhaeuser consults with municipalities on the DFMP.*

Presentations on the forest management plan have been made to all Councils, and the offer for further involvement has been made. Some of Weyerhaeuser's involvement with municipalities relates to negotiating Road Use Agreements. The forest management plans, however, are posted on-line and are available for any public viewing, and anyone can call the Weyerhaeuser office at any time with any questions they may have on the Detailed Forest Management Plan.



## **33 Stakeholder Advisory Group (SAG) Meeting 1 notes (July 6, 2016)**





# NOTES

## Event Information

**Description:** SAG Meeting Notes(#1)  
**Date & Time:** July 6th, 2016; 4:00 PM to 8:30 PM  
**Location:** Drayton Valley, Best Western Plus Executive Residency 2252 50<sup>th</sup> St, Drayton Valley, AB  
**Organizer:** Weyerhaeuser Pembina Timberlands

## Invitees & Affiliation

Paul Scott, Weyerhaeuser – FMP Coordinator	Ron Moss, Fish and Game Association - regrets
Bob Winship, Weyerhaeuser - Facilitator	Rick Stelter, Trappers Association - regrets
Kerri MacKay, Weyerhaeuser – Meeting Administrator	Dennis Poissant, ATV and Snowmobile - regrets
Stephen Mills, GOA	Percy Campbell, ATV and Snowmobile ALT
Trisha Stubbings, GOA	Cecil Anderson, Grazing
Eric Berg, AER	Mary Ellen Shain, NSWA - regrets
	Kara Westerlund, Brazeau County

## Notes

- Meeting was brought to order, note attendance captured above. Those unable to attend to have session scheduled to ensure content covered.
- Welcome address by Bob Winship included a slight reorder of the agenda to accommodate smoother facilitation.
- Round table and introductions completed.
- Terms of reference, disbursement process and meeting logistics reviewed by Kerri MacKay.
- Issues of the Day Past discussion facilitated by Bob Winship, results captured below.

Key Issue groupings that were heard are:

- Water
  - Is forestry less regulated than oil & gas?
  - What's the science around impacts of logging on watersheds? What is monitored, inspected, how do you know?
  - Watercourse protection
- Protection / conservation
  - What's out there for protection & conservation areas? Is there a general west to east pattern?
  - How are natural resources protected from logging? Example of a wildlife lick being logged over.
- Cumulative effects / land use impacts
  - How much is going on out there, and what's the overall impact?
  - What's "natural"? How much is too much?
  - Young vs. old forest? Is our reforestation working?
  - Recreational vehicle use – some controls are warranted, where can / should we go?, industry's role, rural vs. urban population perspectives

- Should we be doing more reclamation? What is getting reclaimed?
- How do us locals influence upwards in Government? Regional land use plan?
- Getting input and perspectives from stakeholders
  - What have we learned from stakeholders such as grazing operators in the past, and how to use that to engage more going forward
  - Maybe Weyerhaeuser should suggest our approaches for a critique or prompt for better ideas
- Misc.
  - Do we reforest, how, does it work, etc.
  - Getting more cooperation from timber operators with oil & gas e.g. salvaging
  - Forestry is not well communicated with public
- The topics described will be utilized to guide, however not limit the agenda development for the remainder of the meetings in the process. Items may be added and reordered to accommodate the desires of the membership, the consultation requirements facing the company, and the evolution of the process.
- The remainder of the meeting was comprised of several presentations provided by Paul Scott including a detailed review of forest legislation, policy and tenure as well as one focused on the concepts guiding the calculation of sustained yield.
- Bob facilitated an interactive discussion on how to improve the quantity and quality of stakeholder engagement. It was emphasized that the group present was requested to offer advice from their individual and personal perspectives in their respective areas of interest, but with no expectations to represent the perspectives of other stakeholders in those same areas of interest. Thus the additional advice sought is how best to reach out for perspectives from others in those interest areas. It was agreed that this was a challenge across the representation.

## Action Items

- Stephen Mills to bring photos from mountain legacy program.
- Weyerhaeuser to create a curriculum of topics based on interests and areas of concern of the membership and provide at the next meeting.
- Weyerhaeuser to circulate meeting materials digitally after the meeting.
- Next meeting to be scheduled third week of August.

## **34 Stakeholder Advisory Group (SAG) Meeting 2 action items (August 24, 2016)**



## Action Items from Meeting #2

Below is a listing of the action items captured during Meeting #2.

- Curriculum Review

Weyerhaeuser to edit curriculum to include :

- Habitat impacts on ungulates versus focus solely on Species of Concern
- Habitat impacts on furbearers, access requirements and other impacts on trapping / trappers
- Forest health particularly Mountain Pine Beetle

- Grazing Timber Agreement Discussion

What is difference in responsibility for weed control when dealing with a license versus a permit ? (GOA)

Weyerhaeuser to discuss herbicide use and potential effect of moving wildlife habitat by its effect on changing forest structure

- Forest Management and Watersheds

GOA to provide a summary sheet of the regulatory review provided at the meeting.

- Consultation and Engagement within the DFMP

Each SAG member was encouraged to continue with recommendations on how the forestry sector can engage with them on forest management e.g. attend Brazeau ATV Club poker rally to provide information, utilize the local Synergy group to connect with Green Zone oil & gas operators, presentation to County Council on water resources, etc.



## **35 Stakeholder Advisory Group (SAG) Meeting 3 notes (September 14, 2016)**





# AGENDA

## Event Information

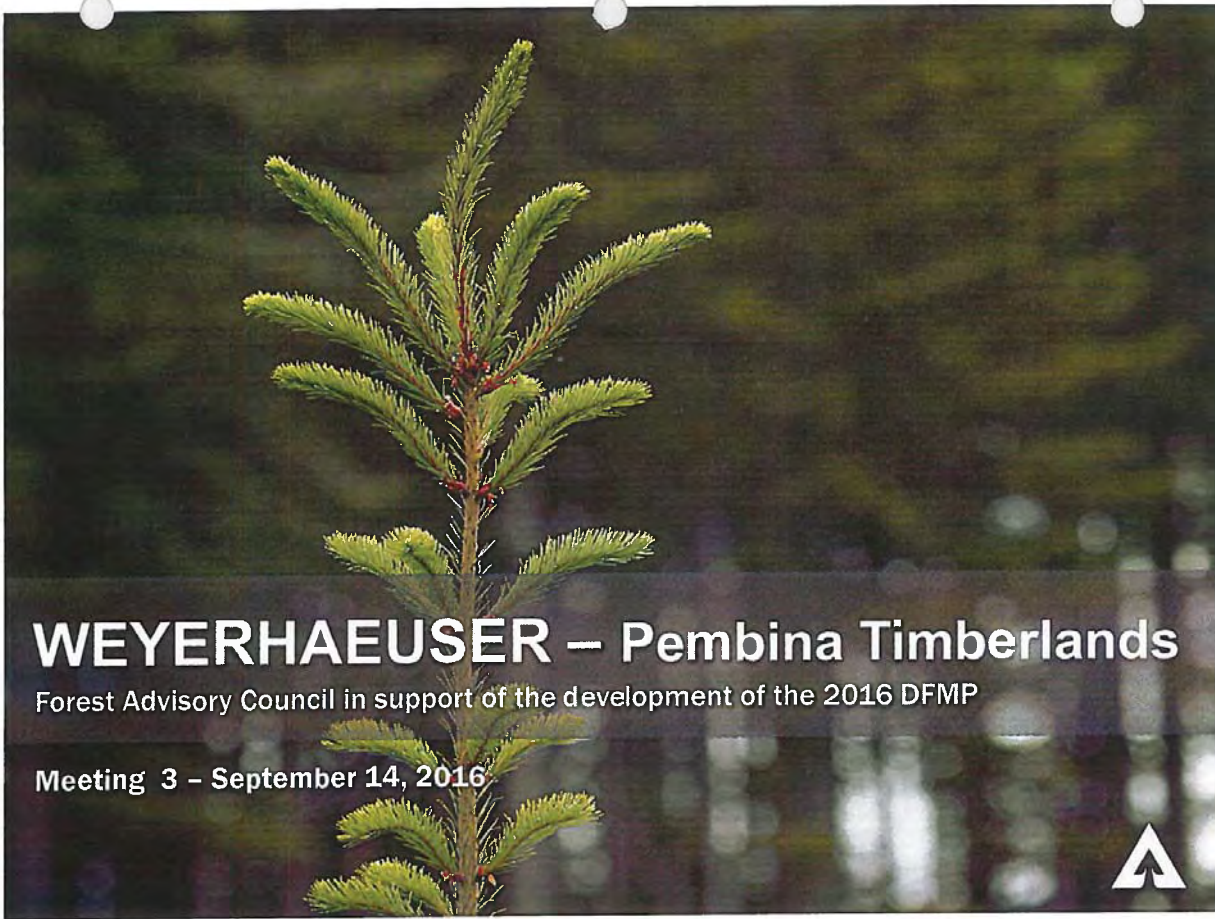
**Description:** SAG Meeting Agenda (#03)  
**Date & Time:** September 14, 2016; 4:00 PM to 8:30 PM  
**Location:** Drayton Valley, Best Western Plus Executive Residency 2252 50<sup>th</sup> St, Drayton Valley, AB  
**Organizer:** Weyerhaeuser  
**Objective:** Third meeting of the Weyerhaeuser Stakeholder Advisory Group for the Pembina Forest Management Plan

## Invitees & Affiliation

Paul Scott, Weyerhaeuser -Facilitator	Ron Moss, Fish and Game Association ✓
Bob Winship, Weyerhaeuser - Facilitator	Rick Stelter, Trappers Association ✓
Kerri MacKay, Weyerhaeuser – Meeting Administrator	Dennis Poissant, ATV and Snowmobile
Stephen Mills, GOA	Percy Campbell, ATV and Snowmobile ALT ✓
Trisha Stubbings, GOA ✗	Cecil Anderson, Grazing ✓
Eric Berg, AER	Mary Ellen Shain, NSWA ✓
Kara Westerlund, County of Brazeau	

## Agenda Items

Agenda Items	Presenter	Length
1. Welcome Address	Bob Winship	15 min
2. Review Agenda	Kerri MacKay	5 min
3. Action Item Review	Kerri MacKay	15 min
4. Report Out on Consultation	Paul Scott	30 min
5. Supper – 5-5:30 pm	All	30 min
6. Cumulative effects – What is Natural ?	Bob, Paul, Kerri	120 min
• Policy		
• Natural Range of Variation		
• Integrated Landuse Management		
• Landbase Definition		
7. Next Meeting Schedule – Field Trip	Kerri MacKay	30 min
8. Adjourn		



# WEYERHAEUSER – Pembina Timberlands

Forest Advisory Council in support of the development of the 2016 DFMP

Meeting 3 – September 14, 2016



## Agenda – Meeting #3



Agenda Items	Presenter	Length
1. Welcome Address	Bob Winship	15 min
2. Review Agenda	Kerri MacKay	5 min
3. Action Item Review	Kerri MacKay	15 min
4. Report Out on Consultation	Paul Scott	30 min
5. Supper – 5-5:30 pm	All	30 min
6. Cumulative effects – What is Natural ?	Bob, Paul, Kerri	120 min
• Policy		
• Natural Range of Variation		
• Integrated Landuse Management		
• Landbase Definition		
7. Next Meeting Schedule – Field Trip	Kerri MacKay	30 min
8. Adjourn		



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# Action Item Review

30 min  
Kerri MacKay



- Curriculum Review

Weyerhaeuser to edit curriculum to include :

Habitat impacts on ungulates versus focus solely on Species of Concern  
Habitat impacts on furbearers, access requirements and other impacts on trapping / trappers  
Forest health particularly Mountain Pine Beetle

- Grazing Timber Agreement Discussion

What is difference in responsibility for weed control when dealing with a license versus a permit ? (GOA)

Weyerhaeuser to discuss herbicide use and potential effect of moving wildlife habitat by its effect on changing forest structure

- Forest Management and Watersheds

GOA to provide a summary sheet of the regulatory review provided at the meeting.

- Consultation and Engagement within the DFMP

Each SAG member was encouraged to continue with recommendations on how the forestry sector can engage with them on forest management e.g. attend Brazeau ATV Club poker rally to provide information, utilize the local Synergy group to connect with Green Zone oil & gas operators, presentation to County Council on water resources, etc.





- A grazing disposition holder (FGL, GRL, FDL, GRP etc.) has the same obligations as a private land owner and industry. Under the weed act ALL occupants are to be controlling weeds
- If someone has a compliant they are best to contact the county as they are the ones that can enforce the Weed Control Act.

## GOA Regulatory Review Highlights- Stephen Mills



### Water and Alberta Legislation

#### Provincial:

1. **Water Act** – Deals with the conservation and management of water will allowing for allocation of water resources. Deals with both surface and subsurface water.
  - a. **Code of Practice for Water course Crossings** – provides guidance on appropriate crossing structures and timing requirements to cross water bodies as defined.
  - b. <http://aep.alberta.ca/water/legislation-guidelines/default.aspx> There are many subject specific regulations/standards enabled by this Act
2. **Forest Act** – Allows for the management of forests and timber within Alberta
  - a. Enables the **Timber Management Regulation** which provides the details on what is required to harvest timber and allows for the establishment of rules to follow
    1. [http://www.agriculture.alberta.ca/ago21/forestrypage?cat1=Forest Management&cat2=Forest Management Manuals %26 Guidelines](http://www.agriculture.alberta.ca/ago21/forestrypage?cat1=Forest%20Management&cat2=Forest%20Management%20Manuals%26%20Guidelines)
    2. Has specific legislation around protection of water.
  - b. [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/acts15898](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/acts15898) enables other rules and manuals required for operations.
3. **Environmental Protection and Enhancement Act** – dealing the allowable limits of contamination and pollution on land, in water and in air.
  - a. Also deals with Herbicide Application and allowable requirements.
4. **Public Lands Administration Regulation** – allows for the management and administration of public lands in Alberta. Deals with surface access only and does not confer mineral rights.
  - a. Bed and shore of all water bodies are included and protected under this legislation.
  - b. Allows for the establishment of Public Land Use Zones
5. **Alberta Forest Prairie Protection Act** – deals primarily with wildfire risk and management in Alberta
  - a. Enables the **Forest Prairie Protection Act Regulations**. Pollution of Water is enforceable under these regulations.
6. **Mines and Minerals Act** – deals with the development of subsurface mineral rights. Mostly oil and gas or mining focused.
  - a. Allows for the establishment of rules around drilling of wells, seismic programs and conservation/reclamation plans.
  - b. Usually requires surface access via a disposition under the **Public Lands Administration Regulation** or private landowner consent.

#### Federal Legislation:

**Fisheries Act** – deals with known and potential fish habitat within Canadian waters.

**Navigable Protection Act** – deals with movement along water corridors and crossings.

## Report out on Consultation of the FMP – Other than First Nations



- Facebook page set up
  - Opportunity to add links to other Facebooks – i.e Brazeau ATV club, Edson Fish and Game Association – advertise activities of both parties
- Descriptive one-pager as an insert or mailout to be developed this fall
- Develop mailout lists for stakeholder and other groups – with help from SAG membership lists
- Open houses in Drayton, Edson and Rocky, likely in October and mid-winter
- Opportunities for sessions with primary (SAG groups) and secondary stakeholder (municipal governments) groups upon request by Weyerhaeuser or the stakeholder
- Utilize local synergy group to connect with green zone operators
- Opportunities to interact with SAG group activities where potential benefits exists

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## Report out on Consultation Activities – First Nations



- Initiation of FMP occurred on September 11<sup>th</sup>, 2015 to following First Nations – Alexander, Alexis, O’Chiese, Paul, Sunchild, Stoney Bearspaw, Stoney Chiniki and Stoney Wesley
- Little feedback; did meet with the O’Chiese FN on September 18<sup>th</sup>, 2015 in an attempt to address concerns, opportunities to be involved in the FMP
- VOITs package sent out to FNs on April 15, 2016 – subsequent meeting with Alexander, Alexis, O’Chiese, Paul and Sunchild
- Most issue evolve around socio-economic values, and industrial footprint on the landscape and impact that is having on FN Treaty Rights; no suggested changes to 34 Provincial VOITs
- Next consultation package will be the draft version of the Preferred Spatial Harvest Sequence (SHS) - likely late fall/early winter

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# Supper



30 min

Weyerhaeuser Pembina – Stakeholder Advisory Group Presentation  
What's Natural? Cumulative Effects?



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## Perspectives:

- Province of Alberta – Regional Land Use Plan
- Forestry – natural disturbances vs. forest management
- Footprint / footstep - anthropogenic impacts

## **Alberta Land Stewardship Act (ALSA)**

### **➤ Regional Plans**

- Binding, superceding
- Deal with conflicts, issues, variances
- Compensation

### **➤ Conservation and Stewardship**

- Tools (MBI, off sets)
- Easements, directives

### **➤ Private land respect of rights vs. good of society**

## **Public Lands Administration Regulation**

- **Complex, comprehensive, GOA empowering**
- **Enforcement**
- **Recreation constraints**
- **AER alignment**
- **Forestry reg losses**



## Land Use Framework

**Vision – “Albertans work together to respect and care for the land as the foundation of our economic, environmental and social well-being”**

**Desired Outcomes –**

- **“Healthy economy supported by our land and natural resources**
- **Healthy ecosystems and environment**
- **People-friendly communities with ample recreation opportunities and cultural opportunities”**

## Land Use Framework (cont'd)

**Principles:**

- **Accountable and responsible**
- **Supported by a land stewardship ethic**
- **Collaborative and transparent**
- **Integrated**
- **Knowledge-based**
- **Responsive**
- **Fair, equitable and timely**
- **Property rights and Aboriginal rights**

## Land Use Framework (cont'd)

### Strategies:

- 7 Regional Land Use Plans
- Land Use Secretariat and Regional Advisory Councils
- Cumulative effects management
- Conservation and stewardship on all lands
- Efficient use of land and minimize footprint
- Information, knowledge, monitoring and PDCA
- Inclusion of Aboriginal people

## Regional Plans

- **Main strategy under the Land-use Framework Policy**
- **Define economic, environmental, and social outcomes for a region in relation to land-use**
- **Align provincial policies related to land/environment at a regional level**
  - E.g. *Clean Air Strategy, Energy Strategy, Water for Life Strategy*
  - Plans will express appropriate regional integration of various policies based on unique regional circumstances
- **Environmental Frameworks for each Region (Air, Surface Water, Groundwater, Biodiversity)**

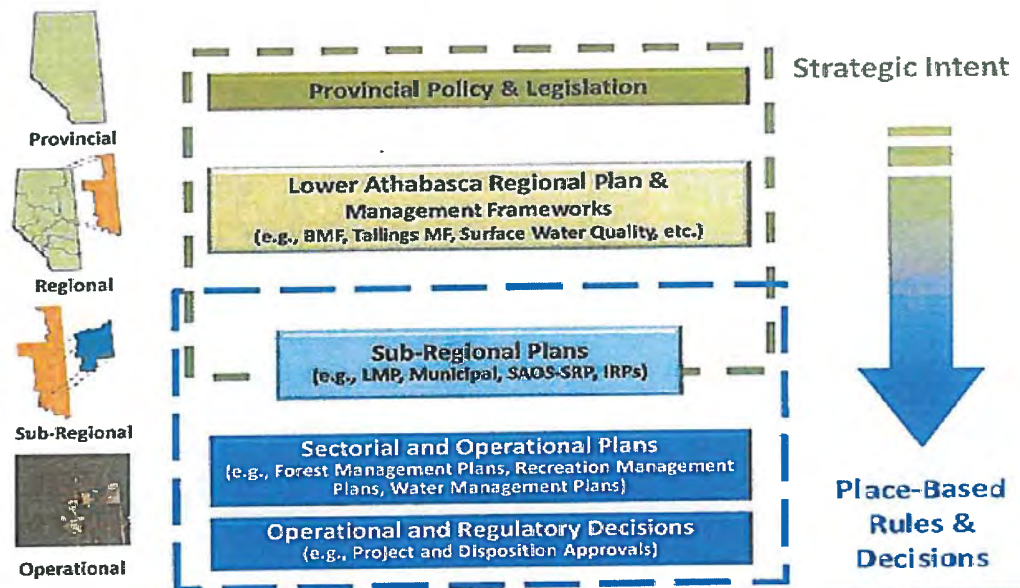
## North Saskatchewan Regional Plan

### Key Issues:

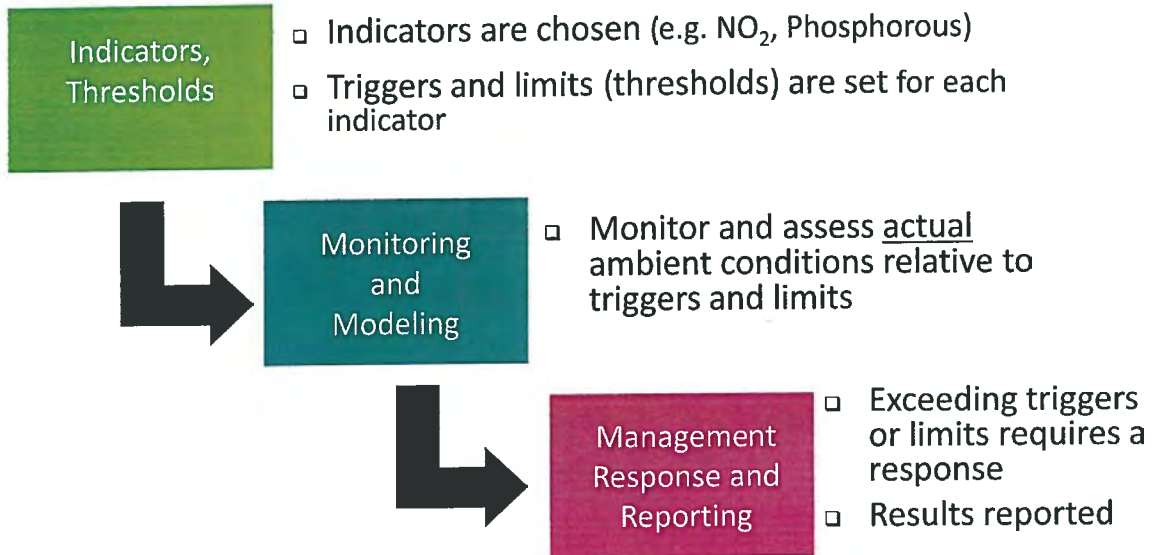
- Maintain Industrial Heartland while balancing environmental impacts
- Maintaining viable agriculture landbase vs. expanding urban areas vs. declining rural populations
- Managing biodiversity impacts & human footprint
- Healthy lakes, wetlands management
- Recreation & tourism priorities

### Pembina Timberlands – LUF and NSRP

## Planning Hierarchy



## Environmental Management Frameworks – Regional Approach to Cumulative Effects



### Pembina Timberlands – LUF and NSRP

#### CE Management example:

Level	Description	Management Intent & Potential Response
<b>Level 3</b>	Exceedance of water quality limits.	Mandatory management action.  Regulatory approach to reduce emissions (eg. restricted approvals, mandatory plans)
<i>Limit</i>		
<b>Level 2</b>	Exceedance of water quality triggers.	Enhanced monitoring to investigate or verify causes and effects.  Additional management responses may be necessary – planning to reduce emissions – education / awareness with ‘emitters’
<i>Trigger</i>		
<b>Level 1</b>	Median and peak water quality conditions at or better than historic water quality conditions.	Standard monitoring approach  No change to existing management approaches



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## Environmental Management Frameworks

- Air Quality Management Framework
- Surface Water Quality Management Framework
- Biodiversity Management Framework

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## Biodiversity Management Framework – *what will it do?*

- •Systemic, credible approach to biodiversity management
- •Support continued economic and community growth in all Land Use Framework Regions
- •Drive improved practice (industry and other land users) in a region to minimize the extent and duration of human footprint
- •Assist in preventing new 'species at risk' through a proactive system for biodiversity management
- •Adapt to, and reflect ecosystem change (e.g., forest fires and future climate change adaptation strategies)

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BMF Objectives:

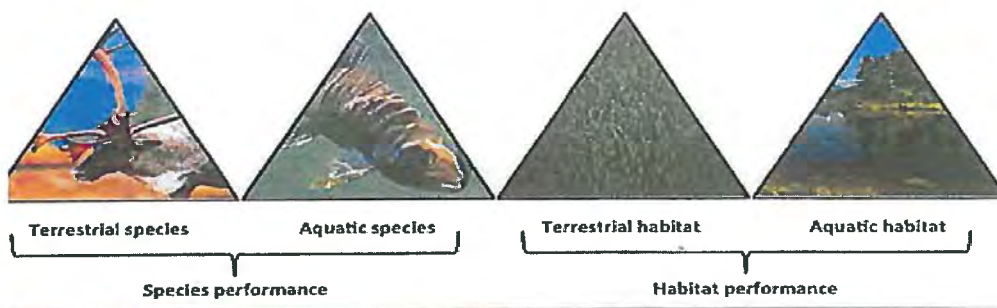
- –Terrestrial and aquatic biodiversity are maintained.
- –Long-term ecosystem health and resiliency is maintained.
- –Species at risk are recovered and no new species at risk are designated.
- –Biodiversity and healthy, functioning ecosystems continue to provide a range of benefits to communities in the region and all Albertans and there is sustainable use of Alberta's biodiversity.

Pembina Timberlands – LUF and NSRP

## Biodiversity Management Frameworks

### Indicators

- Indicators help determine whether we're meeting the biodiversity objectives established for the region
- Biodiversity pressures – habitat loss, human use, altered hydrology







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### Indicators - *what do they do?*

- Biodiversity is complex
- Biodiversity indicators
- Specific elements of biodiversity that provide scientific information on the state or condition of that element
- Indicator information has the capacity to represent a broader suite of biodiversity in the region
- Indicators help determine whether we are meeting the biodiversity objectives that are set for a specific region

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### Tiers of Indicators

- **Tier 1** – Composite indicators to report on overall state of biodiversity
- **Tier 2** – Key indicators of regional biodiversity
- **Tier 3** – Numerous indicators that complement Tier 1 and 2; additional indicators that are important to people
- **Tier 4** – Supporting data

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### Triggers - *how will they work?*

- Limits were not considered appropriate given our emerging knowledge of biodiversity (as compared to air and water quality)
- Triggers are a management 'warning system' that signal that a change in biodiversity has occurred and a response may be required

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Focus is on current condition and managing future levels of biodiversity

- **Not replicating pre-human settlement biodiversity levels**
- **But, must consider past development effects on current biodiversity levels to better manage cumulative effects into the future**
- **Development of a reference condition – undisturbed state**
- **Management actions that better manage and restore biodiversity around existing human footprint**

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North Saskatchewan - Regional Plan

Biodiversity Framework – Terrestrial Tier 1&2 Indicators



**Forestry Perspective**



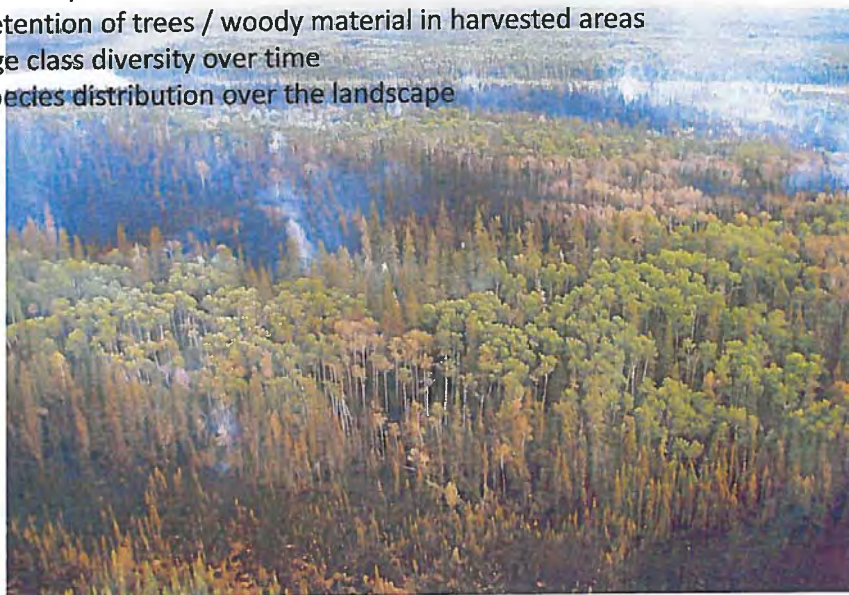


31



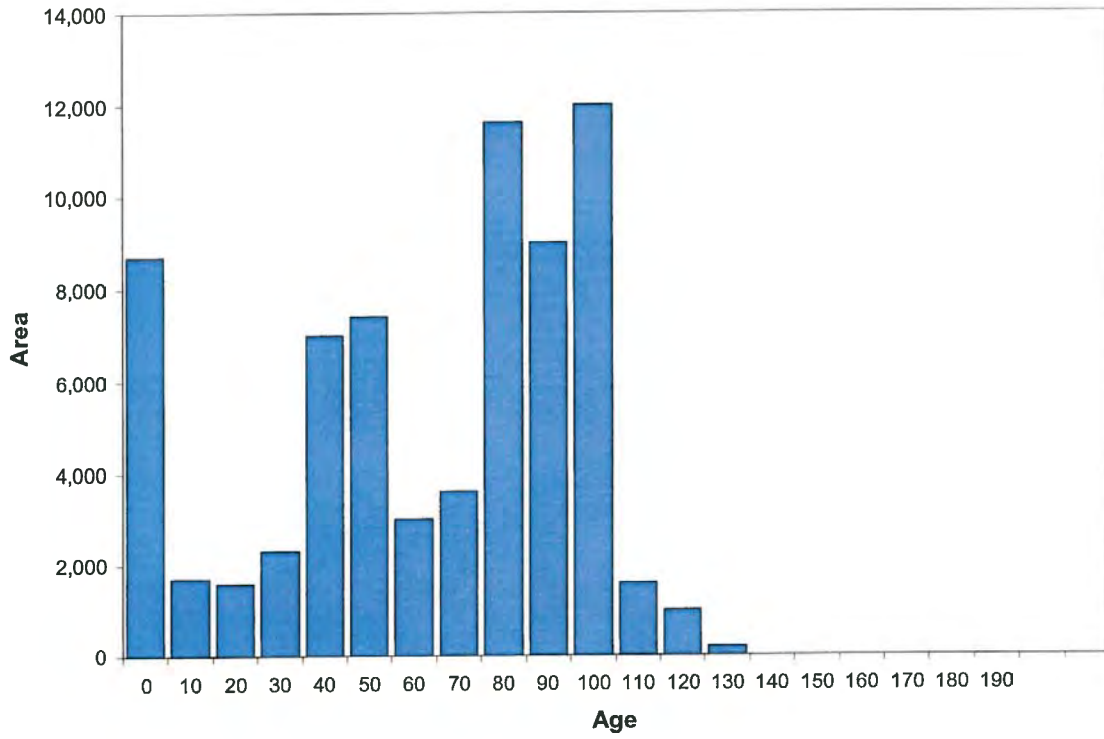
**Emulating fire at the landscape and stand level:**

- Diversity of disturbance sizes across the landscape
- Retention of trees / woody material in harvested areas
- Age class diversity over time
- Species distribution over the landscape

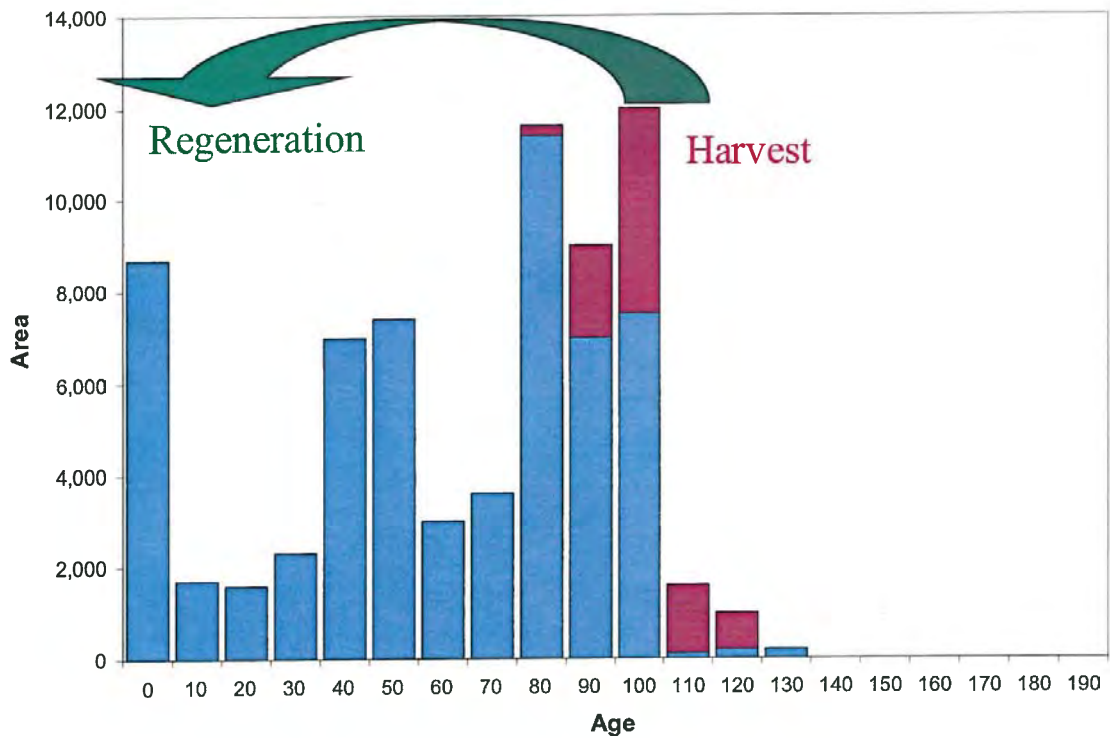


32

# Forest Management Effects

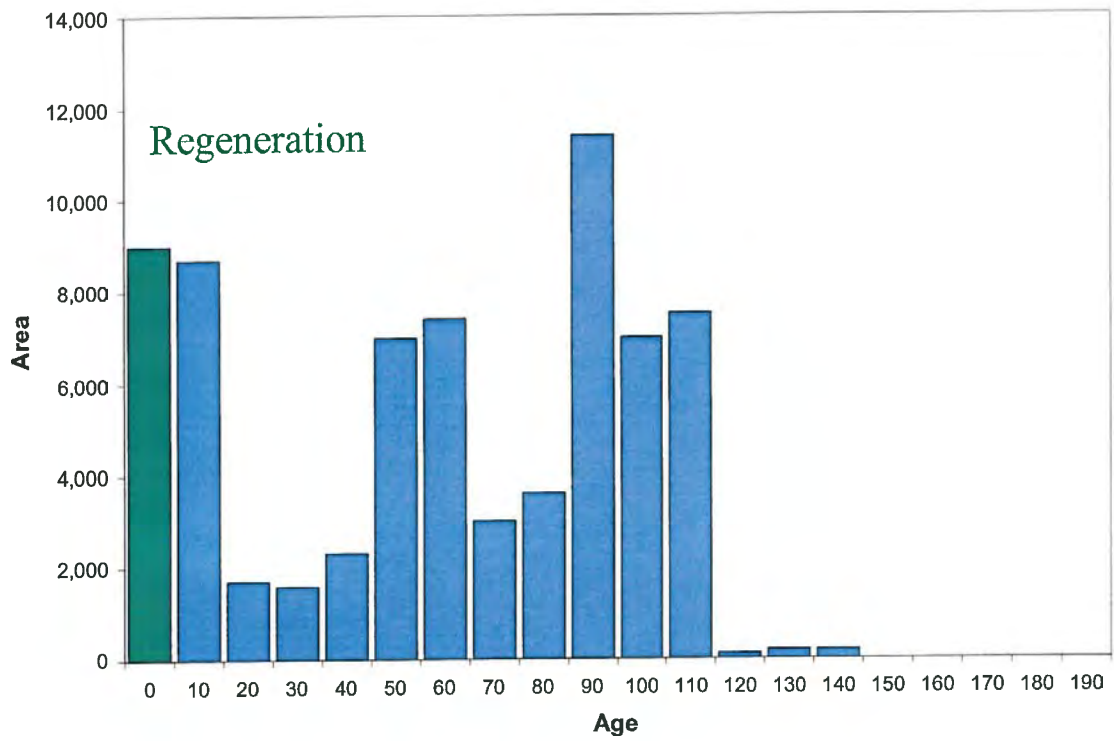


## 10 Years of Harvest

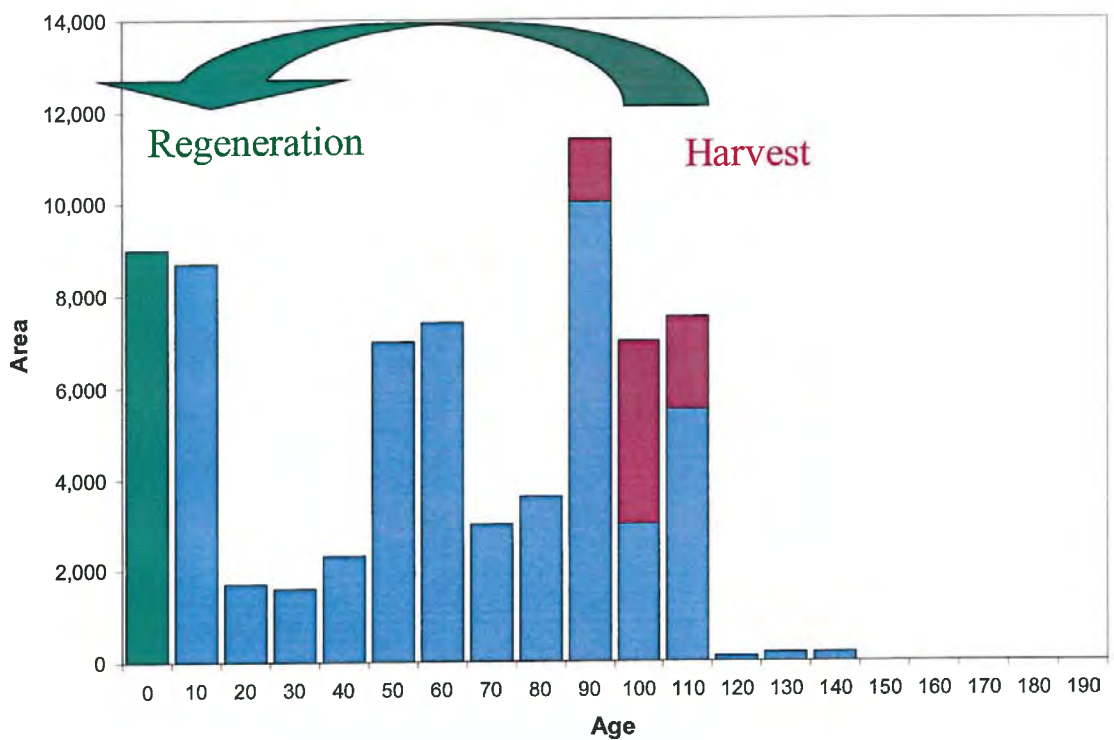




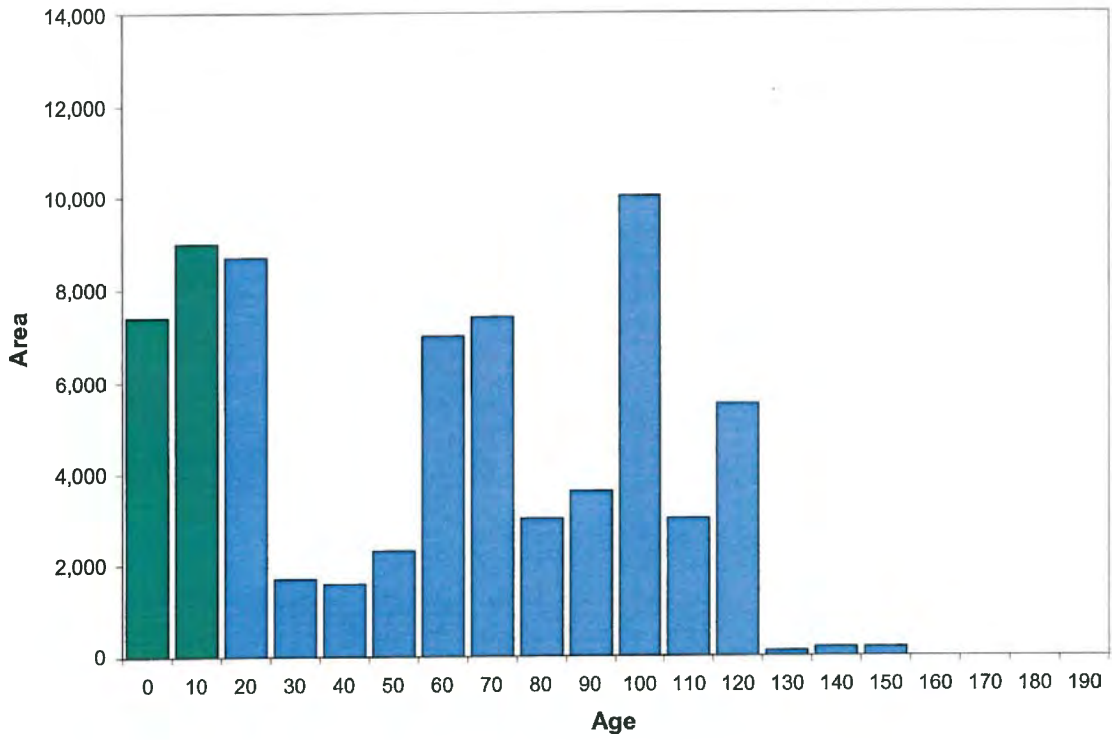
## Age Structure After 10 Years of Harvest



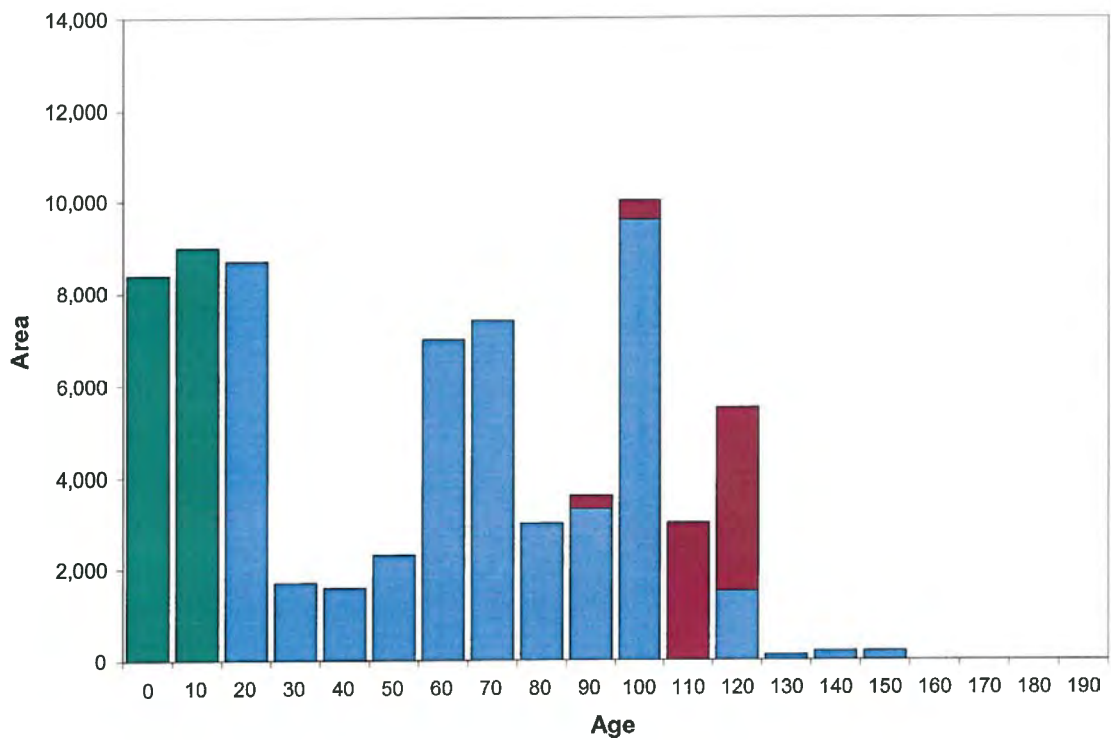
## 10 Years of Harvest



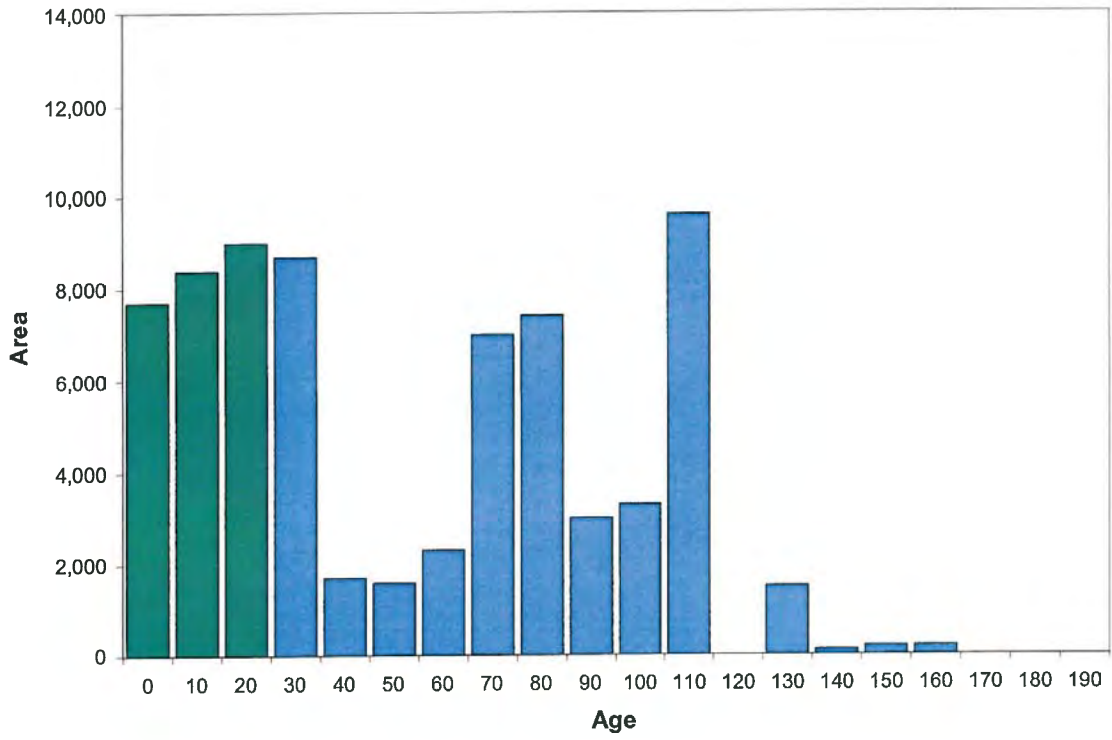
### Age Structure After 20 Years of Harvest



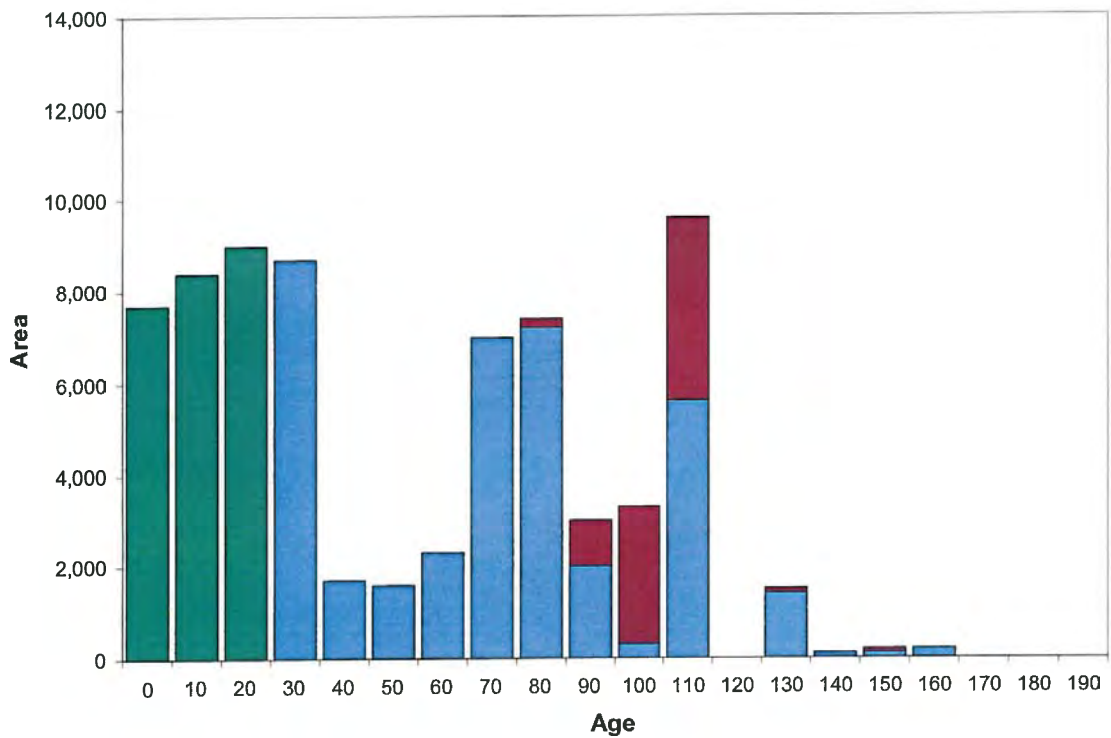
### Another 10 Years of Harvest



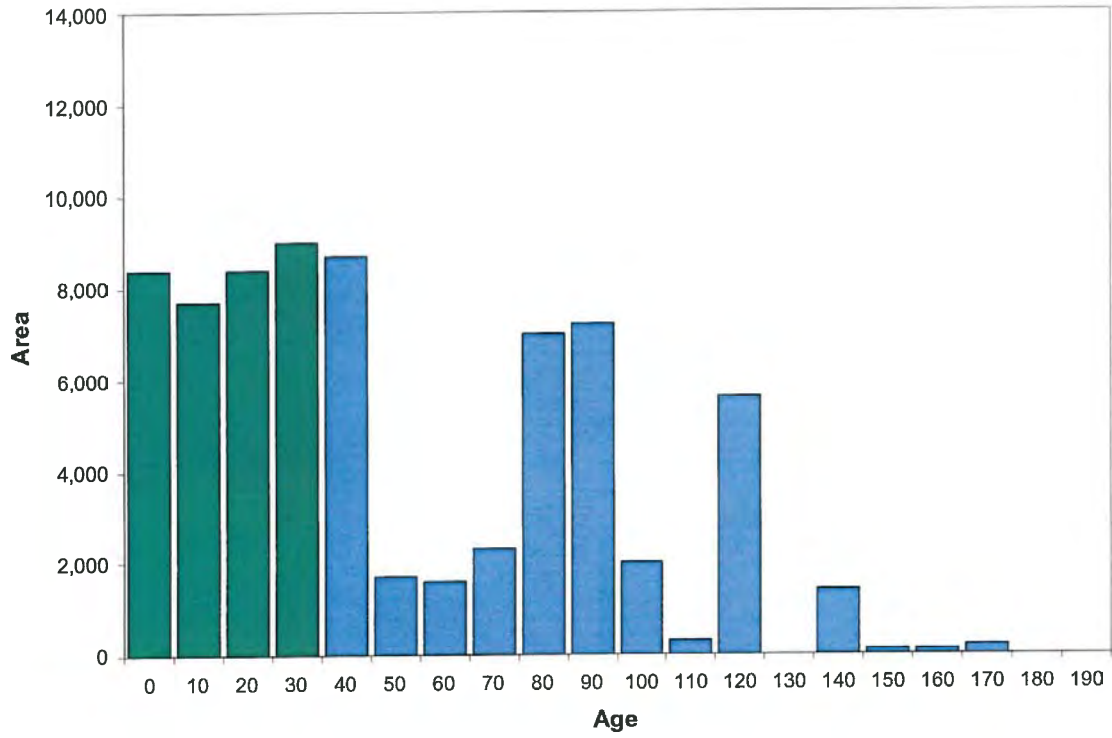
### Age Structure After 30 Years of Harvest



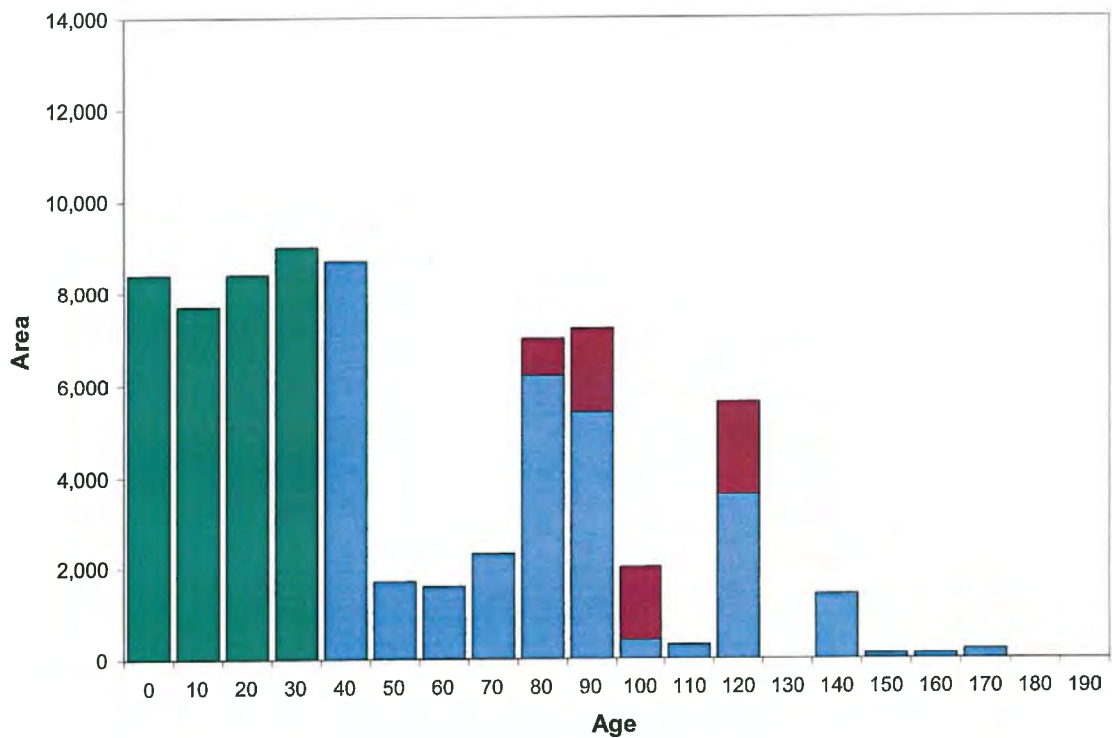
### Another 10 Years of Harvest



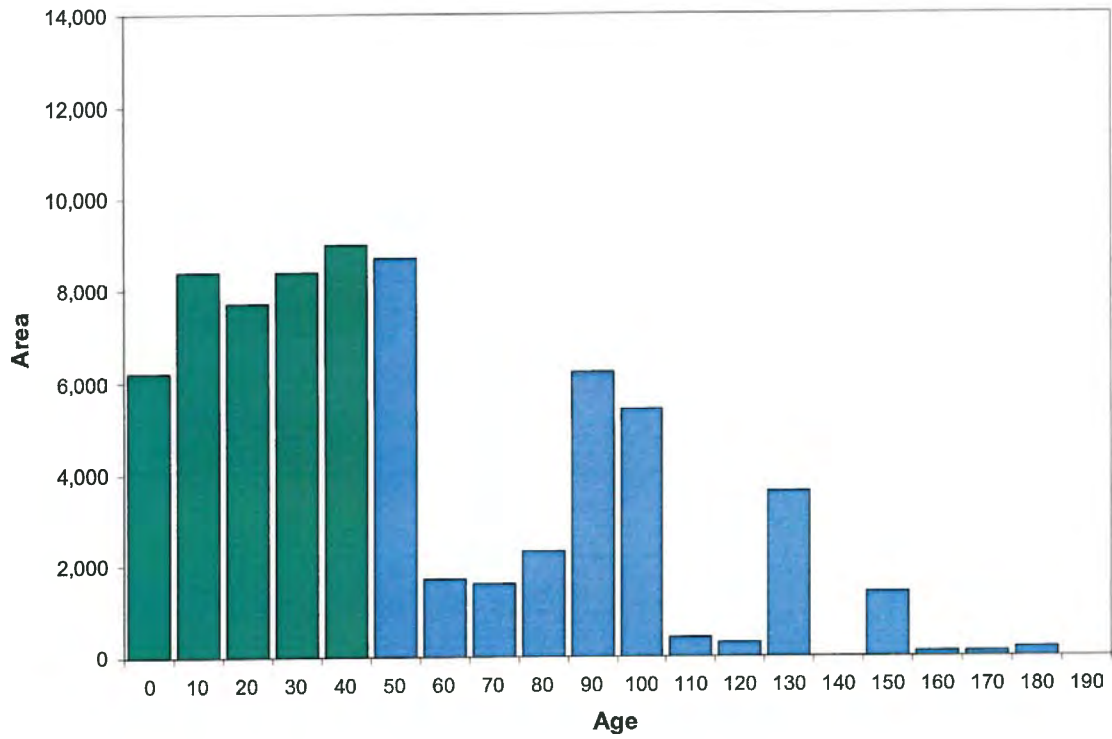
### Age Structure After 40 Years of Harvest



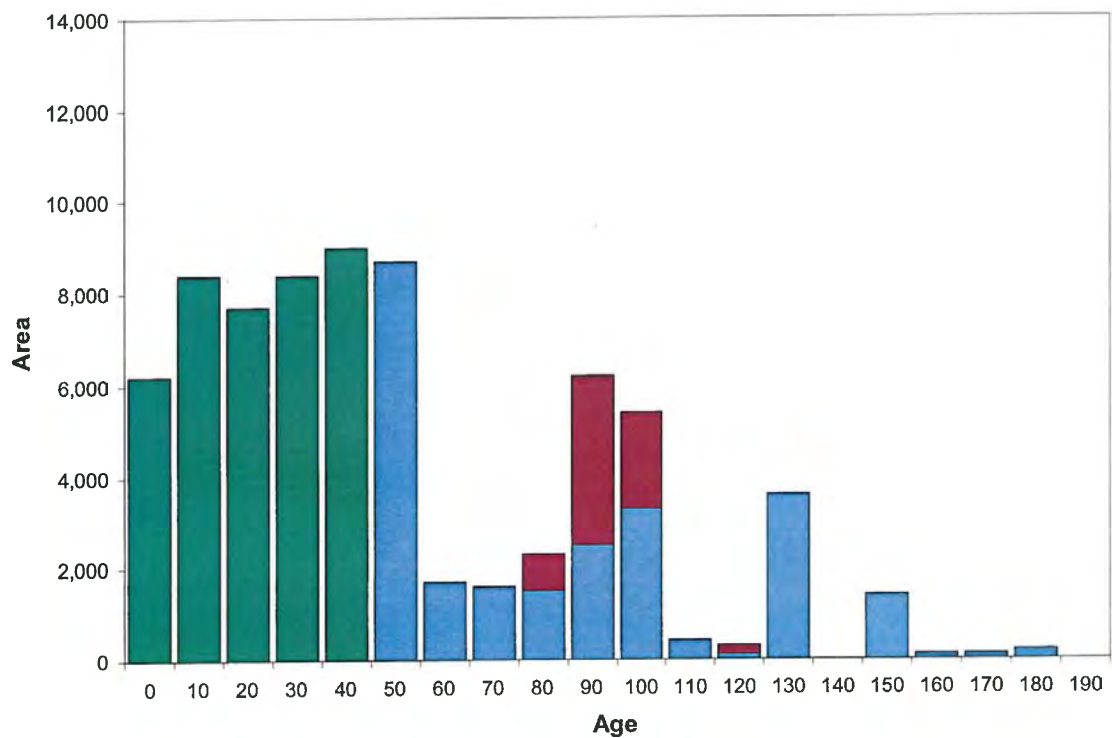
### Another 10 Years of Harvest



## Age Structure After 50 Years of Harvest

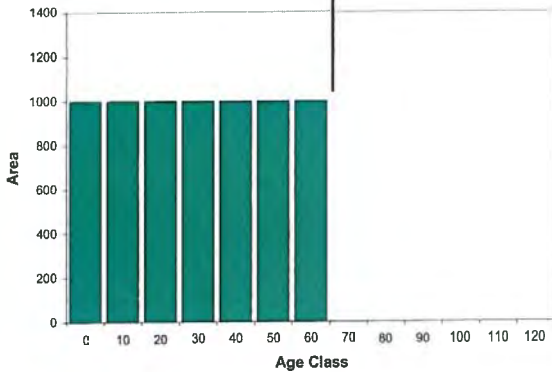
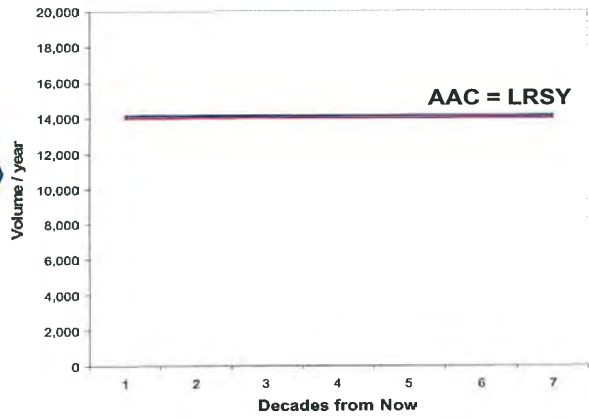
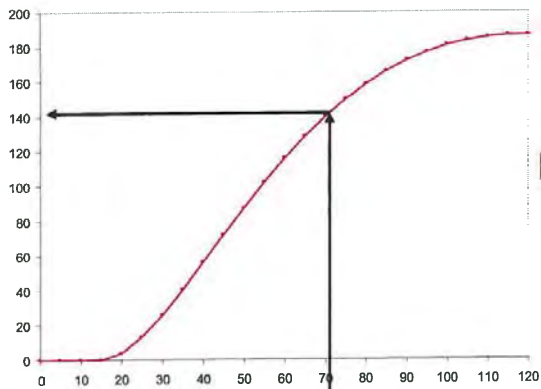
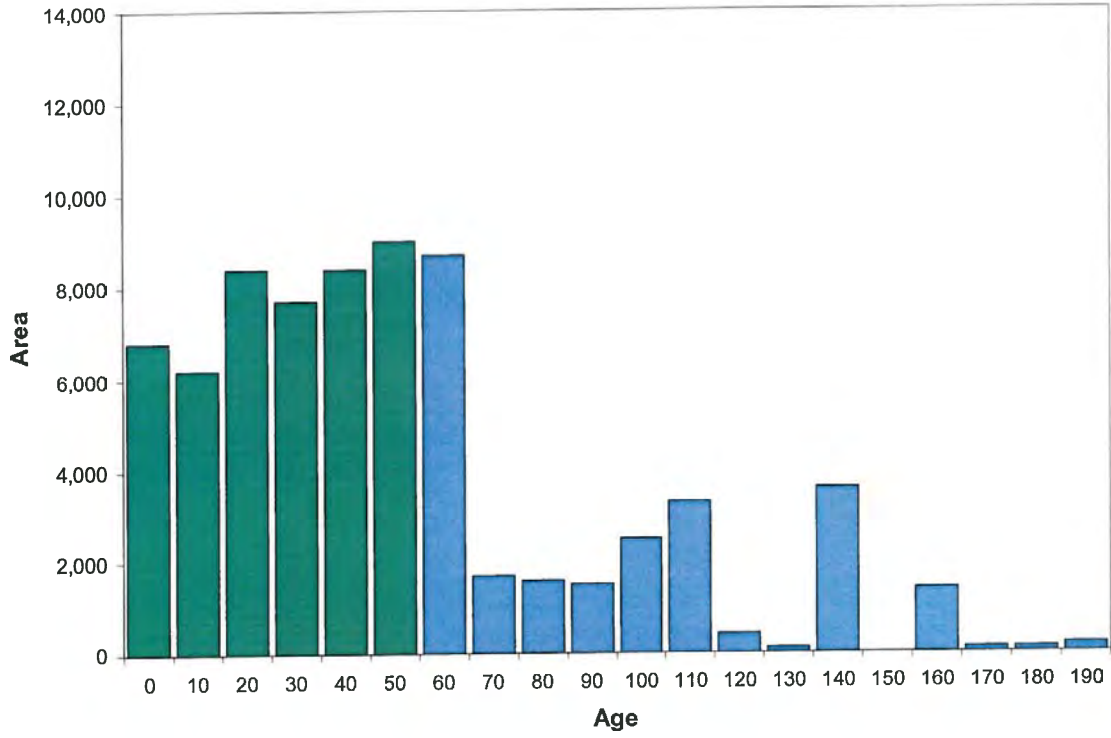


## Another 10 Years of Harvest

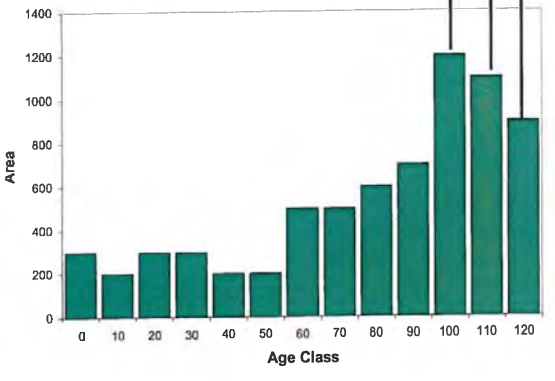
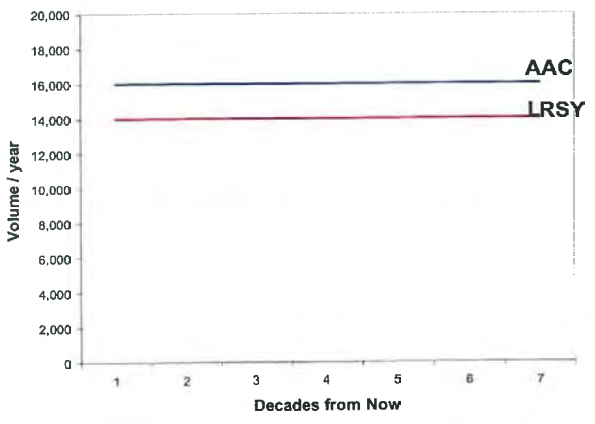
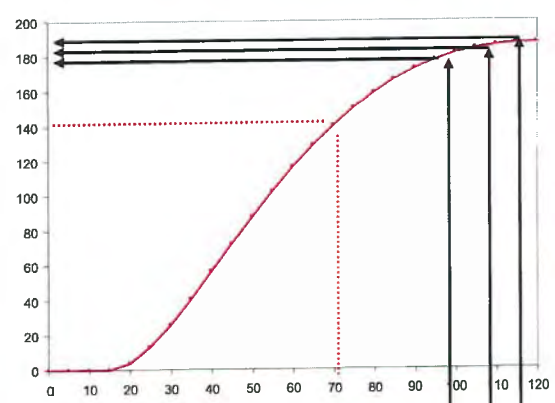




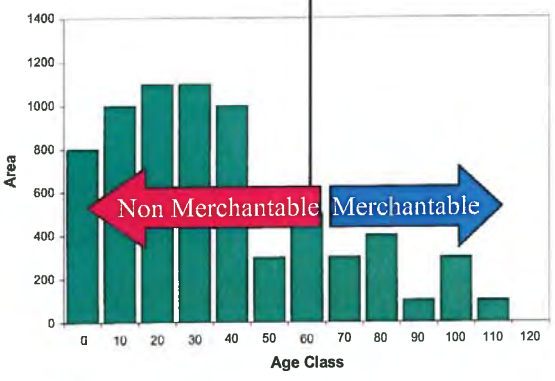
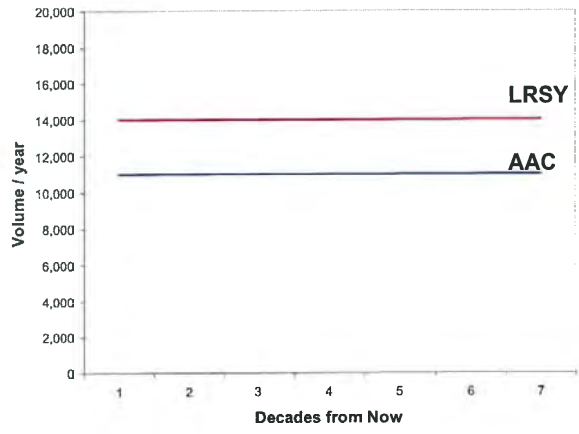
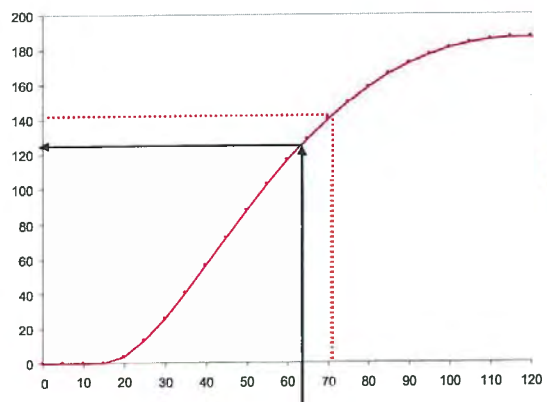
# Age Structure After 60 Years of Harvest



Balanced Forest

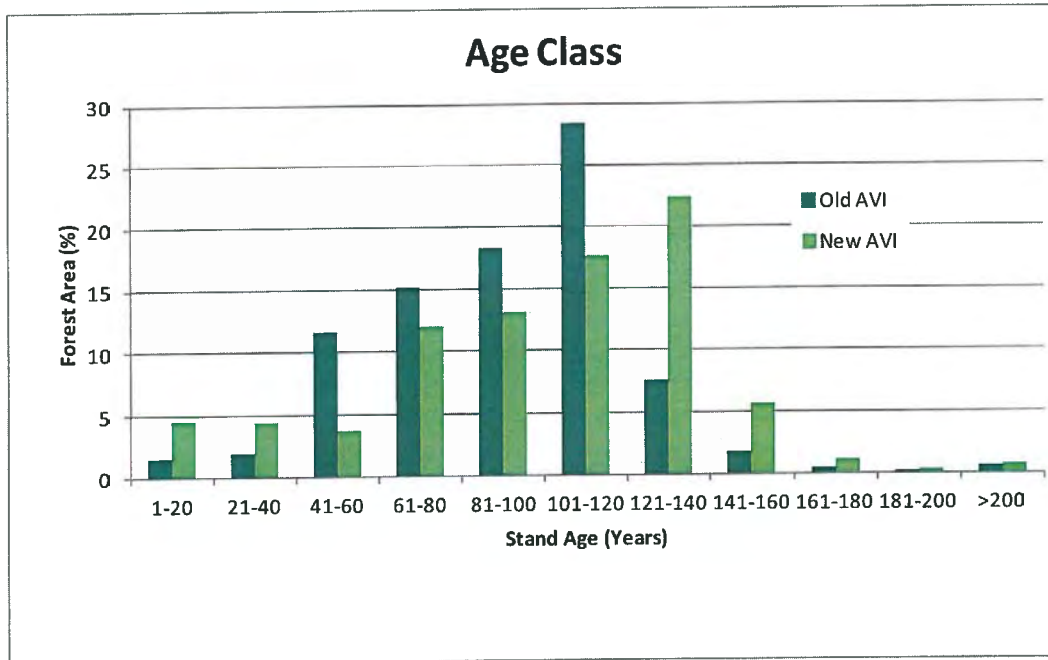


Old Forest



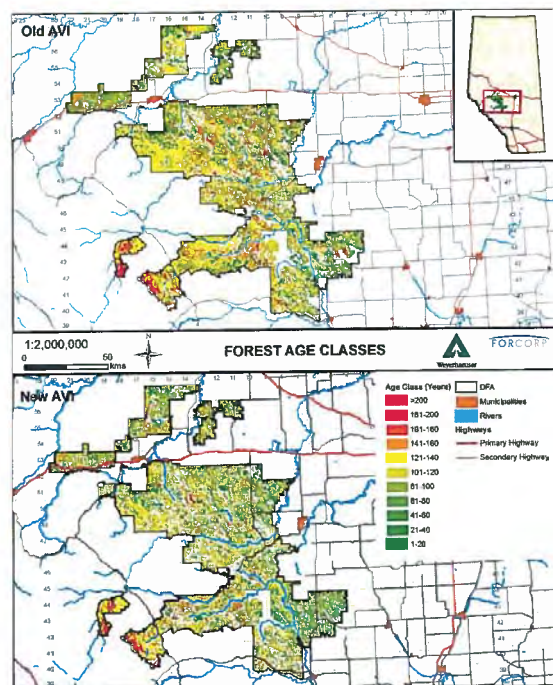
Young Forest

# Age-Class comparison between the old AVI and the new AVI



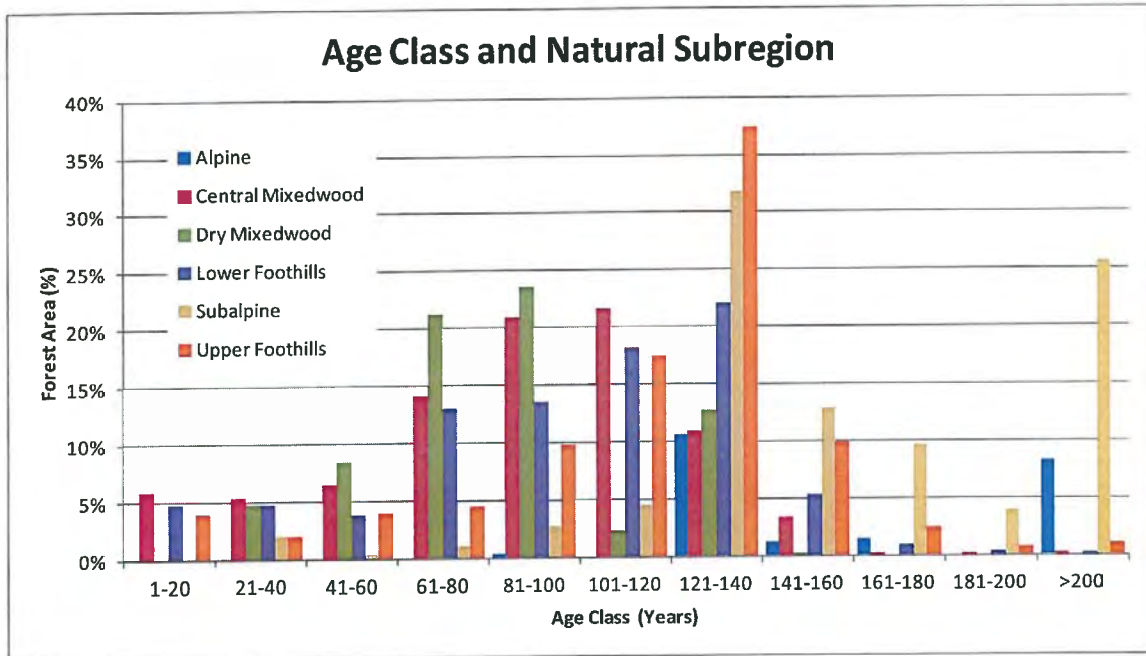
49

# Maps of age-class comparison between old and new AVIs

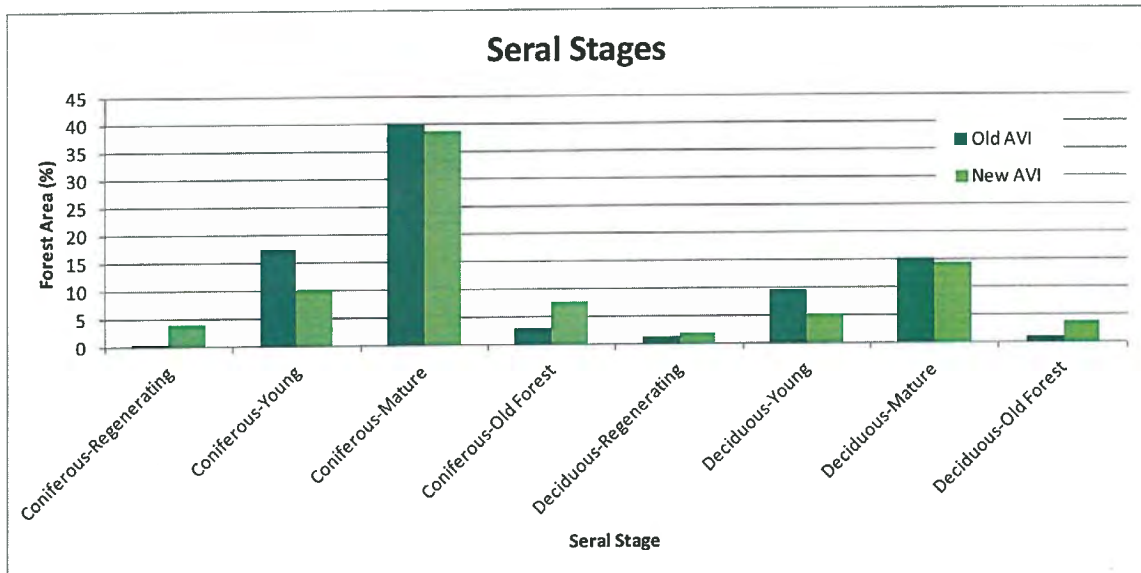


50

# Age-class distribution of New AVI by Natural Subregion

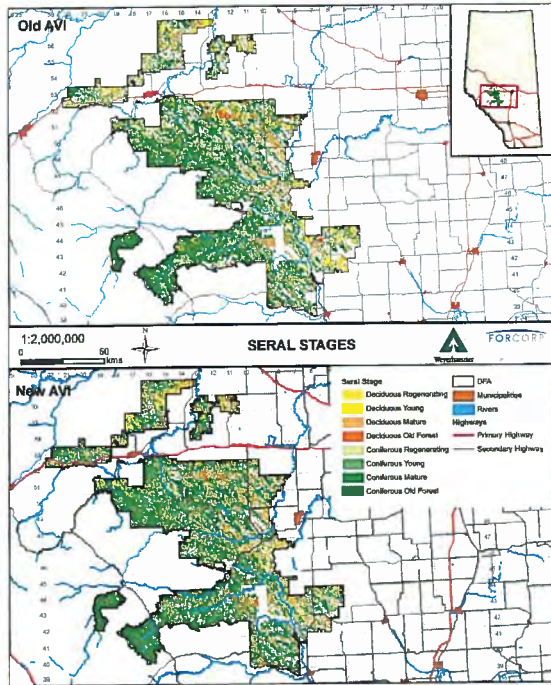


# Seral Stage comparison between old and new AVI



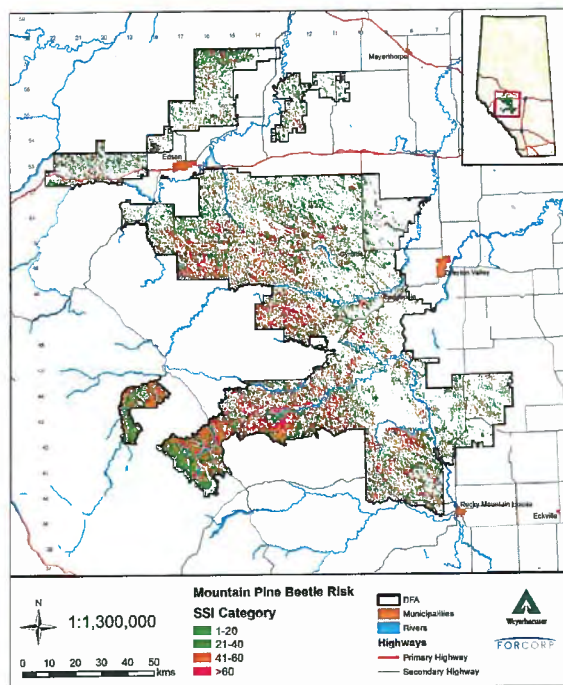


# Map of seral stage distribution on the DFA – old and new AVIs



53

# Map of MPB Stand Susceptibility Index polygons on the DFA



54

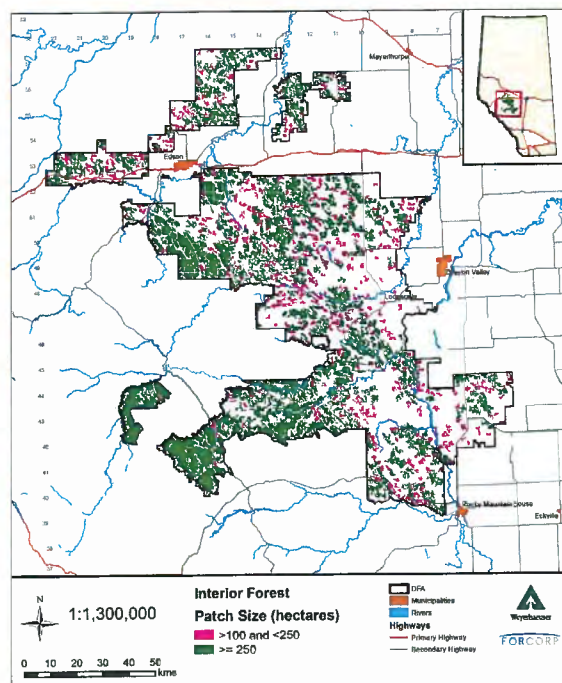
## Interior Forest Patches on the DFA



Patch Size (ha)	Number of Patches	Area (ha)	Average Patch Size (ha)	% of DFA
>100 and <250	505	78,517	155	7
>= 250	374	337,105	901	32
<b>Total</b>	<b>879</b>	<b>415,622</b>	<b>473</b>	<b>39</b>

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## Map of Interior Forest Patches on the DFA



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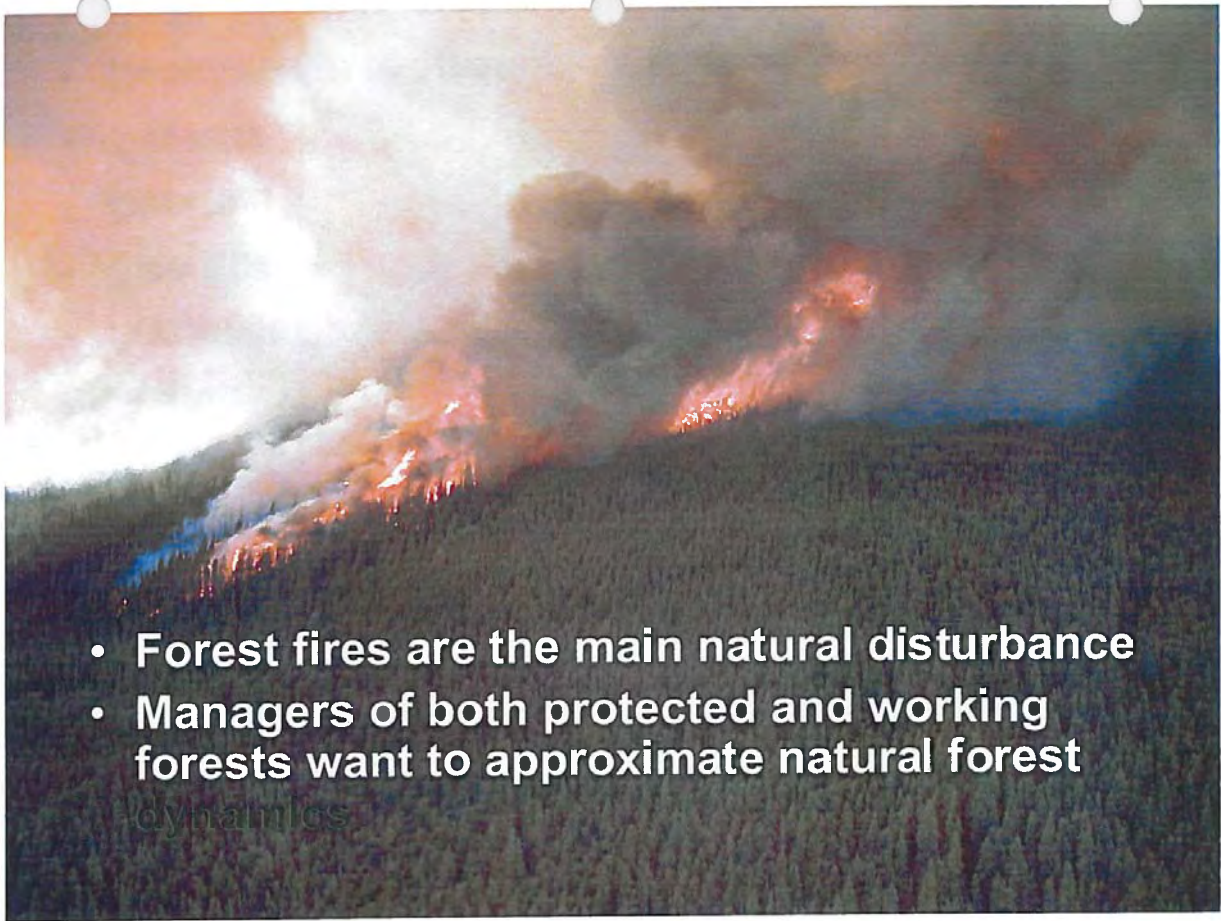
Stand Level – Retained trees and woody material



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- Forest fires are the main natural disturbance
- Managers of both protected and working forests want to approximate natural forest dynamics

Weyerhaeuser Pembina – Stakeholder Advisory Group Presentation  
What's Natural? Cumulative Effects?



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### ***Natural Range of Variability Assessment***

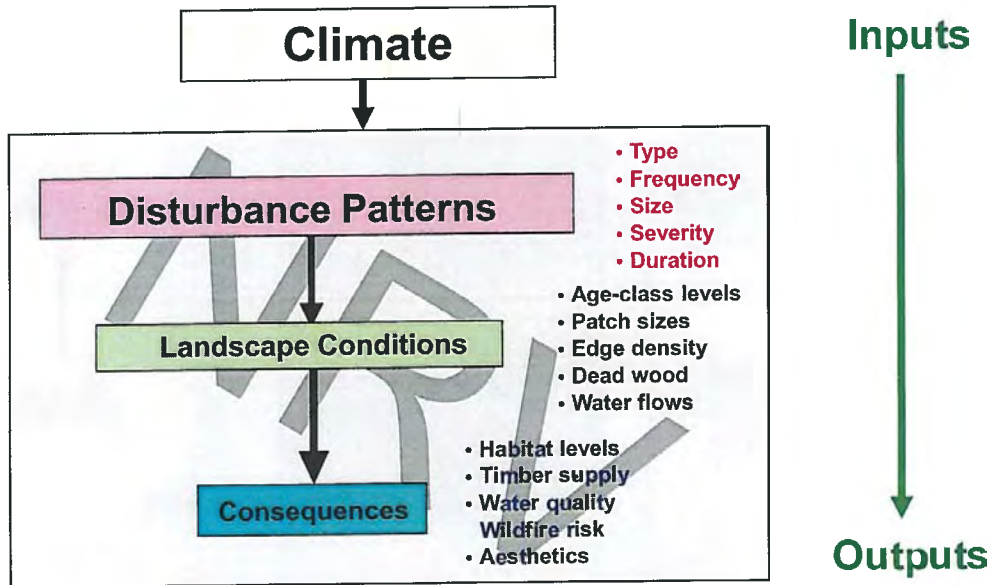
***Establishing indicators of disturbance patterns and predicting their history***

***Indicators:***

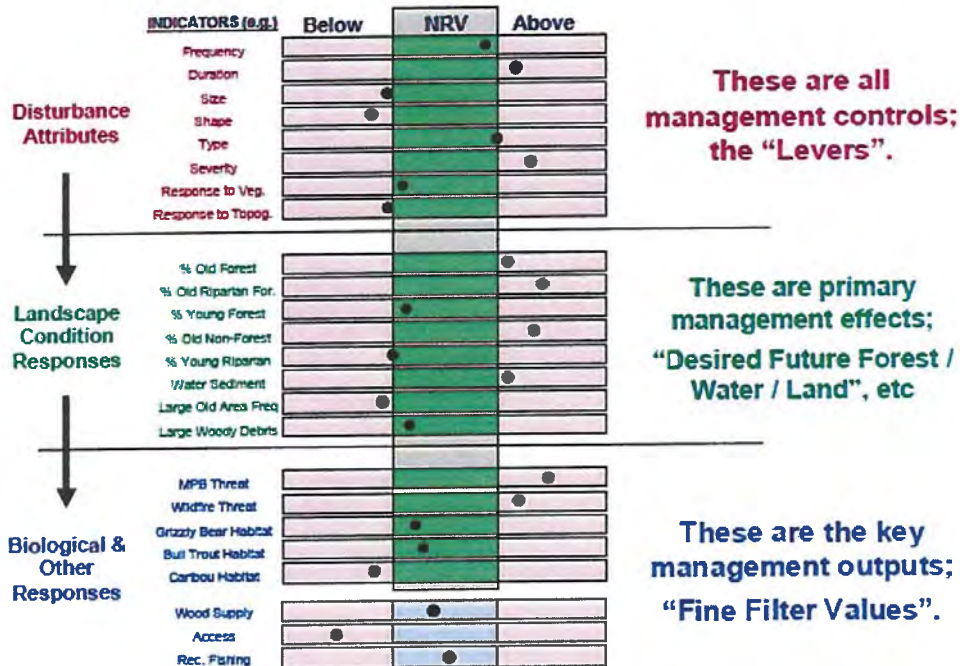
- ***Frequency***
- ***Size Shape***
- ***Duration***
- ***Severity***
- ***Relationship to location, vegetation, etc.***



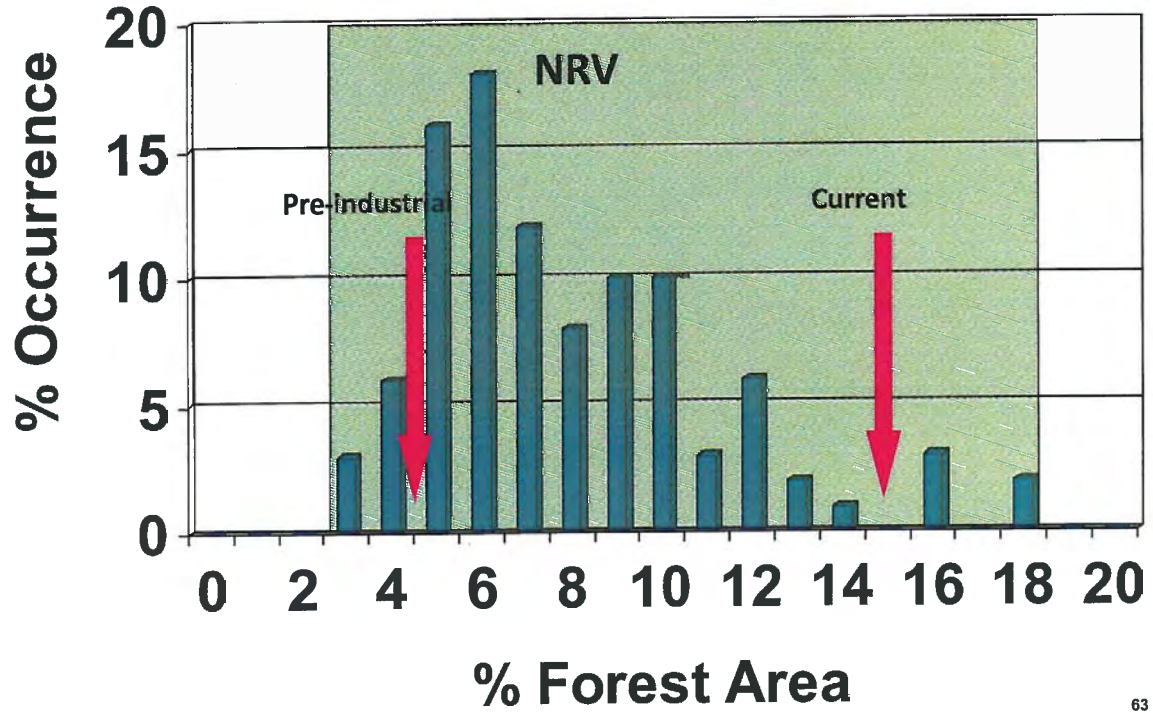
# The Boreal System:



## Weyerhaeuser Pembina – Stakeholder Advisory Group Presentation What's Natural? Cumulative Effects?



## Old (>160 years) Pine Forest



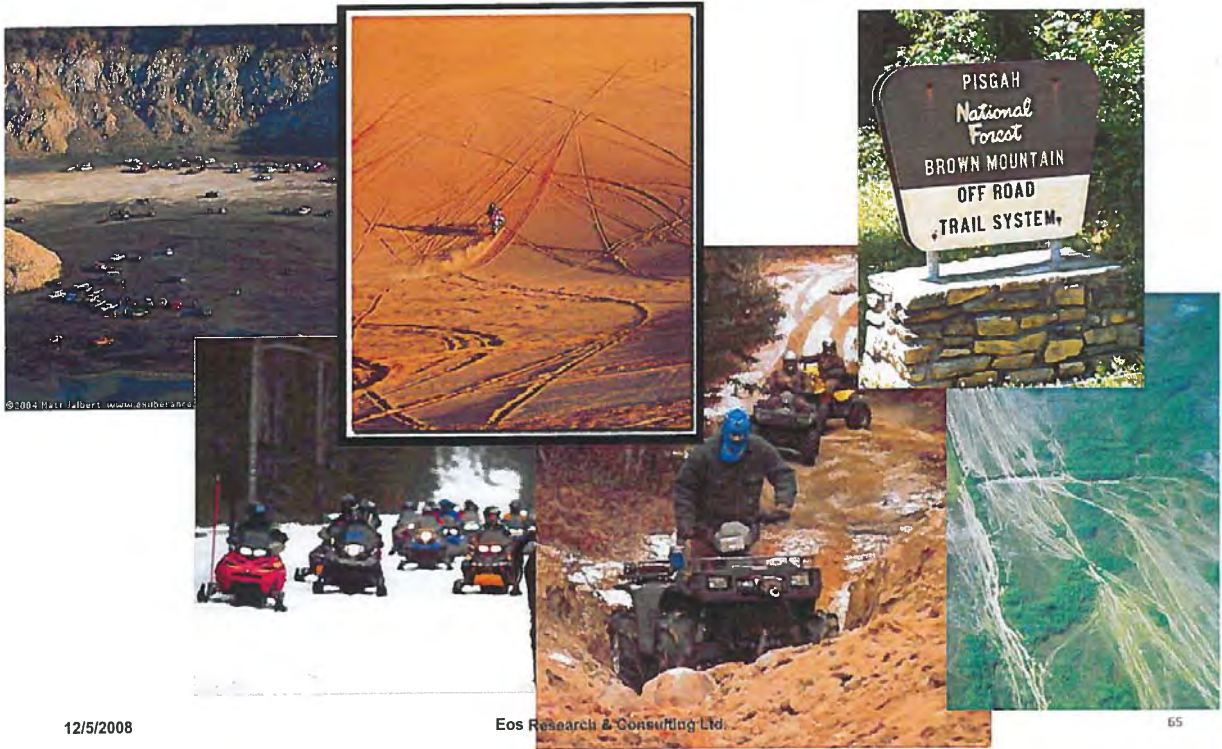
63

## Footprint - Industrial





# Footprint – Recreational Use

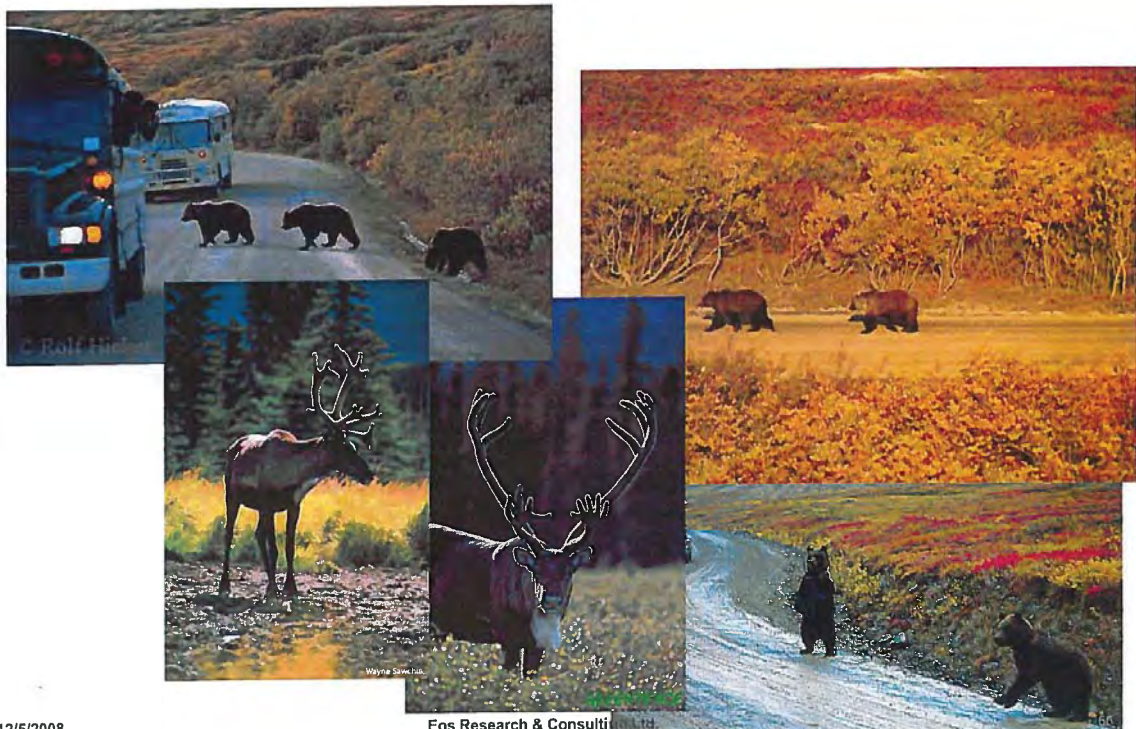


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# Footstep - Wildlife



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66



### *Footprint & Footstep*

Disturbances	Impacts
<ul style="list-style-type: none"><li>• Logging – timber removal progressing to reforested</li><li>• Roads</li><li>• Well sites</li><li>• Pipelines</li><li>• Trails</li><li>• Hunting, trapping, fishing</li><li>• Noise, activity</li></ul>	<ul style="list-style-type: none"><li>• Habitat fragmentation</li><li>• Increased predation</li><li>• Barriers to wildlife movement</li><li>• Increased wildlife disturbance &amp; mortality</li><li>• Soil, watershed disturbance</li><li>• Less forest growth</li></ul>

67

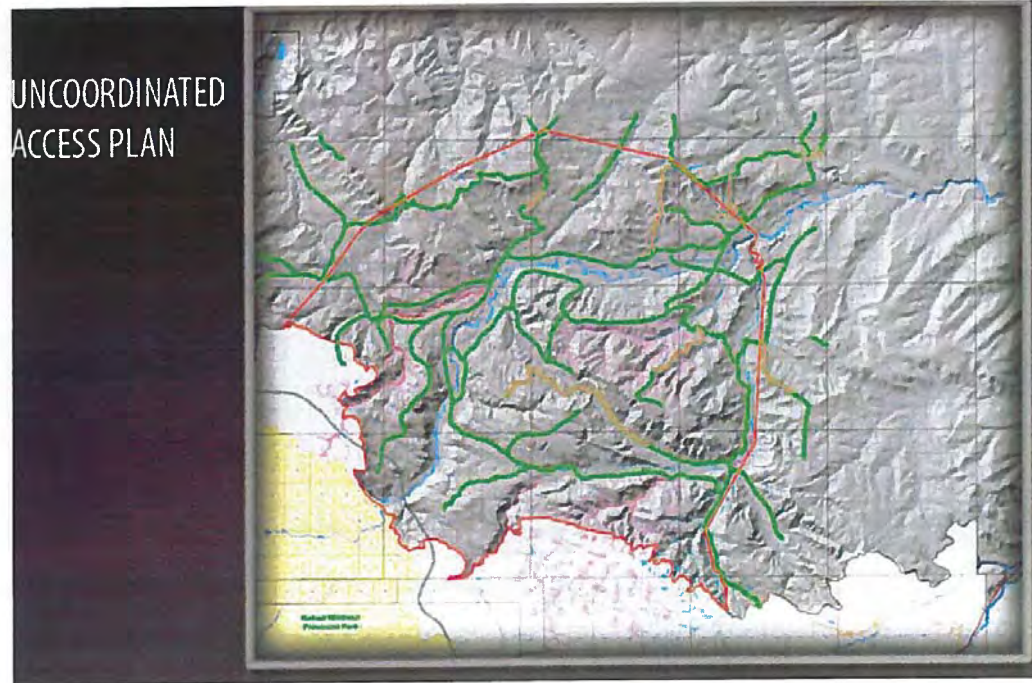


### *Managing Footprint = Integrated Land Management Alberta Experiences*

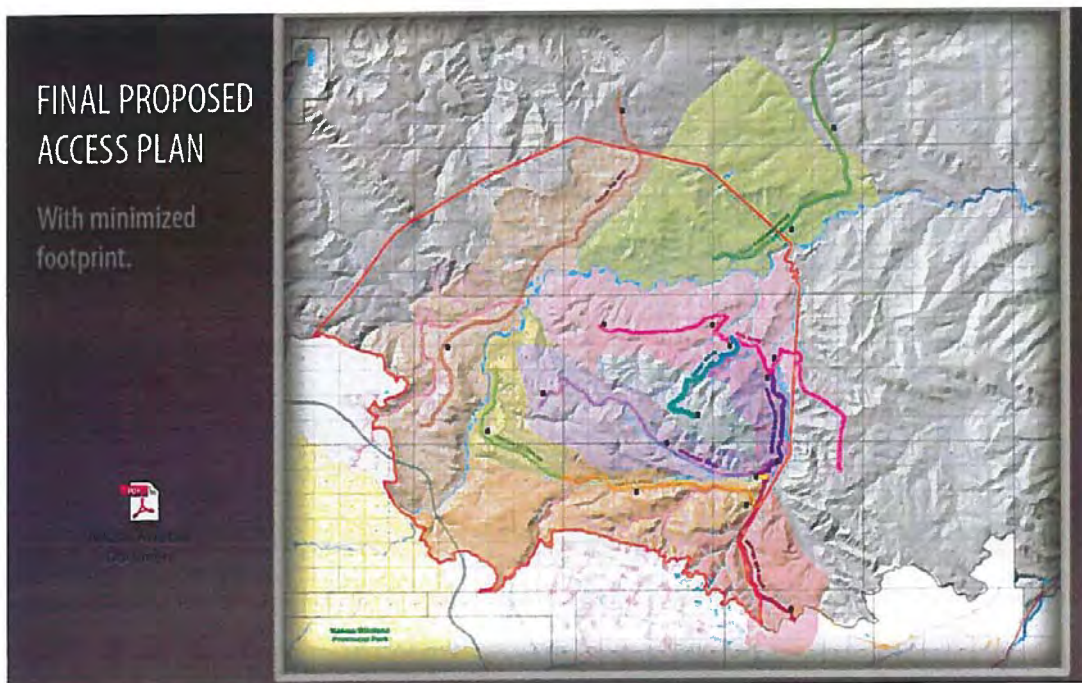
- Chungo Creek
- Kakwa Copton
- Surmont oilsands project
- Foothills Landscape Management Forum
- Ghost Wiaparous, Castle, “Rig Street” (recreational)
- AER pilots
- **Wildlife recovery plans**

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# Ranking Access Measures on Effectiveness

Access Management Measure	Golder -2007	Axys-1995	Platt-1993
Rollback	1	1	
Stream crossings	2		
Excavation/road deactivation	3	4	
Manned gates	4	2	
Remote operations	6		
Visual Screening	9	8	
Berms	10	7	1
Unmanned gates	11	6	2
ROW Re-countouring		2	
Special Construction		3	
Barriers (boulders, post & rails, etc.)			3

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## Weyerhaeuser Pembina – Stakeholder Advisory Group Presentation What's Natural? Cumulative Effects?



### *ILM Learnings*


- ✓ Government should incent & participate, but not lead / direct
  - ✓ ILM or else..
  - ✓ Reward those who do (and conversely...)
  - ✓ BUT also be prepared to support a good plan done by others
- ✓ Collaborate and cooperate between footprint makers
- ✓ Industry first (then municipal / recreational)
  - ✓ Facilitate
  - ✓ Without Government in the room
  - ✓ Need business case

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### *ILM Learnings (cont'd)*

- ✓ Good information and planning tools
- ✓ Measurable results, targets  basis for going forward, accountability
- ✓ Form the group/forum, see it through from planning to integration
- ✓ Restoration > minimizing new footprint in future
- ✓ Education & promotion vs. enforcement
  - ✓ Can't go anywhere anytime – anymore...

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# Net Land Base Definition

45 min

Paul Scott

## What is the Purpose of Net Land Base Determination



- Identify the Defined Forest Area (DFA) to be used
  - FMA area; non-FMA areas but within the Forest Management Unit
- Classify the landbase into either active (managed) or passive (unmanaged) landbase

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## How is Net Land Base determined



- Identify data sets to be used in the process
- Clean up data sets to match the perimeter of the Defined Forest Area
- Amalgamate the different data sets into one file
- Apply rules to force separate polygons into either the active or the passive landbase

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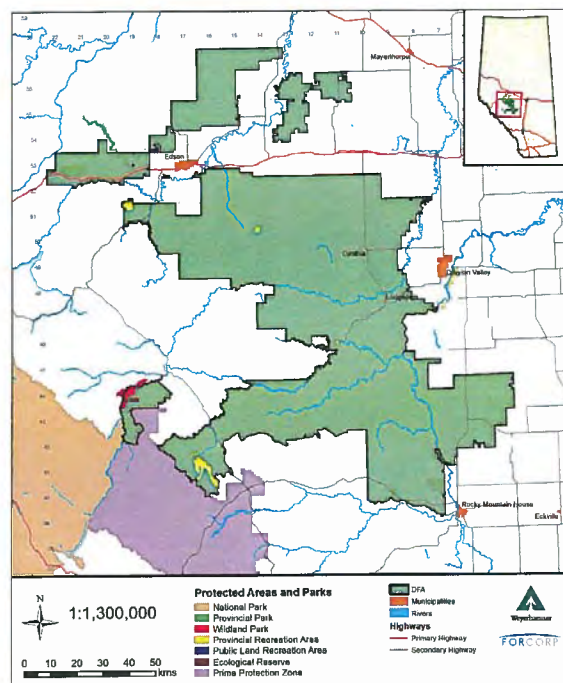




# Administrative

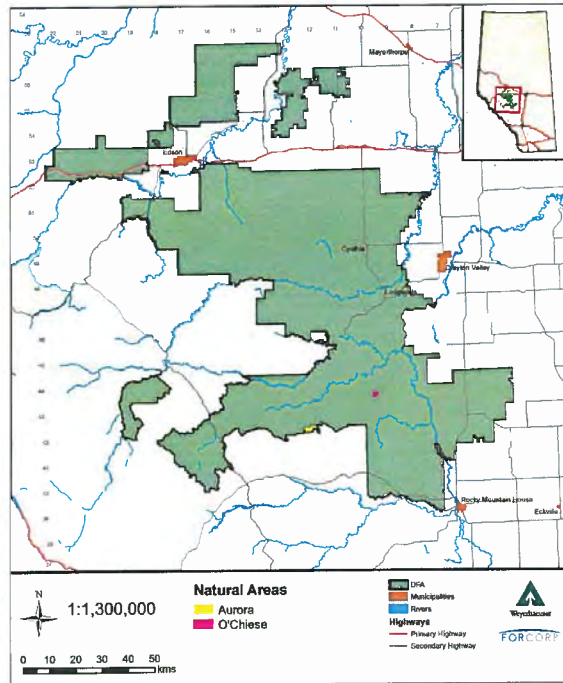
77

## Protected Areas and Parks



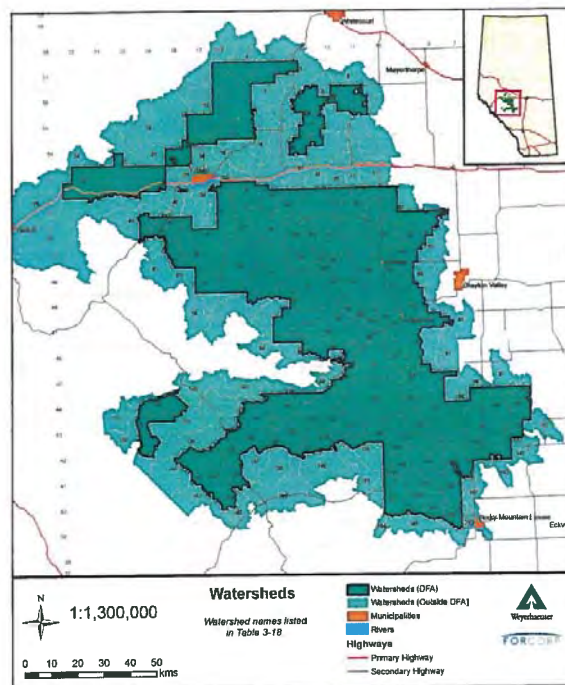
78

# Natural Areas



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# Watersheds



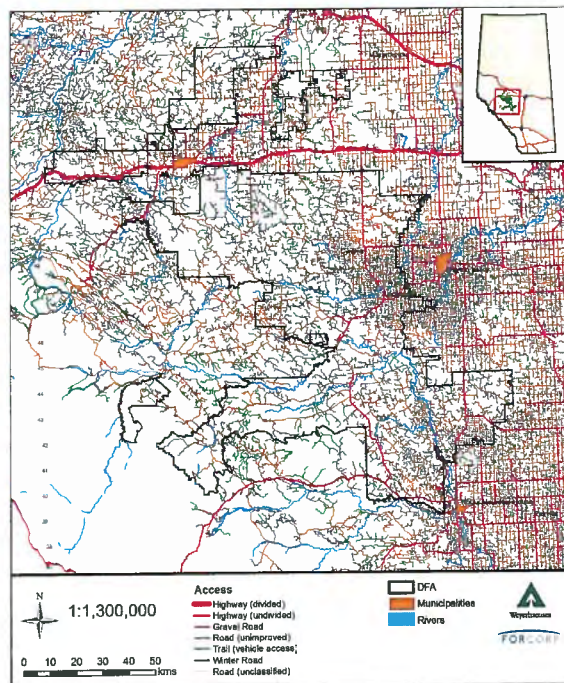
80



# Access Layers

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## Roads



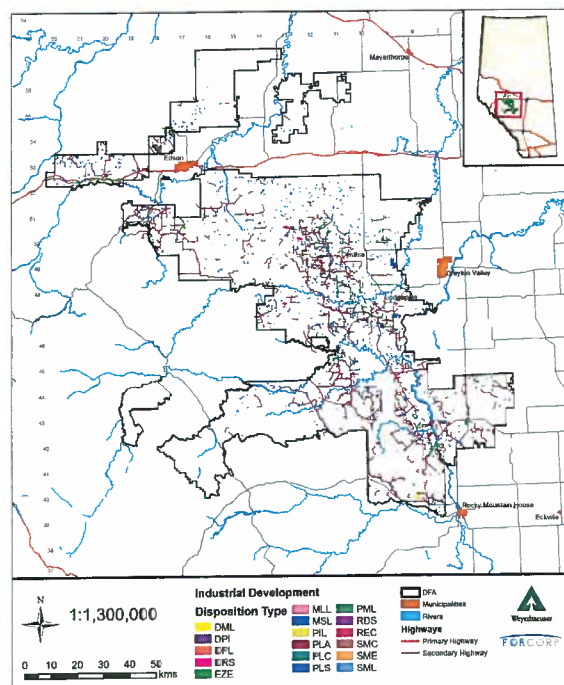
82



# Anthropogenic layers

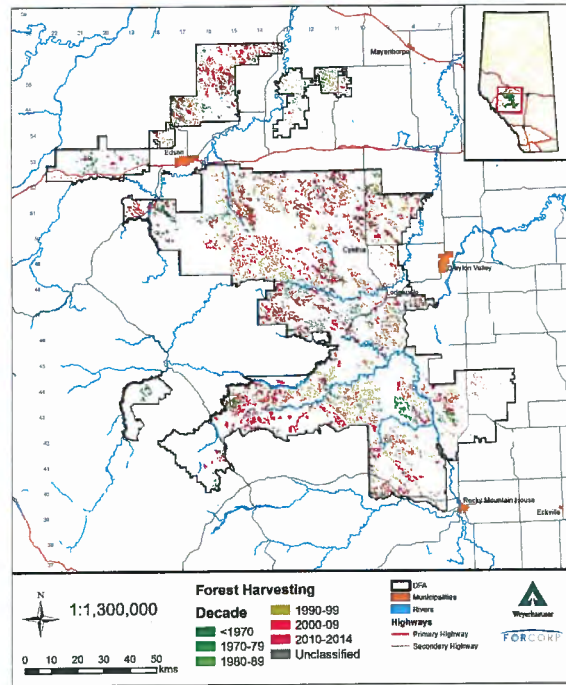
83

## Industrial activity – post 2012 AVI



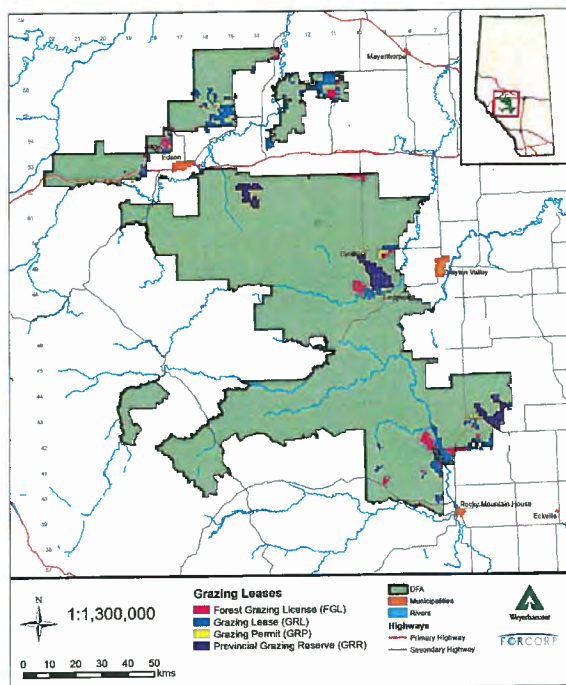
84

# Harvesting



85

# Grazing Dispositions



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# Draft Summary Table of Net Land Base



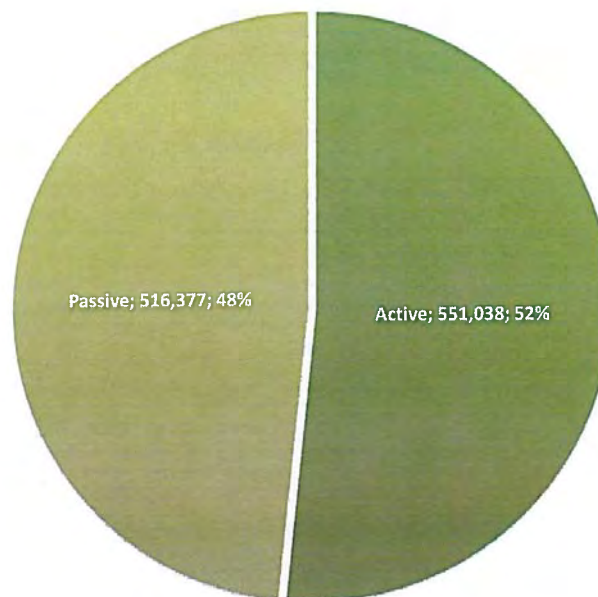
Landbase Comparison

Category	2016 FMP Aug 26 (17)	2024/25 19M%
<b>Administrative</b>		
Plan Buffers	19,066	19,066
Public and protected areas	16,211	9,639
Private land	11,783	7,151
Special Land Use Areas	1,263	93
Unsettled (Cottles/Landmarks)	121	0
<b>Total</b>	<b>50,537</b>	<b>36,377</b>
<b>Arable</b>		
Road	24,716	11,470
Highway Buffer	0	1,094
Setback Area	24,136	13,499
<b>Total</b>	<b>48,852</b>	<b>26,063</b>
<b>Arable Equivalents</b>		
Non-vegetated	3,441	3,273
Ungrazed	33,263	13,316
Provisional Grazing Reserve	35,758	0
Provisional Pasture	2,801	294
Permanent Sample Pans	513	934
Other Landbase Dispositions	6,180	25,580
Cattle	7	0
Historical Reserves	903	47,689
<b>Total</b>	<b>80,066</b>	<b>91,166</b>
<b>Water Features (including buffers)</b>		
Lakes, rivers and streams	27,508	8,251
Flooded areas	1,806	4,233
Regulated areas (AVS)	360	0
<b>Total</b>	<b>29,674</b>	<b>12,484</b>
<b>Water Buffers</b>		
Lakes, rivers and streams	82,846	32,438
Transportation	743	398
<b>Total</b>	<b>83,589</b>	<b>32,836</b>
<b>Non Forested Areas</b>		
Naturally non-vegetated	3,866	2,201
Naturally non-forested	11,201	29,865
Mining AVS	743	0
<b>Total</b>	<b>15,810</b>	<b>32,066</b>
<b>Unproductive Areas</b>		
Unproductive Areas	176,711	711
Timber Production (Logging)	4,617	0
Horizontal Structures	401	0
<b>Total</b>	<b>181,729</b>	<b>711</b>
<b>Natural Obstacles</b>		
Steep areas	338	0
Other	417	0
<b>Total</b>	<b>755</b>	<b>0</b>
<b>Operational Disturbances</b>		
Slips	2,467	10,221
Power Operations with no AVS	0	1,500
Isolated stands	2,870	0
SWP	258	0
Operational Buffers	9,862	67
Provisional Disturbances	1,264	0
<b>Total</b>	<b>16,728</b>	<b>11,888</b>
<b>Subjective Disturbances</b>		
Scrub	49,046	177,345
Brush	1,448	0
A-then-Agony with A-Gone-10	0	0
A-then-Agony with 10-10	24,008	0
Stock Control	13,470	62,777
Four-10-10-10	0	799
Unsettled	0	0
<b>Total</b>	<b>88,072</b>	<b>240,921</b>
<b>Total Disturbances</b>	<b>116,177</b>	<b>441,081</b>
<b>Net Forested Landbase</b>	<b>561,838</b>	<b>589,150</b>
<b>Net Non-Forested Landbase</b>	<b>1,092,415</b>	<b>1,036,212</b>
<b>Grand Total</b>	<b>1,654,253</b>	<b>1,625,362</b>
<b>Landbase Base to Active 18</b>	<b>11,293</b>	

# Summary of Active vs Passive land base



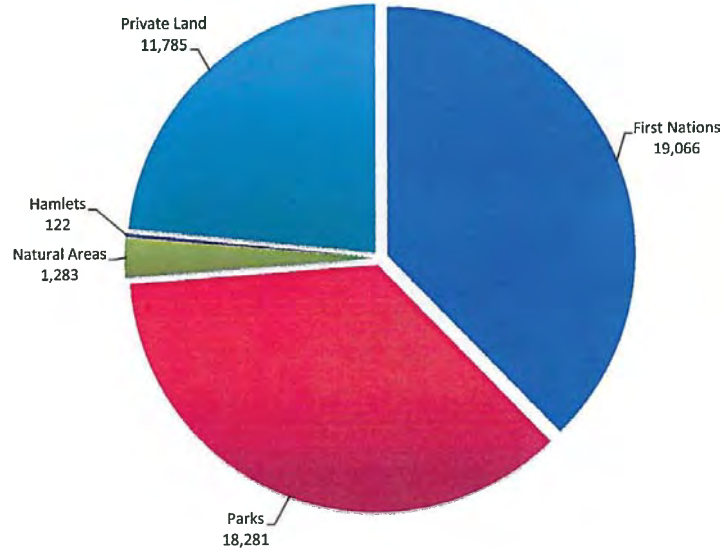
Active Vs Passive Landbase (Ha)



# Summary of Administrative Deletions



## Administrative Deletions (D\_ADMIN) (Ha)

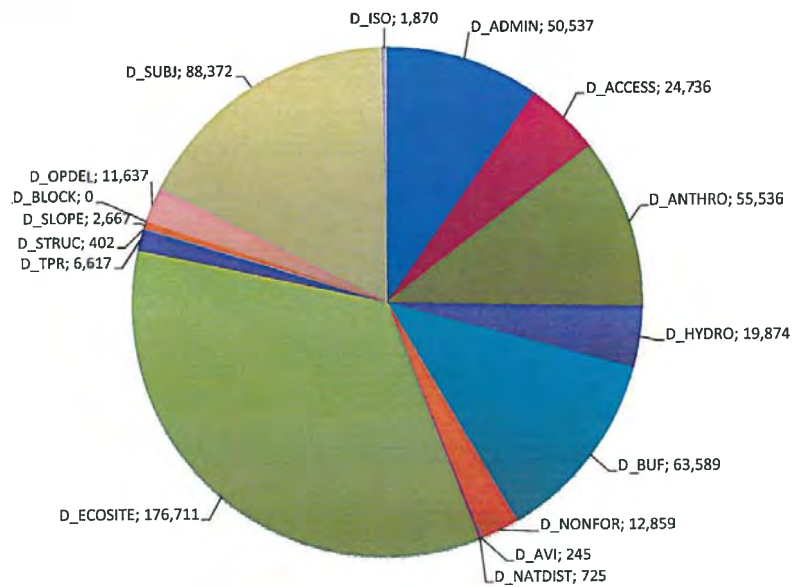


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# Summary of deletions by category



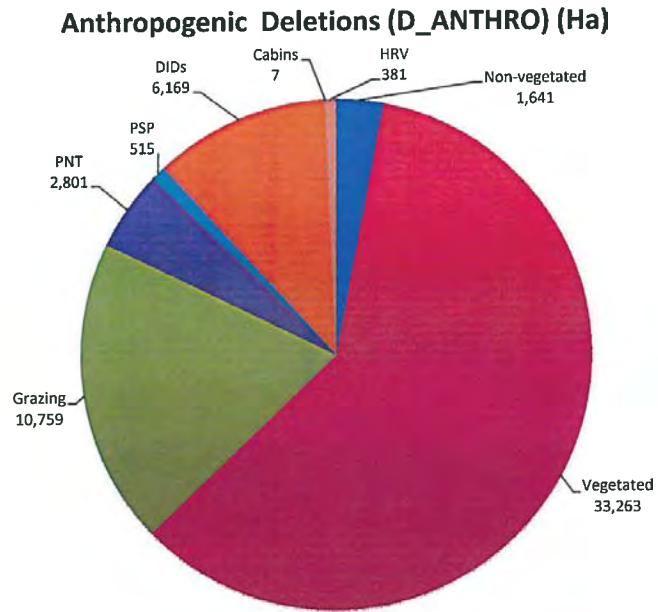
## Landbase Deletions by Category (Ha)



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# Summary of Anthropogenic Deletions



### **Weyerhaeuser Pembina Timberlands – SAG meeting #3 Sept 14/16**

- ✓ Dennis & Eric unable to attend – need to catch up with Eric before next meeting as this is his area of interest
- ✓ Mary Ellen's first meeting, introduced to group, and shared with SAG that she is somewhat versed already on the matter of forest management and watershed impacts due to her involvement with the North Saskatchewan Watershed Alliance and Bob's presentations to them, plus her scientific and technical background on watershed management.
- ✓ Started with keeping SAG in the process objectives:
  - Reminder to identify issues they would like to talk about, and Weyerhaeuser will schedule appropriately in the following meetings;
  - Responding to previous meeting's follow up
- ✓ Reviewed issues brought forth from meeting #2:
  - Wildlife impacts including herbicide use to be addressed in meetings 5 & 6 (referred again to what Weyerhaeuser calls our "curriculum")
  - Reviewed issue of ensuring rights and responsibilities of grazing interests versus forestry are understood up front before overlap occurs. The basic legal responsibilities were reviewed, but the residual issue is determining who caused the weeds to occur thus hold the accountability for removing. Weyerhaeuser position is that if the weeds occurred on logging site, they would remove for grazing interest. Not a DFMP matter but more of a best practice for grazing / forestry integration, with possible content in future Guidelines or OGR's.
  - Continued discussion on how Weyerhaeuser can develop ongoing relationships with local stakeholder groups to address operational concerns. The example discussed was around the local "synergy" groups which deal with private land owners and upstream oil & gas operators – not sure how well this will work but it should at least connect the operators more with Weyerhaeuser.
  - Provided the summary of regulatory links to protection of water and watersheds from previous meeting where Bob & Stephen teamed up on presenting
  - Reported out on what Weyerhaeuser is doing for consultation with area First Nations interests, and opted to do same again on other stakeholder groups. The interest from SAG was around how input received from those groups should be shared with SAG ongoing for interest and/or alignment.
- ✓ Presented overview of Alberta land use stewardship and planning i.e. ALSA, LUF, etc.
  - Key messages were around how this is the means and appropriate place for Albertans to look to how cumulative impacts is going to be addressed.
  - Bob acknowledged he is on the North Sask RAC, but not at liberty to disclose any specifics right now due to policy on process
  - Key comments were around how is Government going to establish the thresholds for how much is too much (e.g. will not be pre-settlement conditions), how will they determine them for the region as an average when there is the white versus green zones, how will they engage stakeholders to manage cumulative impacts, and when are they going to get on with it
  - Weyerhaeuser was asked to pass on the SAG sentiments around encouraging the Province to proceed with regional planning and ensure they engage with regional stakeholders

- ✓ Weyerhaeuser presented their context for recognizing cumulative effects:
  - Emulating fire as the main ecological engine for disturbance patterns in forests (focus on scale), from 2 rotation age class to stand retention strategies
  - Tempering this with a desire to manage for a given age class distribution for timber sustainability
  - Info was presented on various current landscape natural and anthropogenic indicators, and then the commitment in the DFMP to model future forest development over large periods of time as a comparison
  - Key issue from the SAG was no allowance for future anthropogenic footprint or “footstep”, where Weyerhaeuser’s response was that the DFMP is restricted to what’s in its scope of control and influence
- ✓ Weyerhaeuser presented on ILM:
  - Emphasis on ILM being a process or means to manage the collective footprint / footstep of human activity
  - This is the main area of interest of Eric representing upstream oil & gas operations, and Dennis with the OHV users, Bob will follow up with them before next meeting with 1-on-1’s.
  - Shared Weyerhaeuser’s position on key learnings from our experiences, what works and doesn’t, and keys to success
  - SAG response was wanting Weyerhaeuser and Government to do more. Weyerhaeuser suggested sub-regional planning is the best means, but Weyerhaeuser has & will do what they can, but not a DFMP scope of management per se.
  - Weyerhaeuser noted their concern for a dwindling landbase = lower growth & AAC from the FMA Area
- ✓ Presented info on determination of net landbase:
  - SAG clearly not interested in providing site-specific contributions to the landbase netdown, more interested in how it simply presents the big picture on the landscape issues e.g. how much linear development, how much is logged already
  - Gave key messages around about half of FMA Area is available for our forest management, we’re losing about 1+% per year to land loss
  - Question around how conservation areas are established, so reviewed land use decisions versus what the DFMP will do for habitat, including species of concern (deferred discussion till when it came up on the curriculum schedule and Weyerhaeuser will get Wendy to present on species of concern)
  - Raised the question again on watershed impact modeling and ECA. Good question was on the analysis may have been done for TSA purposes, but how is Weyerhaeuser going to honour and update it as they go in FHP’s by watershed? Will look to the Implementation section of the DFMP for this opportunity. Will follow up with Mary Ellen on more information as to how to, where her interest is in the actual modeling and not about the FMA Area impacts.
- ✓ Kerri reviewed follow-up and what’s next (field tour)
  - Kerri noted past meeting we did not present the VOIT’s – will need to include in review going forward



## **36 Stakeholder Advisory Group (SAG) Meeting 4 notes (October 12, 2016)**



# Field Tour

## Event Information

**Description:** SAG Field Tour  
**Date & Time:** October 12, 2016; 9:00 AM to 5 PM  
**Location:** Pembina Timberlands FMA  
**Organizer:** Weyerhaeuser  
**Objective:** First field based tour of the SAG

## Invitees & Affiliation

Paul Scott, Weyerhaeuser -Facilitator	Ron Moss, Fish and Game Association
Bob Winship, Weyerhaeuser - Facilitator	Rick Stelter, Trappers Association
Kerri MacKay, Weyerhaeuser – Meeting Administrator	Denis Poissant, ATV and Snowmobile
Stephen Mills, GOA	Percy Campbell, ATV and Snowmobile ALT
Trisha Stubbings, GOA	Cecil Anderson, Grazing
Eric Berg, AER	Mary Ellen Shain, NSWA
Kara Westerlund, County of Brazeau	

## Agenda Items

Agenda Items	Time
1. Welcome and Safety Orientation	9:00 am
2. Leave for Field	9:30 am
3. Arrive Meeting Point	11:00 am
4. Current Operations	11:15am
5. Tailgate Lunch	12:00 pm
6. Silviculture Tour	12:30pm
7. Flights	1:00 pm
8. Final comments and questions	3:00 pm
9. Depart to DV/Edson	3:15 pm





## **37 Stakeholder Advisory Group (SAG) Meeting 5 notes (November 10, 2016)**



## SAG Meeting #5 Notes and Action Items (Bob Winship)

My recollection of the discussion from the last SAG meeting, with a summary of our response in red font following each topic – needless to say these are summarizing notes and not a detailed account.

On fur bearers:

- Clear cuts = habitat destruction
- Harvest planners / forest managers need to get the trappers' perspectives on how to mitigate impacts from timber harvesting – how much consultation does Weyerhaeuser do with trappers? **Harvest planners consult with registered trappers (as per Government information) during the harvest design stage i.e. when decisions on where harvesting will occur – this is the best stage for trappers to provide input and influence where harvesting will occur, and how it can respect trails and cabins. Trappers are notified again just prior to harvesting for the purposes of giving trappers a chance to check and move any traps that may be impacted by the pending operations. A trappers' compensation program still exists that is run in cooperation with Government and industry, but Weyerhaeuser has had only minimal involvement with the program over the years. I offers compensation for 3 increasing levels of impact i.e. damage to property (traps, cabins), short term revenue loss form disturbance, and long term loss of revenue due to habitat changes. Weyerhaeuser was unable to inform the Group as to how many trappers we do engage, and to what level of accommodation we do on average.**
- Habitat will recover as cut areas regenerate, but will bring new species associated with early succession first, depends on size of cut area, forest covertypes, amount of edge, etc. **Weyerhaeuser has attempted long term habitat modeling integrated with timber supply analysis for fur bearers in the past, but does not do so anymore. It was somewhat problematic in terms of reaching agreement between experts and Government on how to do the modeling, and Government at present does not require it.**
- What is the impact of residual habitat and populations from adjacent cut areas? Do we provide some connectivity between residual forest cover?  
**There are currently no specific guidelines for fur bearer habitat protection during harvest design, including maintaining corridors of residual habitat.**
- How does our harvest patterns compare to fire disturbance? **The topic remains one of ongoing study, but generally logging disturbances (i.e. blocks) tend to be much smaller than fire disturbances historically, and conversely there are many smaller sized natural disturbances e.g. minor windthrow, small non-spreading fires**
- Seems that many/some species use the edge between new harvest areas and residual forest **There is much long standing research that supports this.**
- Some debris piles should be left for some residual cover for fur bearers, and preferably close to the edge of residual mature forest **Government will allow some minor amount of debris piles left for fur bearer habitat, but its location needs to be a certain minimum distance from standing timber to discourage fire fuel continuity**
- Weyerhaeuser suggests the current forest is not typical with respect to the predominance of older forest across the landscape, and that earlier forest landscapes were generally much younger due to no fire control. How do you know? **Weyerhaeuser will look for scientific references for the region. As well, the current forest inventory provides an overview of fire history (i.e. stand origin dates) What will the next forest landscape look like? The forest management plan timber supply analysis will show a projection of forest ages over the next 200 years**

On deciduous versus coniferous forest cover in regenerating landscapes – do we maintain a balance comparable to natural conditions? **The general direction is to maintain the same amount and spatial distribution of deciduous versus coniferous forest cover as we see it today, with only minor exceptions allowed spatially but not in terms of total area in balance. That being said, a strategic issue for forest regeneration is preventing a natural dominance of deciduous tree species in establishing new stands**

On herbicides:

- Many smaller mammals will not use regenerating areas that were herbicided for several years after application. Herbicided areas will see little diversity and animal use **Research that Weyerhaeuser references suggests the suppression of lesser vegetation (mostly grasses) is short term, and as it returns to a reforestation site so does the expected biodiversity associated with early succession vegetation.**
- How does herbicide use impact surface / ground watershed from such areas? Is there residual chemical pollution in run-off? **The Weyerhaeuser SAG representatives are only informed of the extensive research that has gone into the determination of the safe use of glyphosate in reforestation applications, however we are not experts on the actual science behind its approved use. We are aware as applicators and users of this “tool” that it has restricted conditions for its use, including ensuring dry conditions before applying, so as to ensure its uptake by active vegetation and prevention of any trans-location of the herbicide.**

Need to avoid bear denning sites:

- Local “active” trappers can be helpful identifying known or likely denning sites (e.g. higher ground / ridge sites in pine dominant forests) **Good suggestion, Weyerhaeuser could develop a list of potential inputs and advice from active trappers on local knowledge**
- Do harvest planners look for likely denning sites, or use some predictive methods? **All planners are trained to look for possible key habitat features but only co-incidental with other field work i.e. no specific expert survey for bear denning sites. The same would apply to actual logging operations should a denning site be discovered coincidentally – in all cases the result is establishing a protective buffer of undisturbed area.**

On logging during the “nesting” season:

- Weyerhaeuser should not do any harvesting during the nesting season. Any logging will likely result in mortality of songbirds. Mixedwoods likely to have more species / numbers of individuals. **In support of the intention of Federal statutes, Weyerhaeuser defers or adjusts harvest schedules in areas having a higher probability of nesting songbirds (yes, such as lower elevation mixedwood forest). We will also conduct bird nesting surveys in such susceptible stands during a defined period of concern (i.e. summer), and if any active nests are found, then a protective buffer of undisturbed forest will be maintained around the nesting sites.**
- Does Weyerhaeuser have targets for habitat supply over time and the landscape? **The Government of Alberta now works collaboratively with forest managers to model the potential impacts of habitat change over the long planning horizons of forest management plans. This generally uses a smaller list of threatened or endangered / indicator species, where the modeling looks at amount of habitat over time and its spatial arrangement, and otherwise uses various indices to constrain harvest scheduling.**

On cumulative effects:

- Does the DFMP / Weyerhaeuser work with all other resource operators to address cumulative effects? **The short answer is that a forest management plan will only look at the possible cumulative effects of forest management operations, and not those of other resource sectors or users. Weyerhaeuser has experience working with oil & gas sector in smaller landscapes of critical habitats such as for caribou, the learnings from which could be applied to larger landscapes. This remains an important opportunity for Alberta to truly achieve an integrated approach to resource development on an ongoing operational basis.**

Suggested follow-ups:

- Can we do more in terms of reaching more “active” trappers (as defined by Rick) at harvest design stage, and with a broader list of questions and info topics? Ask Bill and Ian what their current guess is for actual consultations versus total number of registered trappers. What’s available for research on long term impacts of forest management transitioning to younger forests?
- We should be prepared to report out more on the Government critical species habitat modeling.

- We should provide more information (again) around the point on our forests transitioning to a different age class distribution, and also on the assumptions around pre-European settlement (and post). This could be combined with our commitment to look at some NRV modeling during DFMP implementation, but at least describe more as to what specifically we are going to model and our objectives.
- Again, the demand for ILM !! Probably best to continue to lobby AE&P and AA&F via the North Sask Regional Plan for a Green Zone ILM program, but maybe get a more formal commitment to do so as an outcome of the Plan public involvement process.





## **38 Stakeholder Advisory Group (SAG) Meeting 6 notes (December 15, 2016)**



Rep	Issue	Discussion	Potential Recommendations
Rick - Trappers	<p>December 15, 2016 – DV SAG meeting #6: In Attendance: Paul Scott, Bob Winship, Bill Taylor, Eric Berg, Stephen Mills, Kara Westerlund, Dennis Poissant, Cecil Anderson, Mary Ellen Shain</p> <p>Review of Weyerhaeuser's response to issues and concerns raised at meeting #5</p>	<p>Content from Rick's email to Weyerhaeuser and SAG of Dec 15/16:          "- trapper notifications with accurate maps showing proposed access and cutblocks followed by contact from a company representative to discuss any concerns like trail clean up, cabins, trapper bridges, timing. Timing is a big one as if a trapper knows well enough in advance they can totally avoid the area for that winter It's very frustrating to spend the energy to get a line set out then receive a call saying some is going to start logging there in a couple of days. Alberta law requires a minimum 10 day notification but a notification in the summer re upcoming winter activity can alleviate a lot of tension          This would also be a good time to ask trappers re possible bear dens, eagle and osprey nesting sites          -Stop all spring time timber harvesting as trappers are of the opinion that spring time logging kills or destroys thousands of young birds or nests per every cut block harvested during nesting season          Weyerhaeuser is only concerned with the few species of migratory birds that are on the threatened species list however the big picture has all the native Alberta birds from chickadees to grouse to owls. Down the road, I believe this will become a black eye for timber harvest companies.          If necessary do more logging before and after nesting season          -cutblock spraying-spray only where absolutely necessary as spraying turns a cutblock into a desert again, where nothing lives for a few years</p>	<p>Potential Recommendations</p> <ul style="list-style-type: none"> <li>• Weyerhaeuser to look at increased effort of earlier consultations with trappers, and to expand topics of consultation. This could form expanded standards for consultation and notification, best practices and Ground Rules content.</li> <li>• Weyerhaeuser remains confident that its current due diligence on protection of nesting migratory birds is adequate (reference meeting #5 presentation information). Weyerhaeuser will report on the amount of more susceptible forest cover_types harvested every year relative to total amount of such cover_types on the FMA Area, and forest types harvested outside of the concerned season.</li> <li>• Weyerhaeuser remains confident that the use of herbicide in lesser vegetation control remains safe to do so as per regulatory requirements and supporting research, and has only short term site-specific ecological impacts. That being said, Weyerhaeuser will continue to use herbicides only where deemed necessary, and will review alternatives to herbicide use with the intent to – re-evaluate the consequences of less use on silvicultural program success.</li> <li>• Weyerhaeuser will investigate the application of a marten habitat supply impact model integrated with the long term timber supply analysis, although AA&amp;F has not requested this.</li> </ul>

		<p>-timber harvest destroys marten habitat The more logging , the less marten I don't know what can be done about this. Some trappers have quit trapping marten to try to save them. If marten are ever declared an endangered species there will be no logging or trapping in marten areas”</p> <p>From meeting #5, a question was raised as to the matter of understanding how the future forest state will differ from an otherwise “natural” state. During meeting #5, Weyerhaeuser stated that the forest area was believed to be generally younger in overall age from a period of early European settlement and prior, and with less area of older forest, due to lack of significant / modern fire control efforts until post WWII. At this meeting, Weyerhaeuser referenced in more detail an extract from the current forest management plan that describes in more detail the science and modeling into this premise. This “look back” presents a contrast to what the future forest state is predicted to look like based on current assumptions, and thus prompts the question as to how does one reference various forest states with intervention by forest management. Weyerhaeuser further repeated some of the information presented in meeting #5 in regard to disturbance sizes and patterns resulting from natural versus managed scenarios.</p>	<ul style="list-style-type: none"> <li>• Weyerhaeuser will commit to an analysis of natural range of variation in comparison to the landscape forest patterns predicted by the forest management plan, as part of the forest management plan implementation.</li> </ul>
Kara- Brazeau	What are we going to do to stay ahead of the MPB	<p>This is a detailed answer that will be answered with SHS and modeling. The major fly-overs into Alberta from BC have essentially subsided due to the MPB having attacked and killed the majority of existing pine growing stock in that Province i.e. population numbers have subsided due to lack of live pine forest now. As well, west central</p>	<p>Ensure Weyerhaeuser and AA&amp;F are doing their best to minimize the impact of MPB attack in our area. This should include:</p> <ul style="list-style-type: none"> <li>• Ensuring all harvesting targets susceptible forest stands and those attacked by the MPB</li> <li>• Ensure AA&amp;F continues to monitor and enact control and prevention actions where the MPB</li> </ul>

		<p>Alberta south of Hwy 16 did not experience any significant infestations from the fly-over due to the large distance of Rocky Mountains between the BC attack areas and our area. However some believe we will continue to have an Alberta endemic population that will survive due to increasingly warmer winters. As well, there continues to be populations growing and spreading from BC into Alberta via the Yellowhead corridor through Jasper National Park. This may be important as Weyerhaeuser's Pembina Area contains some of the most susceptible pine forest in the Province (i.e. lower elevation pine in mixedwood forest types attracts flying beetles and the spread rate is high once attacked).</p> <p>There are few essential aspects to Alberta's Healthy Pine Strategy that forest management are required to address, namely:</p> <ul style="list-style-type: none"> <li>• Reduce (harvest and utilize) the majority of the susceptible pine forest with 2006 targets such as a 75% reduction after 20 years = increased harvesting levels for forest industry = increased investment and economic development to utilize the short term amount of extra timber available as a result, notwithstanding all of which cannot compromise the long term sustainability of the forest as determined in forest management plans;</li> <li>• Focus harvesting on those forest stands which are most susceptible to beetle attack;</li> <li>• Harvest (i.e. salvage) those stands which are attacked by beetle, and ensure all infested trees are utilized or otherwise dispose of all trees that contain overwintering beetles as a means to prevent further spread.</li> </ul> <p>AA&amp;F has committed to review its strategy on MPB</p>	<p>may occur in our area</p> <ul style="list-style-type: none"> <li>• Weyerhaeuser should continue to support AA&amp;F in monitoring and control programs, and research around evaluating the continued risk of MPB east of BC</li> </ul>
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<p>Dennis - ATV</p>	<p>Concern about the public perception of environmental impact of OHV in public lands, and the need for recognition of the recreational value of OHV use.</p>	<p>control and prevention, but regardless the next forest management plan will need to address the above elements as a minimum.</p>	<ul style="list-style-type: none"> <li>• Ensure that Weyerhaeuser’s Forest Management Plan has a commitment to cooperate and facilitate OHV trail development, subject to some key criteria such as: <ul style="list-style-type: none"> <li>○ Supporting other strategic resource management plans that require footprint management e.g. Regional Land Use Plan, grizzly bear recovery plan, general published environmental protection requirements</li> <li>○ Supporting trails that will have some structured stewardship and align with larger landscape scale recreational planning (e.g. Municipal recreational node development, managed random campsites, designated cross-country routes, etc.)</li> <li>○ “support” could take the form of Government-approved trail retention (i.e. partial reclamation), cooperating in trail development or protection of existing trails, assist with mapping and surveying of longer term trails, working with local OHV clubs and associations in advocacy and planning</li> </ul> </li> <li>• Weyerhaeuser to advocate for a North Saskatchewan Region sub-regional ILM / access management plan to address the cumulative impacts of industrial and recreational footprint development.</li> </ul>
	<p>Very big concern by ATV owners that they will be limited to where they can ride on Crown lands. Why do WY and oil and gas close roads and limit access. There is a large number of people and economic input involved in this sport and want to continue to have access for OHV. At the end of the day it is huge industry that wants to maintain the sport, camping and hunting. Needs to be better enforcement for those that ruin the land.</p> <p>Weyerhaeuser supports a strategy of designated trail routes to promote the recreational OHV opportunity in the Green Zone. OHV-specific use areas have a role (e.g. Brazeau Club trails), but will probably not satisfy the implicit expectation of such users having access to larger landscapes of public lands. This approach should provide a higher value experience for trail users, incent more responsible environmental protection and appropriate trail design, facilitate enforcement, and should align with the Provincial OHV associations’ position of the need for an Alberta program to fund and authorize such a scenario. This should also incent the resource sector to participate and support as a means to direct OHV use away from susceptible infrastructure. Key to success will be Government policy and legislation that also addresses liabilities, notwithstanding the ultimate responsibility to practice due diligence by all stakeholders involved. Again though the implicit outcome is that OHV users will be restricted as to where they can go on public lands, but there are examples of other locations in North America where this approach</p>		

	<p>has been successful.</p> <p>Eric – If access is created by industry then they have a responsibility to deal with it. They are responsible to insure enforcement takes place.</p> <p>Weyerhaeuser acknowledges that the resource sector in effect creates most OHV routes coincidental to those sectors' land developments, temporary or otherwise. Therefore, the resource sector has a vested interest in seeing more direction and control on OHV use on public lands, and will most likely be willing to assist in promoting a designated trail strategy providing costs, liabilities and enforcement issues can be addressed.</p> <p>Dennis – The Alberta ATV association has offered to take responsibility for liability on designated trails if they can get support from the GOA in the form money from an additional surtax on licence fees. Money would be used to maintain trails and manage liability.</p> <p>Weyerhaeuser can offer a general intent to cooperate with OHV trail development, but would require some strategic landscape direction from Government as opposed to an ad hoc / first come-first-serve basis. In addition to expressions of support to the Provincial OHV associations' advocacy, Weyerhaeuser would recommend a concerted cooperative advocacy for a pilot ILM / access management project for the North Saskatchewan Region under the auspices of the forthcoming Regional Land Use Plan. This could / should align with the Regional Plan's forthcoming Biodiversity Management Frameworks, and the need for controlled footprint for the grizzly bear recovery plan targets.</p> <p>Mary Ellen: suggested the involvement of David Campbell who has modelled trail development (might be same DC who works at Forcorp?) Uses LiDAR and</p>	
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		<p>other GIS layers to plan for future trails that avoid areas of concern.          Kerri is working with the ATV club to put their trails into a GIS format.</p>	<ul style="list-style-type: none"> <li>Any look at integrating recreational trail development at a landscape level will need to use best knowledge and modeling on the subject as appropriate for our area. Regardless of any projects being developed, Weyerhaeuser will look into the suggested reference, and others, for consideration on “how to” plan for recreational trail development with other stakeholders.</li> </ul>
<p>Eric - ERB</p>	<p>Work with Oil and Gas industry to determine how much is too much overall industry Footprint on the environment. Is DV a good location for an industry footprint pilot project?</p>	<p>Eric – There are some recent examples of pilots by the AER in addressing synergies / less infrastructure development (e.g. Fox Creek Pilot) and possible cumulative impacts on water resources (e.g. Grande Prairie area). It is possible to predict future develop with oil and gas to a certain extent that could contribute to forecasting overall surface land development in the future i.e. modeling cumulative effects. Put a stakeholder group like the SAG here to develop a process to manage footprint.          Eric – First need to understand the current state of the environment and move forward with targets.</p> <p><b>Weyerhaeuser has participated in some smaller scale</b></p>	

landscape footprint management projects (e.g. caribou zones), where the key learnings were more around how to make such collaborative efforts successful, such as:

- Getting Government support to enable and empower collaborative groups to address the challenge subject to a terms of reference that satisfies Government’s process and outcomes expectations.
- Allowing and enabling proactive, collaborative industry participants *first* to work together with strong facilitation, but without Government directing i.e. not in the room but having set desired outcomes at the beginning as deliverables
- Need to project oil & gas development on landscape surface
- Setting specific “targets”, versus “guidelines”, incents more effort but without necessarily binding the participants to achieve such targets
- Key is having a common information base to work from that is open to all participants but also contributed to – also key is having the information *promptly*
- Once the resource sector footprint management has an agreed-to plan, then allow the same group to then engage municipal governments and other stakeholders for support
- Government support appropriate recommendations
- Maintain a program of collaborative participants for implementation of footprint management, and reward / incent those who do accordingly **WY—Firstly, put the industries**

<p>Cecil - Grazing</p>	<p>What have we learned so far so we can create a better plan moving forward?</p>	<p><del>(Oil and Gas, Forestry) that have the biggest impact regarding footprint and set direction (target) on what the outcome needs to be and let industry work it out without GGA in the room. Big opportunity is to develop an ILM with the biggest footprint industry sitting at the table. Identify in the FMP what that pilot may look like and layout suggestions on how to move forward.</del></p> <p><del>Eric – First need to understand the current state of the environment and move forward with targets.</del></p>	
		<p>The largest concern is communication and the grazing operator being informed as early as possible in the planning process as to the responsibilities and liabilities of both parties. Laying out what the logging plan is and getting the grazer informed early is essential. Grazer does not want to shoulder extra cost due to the logging coming through (i.e. fencing requirements and deferral of grazing timing). Who was there first often comes up, but industry is often responsible for that cost. Who was responsible should be laid out at the time the grazing licence is issued. Make the content and responsibility clear and that will reduce conflict later.</p> <p>Weeds being responsibility of the grazer after three years often comes up.</p> <p>There is often a concern for Weyerhaeuser using herbicides for vegetation control in regeneration, or control of noxious weeds, on areas that would be later used for grazing.</p> <p>Cecil – should send personal invitations to grazing operators being impacted to attend open houses in order to communicate with them. The invitation should</p>	<p>Guidelines to develop Grazing and Timber Agreements (GTA) for grazing and timber integration do exist but not easily understood by design. Firstly, they will apply to new grazing dispositions but not necessarily older issuances, even with an implied renewal mechanism with Government. Regardless, the concept is a good approach regardless of this typical legal sensitivity about imposing conditions on land dispositions post issuance i.e. the Guidelines are good practice.</p> <p>The Guidelines could be updated to improve early communications with specific topics as brought forth through the SAG recommendations.</p> <p>Currently the location of new and renewed grazing dispositions is directed by applicants' demands, and there is no consideration for landscape level integrated land management. One past recommendation of Weyerhaeuser was to establish with AA&amp;F more precisely how much grazing capacity is available for a given landscape, and where best to issue new or renewing dispositions in order to minimize conflicting uses. Such an approach would</p>

		<p>also include a map that shows how and when Weyerhaeuser will impact their disposition. Important to have them in locations so travel is not an issue.</p>	<p>include the concept of a longer term movement of grazing opportunities across a landscape for a given grazing industry. Previous discussions talked about forming a regional grazing plan to identify appropriate locations for grazing under this concept.</p> <p>Currently Weyerhaeuser relies on operations staff to consult with ranchers on the integration with timber harvesting and reforestation, versus outside stakeholder relations contacts, due to their knowledge and authorization to offer agreement terms. Again this requires an exceptional amount of extra time to adequately work with a rancher on an integration plan. However any means to advance the knowledge of grazing operators well before timber harvesting operations may occur is seen as beneficial, and this may include some help liaising with the forest grazing community. This could include specific group meetings with Government representation attending, more on-line or mail-out information, and/or a liaison person contacting ranchers directly with info share.</p>
Eric	Communication and relationships with stakeholders	<p>Eric – WY should have a dedicated stakeholder person to deal with all users of the land. It’s important to have a relationship with other resource users first, then work towards issue resolution and integration. One needs to distinguish making relationships first versus making decisions, and having a liaison has benefits in effectiveness for Weyerhaeuser staff.</p> <p>Eric – For the general public there was some discussion at one of our previous sessions regarding information</p>	<ul style="list-style-type: none"> <li>• The suggestion is one to consider by Weyerhaeuser, as with most organizations these days our staff have less time to devote to proactive stakeholder relations. The most immediate need for our staff is simply to be able to make the connection with a stakeholder, where Weyerhaeuser defines “stakeholder” as a person who has an authorized / dispositioned use on public lands. The dilemma for Weyerhaeuser staff is their desire to have genuine ongoing</li> </ul>

		<p>sessions on the FMA, e.g. at OHV rallies, etc. where WY staff could make information available in an informal setting. The idea is about educating and increasing awareness while “on the land” e.g. info on line, signs, where to learn more, etc.</p>	<p>relationships with stakeholders so as to ensure the integrity of accommodations and integration, however time becomes the limitation.</p> <ul style="list-style-type: none"> <li>As per prior SAG meetings, Weyerhaeuser sees a need to improve its efforts of ongoing general public involvement and awareness. To this end, we shared a list of possible activities prior with the SAG group, and will add these suggestions to it, and again will review this topic at the next SAG meeting.</li> </ul>
<p>Mary - NSWA</p>		<p>Mary – excited about the idea with the landuse pilot project and would like to be involved in these in the future</p>	<ul style="list-style-type: none"> <li>For the benefit of the SAG group, the North Saskatchewan Watershed Alliance (NSWA) group was explained to the other SAG members. The relevance is the NSWA is a model of a stakeholder stewardship group endorsed by Government under the Water For Life Strategy, and may by example have some learnings to share should a land stewardship effort begin to develop in a similar way.</li> </ul>

## **39 Stakeholder Advisory Group (SAG) Meeting 7 notes (July 13, 2017)**



**Notes from SAG Meeting #7**  
**July 13, 2017 – 4:00-6:00 p.m.**

Attendance:

WY – Bob Winship, Paul Scott, Kerri Mackay

SAG – Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Shirley Mahan (alternate for Kara Westerlund)

AAF – Stephen Mills, Trisha Stubbings

1. Introductions
2. Agenda Review
3. Final Report Review
  - The draft final report sent out for review in April 2017 was consistent in this report starting on page 26
  - Shirley from Brazeau County noted that Brazeau and Clearwater counties have signed an MOU in support of the OHV trials initiative noted on page 31 of the report
    - i. WY response – company will continue to be an advocate for a process to develop a trail system on the FMA and elsewhere (Paul to document in Chapter 7 (Implementation) of FMP)
    - ii. Key recommendation from Weyerhaeuser is to develop a landscape look at overall footprint for rec trail development i.e. not first come-first serve
    - iii. Trisha stated that with AAF there are two departments where they used to be one; timber and lands; currently creating a GIS trail layer for the entire area
    - iv. Bob offered to have a pilot project on the FMA in support of the North Saskatchewan LUF plan.
    - v. Noted that most people do not understand what is being proposed, and therefore more education is required regarding the development of a trail system
  - Mary Ellen would like to see evidence of monitoring permanent crossings that WY is doing
    - i. WY response – will provide reports as such to the group (Bob to do)
  - Bob spoke to Ron's desire to have more information regarding ungulate populations
    - i. Really nothing is available from AAF
  - Eric – discussed the cumulative effects section on page 30; seem to represent their discussions accurately
    - i. Bob briefed the group on the Denhoff report of May 2016 regarding 'Caribou Path to Recovery' in the context that it serves as an example of where Alberta is being forced to minimize the cumulative footprint on a forested landscape
    - ii. There was some modelling done to figure out how much roading would be acceptable in Caribou areas
    - iii. Some roads would have to be reclaimed so that others could be built
    - iv. Also some reforestation of linear developments (planting of seismic lines)



- v. Trisha offered up that other remedial work will be a condition of future footprint makers requesting new land use activity
  - vi. The NSRP has set indicators of intact habitat, but Bob suggested that no targets have been set in the NSRPLUF; targets or limits might reflect the current status on the landscape; let industry work together to meet the targets
  - vii. Bob offered to have future discussions with the group to discuss cumulative effects, outside of the realm of this FMP
- Eric – on page 28, discussions on water; addressed most issues, and the tour helped as well to understand this issue; is SAG sure there are no recommendations made to WY
    - i. WY response – no commitment to measure water quality; continue to monitor the results of crossing structures as potential sources of sedimentation
    - ii. There is to be an announcement made shortly by a national research group regarding a new study to see if there is an influence of forest disturbance on drinking water
    - iii. Stephen reported that there may be additional studies funded for Tri Creeks on the West Fraser Hinton FMA
  - In wrapping up the discussion on the final report, suggested that the SAG should report back to WY no later than September 1, 2017 on any discrepancies they note.
4. Timber supply model outcomes
- Reviewed the 20-year Spatial Harvest Sequence from PatchWorks PW60015 run, with a map showing decade one and decade two polygons
  - The scenario took into account the review and edits completed by all timber operators in early June
  - PW60015 will likely be the second of three Versions to be reviewed by all timber operators prior to signoff of the Preferred Forest Management Scenario in September
  - Question from Cecil about how much has been logged in the previous 20 years
  - WY response – will send out map indicating all harvesting to date (see chapter 3 – Landscape analysis to provide this). (Paul to send map Kerri to send to members)
  - Showed ECA maps for 0, 10, 20, 50, 100 and 200 year snapshots; no watersheds were identified as being in the ‘red’ (critical) zone; some moved in and out of the ‘yellow’ (warning) zone; two areas were identified (for Bull trout and Athabasca Rainbow Trout) that had constraints applied to stay in the green (good to go) zone.
  - Showed Songbird output – all in the “green” zone of charting i.e. acceptable
  - Showed Marten output – in the green zone
  - Showed the Barred Owl output for years 0, 10, and 20 – everything ok; appears to be some issues with breeding pairs 35-45 years out, but stayed in yellow or warning zone
  - Showed Grizzly Bear output – years 0, 10 and 20 – no apparent issues identified by AAF biologists.
5. VOIT table – explained their purpose and origins, reviewed briefly; indicated which were reviewed in prior sessions, and which have not; can supply comments back to WY by September 1, 2017
6. Draft FMP – SAG members were asked at the end of the meeting if they would like the opportunity to review the draft FMP when available in the fall of 2017 – no interest was shown by the members. Meeting was adjourned at 6:30 for supper.

## 40 Consultation Tracker Report (July 11, 2018)



## GENERAL PUBLIC - DETAIL REPORT

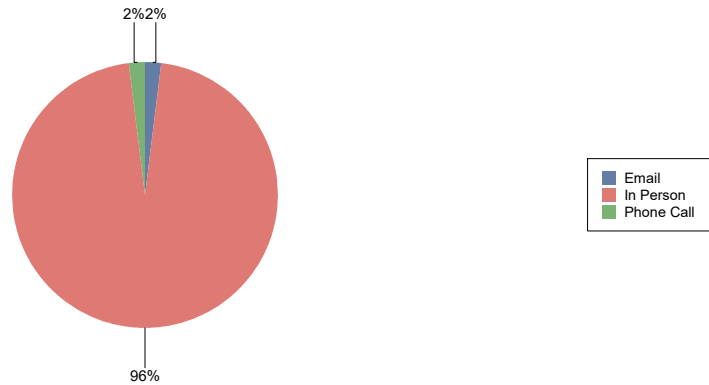
Report Dates: November 01, 2016 to November 30, 2017

Number of Records: 53

Number of Programs: 1

Programs: 2017 FMP

Communication Type Summary



Program Summary



## CONSULTATION RECORDS

### RECORD #1

**Contact:** Anthony Geisen

**Subject:** 2017 FMP

**Date:** 2016/11/22

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson to share status of FMP and outputs of FMP to date

**Legal Location(s):**

**Details:** No concerns brought forward at the open house. Talked briefly about the W5 and W6 CTPP programs.

**Extra Notes:**

**RECORD #2**

**Contact:** Aron Connelley  
**Subject:** 2017 FMP  
**Date:** 2016/11/22  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** 2017 FMP open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised by individual. Dropped in the open house as he was a quest of the hotel. Resident of Grande Prairie.

**Extra Notes:**

**RECORD #3**

**Contact:** Thelma Bowhay  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** Thelma was at the meeting to talk to Deb Weber and get a harvest design for Brewster Creek. Info shared with Deb after meeting to follow up with. No concerns related to the FMP.

**Extra Notes:**

**RECORD #4**

**Contact:** Jim Glover  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns shared about FMP at the open house.

**Extra Notes:**

**RECORD #5**

**Contact:** Richard Roper  
**Subject:** 2017 fMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:**  
**Legal Location(s):**

**Details:****Extra Notes:****RECORD #6**

**Contact:** Susan Roper  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised at the open house. Susan works for Roper Enterprises, a logging contractor for Weyerhaeuser.

**Extra Notes:****RECORD #7**

**Contact:** Angella Fobert  
**Subject:** 2017 FMP  
**Date:** 2016/11/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised at open house. Spouse of WY timberlands employee.

**Extra Notes:**

**RECORD #8**

**Contact:** Benjamin Mcsauer  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open House in RMH  
**Legal Location(s):**

**Details:** No concerns raised concerning FMP. Will contact Bill Taylor in DV office.

**Extra Notes:**

**RECORD #9**

**Contact:** Jessica Unknown  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2016 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding FMP. Bill sent an FMA map to her as a followup.

**Extra Notes:**

**RECORD #10**

**Contact:** John Vandermeer  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open House in RMH  
**Legal Location(s):**

**Details:** No concerns were raised concerning the FMP

**Extra Notes:**

**RECORD #11**

**Contact:** Ken Bradshaw  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the FMP. Bill sent ortho/hillshade maps to him. Grazing operator. OMNI grazing range.

**Extra Notes:**

**RECORD #12**

**Contact:** Bert Ciesielski  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the FMP at this time.

**Extra Notes:**

**RECORD #13**

**Contact:** Richard Anderson  
**Subject:** 2017 FMP  
**Date:** 2016/11/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the FMP. Acknowledged the amount and quality of the information provided at the open house.

**Extra Notes:**



**RECORD #14**

**Contact:** Charlie Martin  
**Subject:** 2017 FMP  
**Date:** 2016/11/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open houlse in DV  
**Legal Location(s):**

**Details:** No concerns related to the FMP. Interested in the power potential of the DV hog fuel.

**Extra Notes:**

**RECORD #15**

**Contact:** Trina Wakelin  
**Subject:** 2017 FMP  
**Date:** 2016/11/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the FMP.

**Extra Notes:**

**RECORD #16**

**Contact:** Martin Machau  
**Subject:** 2017 FMP  
**Date:** 2016/11/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns related to the FMP. Was interested in a mill tour. Wanted an update to the CTPP program for R12. Wanted a contact person (Bob Winship).

**Extra Notes:** Bob Winship met with Martin at the open house, and Bob provided information related to the CTPP program in R12; question about salvage wood; question about Weyerhaeuser access to unde

**RECORD #17**

**Contact:** Dale Hansen  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns related to the FMP. Dale is a Quota Holder on the FMA in R12.

**Extra Notes:** Dale attends FMP technical sessions as a Quota Holder, where additional information is shared.

**RECORD #18**

**Contact:** Henry Watson  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns were raised regarding the FMP. General discussion about forestry practices.

**Extra Notes:**

**RECORD #19**

**Contact:** Norma Black  
**Subject:** 2017 FmP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #20**

**Contact:** Robyn Fonge  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open House in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #21**

**Contact:** Bert Ciesielski  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP.

**Extra Notes:**

**RECORD #22**

**Contact:** Martino Verhaeghe  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #23**

**Contact:** Pam Ulrich  
**Subject:** 2017FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #24**

**Contact:** Faynell Wheeb  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #25**

**Contact:** Dar Claypool  
**Subject:** 2017 fMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in DV  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices. Discussed with Claypools about working closely with silviculture forestry to see if grazing can offset some applications of herbicide on their grazing allocations.

**Extra Notes:**

**RECORD #26**

**Contact:** Stacy Ingham

**Subject:** 2017 fMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH

**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #27**

**Contact:** Brian Walisser

**Subject:** 2017 FMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH

**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #28**

**Contact:** Darren Williams

**Subject:** 2017 fMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open House in RMH

**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #29**

**Contact:** Jim Williams  
**Subject:** 2017 fMP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #30**

**Contact:** Pam Melnick  
**Subject:** 2017 FMP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house RMH  
**Legal Location(s):**

**Details:** Pam was at the open house in case there were any questions about MPB.

**Extra Notes:**

**RECORD #31**

**Contact:** Ron Hallahan  
**Subject:** 2017 fMP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #32**

**Contact:** Trisha Stubbings

**Subject:** 2017 fMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH

**Legal Location(s):**

**Details:** Trisha was there in case there were any questions.

**Extra Notes:**

**RECORD #33**

**Contact:** Ray Gervais

**Subject:** 2017 FMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH

**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #34**

**Contact:** Shae Poteet

**Subject:** 2017 FMP

**Date:** 2017/10/25

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Paul Scott

**Attachments:** Article in Mountainer

**Operating Area:**

**Program:** 2017 FMP

**Project:** 2017 FMP Open Hous

**Location Description:** Open house

**Legal Location(s):**

**Details:** Shae asked questions about the open house so that she could write and article for the Rocky Mountaineer. See attached.

**Extra Notes:**

**RECORD #35**

**Contact:** Richard Roper  
**Subject:** 2017 fmP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open housein RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:** Richard is a logging contractor for WY.

**RECORD #36**

**Contact:** Susan Roper  
**Subject:** 2017 fMP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:** Susan is a logging contactor for WY.

**RECORD #37**

**Contact:** Andrea Spongberg  
**Subject:** 2017 FMP  
**Date:** 2017/10/25  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.



**Extra Notes:**

**RECORD #38**

**Contact:** Heather Gavin  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #39**

**Contact:** Brian Gavin  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #40**

**Contact:** Ann Dechambeau  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #41**

**Contact:** Norm Pelke  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #42**

**Contact:** Jack Dickson  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:** Jack is associated with EDFOR Cooperatives

**RECORD #43**

**Contact:** Carli Costall  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #44**

**Contact:** Carli Costall  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** No concerns raised regarding the fMP. General discussions about forestry practices.

**Extra Notes:**

**RECORD #45**

**Contact:** Mijke Dietech  
**Subject:** 2017 FMP  
**Date:** 2017/10/24  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in Edson  
**Legal Location(s):**

**Details:** Mike is the OSB mill manager in Edson.

**Extra Notes:**

**RECORD #46**

**Contact:** Gary Neufeld  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** Email  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open House in Edson  
**Legal Location(s):**

**Details:** Gary saw the notice for the open house and sent an email requesting a map of the Beaver Meadows area. He is a landowner in the area. Sent link to draft FMP as well.

**Extra Notes:**

**RECORD #47**

**Contact:** Rick Artzen  
**Subject:** 2017 FMP  
**Date:** 2017/10/26  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** Phone Call  
**Representative:** Paul Scott  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:** 2017 FMP Open Hous

**Location Description:** Open house in RMH  
**Legal Location(s):**

**Details:** Receive a voice mail from Rick asking for a copy of the draft FMP. Sent Forcorp link on October 27, 2017.

**Extra Notes:**

**RECORD #48**

**Contact:** Town of Drayton Valley  
**Subject:** 2017 FMP  
**Date:** 2016/11/23  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Bob Winship  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:**

**Location Description:**  
**Legal Location(s):**

**Details:** Bob gave a presentation to the Town of DV ; questions were asked about the MPB is doing; Weyerhaeusers willingness to work with ATVers; softwood lumber impacts; mill residuals;

**Extra Notes:** No concerns were raised that directly affected the FMP development.

**RECORD #49**

**Contact:** Clearwater Council  
**Subject:** 2017 FMP  
**Date:** 2016/12/14  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Bob Winship  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:**

**Location Description:**  
**Legal Location(s):**

**Details:** Bob gave a presentation to the Clearwater County Council. Questions asked related to: MPB status; MPB baiting program; Weyerhaeuser and ILM process; old growth species dependency;

**Extra Notes:** No specific concerns related to the FMP; Bob did a followup interview the a reporter from the Rocky Mountaineer.

**RECORD #50**

**Contact:** Town of Edson  
**Subject:** 2017 FMP  
**Date:** 2017/01/20  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Bob Winship  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:**

**Location Description:**  
**Legal Location(s):**

**Details:** Bob did a presentation to the Town of Edson; the following questions were asked: how old will the forest get with the logging going on; outlook for MPB; any effect of the GOA caribou decision on the company; site preparation techniques; wood supply issues in the future; softwood lumber impacts; watershed management in the FMP.

**Extra Notes:** There were no direct concerns related to the FMP.

**RECORD #51**

**Contact:** Yellowhead County  
**Subject:** 2017 FMP  
**Date:** 2017/02/21  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Bob Winship  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:**

**Location Description:**  
**Legal Location(s):**

**Details:** Bob gave a presentation to Yellowhead County Council; Questions were related to: caribou issue;MPB; debris burning as a health or environmental concern; climate change.

**Extra Notes:** There were no specific concerns related to the FMP

**RECORD #52**

**Contact:** Brazeau County  
**Subject:** 2017 fMP  
**Date:** 2016/12/20  
**Category:**  
**Department:**

**Stakeholder:** General Public  
**Communication Type:** In Person  
**Representative:** Bob Winship  
**Attachments:**

**Operating Area:**  
**Program:** 2017 FMP  
**Project:**

**Location Description:**  
**Legal Location(s):**

**Details:** Bob gave a presentation to the Brazeau County Council; question related to: softwood lumber agreement; MPB update; Forest fire concerns; North Saskatchewan watershed group.

**Extra Notes:** No direct concerns were brought up about the FMP.

**RECORD #53**

**Contact:** Pembina Synergy

**Subject:** 2017 FMP

**Date:** 2016/11/24

**Category:**

**Department:**

**Stakeholder:** General Public

**Communication Type:** In Person

**Representative:** Bill Taylor

**Attachments:**

**Operating Area:**

**Program:** 2017 FMP

**Project:**

**Location Description:**

**Legal Location(s):**

**Details:** Bill did a presentation on the FMP; question related to: FMP preparation; reforestation of Pipeline ROWs; reforestation of reclaimed O&G sites; PSPs; retention requirements; forest fires on cut blocks; MPB; planting; carbon tax effects; reforestation efforts; consultation with municipalities for the FMP

**Extra Notes:** No specific concerns were raised regarding the FMP.



## 41 Consultation Tracking Sheet (July, 2018)





Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-1	Water	<ul style="list-style-type: none"> <li>• Is forestry less regulated than oil &amp; gas?</li> <li>• What's the science around impacts of logging on watersheds? What is monitored, inspected, how do you know?</li> <li>• Riparian protection (my translation)</li> </ul>	Meeting curriculum to include a targeted presentation on Watershed and riparian management.	August 24, 2016
6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-2	Protection and conservation	<ul style="list-style-type: none"> <li>• What's out there for protection &amp; conservation areas? Is there a general west to east pattern?</li> <li>• How are natural resources protected from logging? Example of a wildlife lick being logged over.</li> </ul>	Meeting curriculum to include a targeted presentation on Protection and Conservation.	November 10, 2016

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6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-3	Cumulative Effects and Land Use Impacts	<ul style="list-style-type: none"> <li>• How much is going on out there, and what's the overall impact?</li> <li>• What's "natural"? How much is too much?</li> <li>• Young vs. old forest? Is our reforestation working?</li> <li>• Recreational vehicle use – some controls are warranted, where can / should we go?, industry's role, rural vs. urban population perspectives</li> <li>• Should we be doing more reclamation? What is getting reclaimed?</li> <li>• How do us locals influence upwards in Government? Regional land use plan?</li> </ul>	Meeting curriculum to include a targeted presentation on cumulative effects and land use impacts.	Oct. 12, 2016
6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1.4	Access	<ul style="list-style-type: none"> <li>• Type and Timing of access</li> </ul>	Meeting curriculum to include a targeted presentation on cumulative effects and land use impacts.	Oct. 12, 2016

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

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6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-5	Stakeholder input	Getting input and perspectives from stakeholders: <ul style="list-style-type: none"> <li>• Good luck!</li> <li>• What have we learned form stakeholders such as grazing operators in the past, and how to use that to engage more going forward</li> <li>• Maybe Weyerhaeuser should suggest our approaches for a critique or prompt for better ideas</li> </ul>	Meeting curriculum to include a targeted discussion on how to get better stakeholder input in to plans	July 6, 2016
6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-6	Reforestation	<ul style="list-style-type: none"> <li>• Do we reforest, how, does it work, etc.</li> </ul>	Meeting curriculum to include a targeted presentation on reforestation and silvicutre systems.	Oct. 12, 2016
6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-7	Industrial salvage	<ul style="list-style-type: none"> <li>• Getting more cooperation from timber operators with oil &amp; gas e.g. salvaging</li> </ul>	Meeting curriculum to include a discussion/presentation section on stakeholder communication.	August 24, 2016

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6-Jul-16	Eric Bert, Percy Campbell, Cecil Anderson, Kara Westerlund, Paul Scott, Bob Winship, Stephen Mills, Trisha Stubbings	1-8	Education	<ul style="list-style-type: none"> <li>• Forestry is not well communicated with public</li> </ul>	Meeting curriculum to include a description of our strategy to engage and educate.	August 24, 2016
24-Aug-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	2-9	Curriculum edits	<ul style="list-style-type: none"> <li>• Habitat impacts on ungulates versus focus on species of concern</li> <li>• Habitat impacts on furbearers, access requirements and other impacts on trapping/trappers.</li> <li>• Forest health particularly the MPB</li> <li>• Question about ungulate numbers and recovery plans</li> </ul>	Presentation by Weyerhaeuser Canadian Biologist Wendy Crosina	November 10, 2016

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
24-Aug-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	2-10	GrazingTimber Agreements	<ul style="list-style-type: none"> <li>• What is the difference in responsibility for weed control when dealing with a licence versus a permit (GOA)</li> <li>• Weyerhaeuser to discuss herbicide use and potential effect on moving wildlife habitat by its effect on changing forest Structure</li> </ul>	Stephen Mills to provide explanation; review this issue with presentation by Wendy Crosina	September 14, 2016 and November 10, 2016
24-Aug-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	2-11	Forest Management and Watersheds	<ul style="list-style-type: none"> <li>• GOA to provide summary sheet of the regulatory review provided at the meeting</li> </ul>	GOA to provide summary sheet on regulatory process	September 14, 2016

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
24-Aug-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	2-12	Consultation and engagement with the FMP	<ul style="list-style-type: none"> <li>Each SAG member was encouraged to continue to recommendations on how the forestry sector can engage with them on forest management e.g. attend Brazeau ATV club poker rallies, utilize local synergy groups to connect with issues in the Green Zone, presentation to Municipal councils on water resources, etc.</li> </ul>	Weyerhaeuser to undertake to do presentations to municipal governments regarding the FMP	21-Feb-17
24-Aug-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	2-13	Water crossing monitoring	Question about track record of watercourse monitoring	Meeting curriculum to include a targeted presentation on Watershed and riparian management.	August 24, 2016

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
14-Sep-16	Cecil Anderson, Rick Stelter, Ron Moss, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott	3-14	OHV trail systems	Use of recreational trail systems	To discuss at future meetings when public members are in attendance.	15-Dec-16
12-Oct-16	Dennis Poissant, Eric Berg, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	4-15	Field Trip	No issues brought forward	NA	12-Oct-16



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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-16	Protection and conservation	Presentation given by Wendy Crosina, Weyerhaeuser Canadian biologist <ul style="list-style-type: none"> <li>•Questions answered: reseach and monitoring of wildlife;</li> </ul>	No additional action items resulting from the presentation	10-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-17	VOITs	Reviewed Voits 1,2,3,4,5a, 5b, 10 and 11 reveiwed: voits listing of species of concern; reference to targets 'X' still to be set; discussion about forestry versus O&G roads, and what is a road.	No additional action items resulting from the presentation	10-Nov-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-18	VOITs	Commitment to send out Voits (Bob to Cecil)	Kerri sent copy of VOITs to Cecil	15-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-19	Herbicides	Discussion on the use of herbicides in Alberta - see issue 2-10	No additional action items resulting from the presentation	10-Nov-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-20	Protection during the nesting season	Review of process to protect migratory birds during the nesting season - see issue 1-2	No additional action items resulting from the presentation	10-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-21	FMP 20-year modelling	Reviewed how forests were managed in the 1980s, (main benefit was for ungulate populations), and how modelling for TSA is done now,	No additional action items resulting from the presentation	10-Nov-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-22	Protection of Sensetive sites	Discussion s revolved around slide # 44, Voit #12 and den sites, with some discussion of use of den sites by Wolverines	No additional action items resulting from the presentation	10-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-23	Cummulative effects	Review of how the forest management plans address cummulative effects; discussion that FMP focus is on forestry activities for the most part in the planning process; WY works with other stakeholder to reduce footprint where possible.	No additional action items resulting from the presentation	10-Nov-16

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10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-24	Impacts of harvesting on logging	Discussion on impacts of forestry on logging: logging = habitat distruction; landscape fragmentation; comparing fires with logging; recovery of vegeation in harvested areas for cover; resets clock after herbicide use for a number of years; mid-level planning with the GDP; reuse of areas by marten; impact of MPB surge on marten; review of trapper consultation process; forest connectivity; use of edge of forest; debris pile retention for wildlife; comparing todays forests to historical records; discussion around the deciduous predominance of regenerating forests;	No additional action items resulting from the presentation	10-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-25	Herbicides	Discusion about re-use of areas by small animals after herbicide treatments, and around run-off being contaminated by herbicides;	No additional action items resulting from the presentation	10-Nov-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-26	Bear denning sites	Discussion around protection around denning sites for bears; detected at time of layout; opportunity for trapper to share known den sites with Weyerhaeuser during consultation of the Forest Harvest Plan.	No additional action items resulting from the presentation	10-Nov-16
10-Nov-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Stephen Mills, Bob Winship, Kerri Mackay, Paul Scott , Wendy Crosina	5-27	Public Participation	Discussion on ongoing public participation after the plan is approved; WY offer to meet with any group who shows interest in forest management activities	No additional action items resulting from the presentation	ongoing

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-28	Trapper Notification	Timing of notification of activities; sharing of trapper knowledge on stick nests and denning sites with Weyerhaeuser planning staff during FHP development	Weyerhaeuser to insure conflicts with trappers are minimized with timely notifications	Ongoing
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-29	Protection of nesting sites	Concern that spring time logging is harmful to all birds and animals, not just migratory birds	Review of due diligence on migratory birds covered in meeting 5. No further restrictions will be contemplated by Weyerhaeuser at this time.	15-Dec-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-30	Herbicides	Spraying of cutovers results in habitat destruction for a number of years	Weyerhaeuser minimizes its use of herbicides to only those areas required to meet Provincial reforestation regulations	15-Dec-16
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-31	Marten habitat	Reduced marten take during trapping season the last few years	Weyerhaeuser committed to include marten model outputs in the FMP	15-Dec-16



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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-32	Future Forest Condition	Question about how the future forest will differ from a 'natural' forest; discussion ensued regard future forest and what was deemed 'natural' (i.e. pre-European) with review of slides presented at meeting 5 and additional slides to supplement the discussion; discussion; review of age class distribution, effect on average piece size, habitat modelling for water, old forest songbirds, barred owls, east slopes cold water fish species, and Grizzly Bear, as well as forest condition (seral stages, patch size, interior older forest, etc.)	Weyerhaeuser is committed to undertake an analysis of the natural range of variation and compare to those predicted the Preferred Forest Management Strategy	Post-FMP
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-33	MPB	What will Weyerhaeuser do to stay ahead of the MPB; discussio over the condition of the futrure forest as compared to what was thought to be a 'natural forest resulting from the main disturbance, fire'. Review of slides shown at meeting #5; FMP will forcast state of the forest over a 200 year period resulting from the Preferred Forest Management Strategy	During the development of the Spatial Harvest Sequence, MPB Rank 1 and 2 stands will be prioritized for scheduling in the first 20 years of the plan; work with AAF in their monitoring and contol capacity;	15-Dec-16

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-34	OHV	Limits to ATV users on Crown lands	Weyerhaeuser committed to supporting regional land use planning that involves all users of the DFA; will support trail systems aligned with recreational planning requirements; WY to avocate for a North Saskatchewan sub-regional /access management plan to address commulativeimpacts on industrial and recreational activities	ongoing

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-35	Grazing	Grazing and timber integration issues regarding: responsibilities, cost sharing, weed control	Additional discussion occurred at the meeting; No additional action items resulting from the presentation	Ongoing
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-36	Grazing	Notification of open houses	Notifications of future open houses will be sent to primary and secondary stakeholders annually	ongoing

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15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-37	Grazing	Notification of Activities on grazing dispositions; discussion around the use of the Grazing Timber Agreement;	Discussions start with grazing operator(s) as blocks are identified through scheduling	ongoing
15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-38	Grazing	Concern that WY uses herbicides to control vegetation and weeds on grazing dispositions that adversely affects grazing once treatments are completed; discussion around weed control and reforestation standards to be met.	No additional action items resulting from the presentation	15-Dec-16

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15-Dec-16	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Bob Winship, Paul Scott	6-39	Oil and Gas integration	Work closely with Oil and Gas Produces with a dedicated staff member; opportunity to develop a pilot project utilizing ILM process similar to the Fox Creek Pilot	Weyerhaeuser to work closely with all stakeholders; interaction with Synergy groups; work with GOA through land use framework planning processes.	ongoing
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-40	Watercourse monitoring	Evidence of Weyerhaeuser monitoring of premanent crossing on WY roads	Bob to send reports to the group after the meeting	15-Sep-17

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-41	Wildlife Populations/Habitat supply	Question asked about information available regarding ungulate populations; WY indicated AAF surveys for specific species, but no external reports available for the public	No additional action items resulting from the presentation	13-Jul-17
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-42	Road Corridor planning	Discussion around the pilot study in Fox creek to minimize footprint	WY to address in promoting ILM planning	ongoing

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Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-43	Documentation	Members reviewed the July final report to SAG	SAG members were asked to review the report and provide WY with any by September 1, 2017	1-Sep-17
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-44	Timber Supply Model outputs	Reviewed 20-year draft SHS, by decade; input from timber operators incorporated; question about logging history on the DFA; showed current outputs of the patchworks mode: ECA, old forest songbirds, marten, barred owl, Grizzly Bear;	Kerri to send out harvest history Map in shown in the Landscape assessment chapter 3	15-Sep-17

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-45	VOITs	Explained the intent behind the VOITs	SAG review of VOITs and provide comments back to WY by Sept. 1, 2017; NOTE: no comments received by September 1st deadline	1-Sep-17
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-46	Draft FMP	Opportunity to review draft FMP when available; link to FMP draft shown in three newsletters which had previously been given to the SAG members; (NOTE - link to draft FMP documents on the Forcorp site remained active until the FMP was submitted in late November, 2017 - no comments were received from the SAG regarding any draft components of the FMP)	No interest expressed in reviewing the entire Draft FMP when available in the fall of 2017	13-Jul-17



Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
13-Jul-17	Cecil Anderson, Ron Moss, Dennis Poissant, Eric Berg, Mary Ellen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott	7-47	Post-FMP approval	Weyerhaeuser to review options of continuing with the SAG post FMP approval, potentially meeting annually to view the annual report - details to be determined	No additional action items resulting from the presentation	13-Jul-17

Table1: Tracking sheet for issues and decisions of the Stakeholder Advisory Group

Date	In Attendance	Tracking Number	Topic Category	Description	Action Item or Decision Made	Completion Date
full list of participating members on the SAG	Cecil Anderson, Rick Stelter, Ron Moss, Dennis Poissant, Percy Campbell, Eric Berg, Mary Eillen Shain, Kara Westerlund, Stephen Mills, Trisha Stubbings, Bob Winship, Kerri Mackay, Paul Scott					





Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Annex IV: Consultation

March 19, 2018



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# 1 Pre-Consultation Assessment









## 2 Approval Letter – First Nation Consultation Plan



August 25, 2014

Weyerhaeuser Company Ltd.  
2509 Aspen Drive  
Edson, Alberta  
T7E 1M3

Dear Paul Scott - Planner:

Re: Weyerhaeuser Pembina Ltd. First Nation Consultation Plan for the 2016 Forest Management Plan

The Department has reviewed your First Nations consultation plan of July 18, 2014 for the proposed Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan and it is hereby approved. The delegated procedural aspects for consultation are as set out in the approved plan.

Pursuant to Alberta's *First Nations Consultation Guidelines on Land Management and Resource Development* (referred to as the [Guidelines](#)), Environment and Sustainable Resource Development (ESRD) will remain responsible for all substantive aspects of consultation, and any procedural aspects not delegated to Weyerhaeuser Pembina Ltd. The responsibilities of ESRD include:

- Determining which First Nations to consult with
- Providing advice and making information available to Weyerhaeuser Pembina Ltd. regarding potential adverse impacts to Rights and Traditional Uses
- Ensuring potentially affected First Nations receive early and adequate notification regarding the Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan as described in the Consultation Plan submitted.
- Reviewing and approving Weyerhaeuser Pembina Ltd.'s consultation plan
- Overseeing the consultation process by evaluating periodic updates of progress
- Making a final decision on consultation completeness and adequacy

All consultation activities with First Nations must be carried out in the manner described by the [Guidelines](#) and proceeds according to the approved consultation plan.

The Weyerhaeuser Pembina Ltd. shall update the Approvals Manager at the end of each milestone listed in the consultation plan where consultation will occur. Each update shall list all consultation activities (successful and unsuccessful) for the Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan.

ESRD recommends that you share your consultation plan with the First Nations that you have been directed to consult. ESRD may require Weyerhaeuser Pembina Ltd. to undertake further consultation based on new or additional information at any time during development of the Weyerhaeuser Pembina Ltd. 2016 Forest Management Plan or during the regulatory approval process.

Please contact me if you have any questions concerning the procedures outlined in this letter.

Sincerely,



Dave Hugelschaffer  
Approvals Manager  
Upper Athabasca Region South

Cc: Kurt Borzel – Consultation Advisor, Aboriginal Relations  
Graham Legaarden – Senior Forester, Upper Athabasca Region South, Alberta  
Environment and Sustainable Resource Development  
Bert Ciesielski – Senior Forester, Red Deer - North Saskatchewan Region,  
Alberta Environment and Sustainable Resource Development  
Liana Luard – Lead Forest Planning and Performance Monitoring, Forestry and  
Emergency Response Division, Forest Resource Management Section,  
Alberta Environment and Sustainable Resource Development

### 3 First Nation Consultation Plan





*Weyerhaeuser Pembina Timberlands*

*First Nations Consultation Plan*

*For the 2016-26*

*Forest Management Plan*

*For*

*FMA#0900046 and*

*DTA R120001*

*CTQ R120005*

*and*

*DTA E910001*

July 18, 2014

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## **1.0 Introduction**

The Government of Alberta (GOA) released its First Nations Consultation Guidelines on Land Management and Resource Development (the Guidelines) in September 2007. The Guidelines outline procedures to carry out the GOA's recognized duty to consult with First Nations regarding land management and resource development policies, legislation and regulatory decisions. They also allow for GOA to delegate aspects of that consultation to industry. Furthermore, the Guidelines provide direction to industry regarding its role in the consultation process with respect to specific forest management plans, including the annual General Development Plan and the Forest Management Plan (FMP).

As such, Weyerhaeuser Pembina Timberlands (the Company) has developed a First Nations FMP Consultation Plan that articulates the manner in which the company will carry out the prescribed procedural aspects of consultation required by Environment and Sustainable Resource Development (ESRD) with specific First Nations. This process is driven by the aforementioned revised guidelines, and the Company believes this plan will meet the consultation requirements necessary to secure approval of its FMP.

Weyerhaeuser's own policies will influence the development of the DFMP. These include: Aboriginal Relationships, Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser's commitment to certification under the Sustainable Forestry Initiative.

The Primary contact for the Company in regards to this plan will be:

Paul Scott  
Strategic Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company  
2509 Aspen Drive  
Edson, AB  
T7E 1S8  
1-780-712-6886

[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)

## **2.0 First Nations**

The following First Nations will be consulted during the development of the FMP, as defined in the ESRD pre-consultation assessment dated March 25, 2014:

- Alexander First Nation
- Alexis Nakota Sioux Nation
- O'Chiese First Nation
- Paul First Nation
- Stoney (Wesley) First Nation
- Sunchild First Nation

### ***3.0 Proposed Project***

The FMP is one component of the company's forest management planning process. The FMP is a technical document that outlines strategies regarding where, when and how the Company and other timber operators will manage the forest land base on which they operate. The Company and other timber operators are embarking on a planning process to provide an FMP to meet the ongoing needs of forest companies operating within Forest Management Units (FMUs) E15, E2, W5, W6 and R12 (see map figure 1). This process will result in a FMP centered on a commitment to preserve a number of ecological, economical and societal values. The FMP includes details regarding both the planning and operational aspects of activities over a 20-year period, from 2016 through 2036, with a renewal period after 10 years.

### ***4.0 Potential Short and long-term impacts***

The Company recognizes that timberlands operations have the potential to impact First Nation rights or traditional uses.

It is the Company's goal to minimize any adverse impact to Treaty rights or the use of traditional sites. These known sites may include, but is not limited to, some of the following:

- historic trails
- campsites
- hunting areas
- fishing waters
- ceremonial and spiritual sites
- grave sites
- gathering areas

Potential impacts may include the following:

- temporary disruption of travel on historic trails
- temporary disruption of camping activities due to operations
- temporary displacement of game during periods of increased operational activities
- temporary disruption of use of ceremonial or spiritual sites during periods where noise may be a deterrent for use
- temporal disruption within gathering areas until vegetation communities re-establish post-harvest

Consultation with First Nations is a primary step to be able to achieve that goal. This Consultation Plan will ensure that First Nations with the potential to be impacted by Company or other timber operators activities have the opportunity to provide input into the development of the FMP. As part of the consultation process the Company will strive to learn from the First Nations that are being impacted, and to use this knowledge in preparing the preferred forest management strategies that will be embodied within the FMP. The Company expects that additions to the lists above will likely occur as the consultation process takes place with each First Nation.





**Legend**



-  Aboriginal Community
-  BF\_FM\_U\_Polygon



Figure 1: Map of FMA with associated FN Communities shown

## **5.0 Schedule of consultation for FMP documents**

The Company will share with affected First Nations such documents that allow for consultation, as described by ESRD consultation timelines (21 day) per submitted document. The documents that will be sent out for consultation will include:

- initial notification of the project – summer of 2014
  - Company contact information so the First Nation can provide initial feedback in writing and/or request further information about the proposed FMP planning process
  - Description of the FMP planning process, including magnitude, scope and duration. This will clearly describe how First Nation concerns are recorded and brought forward to the FMP
  - A copy of the approved Terms of Reference will be provided for notification only.
  - A map to illustrate the location of the FMP area of interest in relation to identifiable features such as major roads, lakes, rivers, and First Nation communities
  - Identification of potential short and long-term adverse impacts of the FMP (as known)
  - What stage the FMP process is at
  - A proposed schedule for development of the FMP documents that will be consulted.
  
- performance monitoring ( VOITs) – spring of 2016
  - What a VOIT is, how they are incorporated into the FMP, specifically highlighting which VOITs are directly related to First Nations
  - What stage VOITs development is at
  - A copy of the draft VOITS that have been reviewed by Timber Operators involved in the FMP process
  - Identification of potential short and long-term adverse impacts of the FMP (as known) and clearly pointing out that the Company is looking for (in writing) First Nations specific concerns regarding the VOITs
  - A map to illustrate the location of the FMP area of interest in relation to identifiable features such as major roads, lakes, rivers, and First Nation communities
  - An explanation of how the First Nation can provide feedback and an invitation to further face-to-face meeting, if so desired.
  - A summary of the input the Company has received regarding the VOITs from the First Nation to date and how this input has been considered and was incorporated into the plan thus far (i.e. mitigation efforts). This is to be recorded on the Specific Concern and Response Table for the First Nation.
  
- the spatial harvest sequence (SHS) for the first 20 years of the plan – spring of 2016
  - Description of the Spatial harvest sequencing process and clearly pointing out that the Company is looking for (in writing) the First Nations specific concerns with the Spatial Harvest Sequence
  - A map of appropriate scale of the 20-year Spatial Harvest Sequence, including an explanation of what it is and how accurate it may be.

- A map to illustrate the location of the FMP area of interest in relation to identifiable features such as major roads, lakes, rivers, and First Nation communities
  - What stage the SHS process is at
  - An explanation of how the First Nation can provide feedback and an invitation to further face-to-face meeting, if so desired.
  - A summary of the input the Company has received regarding the Spatial Harvest Sequence from the First Nation to date and how this input has been considered and was incorporated into the plan thus far (i.e. mitigation efforts). This is to be recorded on the Specific Concern and Response Table for the First Nation
- the final submission document – spring of 2016
    - This is the final opportunity for First Nation input into the FMP
    - A copy of the FMP as submitted for review and approval to Alberta will be provided to the First Nation
    - Identification of potential short and long-term adverse impacts of the FMP (as known) and clearly pointing out that the Company is looking for (in writing) the First Nation's specific concerns with the FMP and how the impacts will impact their Rights and Traditional Uses.
    - A summary of the input the Company has received regarding the final submission document from the First Nation to date and how this input has been considered and was incorporated into the FMP (i.e. mitigation efforts). This is to be recorded on the Specific Concern and Response Table for the First Nation

## ***6.0 Delivery Methods to First Nations***

All First Nations will be notified by registered mail. Additional follow up efforts will be made minimum of two times per consultation cycle as identified in Section 5.0.

The Company will contact each First Nation to establish a contact to manage the responses to these planning processes.

The Company will provide additional information as requested throughout the entire planning process.

## ***7.0 Reporting to ESRD on Progress of the Consultation Plan***

Weyerhaeuser will use the ESRD First Nations Consultation Log (the Log) to track consultation with each First Nations. Logs will be a running summary format for each First Nation. The Logs will be sent to ESRD Approvals Manager, Upper Athabasca Region Area quarterly upon notification to the First Nations of the start of the FMP planning process.

Table 1 represents the format for how the responses received from each First Nation will be tracked and reported during the consultation process.



Table 1: Specific Concern and Response Table for each First Nation

Document for Meeting Reference	Specific Concern Expressed	Specific Aspect of the Concern Expressed	Weyerhaeuser Response on Effort to Avoid or Mitigate Concern	First Nation Response to Weyerhaeuser Effort to Avoid or Mitigate Concern

## 8.0 Glossary of Forestry Terms

**Afforestation:** The conversion of non-forested land to forested land through the practice of introducing commercial trees species to the site, through appropriate silviculture techniques.

**Alberta Vegetation Inventory (AVI):** A system for describing the quantity and quality of vegetation present. It involves the stratification and mapping of the vegetation to create digital data according to the AVI Standards Manual and associated volume tables.

**Annual Allowable Cut (AAC):** The volume of timber that can be harvested under sustainable forest management in any one year.

**Annual Operating Plan (AOP):** Plans prepared and submitted annually by timber operators describing how, where and when to develop roads and harvest timber. They describe the integration of operations with other resource users, the mitigation of the impacts of logging, the reclamation of disturbed sites and the reforestation of harvested areas.

**Artificial regeneration:** The creation of a new stand by direct seeding or by planting seedlings or cuttings.

**Detailed Forest Management Plan (DFMP):** A strategic long-term plan. It is the foundation for all forest management activities upon the FMA.

**Even-aged Stand:** A forest stand comprising trees with less than a 20-year difference in age.

**Forest Management Agreement (FMA):** Agreement between the Province and a company to grow, harvest and reforest on a landbase tenure.

**Forest Management Area (FMA):** Refers to the tract of forest land over which a company has been given management rights for establishing, growing and harvesting trees on a perpetual sustained yield basis for a defined period of time.

**Forest Management Plan:** A generic term referring to both Forest Management Unit plans prepared by the government, and Detailed Forest Management Plans prepared by industry.

**Forest Management Unit (FMU):** A defined area of forest land located in the Green Area of the province designated by the Department to be managed for sustainable forest management.

**General Development Plan (GDP):** A five-year operating plan prepared, updated and submitted annually by the timber harvest operator.

**Ground rules:** Provide direction to timber operators and employees of Alberta Sustainable Resource Development for planning, implementing and monitoring timber operations on the FMA. They highlight important management principles, define operating and planning objectives, and present standards and guidelines for timber harvest, road development, reclamation, reforestation and integration of timber harvesting with other forest users.

**Harvest design:** A forest harvesting plan for a given area which may include in addition to the initially sequenced cutblocks, reserves for fish and wildlife or protection of unique sites, a reforestation program, watershed and riparian area protection, and roading and reclamation requirements.

**Timber harvesting landbase:** The timber harvesting landbase is the portion of the total land area of the FMA that can be considered to contribute to and be available for long-term timber supply. It is the landbase remaining after deductions for areas that cannot, should not, or will not be managed for timber production.

**Utilization standards:** Standards establishing stand and tree merchantability.

**Woody debris:** Live or dead, standing or downed, woody material left on a site after logging.



## 4 Approval Letter – First Nation Consultation Plan (Revision 1)



March 24, 2016

Weyerhaeuser Company Ltd.  
2509 Aspen Drive  
Edson, Alberta  
T7E 1M3

Dear Paul Scott – Strategic Planning Co-ordinator:

**Re: Weyerhaeuser Pembina Ltd. First Nation Consultation Plan for the 2017 Forest Management Plan**

The Department has reviewed your First Nations consultation plan of March 24, 2016 for the proposed Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan and it is hereby approved. The delegated procedural aspects for consultation are as set out in the approved plan.

Pursuant to Alberta's *First Nations Consultation Guidelines on Land Management and Resource Development* (referred to as the *Guidelines*), Alberta Agriculture and Forestry (AAF) will remain responsible for all substantive aspects of consultation, and any procedural aspects not delegated to Weyerhaeuser Pembina Ltd. The responsibilities of AAF include:

- Determining which First Nations to consult with
- Providing advice and making information available to Weyerhaeuser Pembina Ltd. regarding potential adverse impacts to Rights and Traditional Uses
- Ensuring potentially affected First Nations receive early and adequate notification regarding the Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan as described in the Consultation Plan submitted.
- Reviewing and approving Weyerhaeuser Pembina Ltd.'s consultation plan
- Overseeing the consultation process by evaluating periodic updates of progress
- Making a final decision on consultation completeness and adequacy

All consultation activities with First Nations must be carried out in the manner described by the *Guidelines* and proceed according to the approved consultation plan.

Weyerhaeuser Pembina Ltd shall update the Forest Area Manager as listed in the consultation plan. Each update shall list all consultation activities (successful and unsuccessful) for the Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan.

AAF recommends that you share your consultation plan with the First Nations that you have been directed to consult. AAF may require Weyerhaeuser Pembina Ltd. to

undertake further consultation based on new or additional information at any time during development of the Weyerhaeuser Pembina Ltd. 2017 Forest Management Plan or during the regulatory approval process.

Please contact Stephen Mills ([Stephen.Mills@gov.ab.ca](mailto:Stephen.Mills@gov.ab.ca) or 780-723-8355) if you have any questions concerning the procedures outlined in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'KV' followed by a stylized flourish.

Kevin Vander Haeghe  
Forest Area Manager  
Edson Forest Area

Cc: Kurt Borzel – Consultation Advisor, Upper Athabasca Region, Aboriginal  
Consultation Office, Alberta Indigenous Relations  
Graham Legaarden – Senior Forester, Edson Forest Area, Alberta Agriculture and  
Forestry  
Bert Ciesielski – Senior Forester, Rocky Mountain House Forest Area, Alberta  
Agriculture and Forestry  
Liana Luard – Lead, Forest Planning and Performance Monitoring, Forestry  
Division, Alberta Agriculture and Forestry

## 5 First Nation Consultation Plan (Revision 1)







***Weyerhaeuser Pembina Timberlands***

***First Nations Consultation Plan***

***For the 2016-26***

***Forest Management Plan***

***For***

***FMA#0900046 and***

***DTA R120001***

***CTQ R120005***

***and***

***DTA E910001***

***Revised March 24, 2016***

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## **1.0 Introduction**

The Government of Alberta (GOA) released its First Nations Consultation Guidelines on Land Management and Resource Development (the Guidelines) in September 2007. The Guidelines outline procedures to carry out the GOA's recognized duty to consult with First Nations regarding land management and resource development policies, legislation and regulatory decisions. They also allow for GOA to delegate aspects of that consultation to industry. Furthermore, the Guidelines provide direction to industry regarding its role in the consultation process with respect to specific forest management plans, including the annual General Development Plan and the Forest Management Plan (FMP).

As such, Weyerhaeuser Pembina Timberlands (the Company) has developed a First Nations FMP Consultation Plan that articulates the manner in which the company will carry out the prescribed procedural aspects of consultation required by Government of Alberta (GOA) with specific First Nations. This process is driven by the aforementioned revised guidelines, and the Company believes this plan will meet the consultation requirements necessary to secure approval of its FMP.

Weyerhaeuser's own policies will influence the development of the DFMP. These include: Aboriginal Relationships, Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser's commitment to certification under the Sustainable Forestry Initiative.

The Primary contact for the Company in regards to this plan will be:

Paul Scott  
Strategic Planning Coordinator  
Pembina Timberlands  
Weyerhaeuser Company  
2509 Aspen Drive  
Edson, AB  
T7E 1S8  
1-780-712-6886

[Paul.scott@weyerhaeuser.com](mailto:Paul.scott@weyerhaeuser.com)

## **2.0 First Nations**

The following First Nations will be consulted during the development of the FMP, as defined in the GOA pre-consultation assessment dated March 25, 2014:

- Alexander First Nation
- Alexis Nakota Sioux Nation
- O'Chiese First Nation
- Paul First Nation
- Stoney First Nation – Wesley, Chiniki and Bearspaw
- Sunchild First Nation

### ***3.0 Proposed Project***

The FMP is one component of the company's forest management planning process. The FMP is a technical document that outlines strategies regarding where, when and how the Company and other timber operators will manage the forest land base on which they operate. The Company and other timber operators are embarking on a planning process to provide an FMP to meet the ongoing needs of forest companies operating within Forest Management Units (FMUs) E15, E2, W5, W6 and R12 (see map figure 1). This process will result in a FMP centered on a commitment to preserve a number of ecological, economical and societal values. The FMP includes details regarding both the planning and operational aspects of activities over a 20-year period, from 2016 through 2036, with a renewal period after 10 years.

### ***4.0 Potential Short and long-term impacts***

The Company recognizes that timberlands operations have the potential to impact First Nation rights or traditional uses.

It is the Company's goal to minimize any adverse impact to Treaty rights or the use of traditional sites. These known sites may include, but is not limited to, some of the following:

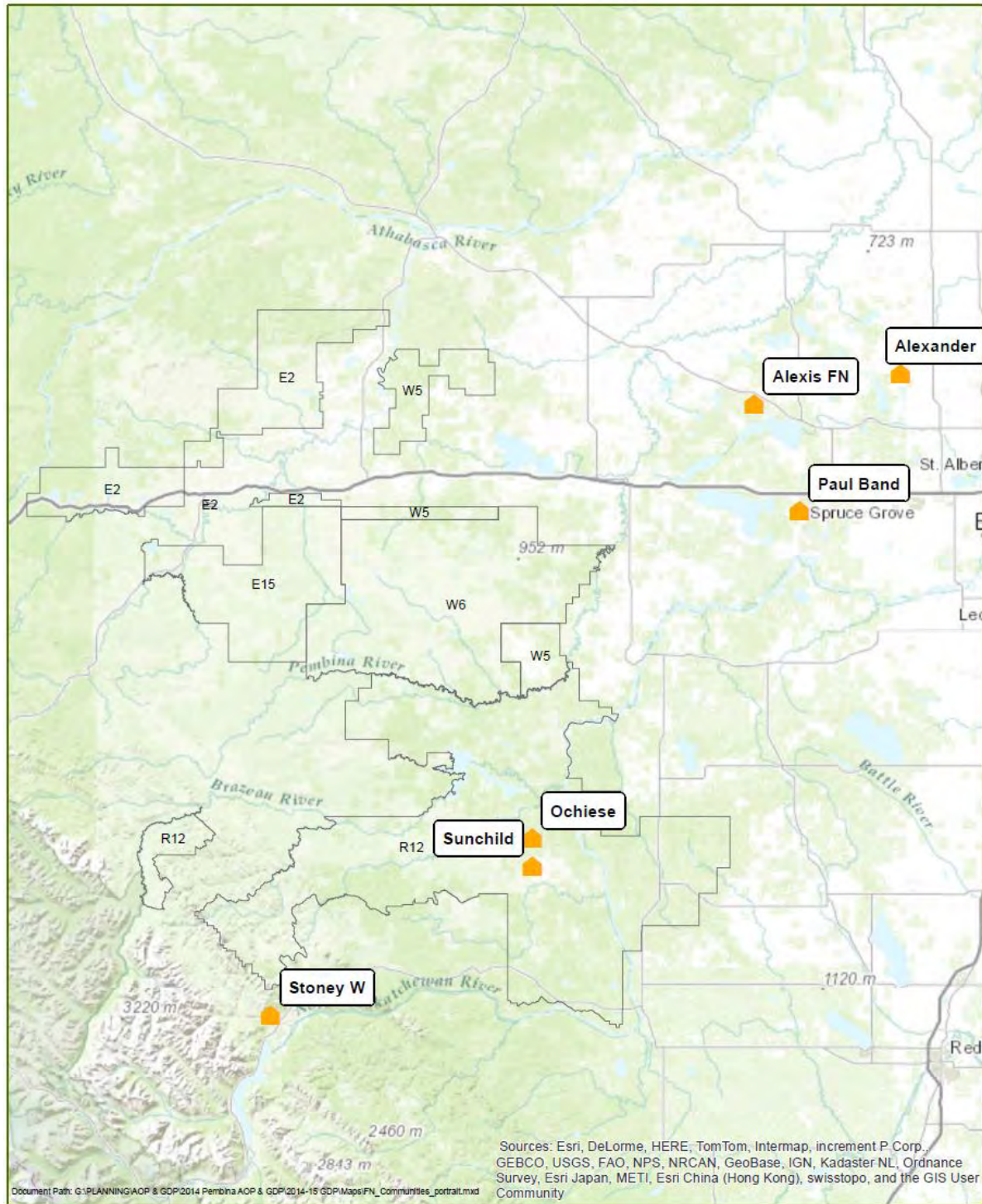
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Potential impacts may include the following:

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**Legend**



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-  BF\_FMU\_Polygon



Figure 1: Map of FMA with associated FN Communities shown

## ***5.0 Schedule of consultation for FMP documents***

The Company will share with affected First Nations such documents that allow for consultation, as described by GOA consultation timelines per submitted document. The documents that will be sent out for consultation will include:

- initial notification of the project – September, 2015
  - Company contact information so the First Nation can provide initial feedback in writing and/or request further information about the proposed FMP planning process
  - Description of the FMP planning process, including magnitude, scope and duration. This will clearly describe how First Nation concerns are recorded and brought forward to the FMP
  - A copy of the approved Terms of Reference will be provided for notification only.
  - A map to illustrate the location of the FMP area of interest in relation to identifiable features such as major roads, lakes, rivers, and First Nation communities
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  - A proposed schedule for development of the FMP documents that will be consulted.
  
- performance monitoring (VOITs) – winter of 2016
  - What a VOIT is, how they are incorporated into the FMP, specifically highlighting which VOITs are directly related to First Nations
  - What stage VOITs development is at
  - A copy of the draft VOITs that have been reviewed by Timber Operators involved in the FMP process
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    - This is the final opportunity for First Nation input into the FMP
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    - A summary of the input the Company has received regarding the final submission document from the First Nation to date and how this input has been considered and was incorporated into the FMP (i.e. mitigation efforts). This is to be recorded on the Specific Concern and Response Table for the First Nation

## ***6.0 Delivery Methods to First Nations***

All First Nations will be notified by registered mail. Additional follow up efforts will be made minimum of two times per consultation cycle as identified in Section 5.0.

The Company will contact each First Nation to establish a contact to manage the responses to these planning processes.

The Company will provide additional information as requested throughout the entire planning process.

## ***7.0 Reporting to GOA on Progress of the Consultation Plan***

Weyerhaeuser will use the GOA First Nations Consultation Log (the Log) to track consultation with each First Nations. Logs will be a running summary format for each First Nation. The Logs will be sent to Forest Area Manager (Edson Forest Area) quarterly upon notification to the First Nations of the start of the FMP planning process.

Table 1 represents the format for how the responses received from each First Nation will be tracked and reported during the consultation process.



Table 1: Specific Concern and Response Table for each First Nation

Document for Meeting Reference	Specific Concern Expressed	Specific Aspect of the Concern Expressed	Weyerhaeuser Response on Effort to Avoid or Mitigate Concern	First Nation Response to Weyerhaeuser Effort to Avoid or Mitigate Concern

## 8.0 Glossary of Forestry Terms

**Afforestation:** The conversion of non-forested land to forested land through the practice of introducing commercial trees species to the site, through appropriate silviculture techniques.

**Alberta Vegetation Inventory (AVI):** A system for describing the quantity and quality of vegetation present. It involves the stratification and mapping of the vegetation to create digital data according to the AVI Standards Manual and associated volume tables.

**Annual Allowable Cut (AAC):** The volume of timber that can be harvested under sustainable forest management in any one year.

**Annual Operating Plan (AOP):** Plans prepared and submitted annually by timber operators describing how, where and when to develop roads and harvest timber. They describe the integration of operations with other resource users, the mitigation of the impacts of logging, the reclamation of disturbed sites and the reforestation of harvested areas.

**Artificial regeneration:** The creation of a new stand by direct seeding or by planting seedlings or cuttings.

**Detailed Forest Management Plan (DFMP):** A strategic long-term plan. It is the foundation for all forest management activities upon the FMA.

**Even-aged Stand:** A forest stand comprising trees with less than a 20-year difference in age.

**Forest Management Agreement (FMA):** Agreement between the Province and a company to grow, harvest and reforest on a landbase tenure.

**Forest Management Area (FMA):** Refers to the tract of forest land over which a company has been given management rights for establishing, growing and harvesting trees on a perpetual sustained yield basis for a defined period of time.

**Forest Management Plan:** A generic term referring to both Forest Management Unit plans prepared by the government, and Detailed Forest Management Plans prepared by industry.

**Forest Management Unit (FMU):** A defined area of forest land located in the Green Area of the province designated by the Department to be managed for sustainable forest management.

**General Development Plan (GDP):** A five-year operating plan prepared, updated and submitted annually by the timber harvest operator.

**Ground rules:** Provide direction to timber operators and employees of Alberta Sustainable Resource Development for planning, implementing and monitoring timber operations on the FMA. They highlight important management principles, define operating and planning objectives, and present standards and guidelines for timber harvest, road development, reclamation, reforestation and integration of timber harvesting with other forest users.

**Harvest design:** A forest harvesting plan for a given area which may include in addition to the initially sequenced cutblocks, reserves for fish and wildlife or protection of unique sites, a reforestation program, watershed and riparian area protection, and roading and reclamation requirements.

**Timber harvesting landbase:** The timber harvesting landbase is the portion of the total land area of the FMA that can be considered to contribute to and be available for long-term timber supply. It is the landbase remaining after deductions for areas that cannot, should not, or will not be managed for timber production.

**Utilization standards:** Standards establishing stand and tree merchantability.

**Woody debris:** Live or dead, standing or downed, woody material left on a site after logging.



## 6 Consultation Guidance for East Prairie Métis Settlement



August 3, 2017

Weyerhaeuser Company Ltd.  
2509 Aspen Drive  
Edson, Alberta  
T7E 1M3

Dear Paul Scott – Strategic Planning Co-ordinator:

**Re: Clarification of First Nation Consultation Plan expectations for East Prairie Metis Settlement**

Alberta has recognized the rights and interests of Metis people within Alberta through the release of *The Government of Alberta's Guidelines on Consultation with Metis Settlements on Land and Natural Resource Management 2016*. At the time of commencement of your Forest Management Plan this policy was not in place and consultation was not required with Metis Settlements.

Upon review of your proposed submission timeline of December 1, 2017 Alberta will require consultation to be done with the following Metis settlements:

- East Prairie Metis Settlement

Due to the requirement to conduct consultation occurring mid-way through the process the following modification to your approved First Nation Consultation plan is required:

1. The approved First Nation Consultation Plan is to be re-labelled to include First Nation and Metis Consultation.
2. A letter is to be included explaining the stages of Forest Management Planning and bringing East Prairie Metis Settlement up to speed on where the current planning is at.
3. Information packages related to the:
  - a. Introduction of the FMP process as per the consultation plan
  - b. VOIT's
  - c. Spatial Harvest Sequence
4. Clearly identifying when additional future consultation will take place. In recognition of the reduced time for consultation since the Forest Management Plan commenced Alberta will only expect consultation to occur twice:
  - a. As per point #3 above bringing East Prairie Metis Settlement up to speed.
  - b. Upon the final submission package.

Please contact Stephen Mills ([Stephen.Mills@gov.ab.ca](mailto:Stephen.Mills@gov.ab.ca) or 780-723-8355) if you have any questions concerning the procedures outlined in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'KV', followed by a long horizontal flourish.

Kevin Vander Haeghe  
Forest Area Manager  
Edson Forest Area

Cc: Kurt Borzel – Consultation Advisor, Upper Athabasca Region, Aboriginal  
Consultation Office, Alberta Indigenous Relations  
Tracy Parkinson – Senior Forester, Edson Forest Area, Alberta Agriculture and  
Forestry  
Bert Ciesielski – Senior Forester, Rocky Mountain House Forest Area, Alberta  
Agriculture and Forestry  
Liana Luard – Lead, Forest Planning and Performance Monitoring, Forestry  
Division, Alberta Agriculture and Forestry

## 7 First Nations and Métis Consultation Summary





# Weyerhaeuser Pembina

## First Nations and Métis Consultation Summary for the 2017 – 2026 Forest Management Plan

PDT - updated to September 14, 2017

### First Nations and Métis Consultation Summary

#### 1. FMP Initiation

##### 1. PREVIOUSLY REVIEWED COMMUNICATION

###### November 18, 2015 PDT meeting:

On September 11<sup>th</sup> 2015, Weyerhaeuser emailed notification packages to the following First Nations: Alexander, Alexis, and Sunchild First Nations. The package included a description of the project (Forest Management Plan (FMP)) and the approved Terms of Reference for the FMP. On September 17<sup>th</sup> the same package was emailed to the Stoney (Bears paw, Chiniki, Wesley) First Nation, and on September 18<sup>th</sup> the package was emailed to the O'Chiese First Nation. On September 21<sup>st</sup>, Weyerhaeuser met with the Paul First Nation and delivered the package at that time.

As a result of the notification, the following occurred:

- Alexis – Ryan McQuilter (consultation specialist – Backwoods Energy Services) contacted via email Weyerhaeuser on October 9<sup>th</sup> to set up a meeting; no meeting date has been set up yet
- Alexander – two attempts made to contact Ken Arcand; no replies to Weyerhaeuser phone messages and emails; final log emailed to Ken on October 22<sup>nd</sup>. No follow-up received.
- Sunchild – two attempts made to contact Jocelyn Goodrunning; no replies to Weyerhaeuser phone messages and emails; final log emailed to Jocelyn on October 22<sup>nd</sup>. No follow-up received.
- Stoney (Bears paw, Chiniki and Wesley) – two attempts made to contact Bill Snow; no replies to Weyerhaeuser phone messages and emails; final log emailed to Bill on October 22<sup>nd</sup>. No follow-up received.
- Paul – Meeting held on September 21<sup>st</sup> between Weyerhaeuser (Bob Winship and Paul Scott) and the Paul FN consultation team, made up of individuals from K&R 2014 INC (Kelly R. and Marnie Sutor) and an associated service provider, LARR Management Corporation (Joel Melanson, Justin). At the meeting, Weyerhaeuser agreed to host a future workshop with a selection of Paul First Nation elders to explain the FMP process and look at opportunities for community involvement. On October 29<sup>th</sup>, Marnie Sutor informed Weyerhaeuser that LARR

was no longer involved in the Paul FN consultation process. On November 2, K&R notified Weyerhaeuser that the Paul FN had terminated their relationship with K&R 2014 Inc, and was now handling all consultation through their own band, with Dennis Paul being the lead for the Paul First Nation. On November 3<sup>rd</sup>, the initial notification package was sent to Dennis Paul, indicating a new timeline.

- O'Chiese – Meeting held between Weyerhaeuser (Bob Winship and Paul Scott) and the O'Chiese (Andrew Scott, Robert Strawberry) at the Calliou Group (consultation service provider) office in Calgary on September 29<sup>th</sup>. A proposed work plan and budget emailed to Weyerhaeuser on September 18<sup>th</sup> was discussed during the meeting. Weyerhaeuser agreed to respond to the work plan and budget at a further meeting with Andrew Scott. Weyerhaeuser also indicated to the group their intent to ask GoA for an extension of the submission date for the FMP to April 1, 2017. On October 27<sup>th</sup> Weyerhaeuser sent Andrew a letter addressing outstanding items of the meeting, with the exception of the work plan and proposed budget, to be discussed at a future meeting.

#### **January 14, 2016 PDT meeting:**

- Alexander First Nation: revised Terms of Reference emailed to Ken Arcand; no feedback received on consultation log emailed on October 22, 2015 – consultation complete regarding initiation of Forest Management Plan
- Alexis Nakota Sioux Nation: revised Terms of Reference emailed to Duane Kootenay on November 23, 2015; Consultation letter and log sent to Duane on December 8<sup>th</sup>
- O'Chiese First nation: revised Terms of Reference emailed to Andrew Scott on November 23, 2015; Bob had several discussion with West Fraser regarding a joint consultation process for both the O'Chiese and the Sunchild FN;
- Paul First Nation: Revised Terms of Reference emailed to Dennis Paul on November 23, 2015; consultation letter and log sent to Dennis on December 7, 2015
- Stoney First Nation (Bears paw, Chiniki and Wesley): Revised Terms of Reference emailed to Dennis Paul on November 23, 2015; no feedback received on consultation log emailed on October 22, 2015 – consultation complete regarding initiation of Forest Management Plan
- Sunchild First Nation: Revised Terms of Reference emailed to Jocelyn Goodrunning on November 23, 2015; no feedback received on consultation log emailed on October 22, 2015 – consultation complete regarding initiation of Forest Management Plan

#### **March 17, 2016 PDT meeting:**

- O'Chiese First nation: meeting held on March 10<sup>th</sup> with the OCFN and Calliou Group in Calgary
- Reviewed Prayer Tree incident with them and possible outcomes
- Reviewed our revised proposal to them for sharing information for the DFMP, and they will take this back and discuss internally; OCFN will not cost share on any component a Traditional Land Use Study and expect industry and or GoA to fund entirely
- No other communication between the other First Nations

**May 20, 2016 PDT meeting:**

- Nothing to report – this section closed for reporting to PDT

## **2. FMP VOITs Review**

### **2.1. PREVIOUSLY REVIEWED COMMUNICATION**

**May 20, 2016 PDT meeting:**

- VOITs table and covering letter sent out April 15<sup>th</sup> 2016 to 8 First Nations via email and registered mail (email only to the Alexis on request)
- Follow-up email sent on May 10<sup>th</sup> 2016 to 8 First Nations
- Alexander First Nation called on May 11<sup>th</sup> 2016 and left message about potential meeting to discuss recent emails; attempts made to date to contact Ken Arcand: May 12<sup>th</sup>, May 16<sup>th</sup>,
- O’Chiese First Nation – Previous letter dated June 5<sup>th</sup>, 2015 from the O’Chiese FN regarding the GDP and the FMP process; the letter brought forward no concerns with the 34 provincial VOITs, other than only one VOIT mentions First Nations – the letter suggested 30 “a preliminary list of VOITs specific to the identification of potential negative impacts to O’Chiese First Nation-specific VOITs will improve O’Chiese First Nation’s confidence in DFMP process”.

**September 22, 2016 PDT meeting:**

- Alexander – met with Ken Arcand and Randy Joseph at the Alexander Consultation office; reviewed opportunities for future input into forestry activities; ROC and Table of concerns emailed to AFN on September 13<sup>th</sup> 2016; no response as of September 20<sup>th</sup>
- Alexis Nakota Sioux Nation - Community meeting at the Alexis Community Hall scheduled for Thursday, June 16<sup>th</sup> 2016 ; West Fraser and Weyerhaeuser presented Forest Management Planning process and addressed questions from the members in attendance
- O’Chiese FN – no additional meetings since last PDT; updated ROC and Concerns and Responses Table emailed to OFN on September 13, 2016 ; no response received
- Paul First Nation – New consultation contact identified as Raymond Cardinal – VOITs information resent to Raymond late June; meeting took place on July 28<sup>th</sup> 2016 concerns listed as
  - FN trapper impacts
  - Watercourse protection
  - Forced displacement
  - Economic opportunities for FN members
  - Company policy on accommodation
- Paul First Nation second meeting held on September 6, 2016 at PFN office
  - Need for company to avoid, mitigate or accommodate

- Initiatives to reduce footprint
- Economic challenges of the PFN
- Data management
- Another meeting scheduled for October 6<sup>th</sup> with focus on economic opportunities between WY and PFN
- Updated ROC and Concerns and Responses Table sent to PFN on September 13<sup>th</sup>; no response to date
- Sunchild FN – no further discussions; updated ROC and Concerns and Responses Table sent out September 13; no response received.
- Stoney (Bears paw, Chiniki and Wesley) First Nations – no further discussions; ROC and Concerns and Responses Table sent on September 13<sup>th</sup> 2016; no responses to date

**December 13, 2016 PDT meeting:**

- O’Chiese FN (October/November 2016) – several attempts to meet Andrew Scott and Connie Tuharsky unsuccessful; continue to seek a date acceptable to the O’Chiese and WY; Meeting scheduled for November 16<sup>th</sup> 2016 cancelled by OFN
- Paul FN – Meeting held on October 6<sup>th</sup> 2016 ; covered outstanding items from the September 6 meeting; provided 3 access maps, landscape assessment draft document, Weyerhaeuser Corporate policy on Aboriginal Relations; Paul FN provided list of important sites they are attempting to document; have 5 field staff working with consultation office; discussed wildlife populations and trends, invasive plant control, economic opportunities between PFN and WY; no comments to date regarding VOITS
- Concerns and Response table submitted to Stephen on October 4<sup>th</sup>

**January 17, 2017 PDT meeting:**

- Paul FN: Meeting held on December 9, 2016 at Duffield; reviewed outstanding items from October 6<sup>th</sup>, 2016 meeting; PFN shared new traditional lands map to WY; discussed the opportunity thru our service provider (Silvacom) to have access to WY GIS data to help in their consultation process; PFN data to be independent of WY control with an agreement between PFN and Silvacom; WY to set up meeting with Silvacom to describe in more detail the opportunity presented today; in regards to pile burning, an area has been set aside for the PFN Development Corp; schedule a meeting for December 14, 2016 between Raymond Cardinal and Kandis Dickhaut to review requirements.

- Paul FN: meeting held on December 14, 2016 to review and sign off on pile burning contract for North Pembina – Trout Creek and Tom Hill Tower to start, with the potential for more is Kandis is satisfied with results of the first two areas

**February 14, 2017 PDT meeting:**

- Nothing to report

**April 11, 2017 PDT meeting:**

- Nothing to report

**May 11, 2017 PDT meeting:**

- Bob has had some brief face to face discussions with Andrew Scott (O'Chiese)
- AAF provided feedback on January ROC and CRT sent to First Nations

**June 15, 2017 PDT meeting:**

- Bob met briefly several times with both Sunchild FN and O'Chiese FN representatives to discuss options for consultation processes into the future; no specific discussions about the FMP; wants to suggest a GIS data management process with each, similar to what we have proposed to the Paul FN.
- Alexis NSN requested a meeting for update purposes; dated suggest by WY but no further action from ANSN
- Paul met with Paul FN to review future opportunities for site visits. Recommended a proposal to do site visits based on 2017 GDP, but nothing to date; could work this in potentially with the SHS
- CRT and new log sent to O'Chiese in response to June 5, 2015 VOITS proposal, no response as of June 15, 2017.

**July 27, 2017 PDT meeting:**

- Nothing to report

## **2.2. NEW COMMUNICATION – July 27, 2017**

- Nothing to report; this section closed for reporting to PDT

## **2.3. UPCOMING COMMUNICATION EFFORTS**

- None

## **3. FMP Harvest Eligibility or Draft SHS Review**

### **3.1. PREVIOUSLY REVIEWED COMMUNICATION**

#### **December 13, 2016 PDT meeting:**

- Stoney Chiniki – meeting held on December 5, 2016 with John, Barry and Charles Wesley to update them on the status of the FMP to date. Shared copies of the Landscape assessment and the VOITs report draft. Also shared with them harvest eligibility maps as a prelude to the draft SHS; follow-up as a result of the meeting was to provide more detailed maps of the West Country and Nordegg Compartments (bare earth and ortho); Paul to look at opportunities for brush pile burning; Paul to discuss with Jeff Struth opportunities to supply dry firewood as well as teepee material this winter; opportunity for Barry Wesley to provide additional Stoney Chiniki history to augment the information currently shown in the landscape assessment draft; desire to have pipe ceremonies twice annually prior to summer and winter operations (WY to put something into chapter 7 – Implementation to reflect this commitment; potential VOIT as well); opportunity to consult on herbicide plans in the spring with the GDP (shown in 2016-2011 GDP); recognition that most of the material provide to the Stoney Chiniki, Wesley and Bearspaw FN is sent to Morley (Bill Snow); Barry will share information with Charley Abraham (Wesley Bighorn Consultation representative; no known Bearspaw representative identified to date).
- Email sent out on December 8<sup>th</sup>, 2016 to Alexis, Alexander, Sunchild, O'Chiese and Stoney to see if they would like to schedule a meeting for WY to provide an update on the status of the FMP process

#### **January 17, 2017 PDT meeting:**

- Resend out request on January 2, 2017 to email sent out December 8<sup>th</sup> suggesting a meeting to review FMP process; no interest shown to meet

**February 14, 2017 PDT meeting:**

- Nothing to report

**April 11, 2017 PDT meeting:**

- Trying to set up meeting with Andrew Scott of the O'Chiese FN; Bob held brief discussions with Andrew but nothing scheduled to date
- Hosted an Open House on March 23, 2017 at the Duffield Hall in cooperation with West Fraser; Paul First Nation elders invited by PFNIRC office; Attended by 14 elders and approx. 20 other community members; ACO present as well; had GDP and FMP information available; landscape assessment and Harvest Eligibility Map available and wildlife pamphlets of interest; additional copies dropped off at PFN IRC Office for community members to access

**May 11, 2017 PDT meeting:**

- Nothing to report

**June 15, 2017 PDT meeting:**

- Nothing to report

**July 27, 2017 PDT meeting:**

- Meeting set up for June 20th to brief Sunchild FN on GIS data management proposal - cancelled by Sunchild
- Provided funding for 2 hours of helicopter time for the O'Chiese FN community for their annual community day on July 1
- Provided food vouchers to Sunchild FN
- Paid invoice to Stoney FN for pipe ceremonies
- No proposed plan to visit sites from the Paul FN
- No meeting date from Alexis NSN



- Sent out PW60015 draft SHSV2 to all FN on July 18, along with update ROC logs and CR Tables by email and registered mail

### **3.2. NEW COMMUNICATION - September 14, 2017**

- Paul First Nation responded to SHSV2 with an email saying that they are currently working with Alberta Culture to register their known sites; likely some unknown sites covered by the proposed SHS; no polygons identified for removal from the SHS at this time.
- East Prairies MS added to list for consultation purposes on August 3, 2017; on August 9, 2017 package sent and emailed that included initial project letter, Voits letter and SHSV2 letter to them; On August 14<sup>th</sup> 2017 the same information was put in their Portal site; on August 24<sup>th</sup> 2017 the EPMS indicated in their Portal that they need to follow up on the information supplied to them; Sept. 11, 2017 second request to identify specific sites related to the SHS V2; Sept. 12 received response from EPMS similar to August 24<sup>th</sup>; no specific sites but specific traditional uses on the traditional lands; Log and CRT sent to Stephen Mills to review for comments.

### **3.3. UPCOMING COMMUNICATION EFFORTS**

- Continue to resolve EPMS concerns if that is the direction from ACO

## **4. FMP Draft Review**

### **4.1. PREVIOUSLY REVIEWED COMMUNICATION**

### **4.2. NEW COMMUNICATION**

- Plan to send out draft FMP on November 1, 2017

### **4.3. UPCOMING COMMUNICATION EFFORTS**

## 8 First Nations and Métis Consultation Report





*Weyerhaeuser Pembina Timberlands*

*First Nations and Métis Consultation  
Report of  
Concerns and Responses  
during the Development of the  
Forest Management Plan*

Updated to: October 1, 2017  
Final Report

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## ***1.0 Introduction***

The Government of Alberta (GOA) released its First Nations Consultation Guidelines on Land Management and Resource Development (the Guidelines) in September 2007. The Guidelines outline procedures to carry out the GOA's recognized duty to consult with First Nations regarding land management and resource development policies, legislation and regulatory decisions. They also allow for GOA to delegate aspects of that consultation to industry. Furthermore, the Guidelines provide direction to industry regarding its role in the consultation process with respect to specific forest management plans, including the annual General Development Plan and the Forest Management Plan (FMP).

As such, Weyerhaeuser Pembina Timberlands (the Company) developed a First Nations FMP Consultation Plan that articulated the manner in which the company would carry out the prescribed procedural aspects of consultation required by Government of Alberta (GOA) with specific First Nations. This process is driven by the aforementioned revised guidelines, and the Company believes this plan has met the consultation requirements necessary to secure approval of its FMP.

Weyerhaeuser's own policies will influence the development of the DFMP. These include: Aboriginal Relationships, Environmental Core Policy, Sustainable Forestry Policy, and Weyerhaeuser's commitment to certification under the Sustainable Forestry Initiative.

The Primary contacts for the Company in regards to the consultation process has been Bob Winship and Paul Scott

## ***2.0 First Nations***

The following First Nations were consulted during the development of the FMP, as defined in the GOA pre-consultation assessment dated March 25, 2014:

- Alexander First Nation
- Alexis Nakota Sioux Nation
- O'Chiese First Nation
- Paul First Nation
- Stoney First Nation – Wesley, Chiniki and Bearspaw
- Sunchild First Nation

## ***3.0 Proposed Project***

The FMP is one component of the company's forest management planning process. The FMP is a technical document that outlines strategies regarding where, when and how the Company and other timber operators will manage the forest land base on which they operate. The Company and other timber operators have embarked on a planning process to provide an FMP to meet the ongoing needs of forest companies operating within Forest Management Unit R15. This process has resulted in a FMP centered on a commitment to preserve a number of ecological, economical and societal values. The FMP includes details regarding both the planning and operational aspects of activities over a 20-year period, from 2017 through 2037, with a renewal period after 10 years.



## ***4.0 Potential Short and long-term impacts***

The Company recognizes that timberlands operations have the potential to impact First Nation rights or traditional uses.

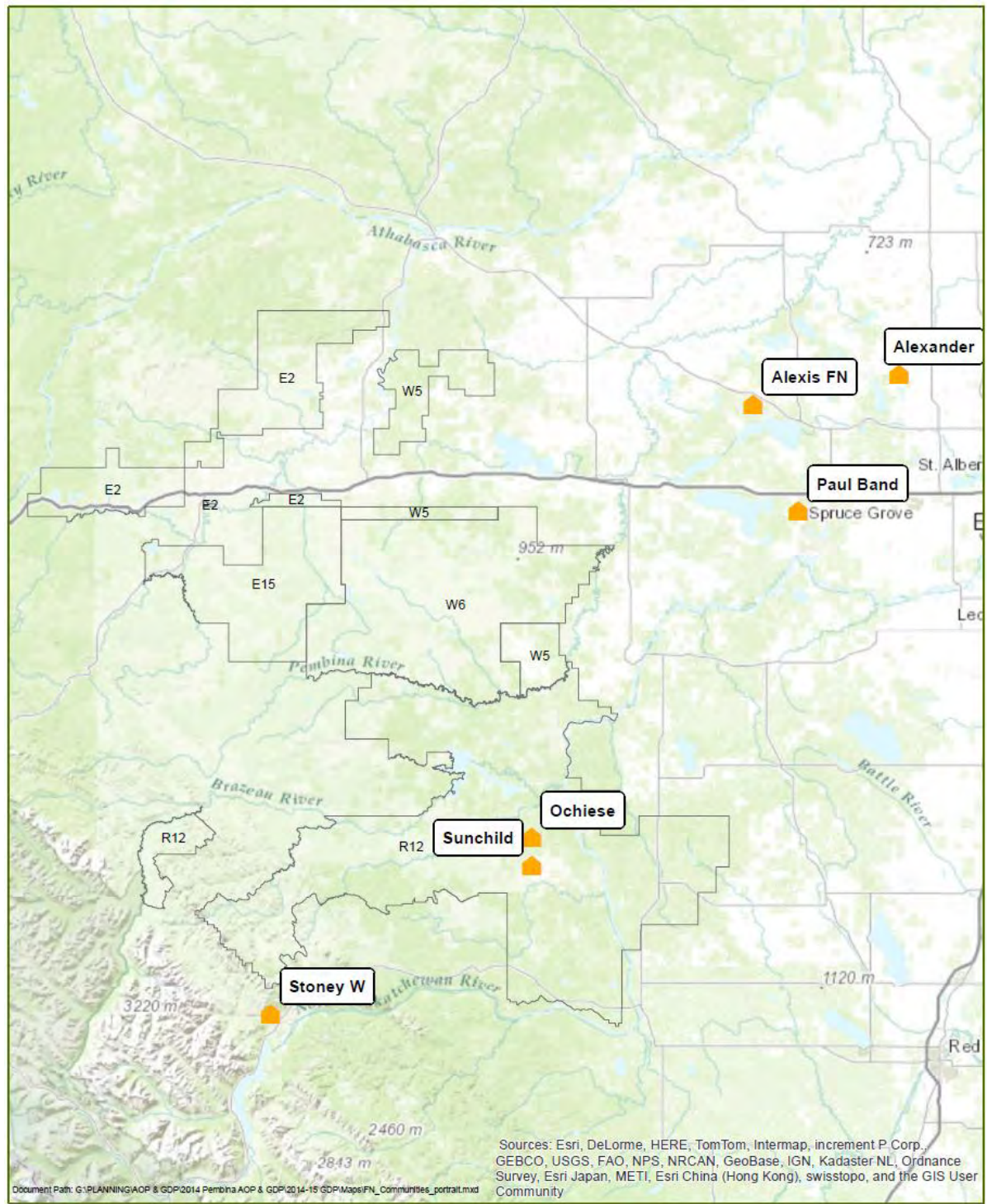
It is the Company's goal to minimize any adverse impact to Treaty rights or the use of traditional sites. These known sites may include, but is not limited to, some of the following:

- Sacred sites
- Ceremonial sites
- Prayer sites
- Oral History sites
- Historic trails
- Camp sites
- Cabin sites
- Hunting sites
- Fishing sites
- grave sites
- trapping sites
- gathering sites for
  - berries
  - medicinal plants
  - minerals
  - quarry/stones

Potential impacts may include the following:

- temporary disruption of travel on historic trails
- temporary disruption of camping activities due to operations
- temporary displacement of game during periods of increased operational activities
- temporary disruption of use of ceremonial, spiritual or prayer sites during periods where noise may be a deterrent for use
- temporal disruption within gathering areas until vegetation communities re-establish post-harvest

Consultation with First Nations was the primary step to be able to achieve that goal. This Consultation Plan attempted to ensure that First Nations with the potential to be impacted by Company or other timber operators activities had the opportunity to provide input into the development of the FMP. As part of the consultation process the Company strived to learn from the First Nations that were being impacted, and to use this knowledge in preparing the preferred forest management strategies that will be embodied within the FMP.



**Legend**



-  Aboriginal Community
-  BF\_FMU\_Polygon



Figure 1: Map of FMA with associated FN Communities shown



## ***5.0 Reporting to GOA on Progress of the Consultation Plan***

Weyerhaeuser has used the GOA First Nations Record of Consultation (ROC) Log to track consultations with each First Nations. Logs provide a running summary format for each First Nation. The Logs will be sent to Forest Area Manager (Edson Forest Area) quarterly upon notification to the First Nations of the start of the FMP planning process, and will continue until the FMP is submitted for review and approval.

Parallel to the Record of Consultation (ROC) Log, each First Nation has been provided summaries of each concern and response brought forward during the process. The most recent tables were provided to all First Nations in September of 2016. A copy of these tables will also be provided to the Forest Area Manager.

Weyerhaeuser has submitted a copy of this report, the ROC Logs, and the Concerns and Response Tables to the Edson Forest Area Manager on the following dates:

- April 1, 2016
- July 1, 2016
- October 1, 2016
- January 1, 2017
- April 1, 2017
- July 1, 2017
- October 1, 2017\*

\*first report that includes the East Prairie Metis Settlement supporting information

This will be the final report. The Draft FMP was submitted to each First Nation and the East Prairie Metis Settlement on November 1, 2017 for final consultation. Updated Logs and CR tables will be sent out in late November upon completion of the consultation timelines, with copies to AAF. Weyerhaeuser will expect an adequacy ruling in early December. The FMP is to be submitted for review and approval on November 28, 2017.





Weyerhaeuser

Pembina 2017-2026

Forest Management Plan



Annex V: Stewardship

March 19, 2018



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# 1 Edson DFMP – Annual and Stewardship Report (November 2016)







**Edson DFMP  
Annual and Stewardship Report  
November 2016**





November 1, 2016

**2015/16 DFMP Stewardship Report of Results  
Edson Defined Forest Area  
For the Period  
May 1, 2007 to April 30, 2016**

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## Introduction:

This is the 9th annual report for the Edson Defined Forest Area. This report contains Weyerhaeuser results for all indicators, as described in the VOITs table (Value, Objective, Indicator and Target) approved July 24, 2008. This report covers the period May 1, 2007 to April 30, 2016. A five-year stewardship report was completed and submitted to ESRD in the summer of 2013.

Questions about the information contained in this report can be directed to:

- Paul Scott, Weyerhaeuser, phone (780) 712-6886 or by email at [paul.scott@weyerhaeuser.com](mailto:paul.scott@weyerhaeuser.com)

An essential component of adaptive forest management is an effective monitoring program. Each indicator will be monitored to assess management success. By monitoring these indicators and comparing actual forest condition and development with planning forecasts, variances with the targets can be identified.

Monitoring will be an ongoing process integrated with regular operations of the Company. It will address the basic aspects of:

- ◆ Tracking actual activities versus planned activities,
- ◆ Tracking actual responses to forest management activities compared to expected responses,
- ◆ Identifying impacts arising from changes in assumptions, terms of reference or unplanned events, and
- ◆ Correcting activities or practices when required.

A variety of data sources including temporary and permanent sample plots, post harvest surveys, and experimental research plots, will be used to monitor forest condition and development.

Adaptive management also implies adjusting the course of action relative to the variances identified in monitoring. There is an opportunity to make operational adjustments within the implementation of the management plan. These operational adjustments may take the form of corrective activities or compensating activities. The corrective actions directly address the identified shortcoming or variance identified. A prime example of this type of activity would be re-treatment of a regenerating harvest area to meet a particular reforestation standard. This activity would indirectly address the identified variance by way of modifying plans. An example of a compensating adjustment could be re-classification of harvest areas to meet reforestation standards.

Monitoring results and variances will be included in both annual and stewardship reports.



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## Timber Supply Sensitivity Analysis (validation of assumptions)

**Cull percent:** The percentage cull on both deciduous and coniferous timber is a rolling average based on a number of years' worth of data. The cull percent that will be applied in the next DFMP will be a result of additional data collection preceding the next plan. The current cull percent is expected to remain the same for a substantial number of years. Due to the aging nature of the forest, it might be suspected that cull will increase slightly in the near term before starting to trend downwards as the forest approaches a more regulated appearance.

**Regeneration Standards:** Regenerating stand covertypes will be assigned prior to harvest and harvest areas will be reforested to standards defined for each strata (C, CD, DC, and D). Harvest areas will have surveys completed no later than years five, eight or fourteen, depending upon the survey standard being applied.

## Annual Performance Monitoring Report Description

### Purpose:

- ◆ To report on the forest management activities undertaken in the previous year that pertains to implementation of the DFMP strategies to meet the plan indicators. The time frames for management activities are identified for each indicator, and generally reflect the following dates:
  - May 1 to April 30 (AOP year)
  - January 1 to December 31 (calendar year)

### Content:

The content of the Annual Performance Monitoring Report may be adjusted over time with mutual agreement between ASRD and the Company, or as deemed appropriate. The Sustainable Forest Management Plan Annual Report (SFMP-AR) will provide much of the information identified below.

The Report will include, but may not be limited to, the following items:

- A. Timber harvesting
  - ◆ Area and volume harvested by species group (**see indicator 34**)
- B. Reforestation and silviculture activities summarized by:
  - ◆ Area of site preparation (type)
  - ◆ Area of stand tending by type
  - ◆ Area of chemical treatments (by application type)
- C. Area summary of land withdrawals and additions (**see indicator 26**)
- D. Significant natural disturbances (e.g. fire, insect, disease, blowdown) (**see indicator 27**)
- E. Activities on afforestation and enhanced forest management (**see indicator 26**)
- F. Summary of incidental replacement strategy results on pure 'C' and 'D' blocks (**see indicator 12**)
- G. Cumulative variance to the spatial harvest sequence by LMU (from GDP)
- H. Compliance infraction – warnings and penalties
- I. Inventory work (timber and non-timber)
- J. Research work (SFMP-AR)
- K. Summary of public involvement activities, concerns or input (SFMP-AR)



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- L. Summary of involvement in Provincial 'Species at Risk' Recovery Plans
- M. DFMP objectives (as identified in Chapter 7 of the DFMP) and indicators

## Stewardship Report Description

### Purpose:

- ◆ To summarize the previous five annual reports;
- ◆ To discuss opportunities for change or adjustments in forest management practices that have been identified;
- ◆ To provide the public with an overall assessment of the DFMP progress, i.e. "Are we doing what we said we would do?"
- ◆ To identify deviations to the approved plan;
- ◆ To undertake analysis of unacceptable deviations as identified by the Company and Alberta; and
- ◆ To provide corrective actions.

### Content:

The content of the Stewardship Report may be adjusted over time with mutual agreement between ASRD and the Company. Therefore, the Report will include, but may not be limited to the following items:

- ◆ Review DFMP objectives and the TSA assumptions to:
  - Identify emerging trends or issues,
  - Identify deviations from the approved plan,
  - Track all variances to the SHS; where subtraction of more than 20% of the SHS or additions that exceed 100% of the SHS occur (by LMU, by decade), an assessment will be made to identify the impacts to the affected objectives and resulting AAC implications,
  - Describe any analysis that has been undertaken of deviations, and
  - Describe the corrective actions to be taken.

The following timber operators operate within the DFA:

- Alberta Newsprint Company - ANC
- Blue Ridge Lumber - BRL
- Cold Creek (W6) CTPP – CC-CTP
- EDFOR Cooperative – EDFOR
- Edson CTPP – ED-CTP
- Edson Timber Products – ETP
- Lobstick Loggers Association (W5 CTPP) - LLA
- Millar Western Industries – MWI
- Weyerhaeuser – WY



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### Non-VOIT Table Information

Table A1: Annual area harvested

Reporting Year	Area Harvested (ha)
2007/08	2119
2008/09	1471
2009/10	1943
2010/11	1675
2011/12	1430
2012/13	1307
2013/14	917
2014/15	812
2015/16	1154
<b>Total</b>	<b>12,828</b>

Table A2: Annual area of site preparation activity

Reporting Year	Area Site Prepared (ha)
2007/08	191
2008/09	201
2009/10	266
2010/11	164
2011/12	0
2012/13	20
2013/14	562
2014/15	244
2015/16	499
<b>Total</b>	<b>2,147</b>



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Table A3: Annual area of chemical stand tending activity

Reporting Year	Area of stand tending – chemical (ha)
2007/08	418
2008/09	32
2009/10	461
2010/11	553
2011/12	497
2012/13*	462
2013/14	763
2014/15	482
2015/16	251
<b>Total</b>	<b>3.919</b>

\*Chemicals used for stand tending and site prep tracked separately in SOL starting in 2013

Table A4: Annual area of non-chemical stand tending activity

Reporting Year	Area of stand tending – Non-chemical (ha)
2007/08	0
2008/09	0
2009/10	0
2010/11	0
2011/12	0
2012/13	0
2013/14	0
2014/15	0
2015/16	0
<b>Total</b>	<b>0</b>





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Table A5: Annual cumulative variance to the SHS

Reporting Year	Cumulative Variance (%)
2007/08	3.4
2008/09	5.2%
2009/10	7.4%
2010/11	9.3%
2011/12	14.0%
2012/13	16.7%
2013/14	17.0%
2014/15	17.5%
2015/16	17.8%

Table A6: Annual number of compliance infractions

Reporting Year	Non-Compliance Issues
2007/08	0
2008/09	2
2009/10	0
2010/11	0
2011/12	0
2012/13	0
2013/14	0
2014/15	1
2015/16	0
<b>Total</b>	<b>2</b>

Table A7: Annual Weyerhaeuser inventory work by type

Reporting Year	Type of inventory work completed
2007/08	Cutover, landuse, Growth and Yield Plots
2008/09	Landuse, Growth and Yield Plots
2009/10	Cutover, landuse, Growth and Yield Plots, TLG validation plots
2010/11	Cutover, landuse, Growth and Yield Plots, TLG validation plots
2011/12	Cutover, landuse, Growth and Yield Plots
2012/13	Cutover, landuse, Growth and Yield Plots
2013/14	Cutover, landuse, Growth and Yield Plots, new AVI
2014/15	Cutover, landuse, Growth and Yield Plots, new AVI
2015/16	Landuse, Growth and Yield Plots, new AVI



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Table A8: Annual research completed by Weyerhaeuser

Reporting Year	Research Description
2007/08	<ul style="list-style-type: none"> <li>• Stand Retention surveys</li> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Small watershed assessment program – Wawa Creek</li> </ul>
2008/09	<ul style="list-style-type: none"> <li>• Stand Retention surveys</li> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Small watershed assessment program – Wawa Creek</li> </ul>
2009/10	<ul style="list-style-type: none"> <li>• Stand Retention surveys</li> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> </ul>
2010/11	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Grizzly Bear</li> <li>• Duck Unlimited – Earthcover, waterbird and water chemistry</li> </ul>
2011/12	<ul style="list-style-type: none"> <li>• Owl and Raptor Survey</li> <li>• Stand retention surveys</li> </ul>
2012/13	<ul style="list-style-type: none"> <li>• Nesting survey – Tom Hill Tower</li> </ul>
2013/14	<ul style="list-style-type: none"> <li>• Nesting survey – Chip Lake</li> <li>• Grizzly Bear scat survey</li> </ul>
2014/15	<ul style="list-style-type: none"> <li>• Nesting survey – Svedberg</li> <li>• Grizzly Bear scat survey</li> <li>• Owl and Raptor Survey</li> </ul>
2015/06	<ul style="list-style-type: none"> <li>• Nesting survey – Tom Hill Tower</li> <li>• Grizzly Bear scat survey</li> </ul>

Table A9: Annual Summary of Public Involvement Activities

Reporting Year	Public Involvement Activities
2007/08	Herbicide open house, FAC review of planning and operations
2008/09	Herbicide open house, FAC review of planning and operations
2009/10	Herbicide open house, FAC review of planning and operations
2010/11	Herbicide open house, FAC review of planning and operations
2011/12	Herbicide open house, FAC review of planning and operations
2012/13	Herbicide open house; Trout Creek Open house
2013/14	Herbicide open house
2014/15	Herbicide open house
2015/06	Herbicide open house



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Table A10: Annual participation in Provincial 'Species at Risk' Plans

Reporting Year	Provincial Species at Risk Plans
2007/08	None
2008/09	None
2009/10	None
2010/11	None
2011/12	None
2012/13	None
2013/14	None
2014/15	None
2015/06	None



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**DFMP Values, Objectives, Indicators and Targets - VOITs**

The following tables describe the VOITs established for the Edson DFMP. Results are summarized below.

Table B1: Identification of acceptable variance for indicators since May 1, 2007  
 (NA = Not Applicable; WV = Within Acceptable Variance; OV = Outside acceptable variance)

Indicator	YEAR									
	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	
1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2	OV	OV	OV	OV	OV	OV	OV	OV	OV	
3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4	WV	WV	WV	WV	WV	WV	WV	WV	WV	
5	WV	WV	WV	WV	WV	WV	WV	WV	WV	
6	WV	WV	WV	WV	WV	WV	WV	WV	WV	
7	WV	WV	WV	WV	WV	WV	WV	WV	WV	
8	WV	WV	WV	WV	WV	WV	WV	WV	WV	
9	WV	WV	WV	WV	WV	WV	WV	WV	WV	
10	WV	WV	WV	WV	WV	WV	WV	WV	WV	
11	WV	WV	WV	WV	WV	WV	WV	WV	WV	
12	WV	WV	WV	WV	WV	WV	WV	WV	WV	
13	OV	OV	OV	OV	OV	OV	OV	OV	OV	
14	WV	WV	WV	WV	WV	WV	WV	WV	WV	
15	WV	WV	WV	WV	WV	WV	WV	WV	WV	
16	WV	WV	WV	WV	WV	WV	WV	WV	WV	
17	NA	NA	NA	NA	NA	NA	NA	NA	NA	
18	WV	WV	WV	WV	WV	WV	WV	WV	WV	
19	WV	WV	WV	WV	WV	WV	WV	WV	WV	
20	WV	WV	WV	WV	WV	WV	WV	WV	WV	
21	WV	WV	WV	WV	WV	WV	WV	WV	WV	
22	WV	WV	WV	OV	OV	WV	WV	WV	WV	
23	NA	NA	NA	NA	NA	NA	NA	NA	NA	
24	WV	WV	WV	WV	WV	WV	WV	WV	WV	
25	WV	WV	WV	WV	WV	WV	OV	OV	WV	
26	WV	WV	WV	WV	WV	WV	WV	WV	WV	
27	WV	WV	WV	WV	WV	WV	WV	WV	WV	
28	WV	WV	WV	WV	WV	WV	WV	WV	WV	
29	WV	WV	NA	NA	NA	NA	NA	NA	NA	
30	WV	WV	WV	WV	WV	WV	WV	WV	WV	
31	WV	WV	WV	WV	WV	WV	WV	WV	WV	
32	WV	WV	WV	WV	WV	WV	WV	WV	WV	
33	NA	NA	NA	NA	NA	NA	NA	NA	NA	
34	WV	WV	WV	WV	WV	WV	WV	WV	WV	
35	WV	WV	WV	WV	WV	WV	WV	WV	WV	
36	WV	WV	WV	WV	WV	WV	WV	WV	WV	
37	WV	WV	WV	WV	WV	WV	WV	WV	WV	
38	WV	WV	WV	WV	WV	WV	WV	WV	WV	



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Indicator	YEAR								
	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
39	WV	WV	WV	WV	WV	WV	WV	WV	WV
40	NA	NA	NA	NA	NA	NA	NA	NA	NA
41	WV	WV	WV	WV	WV	WV	WV	WV	WV
42	WV	WV	WV	WV	WV	WV	WV	WV	WV
43	WV	WV	WV	WV	OV	OV	OV	OV	OV
44	WV	WV	WV	WV	WV	WV	WV	WV	WV



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
		a DFA characteristic, component, or quality considered by an interested party to be important in relation to a CSA SFM element or other locally identified element	a broad statement describing a desired future state or condition of a value	a variable that measures or describes the state or condition of a value	a DFA characteristic, component, or quality considered by an interested party to be important in relation to a CSA SFM element or other locally identified element
1. Biological Diversity	1.1 Ecosystem Diversity  Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that occur naturally in the DFA	1.1.1 Landscape scale biodiversity	1.1.1.1 Maintain biodiversity by retaining the full range of cover types and seral stages	<b>1)</b> Area and percent of young, mature and late seral stages by cover types (DX, MX, PL, SW, and SB) in the net and gross landbase ( <b>Obj 2.1, 2.5</b> )	Percent of Forested Landbase at 2014
			1.1.1.2 Maintain biodiversity by avoiding landscape fragmentation	<b>2)</b> Size of harvest opening by DFA ( <b>Obj. 2.2</b> )	Range of harvest areas reflect the approved SHS *  0-5 ha – 42.5% 5-10 ha- 24.5% 11-40 ha- 28.1% 41-100 ha- 14.2% 100-500 ha- 0.7% >501ha – 0.0%  *updated to reflect the 2008 MPB addendum



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
1. Biological Diversity	1.1 Ecosystem Diversity	1.1.1 Landscape scale biodiversity	1.1.1.2 Maintain biodiversity by avoiding landscape fragmentation	<b>3)</b> Area of old interior forest (ignoring seismic lines) by total area and by selected major species groups: deciduous, mixedwood, Pine, Black Spruce and White Spruce	<p>1) 4,640 ha (1.2% of total forest area for the DFA)</p> <p>2) Area and relative % of each major species group for total forest area as follows*:</p> <ul style="list-style-type: none"> <li>- DX**- 1,945 ha (1.81% of total DX)</li> <li>- MX**- 252 ha (0.31% of total MX)</li> <li>- PL – 1,181 ha (1.58% of total PL)</li> <li>- SB – 1,252 ha (0.69% of total SB)</li> <li>- SW – 0 ha (0.0% of total SW)</li> </ul> <p>*Updated to reflect 2008 MPB addendum  **DX and MX decline due to mortality function in yield curves</p>
			1.1.1.3 Maintain biodiversity by minimizing access	<b>4)</b> Permanent forestry road density by DFA	Less than 0.075 km/km <sup>2</sup>
			1.1.1.3 Maintain biodiversity by minimizing access	<b>5)</b> Kilometers of temporary (Inter-block) access roads	Less than 56 km by DFA
			1.1.1.4 Maintain specific habitat for rare and endangered species of plants	<b>6)</b> Unique biological or physical ecological sites ( <b>CSA 15</b> ) ( <b>Obj. 2.6</b> )	100% of sites are protected



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
1. Biological Diversity	1.1 Ecosystem Diversity	1.1.1 Landscape scale biodiversity	1.1.1.5 Maintain unique habitats provided by wildfire and blowdown events	7) Area of unsalvaged burned forest ( <b>Obj. 2.3</b> )	Live trees: Retain all unburned trees in green islands and retained patches  Burned trees – (Landscape view) Retain >10% of area with merchantable black (burnt) trees in salvage areas greater than 10 ha in size  (Harvest Area Scale): Retain >5% of area with merchantable black (burnt) trees in salvage areas less than or equal to 10 ha in size
				8) Area of unsalvaged blowdown forest	In areas of blowdown exceeding 2 ha in size, an average of 10% of the area will be left unsalvaged
			1.1.1.6 Retain ecological values and functions associated with riparian zones	9) Riparian Management Zones ( <b>Obj. 2.4</b> )	Full compliance with the OGRs
			1.1.1.7 Maintain incidental coniferous and deciduous	10) Areas planted within pure 'D' harvest areas	Plant areas having inadequate hardwood stocking
				11) OGR compliance for understory protection	100% compliance
				12) Contribution to future incidental yields	Replace incidental yields





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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
1. Biological Diversity	1.1 Ecosystem Diversity	1.1.2 Local/stand scale biodiversity	1.1.2.1 Retain stand level structure	<b>13</b> Percent of retained merchantable volume ( <b>Obj. 2.3</b> ) ( <b>CSA 3</b> )	Stand retention of an average of 3% in FMUs E2, W5 and W6 and 8% in FMU E1 of all species utilized
				<b>14</b> Coarse down woody debris levels by harvest area (low, moderate, high) ( <b>Obj. 2.3, 3.1</b> )	100% of harvest areas retain down woody debris at or above preharvest levels
			1.1.2.2 Maintain integrity of sensitive sites	<b>15</b> Unique biological or physical sites ( <b>Obj. 7.1, 7.2</b> ) ( <b>CSA 15</b> )	Protect 100% of the sites as identified
			1.1.2.3 Maintain aquatic biodiversity by minimizing impacts of water crossings	<b>16</b> Forestry water crossings in compliance with Code of Practice for Water Course Crossings within each Subunit ( <b>Obj. 4.1, 4.2</b> ) ( <b>CSA 21, 23</b> )	100% of designs meet standards of the Code of Practice for Water Course Crossings
1. Biological Diversity	1.2 Species Diversity: Conserve species diversity by ensuring that habitats for native species found in the DFA are maintained throughout time	1.2.1 Maintain species diversity on the landscape	1.2.1.1 Maintain landscape level habitat for naturally occurring species of plants and animals	<b>17</b> Species of Concern	Assess next DFMP (2016)
				<b>18</b> Indicator species groups 1) Breeding birds 2) Nocturnal raptors ( <b>Obj. 2.6</b> ) ( <b>CSA 6</b> )	Maintain a monitoring program for the species listed
1. Biological Diversity	1.3 Genetic Diversity: Conserve genetic diversity by maintaining the variation of genes with species	1.3.1 Genetic diversity across the landscape	1.3.1.1 Retain "wild forest populations" for each tree species in each seed zone through establishment of in-situ reserves by the organization with an approved controlled parentage program or in cooperation with Alberta	<b>19</b> Number and area (ha) of in situ genetic conservation areas	Number (X) of genetic conservation areas for each seed zone conforming with Section 20 of the Green Area section of Standards for Tree Improvement in Alberta (yet to be determined by ASRD)



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
			1.3.1.2 Retain wild forest genetic resources through ex-situ conservation	<b>20)</b> Number of provenances and genetic lines in ex-situ gene banks and trials	Active ex-situ conservation program for all Controlled Parentage Program plan species and other species in cooperation with Alberta
	1.4 Protected Areas – respect protected areas identified through government processes	1.4.1 Areas with minimal human disturbances within managed landscapes	1.4.1.1 Integrate transboundary values and objectives into forest management	<b>21)</b> Stakeholder consultation	Ongoing consultations with relevant protected areas' agencies
2. Ecosystem Productivity	2.1 Ecosystem resilience	2.1.1 Reforested harvest areas	2.1.1.1 Meet reforestation targets on all harvested areas	<b>22)</b> Annual % of area for SR establishment surveys ( <b>CSA 36</b> ) ( <b>Obj. 1.1</b> )	95% on an annual basis for establishment surveys
				<b>23)</b> Annual % of area for SR performance surveys	To be determined with the development of Alternative Regeneration Standards (ARS)
				<b>24)</b> Cumulative % of SR areas (establishment and performance)	100% of harvest areas that were harvested on or after May 1, 2001 meet Provincial or approved reforestation standards
				<b>25)</b> Reforestation effort	100% of harvest areas are reforested within two years
		2.1.2 Maximizing the forest land base as a means of conserving the physical environment within the DFA	2.1.2.1 Forests on the DFA will be managed so as to minimize losses to non-forest uses.	<b>26)</b> Changes in DFA landbase ( <b>CSA 28</b> ) ( <b>Obj. 1.6</b> )	A program in place to return landbase lost through industrial activity to the forested landbase
			2.1.2.2 Recognize lands affected by insects, disease or natural calamities	<b>27)</b> Amount of area affected ( <b>CSA 18</b> ) ( <b>Obj. 1.2, 1.4, 1.5</b> )	Area (ha) affected by significant outbreaks, infestations, natural calamities
		2.1.3 Control	2.1.3.1 Control non-	<b>28)</b> Noxious weed program	Maintain a noxious weed



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
		invasive species	native plant species (weeds)	<b>(CSA 13)</b>	program
3. Soil and water	3.1 Soil quantity and quality	3.1.1 Soil productivity	3.1.1.1 Minimize impact of roading and bared areas in forest operations	<b>29)</b> Compliance with Pembina ground rules ( <b>Obj. 3.2</b> )	All blocks will have less than 5% soil disturbance unless prior approval is received from ASRD
			3.1.1.2 Minimize incidence of soil erosion and slumping	<b>30)</b> Incidence of soil erosion and slumping ( <b>CSA 21</b> ) ( <b>Obj. 4.1, 4.2</b> )	Complete compliance
	3.2 Water quantity and quality	3.2.1 Water quantity	3.2.1.1 Limit impact of timber harvesting on water yield	<b>31)</b> Watershed yields ( <b>CSA 25</b> )	Modeled fourth-order watershed yields will be less than 120% of natural watershed yields
			3.2.2.1 Minimize impact of operations in riparian areas	<b>32)</b> Riparian management zones ( <b>Obj.2.9</b> )	Complete compliance
4. Global Eco-logical Cycles	4.1 Carbon uptake and storage	4.1.1 Carbon uptake and storage	4.1.1.1 Maintain functioning forest ecosystems capable of contributing to global carbon cycles	<b>33)</b> Impact on carbon production ( <b>CSA 26</b> )	Identify and review forest management activities as related to carbon storage and release.
		4.1.2 Maximizing the forest land base as a means of conserving the physical environment with the DFA	4.1.2.1 Forests on the DFA will be managed so as to minimize losses to on-forest uses.	<b>26)</b> Changes in DFA landbase ( <b>CSA 28</b> ) ( <b>Obj. 1.6</b> )	A program in place to return landbase lost through industrial activity to the forested landbase
5. Multiple Benefits in Society	5.1 Timber and non-timber benefits	5.1.1 Sustainable timber supplies	5.1.1.1 Harvesting to be at a sustainable harvest level	<b>34)</b> Level of harvest ( <b>CSA 34</b> ) ( <b>Obj. 1.1</b> )	Total timber drain does not exceed the periodic AAC except as specified in the FMA agreement



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
5. Multiple Benefits in Society	5.2 Communities and Sustainability	5.2.1 Risk is low to communities and landscape values from wildfire and MPB	5.2.1.1 To reduce wildfire threat potential by reducing fire behaviour, fire occurrence, threats to values at risk and enhancing the suppression capability	<b>35)</b> Percentage reduction in Fire Behaviour Potential area (ha) within the Fire Smart Community Zone	Reduce the area (ha) in the extreme and high Fire Behaviour Potential rating categories by X% within the Fire Smart Community Zones
			5.2.1.2 To reduce the age class structure of pine forests to reduce the long-term susceptibility to mountain pine beetle (MPB) attack	<b>36)</b> Reduction of MPB susceptible stands	Follow the approved SHS from the MPB management plan
		5.2.2 Provide opportunities to derive benefits and participate in use and management	5.2.2.1 Maintain a forest management system that accommodates a variety of values and users	<b>37)</b> Stakeholder review of harvest designs ( <b>CSA 46)</b> ( <b>Obj. 5.3)</b>	Known affected stakeholders will be asked to review all harvest plans that impact their activities
			5.2.2.2 Ensure the Company's harvesting practices do not unduly impact on the viewshed in sensitive areas	<b>38)</b> Direct consultation with the public regarding plans for and activities on the DFA ( <b>CSA 46)</b> ( <b>Obj. 5.3)</b>	a) Address all issues as they arise during the consultation processes b) Update the current PIP by December 31, 2008
5. Multiple Benefits in Society	5.2 Communities and Sustainability	5.2.3 Forest Productivity	5.2.3.1 Maintain long run sustained yield average	<b>40)</b> Regenerated stand yield compared to natural stand yield	No net decrease from the natural stand productivity
6. Accepting society's	6.1 Aboriginal and treaty rights and	6.1.1 First Nations and Métis rights,	6.1.1.1 Forest management planning	<b>41)</b> First Nations or Métis Involvement or input into plans	Comply with all Provincial policy, framework and



November 1, 2016

CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
responsibility for sustainable development	aboriginal forest values	interests and traditional uses in the land and natural resources	and activities will reflect First Nations and Métis rights, interests and traditional uses in the land and natural resources	(CSA 42, 43) (Obj. 5.2)	guidelines
		6.1.2 Métis and First Nations peoples' special and unique needs are respected and accommodated	6.1.2.1 Respect and protect known sites of historic, cultural and traditional significance	42) Number of identified First Nations and Métis sites (Obj. 7.3) (CSA 45)	Protect all known sites of historic, medicinal, spiritual, cultural or nutritional significance
	6.2 Public participation and information for decision-making	6.2.1 Public involvement in forest management planning	6.2.1.1 Meaningful involvement in certification and formal planning processes	43) FAC review of Weyerhaeuser planning and operations (CSA 46)	Produce an annual report for the FAC regarding company activities and issues raised during the year
			6.2.1.2 Improve and apply the knowledge base of ecological processes and classification, and fish and wildlife responses to forest management practices.	44) Research (CSA 50)	Indicate research undertaken or completed on the DFA





November 1, 2016

<b>Indicator 1</b>	<b>Target</b>
Area and percent of young, mature and late seral stages by cover types (DX, MX, PL, SW, PS, and CX) in the net and gross landbase	Percent of Forested Landbase at 2014

Acceptable  
Variance

By DFA, area (ha) of old (late, very late and over mature) and mature seral stage forests shall be between 90% and 100% of target areas.

By DFA, area of young (early and immature) seral stage forest shall not exceed 110% of target area.



November 1, 2016

Current Status The following tables indicate seral stage distribution at 2014 for both the Net and the Gross Landbase (source 2008 MPB addendum):

Net landbase Summary	Species Groups	Area (ha)	Percent
Young	DX	27,502	9.8%
Young	MX	26,986	9.6%
Young	PL	14,002	5.0%
Young	SW	1,944	0.7%
Young	PS	2,611	0.9%
Young	CX	13,070	4.7%
Mature	DX	12,552	4.5%
Mature	MX	15,702	5.6%
Mature	PL	17,650	6.3%
Mature	SW	5,255	1.9%
Mature	PS	1,611	0.6%
Mature	CX	4,075	1.5%
Late	DX	50,774	18.1%
Late	MX	33,426	11.9%
Late	PL	27,626	9.9%
Late	SW	10,329	3.7%
Late	PS	6,261	2.2%
Late	CX	8,732	3.1%
	<b>Total</b>	<b>280,107</b>	<b>100.0%</b>

**No further analysis will be completed until development of VOITs in 2016.**





November 1, 2016

Current Status  
(continued)

Gross landbase Summary	Species Groups	Area (ha)	Percent
Young	DX	28,442	6.1%
Young	MX	28,524	6.1%
Young	PL	14,058	3.0%
Young	SW	2,001	0.4%
Young	PS	2,614	0.6%
Young	CX	16,453	3.5%
Mature	DX	14,003	3.0%
Mature	MX	17,618	3.8%
Mature	PL	19,588	4.2%
Mature	SW	5,936	1.3%
Mature	PS	1,968	0.4%
Mature	CX	48,816	10.4%
Late	DX	58,246	12.4%
Late	MX	37,825	8.1%
Late	PL	30,998	6.6%
Late	SW	12,378	2.6%
Late	PS	7,351	1.6%
Late	CX	121,063	15.9%
	<b>Total</b>	<b>467,882</b>	<b>100.0%</b>

Monitoring  
and  
Measurement

Regular updates to inventory. This occurs through the following activities:

- Updates to AVI as required by the planning standard
- Updates to harvest activities as they occur
- Updates to land use activities
- Updates to the landbase based on natural disturbance events i.e. fire, insect and disease, windthrow, etc.

Forest  
Management  
Activities

Follow the spatial harvest sequence from the 2008 MPB addendum.

Reporting  
Procedure

Analysis of gross and net forested landbase of actual areas and percents will occur at the next FMP in 2016.



November 1, 2016

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Linkages  
Between  
Strategic and  
Operational  
Plans

Following the Spatial Harvest Sequence should result in a fairly close match to the desired outputs at 2014 assuming non-harvest natural and man-made disturbances do not unduly impact the age class distribution.

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Forest  
Stewardship  
Comments

The Edson FMA has been combined with the DV FMA, therefore no further analysis will be completed prior to the 2016 FMP. A new AVI will also be completed as part of the next FMP process.



November 1, 2016

<b>Indicator 2</b>	<b>Target</b>
Size of harvest opening by DFA	Range of harvest areas reflect the approved SHS

Acceptable Variance <20% for each size category

Current Status Class size of harvest openings (relative to total area harvested):

Table 2–1: Average block class distribution by area classes for all operators.

Year	Percent relative to total harvest area harvested					
	0-5.0	5.1-10.0	10.1-40.0	40.1-100.0	100.1-500.0	500.1+
Target	43%	25%	28%	4%	1%	0%
Target Range	35-51	20-30	22-34	3-5	0-2	0-2
2007/08	7.4% 8/108	25.0% 27/108	50.0% 54/108	14.8% 16/108	2.8% 3/108	0% 0/108
2008/09	14.3% 11/67	14.3% 11/67	44.2% 34/67	13.0% 10/67	1.3% 1/67	0% 0/67
2009/10	8.3% 6/72	20.8% 15/72	58.3% 42/72	9.7% 7/72	2.8% 2/72	0.0% 0/72
2010/11	5.0% 3/60	15.0% 9/60	58.3% 35/60	16.7% 10/60	5.0% 3/60	0.0% 0/60
2011/12	7.3% 3/41	12.2% 5/41	51.2% 21/41	22.0% 9/41	7.3% 3/41	0.0% 0/41
2012/13	4.7% 2/43	7.0% 3/43	65.1% 28/43	18.6% 8/43	4.7% 2/43	0% 1/43
2013/14	15.4% 14/91	23.1% 21/91	44.0% 40/91	13.2% 12/91	4.4% 4/91	0% 0/91
2014/15	4.8% 6/125	13.6% 17/125	49.6% 62/125	24.0% 30/125	8.0% 10/125	0% 0/125
2015/16	8.5% 13/153	15% 23/153	47% 72/153	22.9% 35/153	6.5% 10/153	0% 0/153
	8.7% 66/760	17.2% 131/760	51.1% 388/760	18.0% 137/760	5.0% 38/760	0% 0/760

Monitoring and Measurement Regular updates to actual harvest area inventory; ARIS updates.



November 1, 2016

Forest Management Activities

Follow the spatial harvest sequence.

Reporting Procedure

Annual and stewardship reporting on distribution of harvest sizes by number and percent in each size category.

Linkages Between Strategic and Operational Plans

Following the Spatial Harvest Sequence should result in a fairly close match to the desired outputs at 2014.

Table 2-2: SHS block frequency, total area and percent distribution by area classes for periods 1 and 2 from the 2008 MPB Addendum.

Block Size Class (ha)	Count/%	Area (ha)/%
0-5	1,558 (42.5%)	4,209 (9.8%)
6-10	897 (24.5%)	6,450 (15.0%)
11-40	1,028 (28.1%)	19,409 (45.1%)
41-100	153 (4.2%)	8,858 (20.6%)
101-500	27 (0.7%)	4,090 (9.5%)
>500	0 (0.0%)	0 (0%)
<b>Total</b>	<b>3,663 (100.0%)</b>	<b>43,016 (100.0%)</b>

Forest Stewardship Comments

It appears that the data used to generate the tables were patch size, not block size. Patch size varies considerably from forecasted block size due to the amount of linear disturbances across the landscape, most notably seismic lines that broke blocks into patches.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 3	Target
Area of old interior forest (ignoring seismic lines) by total area and by selected major species groups: deciduous, mixedwood, Pine, Mixed Conifer and White Spruce	1) 4,640 ha (0.6% of total forest area) for the DFA  2) Area and relative % of each major species group for total forest area as follows: - DX* - 1,945 ha (1.8% of total DX) - MX * - 252 ha (0.3% of total MX) - PL – 1,181 ha (1.6% of total PL) - CX – 1,252 ha (0.69% of total CX) - SW – 0 ha (0% of total SW)  *DX and MX decline due to mortality function in yield curves

Acceptable Variance <20% of the target for each species group

Current Status Interior older forest summary by major species groups at end of period 2 (2014) – ignoring seismic lines :

DX\* - 1,280 ha (1.3% of total DX)  
 MX \* - 111 ha (0.1% of total MX)  
 PL – 351 ha (0.5% of total PL)  
 CX – 1,252 ha (0.69% of total CX)  
 SW – 0 ha (0% of total SW)

\*DX and MX decline due to mortality function in yield curves

**No further analysis will be completed until development of VOITs in 2016.**

Monitoring and Measurement Regular updates to inventory and ARIS.

Forest Management Activities Follow the spatial harvest sequence.

Reporting Procedure Report on actual areas and percents for each species group at next FMP for comparisons.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Following the spatial harvest sequence should result in a fairly close match to the desired outputs at 2014. Non-forestry activities (Oil and Gas, Fire, insects, etc.) could potentially have a much greater impact than forestry activities.

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Forest  
Stewardship  
Comments

The Edson FMA has been combined with the DV FMA, therefore no further analysis will be completed prior to the 2016 FMP. A new AVI will also be completed as part of the next FMP process.



November 1, 2016

Indicator 4	Target
Permanent forestry road density by DFA	Less than 0.075 km/km <sup>2</sup>

Acceptable Variance <20% by 2014

Current Status 2006 permanent forestry road density calculated as 0.068 km/km<sup>2</sup>.

**No further analysis will be completed until development of VOITs in 2016.**

Monitoring and Measurement Regular updates to inventory.

Forest Management Activities Timber operators will continue coordinated access plans with the energy sector where possible; reclaim disused permanent roads.

Reporting Procedure Stewardship reporting on all permanent forestry and non-forestry roads.

Linkages Between Strategic and Operational Plans Minimizing permanent access will minimize impacts on future calculations of the net landbase.

Forest Stewardship Comments  
 Weyerhaeuser LOC roads = 325 km (Source:2015 WY GDP)  
 All other Forestry LOC roads = 10 km (est.)  
 Total permanent forestry roads = 335 km.  
 Density =325/5000 =0.065km/km2  
 No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 5</b>	<b>Target</b>
Kilometers of temporary (inter-block) access roads	Less than 56 km by DFA

Acceptable Variance <20% of the target

Current Status The 2006/07 AOP was reviewed for temporary road development. Total estimated length for temporary roads was estimated to be approximately 28km. If all roads remained open for two entire years, the average would therefore be a maximum of 56 km of open temporary road.

Table 5-1: Kilometers of open temporary roads open by year

Reporting Year	Kilometers of Temporary Road Open
2007/08	18
2008/09	19
2009/10	4
2010/11	8
2011/12	15
2012/13	13
2013/14	2
2014/15	1.3
2015/16	4.6
<b>Total</b>	<b>84.9</b>
<b>Average</b>	<b>9.4</b>

Monitoring and Measurement The operational status reports will keep track of roads open.





November 1, 2016

Forest  
Management  
Activities

Follow AOP and OGRs; monitor status of temporary roads.

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Reporting  
Procedure

Annual and stewardship report on actual kilometers of open temporary roads on the DFA.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Temporary inter-block roads normally use existing linear disturbances, which have been removed from the productive forest landbase. If they go through existing timber, they will be reforested when the surrounding timber is harvested.

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Forest  
Stewardship  
Comments

The average kilometer of temporary open roads for the company was 13.6 km; normally, all roads are reclaimed within 2 years of harvest; roads are only kept open to facilitate access for silviculture purposes, and reclaimed thereafter.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 6	Target
Unique biological or physical ecological sites	100% of sites are protected

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Acceptable  
Variance

No variance; all known sites are protected from disturbance.

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November 1, 2016

**Current Status** Known sites are buffered and remain outside of the block or are included with patches of structure retention. There have been no recent indications of disturbance of any known sites.

Table 6-1: Number of unique biological or physical sites protected from damage.

Reporting Year	Percent of Sites protected
2007/08	100% - 2 sites
2008/09	100% - Protected: Minnow Lake – 5140510622 – 1 Mineral Lick MacKay – 5110561101 – 2 Mineral Licks
2009/10	100% - Protected: Broken Cabin (access road) - raptor nest Sang Lake – 5150521075 – mineral lick.
2010/11	100% - Sang Lake – 5150512702 – Mineral Lick Sang Lake – 5120512805 – Road re-location due to beaver dams.
2011/12	100% - Erith – 5180501511 – 1 Spring; Sang Lake – 5140510603 – 2 dry mineral licks.
2012/13	Rodney Creek -5170491684 mineral lick, and 3 springs Rodney creek – 5170490793 – 2 springs Cricks Creek- 5150571537 – spring Eta Lake – 5120500298 – mineral lick Sinkhole – 5090510715 – mineral lick
2013/14	100% protected Rodney Creek 5170491727 1 mineral lick, 1 spring Rodney Creek 5170491780 6 springs Trout Creek – 200 m buffer on trumpeter swan lake South Rat - 1 spring
2014/15	100% Protected Svedberg: 1 mineral lick Trout Creek: Multiple migratory bird nests
2015/16	100% Protected Swanson: 1 stick nest, multiple migratory bird nests Cricks Creek: Multiple migratory bird nests



November 1, 2016

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Monitoring and Measurement	Regular updates to inventory; descriptions included in harvest area details and Final Harvest Plans.
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Forest Management Activities	Follow OGR for protection of unique habitat features for rare plant species. Training of staff will occur upon identification of unique biological sites/species that may occur on the DFA. Joyce Gould from ANHIC will provide direction for this indicator.
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Reporting Procedure	Annual and stewardship report on number and type of sites identified.
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Linkages Between Strategic and Operational Plans	There are no known sites within the DFA that have been removed from the productive landbase. Subsequent DFMPs will establish rules on how to handle sites identified since the last approved DFMP.
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Forest Stewardship Comments	All known sites received protection.
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No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 7</b>	<b>Target</b>
Area of unsalvaged burned forest	<p>Live trees: Retain all unburned trees in green islands and retained patches</p> <p>Burned trees: (Landscape view) Retain &gt;10% of area with merchantable black (burnt) trees in salvage areas greater than 10 ha in size</p> <p>(Harvest Area Scale) Retain &gt;5% of area with merchantable black trees in salvage areas less than or equal to 10 ha in size</p>

Acceptable Variance      Greater than or equal to targeted percentages.

Current Status      No fire salvage has occurred recently on the DFA.

Table 7-1: Retention of live or black trees within blocks salvaged as a result of fire

Year	Operator	Percent of Live or Black Trees Retained	
		Fire Area range from 0 to 10 hectares	Fire Area range from >= 10 hectares
2007/08	WY	0	0
2008/09	WY	0	0
2009/10	WY	0	0
2010/11	WY	0	0
2011/12	WY	0	0
2012/13	WY	0	0
2013/14	WY	0	0
2014/15	WY	0	10
2015/16	WY	0	10

Monitoring and Measurement      Final harvest plans and AOPs will be used to estimate percent retentions of unsalvaged burned areas. ASRD will track all fires within the DFA, regardless of size. Weyerhaeuser will only track those fires for which ASRD has generated digital boundaries for.



November 1, 2016

Forest  
Management  
Activities

Salvage planning as required.

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Reporting  
Procedure

Annual and stewardship reporting on area retained as related to total area salvaged and total fire area.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Salvage areas will show up either in the harvest area history or in the updated AVI inventories as they occur. Provincial policy regarding unsalvaged fire areas will be used to determine their inclusion in the net productive landbase at each DFMP development stage.

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Forest  
Stewardship  
Comments

No salvage occurred, therefore no retention was required.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 8</b>	<b>Target</b>
Area of unsalvaged blowdown forest	In areas of blowdown exceeding 2 ha in size, an average of 10% of the area will be left unsalvaged

Acceptable Variance      Greater than or equal to targeted percentages.

Current Status      Table 8-1: Area of unsalvaged blowdown for all operators

Year	Operator	Percent of Area Retained of unsalvaged blowdown
2007/08	All	Incidental salvage – no estimate of area
2008/09	WY	Incidental salvage – no estimate of area
2009/10	WY	Incidental salvage – no estimate of area
2010/11	WY	Incidental salvage – no estimate of area
2011/12	WY	Incidental salvage – no estimate of area
2012/13	WY	Incidental salvage – no estimate of area
2013/14	WY	Incidental salvage – no estimate of area
2014/15	WY	Incidental salvage – no estimate of area
2015/16	WY	5-10%

Monitoring and Measurement      Final harvest plans and AOPs will be used to estimate percent retentions of unsalvaged blowdown areas. Weyerhaeuser will only track those events that exceed 2 hectares and are known to have occurred recently.

Forest Management Activities      Salvage planning as required.

Reporting Procedure      Annual and stewardship reporting on area retained as related to total area salvaged and total blowdown area.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Salvage areas will show up either in the harvest area history or in the updated AVI inventories as they occur. Provincial policy regarding unsalvaged blowdown areas will be used to determine their inclusion in the net productive landbase at each DFMP development stage.

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Forest  
Stewardship  
Comments

No areas of blowdown occurred where retention was required.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 9</b>	<b>Target</b>
Riparian Management Zones	Full compliance with the OGRs

Acceptable Variance      None; full compliance with OGRs – no penalties

Current Status      Table 9-1: Number of non-compliances within riparian management zones

Year	Operator	Compliance
2007/08	WY	No penalties
2008/09	WY	No penalties
2009/10	WY	No penalties
2010/11	WY	No penalties
2011/12	WY	No penalties
2012/13	WY	No penalties
2013/14	WY	No penalties
2014/15	WY	No penalties
2015/16	WY	No penalties

Monitoring and Measurement      Will follow all self-reporting agreements.

Forest Management Activities      Follow final harvest plans, AOPs and OGRs.

Reporting Procedure      Annual and stewardship reporting on the number of incidents on non-conformance.

Linkages Between Strategic and Operational Plans      None

Forest Stewardship Comments      Full compliance occurred.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 10</b>	<b>Target</b>
Areas planted within pure 'D' harvest areas	Plant areas having inadequate hardwood stocking

Acceptable Variance      None

Current Status      Generally, reclaimed roads within pure deciduous blocks are planted with either spruce or pine.

Table 10-1: Area of harvested pure deciduous planted with conifer seedlings

Year	Area of Harvested Pure Deciduous Planted with Conifer Seedlings
2006/7	226
2007/8	228
2008/9	144
2009/10	322
2010/11	438
2011/12	239
2012/13	76
2013/14	60
2014/15	341
2015/16	279
<b>Summary</b>	<b>2353</b>

\*area within 'D' strata only; calculated as #seedlings/average planting density.

Monitoring and Measurement      Silviculture AOP and ARIS will be used.

Forest Management Activities      Planting activities will follow the silviculture AOP.

Reporting Procedure      Annual and stewardship reporting on area planted within the pure deciduous harvest areas.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Incidental species are reflected within natural and regenerated yield curves.

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Forest  
Stewardship  
Comments

Generally, only roads and associated landing within pure deciduous cutovers area planted.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 11</b>	<b>Target</b>
OGR compliance for understorey protection	100% compliance

Acceptable Variance      None

Current Status      Table 11-1: Compliance to OGR regarding understorey protection.

Year	Compliance
2007/08	No penalties
2008/09	No penalties
2009/10	No penalties
2010/11	No penalties
2011/12	No penalties
2012/13	No penalties
2013/14	No penalties
2014/15	No penalties
2015/16	No penalties

Monitoring and Measurement      ARIS or AS

Forest Management Activities      Follow operating ground rules when defining avoidance or planned protection requirements.

Reporting Procedure      Annual and stewardship reporting on non-compliance of OGR relating to understorey protection; area and ocular estimate of density (stems per hectare) retained from planned understorey protection, by block.

Linkages Between Strategic and Operational Plans      Incidental species are reflected within natural and regenerated yield curves.



November 1, 2016

Forest  
Stewardship  
Comments

Generally, avoidance protection versus planned protection was practiced throughout.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 12	Target
Contribution to future incidental yields	Replace incidental yields

Acceptable Variance +/-20% of current incidental yields

Current Status Provincial regeneration standards are followed, based on provincial strata.

Monitoring and Measurement ARS; ARIS

Forest Management Activities Establishment and Performance surveys will be completed on all harvested areas.

Reporting Procedure Stewardship reporting to compare incidental volume contributions from performance surveys to DFMP yield assumptions.

Linkages Between Strategic and Operational Plans Underperformance will reduce future annual allowable cuts.

Forest Stewardship Comments Provincial regeneration standards are followed, based on provincial strata.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 13</b>	<b>Target</b>
Percent of retained merchantable volume	Stand retention of an average of 3% in FMUs E2, W5 and W6 and 8% in FMU E15 of all species utilized

Acceptable Variance      Retention on average should not drop below 5% merchantable retention in any given year for E15 or 2% for E2, W5 or W6..

Current Status      Table 13-1: Annual percent of retained merchantable volume by operator.

Reporting Years	Operator	Merchantable Retention Estimates (Percentage)		
		Deciduous	Coniferous	Average
2007-09	E15	2.8%	2.8%	2.8%
	E2, W5, W6	1.8%	1.8%	1.8%
2010-11	E15	2.8%	2.8%	2.8%
	E2, W5, W6	3.3%	3.3%	3.3%
2012-13	E15	TBD	TBD	TBD
	E2, W5, W6	TBD	TBD	TBD
2014-15	E15	TBD	TBD	TBD
	E2, W5, W6	TBD	TBD	TBD
<b>5 year average</b>		<b>2.6%</b>	<b>2.6%</b>	<b>2.6%</b>

All operators work in FMUs E2, W5 and W6 with the exception of ETP. ETP is active in E15 only. Weyerhaeuser is at 8% retention in E1.

Monitoring and Measurement      Annual photo and ground surveys occur to estimate success of retention program.

Forest Management Activities      Machine operator awareness drives this program. Very few of the retention patches are ribboned out prior to harvest.

Reporting Procedure      Annual and stewardship report on actual retention as determined by the structure retention program. Periodic production volumes will be reconciled with monitoring results at the end of each production period.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Merchantable retention was removed from the AAC prior to approval. It was expected to be an estimate of success for the program, not an auditing tool. However, ASRD will apply it as such, and any retention in excess of the 5% average will be applied as production at the end of each period, based on the previous five years retention (for the period starting May 1, 2006). No credit will be given for retention less than 5%.

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Forest  
Stewardship  
Comments

Stand retention numbers fluctuate from block to block and season to season. The overall estimates appear to suggest our targets were an over-estimate of expected results. Adjustments will be made to the targets in the next FMP.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 14</b>	<b>Target</b>
Coarse down woody debris levels by harvest area (low, moderate, high)	100% of harvest areas retain down woody debris at or above preharvest levels

Acceptable Variance      10% below preharvest levels

Current Status      Preharvest slash conditions are generally light to moderate at best throughout the DFA. Very few areas would be rated as heavy. It is never the intent to reduce DWD other than the breaking up and redistribution within the harvest area from skidding activities. No slash reduction strategies have been used in the recent past.

Currently, levels of DWD are noted on block description sheets completed during layout.

Table 14-1: Estimate of DWD in pre/post harvest situations.

Year	Percent of Down Woody Debris as compared to total harvested area					
	Low		Medium		High	
	Pre	Post	Pre	Post	Pre	Post
2007/08	100	100	0	0	0	0
2008/09	100	100	0	0	0	0
2009/10	100	100	0	0	0	0
2010/11	100	100	0	0	0	0
2011/12	100	100	0	0	0	0
2012/13	100	100	0	0	0	0
2013/14	100	100	0	0	0	0
2014/15	100	100	0	0	0	0
2015/16	100	100	0	0	0	0

Monitoring and Measurement      Final Harvest Plans; Operations status reporting; Ocular determination at the pre (layout) and post (skid clearance) harvest intervals will occur.

Forest Management Activities      DWD will be left in the harvest areas. Reduction of DWD due to excessive amounts of slash would be identified in the silviculture AOP.

Reporting Procedure      Annual and stewardship reporting on percent of harvest areas meeting or exceeding preharvest levels.



November 1, 2016

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Linkages  
Between  
Strategic and  
Operational  
Plans

DWD retention aids biodiversity and soil properties.

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Forest  
Stewardship  
Comments

100% of harvest areas retained down woody debris at or above preharvest levels; all areas harvested had low levels of DWD present prior to logging.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 15</b>	<b>Target</b>
Unique biological or physical sites	Protect 100% of the sites as identified

Acceptable Variance      None; all known sites protected

Current Status      Table 15-1: Annual percent of unique biological or physical sites protected from damage.

Year	Operator	Percent of Sites protected
2007/08	All	100% - 2 sites
2008/09	WY	100 % of sites are protected : Erith – 5180513378 – Cabin remnants Erith – 5180512237 – Cabin remnants North Rat Creek – 5130512265 – Cabin & outhouse remnants
2009/10	WY	100 % of sites are protected: Sang Lake – 5150522120 – Cabin remnants; Paddy Creek – 5110482441 – Culture trees
2010/11	WY	Erith – 5190502456 – Cabin remnants North Rat Creek – 5120510640 – Cabin remnants
2011/12	WY	No sites found
2012/13	WY	Sinkhole – 4 old cabins – 5100511087 & 5100510392 Rodney Creek- 5170491684 cabin remnants
2013/14	WY	No sites found
2014/15	WY	Svedberg – 5150510538 cabin remnants
2015/16	WY	Bigoray – Trapper cabin incorporated into plan

Source: Completed FHPs by year

Monitoring and Measurement      Final Harvest Plans; AOPs; OGRs.



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Forest  
Management  
Activities

Sites to be protected will be identified in the final harvest plans. Sites within harvest areas will appear on individual block description forms.

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Reporting  
Procedure

Annual and stewardship reporting on the number of sites protected.

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Linkages  
Between  
Strategic and  
Operational  
Plans

These types of sites are normally confined to small areas that are not normally recognized in strategic plans geographically, other than as an objective to protect the sites.

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Forest  
Stewardship  
Comments

All known sites were protected by appropriate buffers.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 16</b>	<b>Target</b>
Forestry water crossings in compliance with Code of Practice for Water Course Crossings within each Subunit	100% of designs meet standards of the Code of Practice for Water Course Crossings.

Acceptable Variance      None; full compliance

Current Status      Table 16-1: Annual percent of designs meeting standards of the Code of Practice for Watercourse Crossings

Year	Operator	Compliance
2007/08	All	No penalties
2008/09	WY	No penalties
2009/10	WY	No penalties
2010/11	WY	No penalties
2011/12	WY	No penalties
2012/13	WY	No penalties
2013/14	WY	No penalties
2014/15	WY	No penalties
2015/16	WY	No penalties

Monitoring and Measurement      Self reporting by operators if non-compliances occur.

Forest Management Activities      Road construction, maintenance and reclamation.

Reporting Procedure      Annual and stewardship reporting on percent of crossing meeting standards.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest Stewardship Comments	100% of designs met standards of the Code of Practice for Water Course Crossings.  No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

Indicator 17	Target
Species of Concern	Assess next DFMP

Acceptable Variance      Not applicable

Current Status      After discussion with F&W, it was determined that the next DFMP will assess habitat for the following species

- Grizzly bear
- Barred owl
- Mature forest bird guild (species diversity index tracked over time)

Monitoring and Measurement      Not applicable

Forest Management Activities      Assess next DFMP

Reporting Procedure      Start after next DFMP during annual and stewardship reporting if necessary.

Linkages Between Strategic and Operational Plans      Not applicable

Forest Stewardship Comments      Habitats for selected species of concern will be addressed in the 2016 FMP, and may differ from those identified in this report.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 18</b>	<b>Target</b>
Indicator species groups 1) Breeding birds 2) Nocturnal raptors	Maintain a monitoring program for the species listed

Acceptable Variance      None

Current Status      Currently all guilds are monitored every three years.

Table 18-1: Summary of annual surveys for Breed Birds and Nocturnal Raptors

Year	Species Group Surveyed	Comments
2007/08	No surveys	NA
2008/09	Raptors	Spring 2009
2009/10	Song birds	Summer 2009
2010/11	Raptors	Spring 2011
2011/12	Song birds	Summer 2011
2012/13	Songbirds – cutblock specific only for migratory birds	Summer logging in Trout Creek
2013/14	Songbirds – cutblock specific only for migratory birds	Summer logging in Chip Lake
2014/15	Songbirds – cutblock specific only for migratory birds	Summer logging in Trout Creek
2015/16	Songbirds – cutblock specific only for migratory birds	Summer logging in Cricks Creek

Monitoring and Measurement      Periodic surveys of species groups.

Forest Management Activities      Periodic surveys.

Reporting Procedure      Annual and stewardship reporting on monitoring results.





November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

The maintenance of a monitoring program for the species listed will be reviewed prior to the development of the 2016 FMP.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 19</b>	<b>Target</b>
Number and area (ha) of in situ genetic conservation areas	Number (X) of genetic conservation areas for each seed zone conforming with Section 20 of the Green Area section of Standards for Tree Improvement in Alberta (yet to be determined by ASRD)

Acceptable Variance      None; provincial policy to be followed

Current Status      There are currently no genetic conservation areas identified on the DFA. Until they are, the Company will follow acceptable gene conservation strategies for in-situ genetic material as outlined in section 20.0 of the Standard, and is summarized for the entire DFA below:

- Existing reserves within the DFA
- Subjective deletions: i.e. streamside buffers, river buffers, lake buffers, etc.
- Harvested areas dedicated to natural regeneration i.e. Leave For Natural (LFN) for deciduous blocks or LFN for pine drag blocks
- Harvested areas will use wild seed from the associated seed zones: this is the current approach by all operators on the DFA
- Understory protection (traditionally carried out across the DFA as encountered), and
- Variable retention

Table 19-1: Summary of seed collected.

Year	Operator	Seed Collected
2007/08	WY	3.1 kg SW
2008/09	WY	No seed collected
2009/10	WY	No seed collected
2010/11	WY	No seed collected
2011/12	WY	20 kg PL/26kg SW
2012/13	WY	114 kg PL/ 0 kg SW
2013/14	WY	128.3kg PL/34.5kg SW
2014/15	WY	No Seed Collected
2015/16	WY	13.9 kg PL/ 65.1 kg of HASOC seed Region I Sw

Monitoring and Measurement      AVI updates, ground or air checks to confirm status.

Forest Management Activities      Consistency with government policy. Conservation areas will be designated with a notation (PNT, CNT, ISP, etc.)



November 1, 2016

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Reporting Procedure	Annual and stewardship reporting on number and area of sites per seed zone.
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Linkages Between Strategic and Operational Plans	None
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Forest Stewardship Comments	There are currently no genetic conservation areas identified on the DFA. Until they are, the Company will follow acceptable gene conservation strategies for in-situ genetic material as outlined in section 20.0 of the Standard.
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No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 20	Target
Number of provenances and genetic lines in ex-situ gene banks and trials	Active ex-situ conservation program for all Controlled Parentage Program plan species and other species in cooperation with Alberta

Acceptable Variance

Confirmed Program Plan

Current Status

The only program that has trees for reforestation is our Region I white spruce program. There 165 families for this breeding region which are in Ex-situ conservation (planted off FMA) at this time. Long term (10 years from now) we may only target 10% of this population for conservation.

Monitoring and Measurement

Conservation activities identified as per '*Standards for Tree Improvement in Alberta*'.

Forest Management Activities

Work in cooperation with Alberta and in accordance with the '*Standards for Tree Improvement in Alberta*' (sections 17 and 29).

Reporting Procedure

Stewardship report on controlled parentage program.

Linkages Between Strategic and Operational Plans

None; no recognition of genetically improved stock impacts on AAC.

Forest Stewardship Comments

The only program that has trees for reforestation is our Region I white spruce program. There are 165 families for this breeding region which are in Ex-situ conservation (planted off FMA) at this time. Long term (10 years from now) we may only target 10% of this population for conservation.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 21</b>	<b>Target</b>
Stakeholder consultation	Ongoing consultations with relevant protected areas' agencies

Acceptable Variance None

Current Status Table 21-1: Summary of consultations with protected areas' agencies.

Year	Consultations with Protected Areas' Agencies
2007/08	None
2008/09	1 – Sundance Provincial Park
2009/10	1 – Sundance Provincial Park
2010/11	2 – Sundance Provincial Park
2011/12	None
2012/13	None
2013/14	None
2014/15	None
2015/16	None

Monitoring and Measurement Documentation of consultation processes.

Forest Management Activities Consult with Federal and Provincial Park agencies as necessary. Integrate transboundary values and objectives into forest management practices.

Reporting Procedure Annual and stewardship report on issues addressed during consultations.

Linkages Between Strategic and Operational Plans None.



November 1, 2016

Forest  
Stewardship  
Comments

Ongoing consultations with relevant protected areas' agencies occurred, most notably with Alberta Parks.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 22</b>	<b>Target</b>
Annual percentage (%) of area for SR establishment surveys	95% on an annual basis for establishment surveys

Acceptable Variance      None

Current Status      Table 22-1: Summary of annual establishment survey results

Year	Oper.	Blocks Surveyed		Blocks Passed		Percentage	
		Number	Area (ha)	Number	Area (ha)	(by number)	(by area)
2007/08	WY	88	1813	86	1747	98%	96%
2008/09	WY	116	3803	108	2902	93 %	76%
2009/10	WY	92	1916	92	1916	100%	100%
2010/11	WY	38	807	32	696	84%	86%
2011/12	WY	146	3549	133	3314	91%	93%
2012/13	WY	117	2641	105	2500	90%	95%
2013/14	WY	217	6143	199	5847	92%	95%
2014/15	WY	163	4015	144	4000	88%	99%
2015/16	WY	62	1718	58	1627	94%	95%
<b>Total</b>	<b>WY</b>	<b>1039</b>	<b>26405</b>	<b>957</b>	<b>24549</b>	<b>92%</b>	<b>93%</b>

Monitoring and Measurement      Establishment surveys

Forest Management Activities      Establishment surveys to be completed as per provincial policy.

Reporting Procedure      Annual and stewardship reporting on number of blocks and area surveyed that are SR relative to the total area and number of harvest areas surveyed on an annual basis.

Linkages Between Strategic and Operational Plans      Successful establishment surveys act as a determining factor to define the length of regeneration lag used in the TSA.



November 1, 2016

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Forest  
Stewardship  
Comments

Establishment survey success rates are generally on target, on a block by block basis, however below target on an area basis. Survey methods have changed since this indicator was developed, which has probably introduced reporting errors when comparisons are trying to be mad between survey procedures.

No further analysis will be completed prior to the 2016 FMP.





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<b>Indicator 23</b>	<b>Target</b>
Annual percentage (%) of area for SR performance surveys	To be determined with the development of Alternative Regeneration Standards (ARS)

Acceptable Variance      None (once the target has been set with ARS)

Current Status      Table 23-1: Summary of performance survey results

Year	Operator	Blocks Surveyed		Blocks Passed		Percentage	
		Number	Area (ha)	Number	Area (ha)	(by number)	(by area)
2007/08	WY	10	113	7	84	70.0%	74.3%
2008/09	WY	50	1243	37	916	74.0%	73.7%
2009/10	WY	33	583	29	524	87.9%	89.9%
2010/11	WY	30	414	29	397	96.7%	95.9%
2011/12	WY	12	99	12	99	100%	100%
2012/13	WY	45	212	45	212	100%	100%
2013/14	WY	42	843	42	843	100%	100%
2014/15	WY	2	33	2	33	100%	100%
2015/16	WY	151	2826	151	2826	100%	100%
<b>Total</b>		<b>375</b>	<b>6366</b>	<b>354</b>	<b>5934</b>	<b>94%</b>	<b>93%</b>

\*Blocks assessed by ARS; no FTG status assigned.

Monitoring and Measurement      Performance surveys; ARIS

Forest Management Activities      Performance surveys will be completed within required timelines.

Reporting Procedure      Annual and stewardship reporting on area and number of harvest areas surveyed that are SR relative to the total area and number of harvest areas surveyed.



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Linkages  
Between  
Strategic and  
Operational  
Plans

Degree of success in performance surveys will impact future AACs.

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Forest  
Stewardship  
Comments

No target was developed for this indicator. Provincial regeneration standards are used.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 24</b>	<b>Target</b>
Cumulative percentage (%) of SR areas (establishment and performance)	100% of harvest areas that were harvested on or after May 1, 2001 meet Provincial or approved reforestation standards

Acceptable Variance      None

Current Status      The Company carries liability on all reforested areas until success is achieved. All blocks must pass an establishment survey.

Table 24-1: Cumulative totals of Weyerhaeuser surveys since inception of the FMA on July 1, 1997

Calendar Year Harvested	Not surveyed	PSC	RTD	SR	CSR	NSR	Total Area (ha)
1997/98	0	21	0	995	0	0	1016
1998/99	0	82	0	1778	0	0	1860
1999/00	0	8	0	1151	254	0	1526
2000/01	0	0	0	1018	0	0	1018
2001/02	0	0	0	1170	0	14	1184
2002/03	0	0	0	1403	26	0	1429
2003/04	0	0	7	2484	0	0	2491
2004/05	0	0	82	2014	8	0	2104
2005/06	989	0	63	1844	0	45	2942
2006/07	1807	0	0	0	0	0	1807
2007/08	2	0	0	2106	0	11	2119
2008/09	775	0	0	687	0	9	1471
2009/10*	1943	0	0	0	0	0	1943
2010/11	1675	0	0	0	0	0	1675
2011/12	1430	0	0	0	0	0	1430
2012/13	1307	0	0	0	0	0	1307
2013/14	917	0	0	0	0	0	917
2014/15	812	0	0	0	0	0	812
2015/16	1196	0	0	0	0	0	1196
<b>Summary</b>	<b>12,853</b>	<b>111</b>	<b>152</b>	<b>16650</b>	<b>288</b>	<b>79</b>	<b>30247</b>
<b>Percent</b>	<b>42.9%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>55.0%</b>	<b>1.0%</b>	<b>0.3%</b>	<b>100%</b>

Monitoring and Measurement      ARIS



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Forest Management Activities

None

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Reporting Procedure

Annual and stewardship report on percent of areas SR for areas harvested after May 1, 2001.

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Linkages Between Strategic and Operational Plans

Poor regeneration performance will be identified in future AVI updates and impact future AACs accordingly.

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Forest Stewardship Comments

Company continues to reforest cutovers to the provincial standards.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 25</b>	<b>Target</b>
Reforestation effort	100% of harvest areas are reforested within two years

Acceptable Variance: None

Current Status: Table 25-1: Summary of reforestation effort compliance

Year	Operator	Compliance
2007/08	WY	100%
2008/09	WY	100%
2009/10	WY	100%
2010/11	WY	100%
2011/12	WY	100%
2012/13	WY	100%
2013/14	WY	98%
2014/15	WY	96%
2015/16	WY	100%

Monitoring and Measurement: ARIS

Forest Management Activities: All blocks harvested must complete silviculture treatments within 2 years of harvest.

Reporting Procedure: Annual and stewardship reporting on percent of blocks reforested within two years of harvest

Linkages Between Strategic and Operational Plans: Prompt reforestation minimizes regeneration lag.



November 1, 2016

Forest Stewardship Comments 100% of harvest areas were reforested within two years.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 26</b>	<b>Target</b>
Changes in DFA landbase	A program in place to return landbase lost through industrial activity to the forested landbase

Acceptable Variance: None  
 Current Status: TDA funds are also used to reforest reclaimed Oil and Gas leases.

Table 26-1: Summary of Land use dispositions reclaimed annually

Year	Area Treated (ha)		
	Herbicide	Site Prep	Planted
2007/08	0	56	92
2008/09	94	0	0
2009/10	0	0	3.37
2010/11	0	0	0
2011/12	0	0	0
2012/13	0	0	0
2013/14	0	0	2.5
2014/15	0	0	5
2015/16	0	0	14.6
<b>Summary</b>	<b>94</b>	<b>56</b>	<b>97.87</b>

Table 26-2: Summary of net LU disposition area removed by year

Year	Area in Hectares						Percent of DFA
	LOC/DLO	MSL/DML	PLA/DPL	Other	Crown	Total	
Pembina FMA - 890,000 ha							
06/07-07/06	338	457	658	21	0	1474	0.17%
07/06-08/06	191	351	560	81	0	1183	0.13%
08/07-09/06	88	198	294	76	0	656	0.07%
09/12-10/11	-1043.9	702.3	407.6	-500.5	12.06	-446.6	-0.05%
10/12-11/11	1507.8	665.1	722.9	657.4	0.1	3553.2	0.36%
11/12-12/11	268.7	573.2	872.8	101.5	78.1	1894.2	0.19%
12/12-13/11	-1194.8	508.0	571.3	-478.6	4.37	589.7	0.06%
13/12-14/11	1498	693	742	658	69.4	3660	0.41%
14/12-15/11	85.7	333.4	595.3	157.3	-19.1	1152.6	0.13%
15/12-16/11	0	0	0	0	0	0	0
<b>Summary</b>	<b>1738.5</b>	<b>4481</b>	<b>5423.9</b>	<b>773.1</b>	<b>144.93</b>	<b>13716.1</b>	<b>1.54%</b>

Combined FMAs: Approximate area of DFA – 890,000 hectares. For the period after Dec. 1, 2009, Pembina FMA information provided by ESRD – Ted Edwards



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Monitoring and Measurement	Inventory and landuse systems
Forest Management Activities	Actively pursue opportunities to reforest industrial areas returned to the DFA.
Reporting Procedure	Annual and stewardship reporting on areas afforested by program; report on additions to and deletions from the DFA.
Linkages Between Strategic and Operational Plans	Additions and deletions directly affect the net productive landbase, thereby having an impact on the calculated AAC.
Forest Stewardship Comments	A net 5/10 of 1% was removed from the entire landbase. Approximate 100 hectares of old industrial landbase was planted.  No further analysis will be completed prior to the 2016 FMP.





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<b>Indicator 27</b>	<b>Target</b>
Amount of area affected	Area (ha) affected by significant outbreaks, infestations, natural calamities

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Acceptable Variance      None

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Current Status **a) Loss due to Fire:**

Table 27-1: Amount of area affected by fire

Year	Hectares burned
2007	6
2008	13
2009	37
2010	75
2011	477
2012	7
2013	2
2014	3
2015	812
<b>Summary</b>	<b>1432</b>

**b) Loss due to Insects:** Current insect outbreak on the DFA is limited to the aspen defoliator large aspen tortrix (*Choristoneura conflictana*). It is not considered as significant in terms of its impact on the long term health of the DFA or harvest levels. These are associated impacts, not landbase losses. There are no direct losses due to insects.

Table 27-2: Amount of area affected by insects by severity level.

Year	Insect	Severity (ha)
2007	Bruce Spanworm/ Forest Tent Caterpillar	Light – 20,680 Moderate – 38,318 Severe – 5,630 Total – 64,628
2008	NA	No detectable infestations
2009	MPB	Area of blocks harvested (stumpage reduction applied) = 583 ha.
2010	MPB ; hail damage on reforested cutovers	Area of blocks harvested for MPB (stumpage reduction applied) = 384ha.
2011	MPB	No stumpage reduction
2012	MPB	No stumpage reduction
2013	MPB	No stumpage reduction
2014	MPB	No stumpage reduction
2015	MPB	No stumpage reduction

**c) Disease:** Presently there is no disease outbreak on the DFA considered as significant.



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Current Status  
(continued)

**d) Windthrow:**

Table 27-3: Summary of area affected by windthrow

Year	Area (ha)	Description
2007	0	NA
2008	12	Block 5130512390 – North Rat
2009	0	NA
2010	0	NA
2011	0	NA
2012	0	NA
2013	0	NA
2014	0	NA
2015	0	NA
<b>Summary</b>	<b>12</b>	

**e) Summary**

Table 27-4: Summary of disturbance levels

Year	Fire (ha)	Insects (ha)	Disease (ha)	Windthrow (ha)	Total Area (ha)
2007	6	0	0	0	6
2008	13	0	0	12	25
2009	37	583	0	0	600
2010	75	384	0	0	460
2011	477	0	0	0	477
2012	7	0	0	0	7
2013	2	0	0	0	2
2014	3	0	0	0	3
2015	812	0	0	0	812
<b>Summary</b>	<b>1432</b>	<b>967</b>	<b>0</b>	<b>12</b>	<b>2411</b>

Monitoring and Measurement

Annual detection surveys; fire suppression activities; by calendar year instead of operating year.

Forest Management Activities

Aerial surveys by ASRD; fire suppression activities by ASRD

Reporting Procedure

Annual and stewardship reporting on area affected by agent.



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Linkages  
Between  
Strategic and  
Operational  
Plans

All impacts will have some direct/indirect impact to forest health and forest growth.

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Forest  
Stewardship  
Comments

Area (ha) affected by significant outbreaks, infestations, and other natural calamities was relatively small at approximately 1600 hectares, or 0.32% of the total FMA landbase.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 28</b>	<b>Target</b>
Noxious weed program	Maintain a noxious weed program

Acceptable Variance      None

Current Status      Table 28-1: Summary activities supporting the noxious weed program.

Year	Treatments
2007	WY - Spot treatments on <100km of LOCs
2008	No treatments
2009	Treated 9.9 ha. on Svedberg Rd
2010	Treated 19.43 ha on various LOC's within the Edson area
2011	Treated 2.6 ha on various LOC's within the Edson area
2012	Treated 191.2 ha on various LOC's within the Edson area. Treated 1.451 ha. on MLL040015 log storage site.
2013	Treated 167.6 ha on various LOC's within the Edson area.
2014	Treated 6.7 ha on various pit sites. Treated a total of 35.5 km on various DLO's within the Edson area.
2015	Treated 1.0 ha on the Tom Hill Pit. Treated a total of 37.6 km on various DLO's within the Edson area.

\*Edson data only

Monitoring and Measurement      Company will report on identified noxious weed infestations and control measures undertaken for invasive plants that have been identified as a concern.

Forest Management Activities      Active weed management program; co-operative programs with ASRD and other industrial operators.



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Reporting Procedure

Annual and stewardship reporting on area or number of sites treated.

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Linkages Between Strategic and Operational Plans

None

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Forest Stewardship Comments

A noxious weed program was maintained, with treatments occurring on 10-15 hectares annually, mainly along LOC right-of-ways.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 29</b>	<b>Target</b>
Compliance with Pembina ground rules	All blocks will have less than 5% soil disturbance unless prior approval is received from ASRD

Acceptable Variance      None

Current Status      Table 29-1: Summary of compliance to OGRs relative to soil disturbance levels within cut blocks.

Year	Operator	Compliance
2007/08	All	100% Compliance for all operators
2008/09	All	100% Compliance for all operators
2009/10	All	NA – OGR change
2010/11	All	NA – OGR change
2011/12	All	NA – OGR change
2012/13	All	NA – OGR change
2013/14	All	NA – OGR change
2014/15	All	NA – OGR change
2015/16	All	NA – OGR change

Monitoring and Measurement      Self reporting

Forest Management Activities      Areas are calculated either at the AOP stage or harvest stage. Blocks that have in excess of 5% roads within them require approval as an OGR deviation.

Reporting Procedure      Annual and stewardship reporting on non-compliance to OGRs.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

This indicator became N/A in 2009 with the change in the operating ground rule concerning interior block road disturbance levels.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 30</b>	<b>Target</b>
Incidence of soil erosion and slumping	Complete compliance

Acceptable Variance      None

Current Status      Table 30-1: Summary of incidents of soil erosion or slumping

Year	Operator	Compliance
2007/08	All	100%
2008/09	All	100%
2009/10	All	100%
2010/11	All	100%
2011/12	All	100%
2012/13	All	100%
2013/14	All	100%
2014/15	All	100%
2015/16	All	100%

Monitoring and Measurement      Field inspections and audits; self reporting

Forest Management Activities      Forest operations should attempt to minimize all opportunities for soil erosion or soil slumping.

Reporting Procedure      Annual and stewardship reporting on any non-conformances.

Linkages Between Strategic and Operational Plans      None

Forest Stewardship Comments      There were no incidents of soil erosion or slumping.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 31</b>	<b>Target</b>
Watershed yields	Modeled fourth-order watershed yields will be less than 120% of natural watershed yields

Acceptable Variance      None

Current Status      Table 31-1: Summary of Watershed analysis completed

Year	Watershed Modeled
2007/08	ECA analysis completed during development of the 2008 MPB addendum
2008/09	Watersheds assessment completed for Carrot Creek LMU fall 2008 (North Rat Creek HDA)
2009/10	Watersheds assessment completed for Moose Creek LMU (Sang Creek HDA)
2010/11	Watershed assessment for Cricks Creek H.D.A.
2011/12	Watershed analysis' were completed for the following watersheds: Erith, Raven, Bear, Cricks, Whitefish and Tom Hill.
2012/13	Watershed analysis' were completed for the following watersheds: Raven, Bear, Kathleen, Slide, and McLeod.
2013/14	Watershed analysis' completed for the Trout Creek (Bear, Whitefish, McLeod) Rodney Creek (Raven), and Svedberg (Sang, Coyote) HDAs
2014/15	No watershed analysis done
2015/16	No watershed analysis done

Monitoring and Measurement      Final harvest plans; GDP

Forest Management Activities      Follow the approved SHS and variance requirements.

Reporting Procedure      Annual and stewardship reporting on watersheds where ECA or WRENNS analysis has occurred.



November 1, 2016

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Linkages  
Between  
Strategic and  
Operational  
Plans

SHS analyzed to stay within threshold. Going beyond thresholds may initiate a change to the SHS, and have other long term impacts to the AAC.

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Forest  
Stewardship  
Comments

Watershed yields were completed on areas where SHS variances exceed 20%; analysis completed as described in the approved MPB dfmp.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 32</b>	<b>Target</b>
Riparian management zones	Complete compliance

Acceptable Variance      None

Current Status      See indicator 9 as well.

Table 32-1: Summary of compliance results regarding riparian management zones

Year	Operator	Compliance
2007/08	WY	No penalties
2008/09	WY	No penalties
2009/10	WY	No penalties
2010/11	WY	No penalties
2011/12	WY	No penalties
2012/13	WY	No penalties
2013/14	WY	No penalties
2014/15	WY	No penalties
2015/16	WY	No penalties

Monitoring and Measurement      ESRD Penalties

Forest Management Activities      Follow OGRs

Reporting Procedure      Annual and stewardship reporting on non-compliances.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest Stewardship Comments	Full compliance with OGR's regarding riparian areas. No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

<b>Indicator 33</b>	<b>Target</b>
Impact on carbon production	Identify and review forest management activities as related to carbon storage and release.

Acceptable Variance      Not applicable

Current Status      Forest management activities related to carbon storage:

- Harvesting older forest first, allowing the more thrifty, mature forest to continue to grow
- Protecting understorey during harvesting so that larger, thriftier trees occupy the site faster than replanted stock
- Harvesting forests to produce dimensional lumber and paneling for construction
- Retaining live structure that continues to grow
- Preventing large scale forest fire/ disease/ insect occurrences
- Retaining harvest debris piles for wildlife
- Coordinating road or other linear development between the Company and other resource industries so that impacts on forest growing stock is minimized
- Reforesting reclaimed industrial dispositions such as wellsites and LOCs so that a forest would occupy the site versus either shrub or grass
- Promptly reforesting harvest areas to minimize regeneration lag
- Leaving down woody debris throughout a cutover instead of piling and burning, and
- Minimizing temporary road development to minimize soil disturbance levels

Forest management activities related to carbon release:

- Small fires occurred throughout the DFA
- Endemic levels insects and disease affecting the thriftiness of forest
- Harvest debris piles burned annually
- Participation in the Firesmart Community Programs
- Soil disturbance of temporary and permanent roads
- Clearing of land for industrial activity, and
- Fossil fuels burned during Company harvesting and planning operations

Monitoring and Measurement      Review forest management activities and the Weyerhaeuser CSA Sustainable Forest Management Plan.



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Forest Management Activities

N/A

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Monitoring Procedure

Annual and stewardship reporting on activities that increase or decrease carbon storage.

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Linkages Between Strategic and Operational Plans

None

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Forest Stewardship Comments

Forest management activities as related to carbon storage and release were identified and reviewed.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 34</b>	<b>Target</b>
Level of harvest	Total timber drain does not exceed the periodic AAC except as specified in the FMA agreement

Acceptable Variance      Overproduction/underproduction applied to the following period to balance periodic harvest levels.

Current Status      Table 34-1: Periodic and Quadrant Annual Allowable Cuts and production volumes.

For the period May 1, 2007 to November 30, 2009 Edson Only 970035				
Operator	Periodic or Quadrant AAC Conifer	Conifer Production to date	Periodic or Quadrant AAC Deciduous	Deciduous Production to date
WY	483,060	406,429 (84.14%)	885,082	658,409 (74.39%)

For the period December 1, 2009 to April 30, 2015 Pembina FMA 090046 – Pembina North only				
Operator	Periodic or Quadrant AAC Conifer	Conifer Production to date	Periodic or Quadrant AAC Deciduous	Deciduous Production to date
WY	1,327,878	871,505 (65.6%)	1,684,377	1,066,948 (63.3%)

For the period May 1, 2015 to April 30, 2020 Pembina FMA 090046 – Pembina North only				
Operator	Periodic or Quadrant AAC Conifer	Conifer Production to date	Periodic or Quadrant AAC Deciduous	Deciduous Production to date
WY	1,327,878	147,324 (11.1%)	1,684,377	118,752 (7.1%)

\*Note: quadrant volume assumed to be the same for the current quadrant as per the previous quadrant

Latest audit period completed: Dec. 1, 2009 to April 30, 2015





November 1, 2016

Monitoring and Measurement      TPRS and timber production audits

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Forest Management Activities      Accurately report volumes produced from timber dispositions and industrial salvage activities.

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Monitoring Procedure      Annual and stewardship reporting on actual production.

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Linkages Between Strategic and Operational Plans      Volumes produced should accurately reflect volumes anticipated from approved yield curves.

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Forest Stewardship Comments      Total timber drain has not exceeded the periodic AAC.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 35</b>	<b>Target</b>
Percentage reduction in Fire Behaviour Potential area (ha) within the Fire Smart Community Zone	Reduce the area (ha) in the extreme and high Fire Behaviour Potential rating categories by X% within the Fire Smart Community Zones

Acceptable Variance      To be defined.

Current Status      Table 35-1: Summary of areas reduced via fire smarting programs

Year	LMU	Percent Variance to SHS
2007/08	FMA	Area not determined by ASRD therefore no calculations made
2008/09	FMA	Area not determined by ASRD therefore no calculations made
2009/10	FMA	Area treated by Cynthia by ESRD- 180.4 ha
2010/11	FMA	No additional treatments
2011/12	FMA	Area treated in Bear Lake by Yellowhead County – est 5.0 hectares
2012/13	FMA	No additional treatments
2013/14	FMA	No additional treatments
2014/15	FMA	No additional treatments
2015/16	FMA	No additional treatments

Monitoring and Measurement      AOPs, FHPs, Compartment Assessments

Forest Management Activities      ASRD to model Fire Behavior Potential rating using the approved SHS. Follow the SHS.

Monitoring Procedure      Annual and stewardship reporting on variance of the SHS within the Firesmart Community Zones.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Final harvest plans should follow the approved SHS.

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Forest  
Stewardship  
Comments

Approximately 185 hectares was completed around two communities; Cynthia and Bear Lake.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 36</b>	<b>Target</b>
Reduction of MPB susceptible stands	Follow the approved SHS from the MPB management plan

Acceptable Variance +/- 20% by area of the approved SHS by LMU by decade

Current Status Table 36-1: Summary of variance (deletions or defferals) to the approved SHS from the 2008 MPB addendum.

Year	% Cummulative Variance for all operators on the DFA								
	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Beaver Meadows	4.9	4.9%	4.9	8.7	8.7	8.7	8.7	8.9	8.9
Carrot Creek	29.9	29.0%	29.0	84.7	84.7	84.7	84.7	84.7	84.7
Cynthia	4.3	6.6%	7.6	8.2	12.5	11.4	13.9	13.9	13.9
Edson	2.0	7.4%	12.2	20.2	20.2	20.2	30.6	33.0	36.9
Moose Creek	0.77	3.3%	6.8	10.2	12.6	12.6	14.6	17.3	17.5
Wolf Lake	2.4	2.4%	2.9	7.4	8.1	8.1	15.1	15.1	15.1
<b>Average DFA</b>	<b>3.4</b>	<b>5.2</b>	<b>7.4</b>	<b>9.3</b>	<b>14.0</b>	<b>16.7</b>	<b>17.0</b>	<b>17.5</b>	<b>17.83</b>



November 1, 2016

Monitoring and  
Measurement

Regular updates to inventory and the GDP.

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Forest  
Management  
Activities

Follow the approved SHS.

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Monitoring  
Procedure

Annual and stewardship reporting on percent variance to the approved SHS by LMU.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Following the approved SHS will mean a closer link between the actual and the theoretical AACs.

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Forest  
Stewardship  
Comments

The approved SHS from the MPB management plan was followed to varying degrees; variances ranged from 8.7 to 87.6% within the 6 LMUs. Decade two of the SHS begins May 1, 2014, at which date the variance is reset to zero. Average SHS variance to date is 16.7%.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 37</b>	<b>Target</b>
Stakeholder review of harvest designs	Known affected stakeholders will be asked to review all harvest plans that impact their activities

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Acceptable  
Variance

None; all issues identified through the stakeholder consultation process will be addressed.

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November 1, 2016

Current Status Table 37-1: Summary of issues addressed during final harvest plan development

Year	Issues addressed
2007/08	<ul style="list-style-type: none"> <li>▪ Trappers – 1</li> <li>▪ Recreation – 2</li> <li>▪ Private land – 2</li> <li>▪ Sequencing with other operators – 1</li> <li>▪ Grazing</li> </ul>
2008/09	<p>Summary of issues by type and number during stakeholder review of FHPs</p> <p>North Rat:</p> <ol style="list-style-type: none"> <li>1. Blue Ridge Lumber – Concerns regarding the inclusion of conifer sequenced to BRL addressed.</li> </ol> <p>Sang Lake:</p> <ol style="list-style-type: none"> <li>1. Trapper – Confirming timing of operations so that cubby sets are removed prior to operations.</li> </ol> <p>Erith:</p> <ol style="list-style-type: none"> <li>1. Trapper - Confirming timing of operations so that cubby sets are removed prior to operations.</li> <li>2. Trapper – Interested in long-term harvest plans. WY provided information.</li> <li>3. Trapper – Provided WY with the GPS coordinates of Cabin so that we can incorporate its location into our planning process.</li> <li>4. Edson Snow Seekers Snowmobile Club – Requested notification of winter operations if in the vicinity of their recreational trail and adequate signage; Keep recreational trail passable after operations; minimize damage to trail markers and signage; pipeline crossings over the trail must be removed. Maintain non-merchantable vegetation adjacent to trail.</li> </ol> <p>MacKay:</p> <ol style="list-style-type: none"> <li>1. Conoco-Phillips – Agreement reached to access blocks through their gated LOC.</li> <li>2. Grazing Disposition Holder – GTA agreed to and signed.</li> <li>3. Trapper - Keep access trails passable through harvest areas after operations.</li> </ol> <p>Sundance Creek:</p> <ol style="list-style-type: none"> <li>1. Edson ATV Club – Frequently used trails through harvest areas are to remain passable post operations; Ensure adequate “Harvesting in Progress” signage is maintained during operations.</li> <li>2. Trapper – Requested that seismic lines used to access trap sets and cabin remain passable post operations.</li> <li>3. Land Owner – Requested a small buffer be left around his private quarter to lessen the possibility of windthrow.</li> <li>4. Parks Alberta – Two blocks within the Special Management Zone around Sundance Provincial Park were deferred from harvest so that they can be re-designed to more closely mimic natural disturbance patterns.</li> <li>5. EDFOR – Opportunities identified and jointly agreed to where EDFOR will harvest DC stands adjacent to C stands and WY will harvest a CD stand adjacent to D stands.</li> </ol>



November 1, 2016

Current Status Table 37-1(cont.): Summary of issues addressed during final harvest plan development

Year	Issues addressed
2009/10	<p>Summary of issues by type and number during stakeholder review of FHPs</p> <p>South Rat:</p> <ol style="list-style-type: none"> <li>1. ANC –Integration of FHP with quota holder.</li> <li>2. Trapper – Requested a map of planned blocks and roads so that he could assess the impact on his cabin. As agreed to map was left for him to pick-up at the DV office. Map never picked-up .</li> </ol> <p>Sang Lake:</p> <ol style="list-style-type: none"> <li>1. Trapper – Requested that two seismic lines (cabin access) adjacent to blocks 5150522820 &amp; 5150522116 remain passable post harvest.</li> <li>2. Sang Lake Grazing Reserve – Planned blocks adjacent to reserve including the harvest of ±0.5 ha within the reserve. Access also planned through the reserve. Grazing Reserve Manager required that:             <ol style="list-style-type: none"> <li>a. Any damage to the perimeter fence or other infrastructure be repaired;</li> <li>b. Road side slash accumulations not permitted within the reserve.</li> </ol> </li> </ol> <p>Paddy Creek:</p> <ol style="list-style-type: none"> <li>1. Grazing Disposition Holder – GTA agreed to and signed.</li> </ol> <p>Broken Cabin:</p> <ol style="list-style-type: none"> <li>1. Trapper – Trap-line ownership changed hands during referral process. New owner not aware of our harvest plans. Asked Weyerhaeuser not to harvest for 72 hrs and requested a meeting so that he could assess our harvest plans. WY waited 72 hrs before commencement of operations. Meeting was held to share harvest plans.</li> <li>2. Trapper – Accused the harvest contractor of trespassing and as a result destroying one of his martin boxes. WY and contractor went to field but there was no evidence of a trespass. Trapper was unable to go to field.</li> <li>3. Trapper requested that he be informed in which order propped blocks would be harvested and the dates in which we plan to move into each block. Trapper was given a rough timeline for the remaining blocks but that we could not provide him with actual date each time we move equipment.</li> <li>4. Trapper upset that the logging contractor had fallen trees over the seismic line he uses as his main access route. Trapper viewed area at night when operations had ceased. Felled area dropped that afternoon and plan was to skid wood off trail the next day.</li> </ol>

Monitoring and Measurement





November 1, 2016

Current Status Table 37-1(cont.): Summary of issues addressed during final harvest plan development

Year	Issues addressed
2010/11	<p>Summary of issues by type and number during stakeholder review of FHPs.</p> <p><b>Cricks Creek</b></p> <ol style="list-style-type: none"> <li>1. Shinningbank Buck for Wildlife Area – Access concerns. Class IV temporary roads planned.</li> <li>2. Trapper – Keep heavily used seismic lines open for use post harvest.</li> </ol> <p><b>Broken Cabin</b></p> <ol style="list-style-type: none"> <li>1. Trapper – Access concerns with winter reclamation over heavily used seismic lines (large clumps of dirt). WY quaded lines in the summer after frozen clumps of dirt settled.</li> <li>2. Trapper - Keep heavily used seismic lines open for use post harvest.</li> <li>3. Trapper - Requested a 150 meter + buffer between our planned block and his Wolf sets. Integrated into harvest design.</li> <li>4. Trapper – Requested that debris piles not be burnt until January 2011. Integrated into burn plan.</li> <li>5. Trapper – Complained that WY flagged one of this Martin boxes. Box was flagged to ensure it would be visible to buncher operator if not removed.</li> <li>6. Trapper – Requested a field review of active operations. Left several messages to schedule but no further contact made by trapper.</li> <li>7. Land-owner – Notification of harvest adjacent to private property. Map of area requested. No issues.</li> </ol> <p><b>Sang Lake</b></p> <ol style="list-style-type: none"> <li>1. Trapper – Requested a map of trap-line with updated harvest areas. Map provided.</li> </ol> <p><b>Paddy Creek</b>                      FHP/AOP Amendment – Historical Resources – Deferral of harvest blocks as a result of over-lap with Historical Resources polygon. Scheduled field time with the Alexis First Nation in May 2011.</p>



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Current Status

Table 37-1(cont.): Summary of issues addressed during final harvest plan development

Year	Issues addressed
2011/12	<p>Eta/Granada/Nojack</p> <ol style="list-style-type: none"> <li>1. Historical Resources – Deferral of harvest block as a result of over-lap with Historical Resources polygon.</li> </ol> <p>Erith</p> <ol style="list-style-type: none"> <li>1. Trapper – Identified trails to remain passable post harvest.</li> </ol> <p>Pioneer</p> <ol style="list-style-type: none"> <li>1. Grazing Disposition Holder – GTA (Stanley) agreed to and signed.</li> <li>2. FireSmart CNT – All debris are to be burnt.</li> <li>3. Pioneer Lakes Site Benchmark Area – due to oil and gas development PNT to be cancelled.</li> </ol> <p>Tom Hill</p> <ol style="list-style-type: none"> <li>1. Trapper - Identified trails to remain passable post harvest.</li> <li>2. Edson Snowseekers Snowmobile Club - Identified trails to remain passable post harvest.</li> <li>3. Shinningbank Buck for Wildlife Area – Access concerns. Class IV temporary roads planned.</li> </ol> <p>Sang Lake</p> <ol style="list-style-type: none"> <li>1. Conoco-Phillips – Agreement reached to harvest and haul adjacent immediately adjacent to the Wolf Lake Gas Plant. .</li> <li>2. Trapper – Requesting meeting to review harvest plans – no concerns.</li> </ol> <p>Minnow</p> <ol style="list-style-type: none"> <li>1. Blue Ridge Lumber - Concerns regarding the inclusion of conifer sequenced to BRL addressed.</li> </ol> <p>Sundance Creek</p> <ol style="list-style-type: none"> <li>1. Key Wildlife Biodiversity Watercourse Zone - There is an operational timing restriction on this zone, which restricts activity between January 15 and April 30.</li> <li>2. The very west tip of the block (0.3 ha) is on an isolated portion of a grazing permit. No concerns.</li> <li>3. FireSmart CNT – All debris are to be burnt</li> </ol>



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Current Status

Table 37-1(cont.): Summary of issues addressed during final harvest plan development

Year	Issues addressed
2012/13	<p>South Rat:</p> <ol style="list-style-type: none"> <li>1. 30% is within the Key Wildlife Biodiversity Watercourse Zone - There is an operational timing restriction on this zone, which restricts activity between January 1 and April 30.</li> </ol> <p>Trout Creek:</p> <ol style="list-style-type: none"> <li>1. Extensive contact with local residents regarding proximity to recreation areas, ATV trails, noise during harvesting</li> <li>2. Several blocks within Trumpeter Swan zones</li> <li>3. One block on Grazing: GRL39265</li> </ol> <p>Cricks Creek:</p> <ol style="list-style-type: none"> <li>1. Blocks within Buck For Wildlife Zone</li> <li>2. All blocks within Firesmart zone</li> </ol> <p>Eta:</p> <ol style="list-style-type: none"> <li>1. Terrestrial sampling sites for the Pembina Landfill excluded from block area.</li> <li>2. Blocks within Firesmart zone.</li> </ol> <p>Sinkhole Lake:</p> <ol style="list-style-type: none"> <li>1. Remains of cabin found at layout stage: boundary amended accordingly.</li> </ol>
2013/14	<p>Rodney Creek:</p> <ol style="list-style-type: none"> <li>1. Intensive harvest in one area mitigated by a 20 year deferral in adjacent area.</li> </ol> <p>Trout Creek:</p> <ol style="list-style-type: none"> <li>1. Four blocks within two grazing leases</li> <li>2. Landowners directly adjacent to crown land; feathered edge to mitigate concerns</li> <li>3. Trapper requires access on seismic lines post harvest</li> <li>4. Key Wildlife Biodiversity Watercourse Zone - There is an operational timing restriction on this zone, which restricts activity between January 15 and April 30.</li> </ol> <p>Svedberg:</p> <ol style="list-style-type: none"> <li>1. Activities coordinated with Encana fracking operations.</li> </ol>
2014/15	<p>Svedberg:</p> <ol style="list-style-type: none"> <li>1. Trapper requires access on seismic lines post harvest</li> </ol> <p>Trout Creek:</p> <ol style="list-style-type: none"> <li>1. Three blocks on a grazing lease, GTA signed with Fossheim</li> </ol> <p>Swanson:</p> <ol style="list-style-type: none"> <li>1. Activities coordinated with the Edson Snoseekers, and access maintained on registered trails.</li> </ol>



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Current Status

Table 37-1(cont.): Summary of issues addressed during final harvest plan development

Year	Issues addressed
2015/16	Rodney: Trapper requires access on seismic lines post harvest Erith: Activities coordinated with Bonavista in harvest design Grande Prairie Trail: Three blocks on a grazing license, GTA pending North Pembina 1. Key Wildlife Biodiversity Watercourse Zone - There is an operational timing restriction on this zone, which restricts activity between January 15 and April 30.

Forest Management Activities

Process in place to record all stakeholder consultations/concerns regarding any forest practice.

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Monitoring Procedure

Annual and stewardship reporting on all issues addressed as identified through the stakeholder consultation process.

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Linkages Between Strategic and Operational Plans

None

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Forest Stewardship Comments

All stakeholder concerns addressed as they occurred.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 38</b>	<b>Target</b>
Direct consultation with the public regarding plans for and activities on the DFA	a) Address all issues as they arise during the consultation processes  b) Update the current Public Involvement Plan (PIP) by December 31, 2008

Acceptable  
Variance  
Current Status

None; address all issues identified through the consultation process  
  
 a) Table 38-1: Summary of direct consultation processes during the year and the resulting issues identified:

Year	Activity	Issues/Concerns Raised
2007/08	Personal contact Open House	<ul style="list-style-type: none"> <li>▪ Truck safety – 4</li> <li>▪ No issues</li> </ul>
2008/09	WY – Personal contact	<ul style="list-style-type: none"> <li>▪ Recreation – 2</li> <li>▪ Trapping – 3</li> <li>▪ Grazing - 2</li> </ul>
2009/10	Personal contact	<ul style="list-style-type: none"> <li>▪ Trappers - 29</li> <li>▪ First Nations GDP – 20</li> <li>▪ First Nations other - 2</li> </ul>
2010/11	Personal contact	<ul style="list-style-type: none"> <li>▪ First Nations – GDP – 6</li> <li>▪ First Nations – FHP - 1</li> <li>▪ Trappers - 10</li> </ul>
2011/12	Personal contact	<ul style="list-style-type: none"> <li>▪ First Nations GDP review – 3</li> <li>▪ Trappers – 6</li> <li>▪ Grazing Operators - 2</li> </ul>
2012/13	Open House – Trout Creek GDP Personal contact	<ul style="list-style-type: none"> <li>▪ Operating near hamlet of Bear Lake and surrounding Bear Lake</li> <li>▪ First Nations – GDP review with no outstanding issues</li> <li>▪ Grazing operator – Grazing and Timber Agreement negotiations</li> <li>▪ Trappers – access maintenance</li> </ul>
2013/14	Personal contact	<ul style="list-style-type: none"> <li>▪ First Nations – GDP review with no outstanding issues</li> <li>▪ Grazing operator – Grazing and Timber Agreement negotiations</li> <li>▪ Trappers – access maintenance</li> </ul>



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Current Status a) Table 38-1 (continued): Summary of direct consultation processes during the year and the resulting issues identified:

Year	Activity	Issues/Concerns Raised
2014/15	Personal contact	<ul style="list-style-type: none"> <li>▪ First Nations – GDP review with no outstanding issues; site visits with Stoney (Wesley) FN</li> <li>▪ Grazing operators – Grazing and Timber Agreement negotiations</li> <li>▪ Trappers – access maintenance</li> </ul>
2015/16		<ul style="list-style-type: none"> <li>▪ First Nations – GDP review with no outstanding issue; site visits completed with Stoney (Wesley) FN</li> <li>▪ Grazing operators – Grazing and Timber Agreement</li> <li>▪ Trappers – access maintenance</li> </ul>

b) Edson’s PIP has not been updated during this reporting period. In lieu of the Province’s Mountain Pine Beetle Action Plan, the Company and Alberta Sustainable Resource Development prepared the *Mountain Pine Beetle Prevention Public Involvement Plan*.

The goals of this MPB PIP are:

- i. To foster stakeholder understanding and support for the *Mountain Pine Beetle Action Plan for Alberta*.
- ii. Provide meaningful opportunities for the public and stakeholders to review and comment on MPB plans.
- iii. To provide staff the opportunity to obtain information on the *Mountain Pine Beetle Action Plan for Alberta* and implementation of forest management strategies.
- iv. Deliver the MPB message prior to final implementation of the Detailed Forest Management Plan amendment.



November 1, 2016

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Monitoring and Measurement	Final harvest plans, AOPs, direct and indirect consultations during any planning process.
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Forest Management Activities	Annual open houses, direct mailouts, etc.
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Monitoring Procedure	Annual and stewardship reporting of list of issues addressed; provide update on status of the PIP.
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Linkages Between Strategic and Operational Plans	N/A
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Forest Stewardship Comments	All issues brought forward from stakeholders during consultation processes were addressed. The consultation Log for SRD changed in the spring of 2012, and was used to track FN GDP consultations. The Silvacom Consultation tracker was used for all other stakeholders. A public involvement (communication) plan will be developed for the 2016 FMP.
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No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 39	Target
Blocks within primary or secondary viewsheds	Report number of blocks within primary or secondary viewsheds

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Acceptable Variance      None

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November 1, 2016

Current Status Table 39-1: Summary of blocks located within primary or secondary viewsheds.

Year	Number of Blocks	
	Primary Viewshed	Secondary Viewshed
2007/08	Fickle Lake = 4 (Hwy 47)	Tom Hill = 4 (Tom Hill Tower)
2008/09		# of blocks within viewsheds in FHPs  Secondary Viewsheds:  1. Fickle Lake – Highway 47 - Blocks 5190512562; 5190512579; 5180513208. 2. Erith – Highway 47 – Blocks 5180513255; 5180513058; 5180513052; 5180512906; 5180511922. 3. MacKay – Highway 751 – Block 5110561011
2009/10	none	none
2010/11	none	none
2011/12	Sundance Creek (Hwy 16) =1	Tom Hill (Tom Hill Tower Road) = 3 Sang Lake (Wolf Lake Road) = 1
2012/13	none	Tom Hill (Tom Hill Tower Road) = 6
2013/14	None	None
2014/15	None	None
2015/16	None	None

Monitoring and Measurement

Final Harvest Plans



November 1, 2016

Forest  
Management  
Activities

FHP to address aesthetic concerns.

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Monitoring  
Procedure

Annual and stewardship reporting on number of blocks in FHPs that fall within primary and secondary viewsheds, by LMU.

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Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

A total of 22 blocks were identified within primary or secondary viewsheds.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 40	Target
Regenerated stand yield compared to natural stand yield	No net decrease from the natural stand productivity

Acceptable Variance To be determined.

Current Status **No analysis will occur until 2016.**

Monitoring and Measurement Growth and Yield Program, PSPs, ARS.

Forest Management Activities Follow growth and yield program for establishment and remeasurement protocols.

Monitoring Procedure Annual and stewardship reporting on the number of PSPs established or remeasured annually relative to the growth and yield monitoring program.

Linkages Between Strategic and Operational Plans Data collected will validate the difference between natural stands and harvested stands.

Forest Stewardship Comments Natural stand (PSPs) and Regenerating (GYMP's) continue to be re-measured or established. There are currently 421 PSPs and 90 GYMPs actively being managed.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 41</b>	<b>Target</b>
First Nations or Métis Involvement or input into plans	Comply with all Provincial policy, framework and guidelines

Acceptable Variance      None

Current Status      Table 41-1: Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2007/08	GDPs shared with Alexis	None brought forward
2008/09	2008/2009 GDP shared with: <ul style="list-style-type: none"> <li>• Alexander First Nation</li> <li>• Alexis First Nation</li> <li>• Paul First Nation</li> <li>• O'Chiese First Nation</li> <li>• Sunchild First Nation</li> </ul>	None brought forward
2009/10	2009/2010 GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Sturgeon Lake Cree FN</li> <li>• Enoch FN</li> </ul>	None brought forward



November 1, 2016

Current Status Table 41-1 (con't): Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2010/11	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Sturgeon Lake Cree FN</li> <li>• Enoch FN</li> </ul>	Alexis FN – Requested an Elder review of harvest plans within Paddy and South Rat Creek. Based on review and request was made to view harvest plans in the field. Harvest plans deferred until review completed.
2011/12	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> <li>• Stoney (Wesley) FN</li> </ul>	<ul style="list-style-type: none"> <li>• No issues or concerns were raised by any First Nation</li> <li>• Site visits by elders completed by Stoney (Marshybank LMU with no specific issues brought forward</li> </ul>
2012/13	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> <li>• Stoney (Wesley/Chiniki) FN</li> </ul>	<ul style="list-style-type: none"> <li>• No issues or concerns were raised by any First Nation</li> <li>• Site visits by elders completed by O'Chiese (No Name Creek h.d.a.) with no specific issues brought forward</li> <li>• GIS access provided by direct link into Silvacom</li> </ul>

Current Status Table 41-1 (con't): Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2013/14	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> <li>• Stoney (Wesley/Chiniki) FN</li> </ul>	<ul style="list-style-type: none"> <li>• No issues or concerns were raised by any First Nation</li> <li>• Site visits by elders completed by Stoney (Wesley) to East Rundell and Wawa with no specific issues brought forward</li> <li>• GIS access provided to FN by direct link into Silvacom</li> </ul>
2014/15	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> <li>• Stoney (Wesley/Chiniki) FN</li> </ul>	<ul style="list-style-type: none"> <li>• No site specific issues or concerns were raised by any First Nation</li> <li>• Site visits by elders completed by Stoney (Wesley/Chiniki) to Trunk Road and Marshybank with no specific issues brought forward</li> <li>• GIS access provided to FN by direct link into Silvacom</li> </ul>
2015/16	GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> <li>• Stoney (Wesley/Chiniki) FN</li> </ul>	<ul style="list-style-type: none"> <li>• No site specific issues or concerns were raised by any First Nation</li> <li>• Site visits by elders completed by Stoney (Wesley/Chiniki) to Trunk Road and Marshybank with no specific issues brought forward; two pipe ceremonies completed</li> <li>• GIS access provided to FN by direct link into Silvacom</li> </ul>

Monitoring and Measurement

Comments received during the consultation sessions and issues addressed.



November 1, 2016

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Forest Management Activities

First Nations and Métis consultation will be consistent with the Provincial framework and guidelines.

---

Monitoring Procedure

Annual and stewardship reporting on the number of consultation sessions and the issues addressed.

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Linkages Between Strategic and Operational Plans

None, unless changes occur to the approved SHS as a result of the consultation process.

---

Forest Stewardship Comments

The current Company focus in on 7 First Nation bands that cover the entire FMA; all issues and concerns have been addressed. Interaction with certain bands is increasing (Sunchild, Stoney, Alexander), whereas the remaining are noticeably silent in their desire for consultation opportunities.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 42</b>	<b>Target</b>
Number of identified First Nations and Métis sites	Protect all known sites of historic, medicinal, spiritual, cultural or nutritional significance

Acceptable Variance      None

Current Status      Table 42-1: Summary of First Nations and Métis sites identified and protected.

Year	# First Nations or Métis Sites Identified	# First Nations or Métis Sites Protected
2007/08	No new sites	All known
2008/09	No new sites	All known
2009/10	1 site in Paddy Creek FHP – Cerimonial site – ribboned tree	Sites buffered out of proposed harvest area – Alexis FN
2010/11	1 site in Paddy Creek (same as above) – ceremonial site – ribboned tree	Site now within vicinity of current logging activity; additional buffer applied to minimum 100 meters – Alexis FN
2011/12	No new sites	All known
2012/13	One ceremonial tree (unknown prior to logging) protected, but no treed buffer left	All known
2013/14	No new sites	All known
2014/15	No new sites	All known
2015/16		All known

Monitoring and Measurement      Updates to inventory

Forest Management Activities      Share plans as required. Track changes to the SHS as they occur.

Monitoring Procedure      Annual and stewardship reporting on the number of sites identified and protected.





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Linkages  
Between  
Strategic and  
Operational  
Plans

Large changes to the SHS may result negatively on future AACs.

---

Forest  
Stewardship  
Comments

Only one site has been identified and buffered according to FN requests.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 43	Target
Forest Advisory Committee (FAC) review of Weyerhaeuser planning and operations	Produce an annual report for the FAC regarding Company activities and issues raised during the year

---


Acceptable Variance      None

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November 1, 2016

Current Status Table 43-1: Summary of FAC issues addressed

Year	Issues Addressed by the FAC
2007/08	 <p><b>G:\PLANNING\Forest Advisory Committees'</b></p> <ul style="list-style-type: none"> <li>• Mountain Pine Beetle – what the province is doing, what Weyerhaeuser is doing, alternatives to the suggested plans</li> <li>• The government's Land-Use Framework</li> <li>• Weyerhaeuser economics</li> <li>• CSA Z809 Sustainable Forest Management Draft Standard</li> </ul>
2008/09	<p>Issues addressed by the FAC</p> <ul style="list-style-type: none"> <li>• Small Watershed Assessment Program – Reviewed Swartz Creek results from 2006 report; concern that water temperatures are approaching lethal limits for some fish species; additional monitoring was completed in 2007.</li> <li>• Reviewed Weyerhaeuser's Annual Bird Survey results - Concerned that WY survey not scientific enough to be able to identify problems as they occur. WY survey has been peer reviewed. WY surveys a potential data source for use at a scale much larger than our FMA (i.e. AB Biodiversity Program).</li> <li>• Reviewed new CSA Z809-08 Sustainable Forest Management Standard</li> <li>• The Development of a Land-use Framework for Alberta – presentation by Dave Bartesko.</li> <li>• Status of joint Ducks Unlimited/Weyerhaeuser project on wetland management – presentation by Alain Richard, DU.</li> <li>• Grizzly Bear Recovery Plan – Update provided by Weyerhaeuser.</li> <li>• Alternative Regeneration Standards - Update provided by Weyerhaeuser.</li> <li>• Review of Weyerhaeuser's 2009/2010 Annual Operation Plan Submission</li> <li>• Weyerhaeuser operational and economic updates.</li> </ul>

Current Status Table 43-1(cont): Summary of FAC issues addressed

Year	Issues Addressed by the FAC
2009/10	<p>Issues addressed by the FAC</p> <ul style="list-style-type: none"> <li>• Joint meeting with the Edson and Drayton Valley committess to review the extent of the MPB in-flight from BC and Weyerhaeuer's short term strategy to manage known infestations and longer strategy of reducing the risk to our pine forests.</li> <li>• Joint meeting with the Edson and Drayton Valley committess to review Weyerhaeuser's decision to move from CSA to SFI third party certification.</li> <li>• Reviewed Weyerhaeuser's SFI certification results.</li> <li>• Discussed / reviewed the Provincial Water Advisory Council mandate and initiatives.</li> <li>• Discussed / reviewed Weyerhaeuser's participation in the Canadian Boreal Forest Agreement.</li> <li>• Review of Weyerhaeuser's 2010/2011 Annual Operation Plan Submission</li> <li>• Weyerhaeuser operational and economic updates.</li> </ul>
2010/11	<p>Issues addressed by the FAC</p> <ul style="list-style-type: none"> <li>• Review of Weyerhaeuser's MPB harvest plans and retention strategies on the landscape. Heli-tour with group so they can visually see our harvest practices and extent of the MPB infestation.</li> <li>• Reviewed BC MPB Research.</li> <li>• Reviewed Fish and Wildlife's request that industrial access be minimized thru road and sesmic line reclamation.</li> <li>• Review of Weyerhaeuser's 2011/2012 Annual Operation Plan Submission</li> </ul> <p>Weyerhaeuser operational and economic updates.</p>
2011/12	Temporarily on hiatus. Group will re-sit during the development of the Objectives, Indicators and Targets of the next DFMP.
2012/13	Temporarily on hiatus. Group will re-sit during the development of the Objectives, Indicators and Targets of the next DFMP.
2013/14	Temporarily on hiatus. Group will re-sit during the development of the Objectives, Indicators and Targets of the next DFMP.
2014/15	Temporarily on hiatus. Group will re-sit during the development of the Objectives, Indicators and Targets of the next DFMP.
2015/16	Temporarily on hiatus. Group will re-sit during the development of the Objectives, Indicators and Targets of the next DFMP.



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Monitoring and Measurement      Meeting minutes; annual reports

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Forest Management Activities      Updates to the FAC regarding issues as they arise.

---

Monitoring Procedure      Annual and stewardship reporting on issues addressed by the FAC.

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Linkages Between Strategic and Operational Plans      Current issues may impact current and future AACs/DFMPs.

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Forest Stewardship Comments      The FAC reviewed operational and strategic plans. The group is currently on hiatus as the company starts to develop plans for the 2016 FMP.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 44</b>	<b>Target</b>
Research	Indicate research undertaken or completed on the DFA

Acceptable Variance      None

Current Status      Table 44-1: Summary of Research completed on the DFA

Year	Research undertaken or completed
2007/08	<ul style="list-style-type: none"> <li>• Sustainable Forest Management Research – Dr. Adamowicz</li> <li>• Forest Policy Analysis</li> <li>• ACR integrated landscape management program</li> <li>• Small watershed assessment program</li> <li>• Competition modeling</li> <li>• GYPSY modeling</li> </ul>
2008/09	<ul style="list-style-type: none"> <li>• Sustainable Forest Management Research – Dr. Adamowicz</li> <li>• Forest Policy Analysis</li> <li>• ACR integrated landscape management program</li> <li>• Small watershed assessment program</li> <li>• Competition modeling</li> <li>• GYPSY modeling</li> </ul>
2009/10	<ul style="list-style-type: none"> <li>• Sustainable Forest Management Research – Dr. Adamowicz</li> <li>• ACR integrated landscape management program</li> <li>• Small watershed assessment program</li> <li>• Competition modeling</li> <li>• GYPSY modeling</li> <li>• Foothills G&amp;Y Assn.</li> <li>• Mixedwood Management Assn.</li> <li>• Western Boreal Growth and Yield cooperative</li> <li>• Earthworm, waterbird and water chemistry inventory</li> <li>•</li> </ul>

Current Status Table 44-1 (con't) Summary of Research completed on the DFA

Year	Research undertaken or completed
2010/11	<ul style="list-style-type: none"> <li>• Competition modeling</li> <li>• GYPSY modeling</li> <li>• Foothills G&amp;Y Assn.</li> <li>• Mixedwood Management Assn.</li> <li>• Western Boreal Growth and Yield cooperative</li> <li>• Earthworm, waterbird and water chemistry inventory</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> </ul>
2011/12	<ul style="list-style-type: none"> <li>• GYPSY modeling</li> <li>• Foothills G&amp;Y Assn.</li> <li>• Mixedwood Management Assn.</li> <li>• Western Boreal Growth and Yield cooperative</li> <li>• Earthworm, waterbird and water chemistry inventory</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> </ul>
2012/13	<ul style="list-style-type: none"> <li>• GYPSY modeling</li> <li>• MPB Surveys and Model verification</li> <li>• Earthworm, waterbird and water chemistry inventory</li> <li>• Foothills G&amp;Y Program</li> <li>• Tree Retention Project</li> <li>• Canadian Warbler Surveys and Habitat Association</li> <li>• FRI Programs</li> <li>• Mixedwood Management Assn.</li> <li>• WESBOGY cooperative</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> <li>• Songbird nesting survey in Trout Creek</li> </ul>
2013/14	<ul style="list-style-type: none"> <li>• Foothills G&amp;Y Program</li> <li>• Tree Retention Project</li> <li>• FRI Programs</li> <li>• Mixedwood Management Assn.</li> <li>• WESBOGY cooperative</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> <li>• Songbird nesting survey in Chip Lake</li> </ul>



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Current Status Table 44-1 (con't) Summary of Research completed on the DFA

Year	Research undertaken or completed
2014/15	<ul style="list-style-type: none"> <li>• Foothills G&amp;Y Program</li> <li>• FRI Programs</li> <li>• Mixedwood Management Assn.</li> <li>• WESBOGY cooperative</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> <li>• Songbird nesting survey in Trout Creek</li> </ul>
2015/16	<ul style="list-style-type: none"> <li>• Foothills G&amp;Y Program</li> <li>• FRI Programs</li> <li>• Mixedwood Management Assn.</li> <li>• WESBOGY cooperative</li> <li>• FRI grizzly bear research</li> <li>• WBAC tree improvement program</li> <li>• Region 1 conifer tree improvement</li> <li>• Songbird nesting survey in Chip Lake</li> </ul>

Monitoring and Measurement Annual reporting

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Forest Management Activities Undertake or fund research projects that affect the DFA

---

Monitoring Procedure Annual and stewardship reporting on research.

---

Linkages Between Strategic and Operational Plans Will provide future opportunities.





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Forest  
Stewardship  
Comments

Research is ongoing on a number of individual project, funded internally, or funded through TDA or FRIAA.

No further analysis will be completed prior to the 2016 FMP.



## **2 Drayton Valley DFMP – Annual and Stewardship Report (November 2016)**







**Drayton Valley DFMP  
Annual and Stewardship Report  
November 2016**





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**2015/16 DFMP Stewardship Report of Results  
Drayton Valley Defined Forest Area**

**For the Period  
May 1, 2006 to April 30, 2016**

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## Introduction:

This is the 10th annual report for the Drayton Valley Defined Forest Area. This report contains Weyerhaeuser results for all indicators, as described in the VOITs table (Value, Objective, Indicator and Target) approved March 27, 2007. This report covers the period May 1, 2006 to April 30, 2016. The Stewardship report was submitted to AAF in the summer of 2013..

Questions about the information contained in this report can be directed to:

- Paul Scott, Weyerhaeuser, phone (780) 712-6886 or by email at [paul.scott@weyerhaeuser.com](mailto:paul.scott@weyerhaeuser.com)

An essential component of adaptive forest management is an effective monitoring program. Each indicator will be monitored to assess management success. By monitoring these indicators and comparing actual forest condition and development with planning forecasts, variances with the targets can be identified.

Monitoring will be an ongoing process integrated with regular operations of the Company. It will address the basic aspects of:

- ◆ Tracking actual activities versus planned activities,
- ◆ Tracking actual responses to forest management activities compared to expected responses,
- ◆ Identifying impacts arising from changes in assumptions, terms of reference or unplanned events, and
- ◆ Correcting activities or practices when required.

A variety of data sources including temporary and permanent sample plots, post harvest surveys, and experimental research plots, will be used to monitor forest condition and development.

Adaptive management also implies adjusting the course of action relative to the variances identified in monitoring. There is an opportunity to make operational adjustments within the implementation of the management plan. These operational adjustments may take the form of corrective activities or compensating activities. The corrective actions directly address the identified shortcoming or variance identified. A prime example of this type of activity would be re-treatment of a regenerating harvest area to meet a particular reforestation standard. This activity would indirectly address the identified variance by way of modifying plans. An example of a compensating adjustment could be re-classification of harvest areas to meet reforestation standards.

Monitoring results and variances will be included in both annual and stewardship reports.





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## Timber Supply Sensitivity Analysis (validation of assumptions)

**Cull percent:** The percentage cull on both deciduous and coniferous timber is a rolling average based on a number of years' worth of data. The cull percent that will be applied in the next DFMP will be a result of additional data collection preceding the next plan. The current cull percent is expected to remain the same for a substantial number of years. Due to the aging nature of the forest, it might be suspected that cull will increase slightly in the near term before starting to trend downwards as the forest approaches a more regulated appearance.

**Regeneration Standards:** Regenerating stand covertypes will be assigned prior to harvest and harvest areas will be reforested to standards defined for each strata (C, CD, DC, and D). Harvest areas will have surveys completed no later than years five, eight or fourteen, depending upon the survey standard being applied.

## Annual Performance Monitoring Report Description

### Purpose:

- ◆ To report on the forest management activities undertaken in the previous year that pertains to implementation of the DFMP strategies to meet the plan indicators. The time frames for management activities are identified for each indicator, and generally reflect the following dates:
  - May 1 to April 30 (AOP year)
  - January 1 to December 31 (calendar year)

### Content:

The content of the Annual Performance Monitoring Report may be adjusted over time with mutual agreement between ASRD and the Company, or as deemed appropriate. The Sustainable Forest Management Plan Annual Report (SFMP-AR) will provide much of the information identified below.

The Report will include, but may not be limited to, the following items:

- A. Timber harvesting
  - ◆ Area and volume harvested by species group (**see indicator 40**)
- B. Reforestation and silviculture activities summarized by:
  - ◆ Area of site preparation (type)
  - ◆ Number of seedlings planted (species) (**see indicator 19**)
  - ◆ Area of stand tending by type
  - ◆ Area of chemical treatments (by application type)
- C. Area summary of land withdrawals and additions (**see indicator 30**)
- D. Significant natural disturbances (e.g. fire, insect, disease, blowdown) (**see indicator 31**)
- E. Activities on afforestation and enhanced forest management (**see indicators 23 and 30**)
- F. Summary of incidental replacement strategy results on pure 'C' and 'D' blocks (**see indicator 10**)
- G. Cumulative variance to the spatial harvest sequence by LMU (from GDP)
- H. Compliance infraction – warnings and penalties
- I. Inventory work (timber and non-timber)



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- J. Research work (SFMP-AR)
- K. Summary of public involvement activities, concerns or input (SFMP-AR)
- L. Summary of involvement in Provincial 'Species at Risk' Recovery Plans
- M. DFMP objectives (as identified in Chapter 5 of the DFMP) and indicators

## Stewardship Report Description

### Purpose:

- ◆ To summarize the previous five annual reports;
- ◆ To discuss opportunities for change or adjustments in forest management practices that have been identified;
- ◆ To provide the public with an overall assessment of the DFMP progress, i.e. "Are we doing what we said we would do?"
- ◆ To identify deviations to the approved plan;
- ◆ To undertake analysis of unacceptable deviations as identified by the Company and Alberta; and
- ◆ To provide corrective actions.

### Content:

The content of the Stewardship Report may be adjusted over time with mutual agreement between ASRD and the Company. Therefore, the Report will include, but may not be limited to the following items:

- ◆ Review DFMP objectives and the TSA assumptions to:
  - Identify emerging trends or issues,
  - Identify deviations from the approved plan,
  - Track all variances to the SHS; where subtraction of more than 20% of the SHS or additions that exceed 100% of the SHS occur (by LMU, by decade), an assessment will be made to identify the impacts to the affected objectives and resulting AAC implications,
  - Describe any analysis that has been undertaken of deviations, and
  - Describe the corrective actions to be taken.

The following timber operators operate within the DFA:

- Weyerhaeuser – WY
- Tall Pine Timber Ltd. – TPTL
- Dale Hansen Ltd. – DHL
- Lodgepole CTP – LCTP
- Miscellaneous CTP - MTU



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### Non-VOIT Table Information

Table A1: Annual area harvested

Reporting Year	Area Harvested (ha)
06/07	1,808
07/08	1,895
08/09	1,764
09/10	2,260
10/11	2,321
11/12	2,373
12/13	2,489
13/14	2,382
14/15	3508
15/16	4091
<b>Total</b>	<b>24,891</b>

Table A2: Annual area of site preparation activity

Reporting Year	Area Site Prepared (ha)
06/07	895
07/08	577
08/09	789
09/10	842
10/11	1059
11/12	803
12/13	1149
13/14	1345
14/15	1019
15/16	1553
<b>Total</b>	<b>10,031</b>



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Table A3: Annual area of chemical stand tending activity

Reporting Year	Area of chemical stand tending (ha)
06/07	1609
07/08	575
08/09	575
09/10	740
10/11	1023
11/12	647
12/13	1328
13/14	3184
14/15	367
15/16	197
<b>Total</b>	<b>6,414</b>

Table A4: Annual area of non-chemical stand tending activity

Reporting Year	Area of non-chemical stand tending (ha)
06/07	0
07/08	0
08/09	0
09/10	0
10/11	0
11/12	0
12/13	0
13/14	0
14/15	0
15/16	0
<b>Total</b>	<b>0</b>



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Table A5: Annual cumulative variance to the SHS

Reporting Year	Annual cumulative variance to the SHS %
06/07	0%
07/08	0%
08/09	6.6%
09/10	9.4%
10/11	9.9%
11/12	10.2%
12/13	11.4%
13/14	11.5%
14/15	11.7%
15/16	11.9%

Table A6: Annual number of compliance infractions issued

Reporting Year	Annual number of compliance infractions issued
06/07	1
07/08	1
08/09	4
09/10	1
10/11	0
11/12	0
12/13	2
13/14	0
14/15	1
15/16	0
<b>Total</b>	<b>10</b>



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Table A7: Annual Weyerhaeuser inventory work by type

Reporting Year	Type of inventory work completed
06/07	Cutover, landuse, Growth and Yield Plots
07/08	Cutover, landuse, Growth and Yield Plots
08/09	Landuse, Growth and Yield Plots
09/10	Cutover, landuse, Growth and Yield Plots
10/11	Cutover, landuse, Growth and Yield Plots
11/12	Cutover, landuse, Growth and Yield Plots
12/13	Cutover, landuse, Growth and Yield Plots, new AVI
13/14	Cutover, landuse, Growth and Yield Plots, new AVI
14/15	Cutover, landuse, Growth and Yield Plots, new AVI
15/16	Cutover, landuse, Growth and Yield Plots, new AVI



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Table A8: Annual research completed by Weyerhaeuser

Reporting Year	Research Description
06/07	<ul style="list-style-type: none"> <li>• Stand Retention surveys</li> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Small watershed assessment program – Wawa Creek</li> </ul>
07/08	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Small watershed assessment program – Wawa Creek</li> </ul>
08/09	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Small watershed assessment program – Wawa Creek</li> </ul>
09/10	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Region 1 Conifer Tree Improvement</li> </ul>
10/11	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• FRI Grizzly Bear Research</li> <li>• Ducks Unlimited Earthcover, waterbird and chemistry inventory</li> </ul>
11/12	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• Stand retention surveys</li> <li>• Owls and raptor survey</li> </ul>
12/13	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• FRI Grizzly Bear Research</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Stand retention surveys</li> </ul>
13/14	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• FRI Grizzly Bear Research</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Stand retention surveys</li> <li>• Raptor surveys</li> <li>• Song bird surveys</li> </ul>
14/15	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• FRI Grizzly Bear Research</li> <li>• Region 1 Conifer Tree Improvement</li> </ul>
15/16	<ul style="list-style-type: none"> <li>• Western Boreal Growth and Yield Cooperative</li> <li>• FRI Grizzly Bear Research</li> <li>• Region 1 Conifer Tree Improvement</li> <li>• Spring songbird nesting surveys</li> </ul>



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Table A9: Annual Summary of Public Involvement Activities

Reporting Year	Public Involvement Activities
06/07	WY- Open houses were held in Drayton Valley, Nordegg and Rocky Mountain House.
07/08	Herbicide open houses; mailouts of plans to stakeholders
08/09	Herbicide open houses; mailouts of plans to stakeholders
09/10	Herbicide open houses; mailouts of plans to stakeholders
10/11	Herbicide open houses; mailouts of plans to stakeholders
11/12	Herbicide open houses; mailouts of plans to stakeholders
12/13	Herbicide open houses; mailouts of plans to stakeholders
13/14	Herbicide open houses; mailouts of plans to stakeholders
14/15	Herbicide open houses; mailouts of plans to stakeholders
15/16	Herbicide open houses; mailouts of plans to stakeholders

Table A10: Annual participation in Provincial 'Species at Risk' Plans

Reporting Year	Provincial Species at Risk Plans
06/07	No participation to date.
07/08	No participation to date.
08/09	No participation to date.
09/10	No participation to date.
10/11	No participation to date.
11/12	No participation to date.
12/13	No participation to date.
13/14	No participation to date.
14/15	No participation to date.
15/16	No participation to date.





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**DFMP Values, Objectives, Indicators and Targets - VOITs**

The following tables describe the VOITs established for the Drayton Valley DFMP. Results are summarized below.

Table B1: Identification of acceptable variance for indicators since May 1, 2006 (WV = Within Acceptable Variance; OV = Outside acceptable variance; NA will updated during 2016 FMP development

Indicator	YEAR									
	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV
3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
5	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
6	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
7	WV	WV	WV	WV	WV	WV	WV	WV	OV	WV
8	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
9	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
10	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
11	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
14	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
15	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
16	OV	WV	WV	WV	WV	WV	WV	WV	WV	WV
17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
19	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
20	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
21	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
24	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
25	WV	WV	OV	WV	OV	OV	WV	OV	OV	OV
26	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
27	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
28	WV	WV	OV	WV	WV	WV	WV	WV	WV	WV
29	WV	WV	WV	WV	WV	WV	OV	OV	OV	WV
30	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
31	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
32	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
33	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
35	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
36	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
37	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



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Indicator	YEAR									
	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
39	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
40	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
41	WV	WV	OV	WV	OV	WV	OV	WV	WV	WV
42	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
43	WV	OV	OV	OV	OV	OV	OV	OV	OV	OV
44	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
45	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
46	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
47	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
48	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
49	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
50	WV	WV	WV	WV	OV	WV	OV	WV	OV	OV
51	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
52	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
53	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
55	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
56	WV	WV	WV	WV	WV	WV	WV	WV	WV	WV
57	WV	WV	WV	WV	WV	OV	OV	OV	OV	OV



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
		a DFA characteristic, component, or quality considered by an interested party to be important in relation to a CSA SFM element or other locally identified element	a broad statement describing a desired future state or condition of a value	a variable that measures or describes the state or condition of a value	a DFA characteristic, component, or quality considered by an interested party to be important in relation to a CSA SFM element or other locally identified element
1. Biological Diversity	1.1 Ecosystem Diversity  Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that occur naturally in the DFA	1.1.1 Landscape scale biodiversity	1.1.1.1 Maintain biodiversity by retaining the full range of cover types and seral stages	1) Area and percent of young, mature and late seral stages by cover types (DX, MX, PL, SW, and SB) in the net and gross landbase (CSA 1)	Percent of Forested Landbase at 2015
			1.1.1.2 Maintain biodiversity by avoiding landscape fragmentation	2) Size of harvest opening by DFA (CSA 2) (Obj. 2.2)	Range of harvest areas reflect the approved SHS*  0-5 ha – 43.9% 5-10 ha- 23.8% 11-40 ha- 25.2% 41-100 ha- 5.2% 100-500 ha- 1.7% >501ha – 0.2%  *updated to reflect the 2008 MPB addendum



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
				3) Area of old interior forest (ignoring seismic lines) by total area and by selected major species groups: deciduous, mixedwood, Pine, Black Spruce and White Spruce	1) 37,233 ha (8.2% of total forest area for the DFA)  2) Area and relative % of each major species group for total forest area as follows**:  - DX*- 721 ha (0.8% of total gross DX) - MX*- 243 ha (0.03% of total gross MX) - PL – 14,996 ha (22% of total gross PL) -SB – 916 ha (0.7% of total gross SB) -SW – 8,342 ha (27% of total gross SW)  *DX and MX decline due to mortality function in yield curves  **Updated to reflect 2008 MPB addendum
1. Biological Diversity	1.1 Ecosystem Diversity	1.1.1 Landscape scale biodiversity	1.1.1.3 Maintain biodiversity by minimizing access	4) Permanent forestry road density by DFA ( <b>Obj. 3.1</b> )	Less than 0.075 km/km2
				5) Kilometers of temporary (inter-block) access roads ( <b>Obj. 3.1</b> )	Less than 165 km by DFA
			1.1.1.4 Maintain specific habitat for rare and endangered species of plants	6) Unique biological or physical ecological sites ( <b>CSA 11</b> ) ( <b>Obj. 2.3</b> )	100% of sites are protected



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
			1.1.1.5 Maintain unique habitats provided by wildfire and blowdown events	7) Area of unsalvaged burned forest ( <b>Obj. 2.1</b> )	<p>Live trees: Retain all unburned trees in green islands and retained patches</p> <p>Burned trees – (Landscape view) Retain &gt;10% of area with merchantable black (burnt) trees in salvage areas greater than 10 ha in size</p> <p>(Harvest Area Scale): Retain &gt;5% of area with merchantable black (burnt) trees in salvage areas less than or equal to 10 ha in size</p>
1. Biological Diversity	1.1 Ecosystem Diversity	1.1.1 Landscape scale biodiversity	1.1.1.5 Maintain unique habitats provided by wildfire and blowdown events	8) Area of unsalvaged blowdown forest	In areas of blowdown exceeding 2 ha in size, an average of 10% of the area will be left unsalvaged
			1.1.1.6 Retain ecological values and functions associated with riparian zones	9) Riparian Management Zones ( <b>CSA 15</b> ) ( <b>Obj. 4.2</b> )	Full compliance with the OGRs
			1.1.1.7 Maintain incidental coniferous and deciduous	10) Areas planted within pure 'D' harvest areas	Plant areas having inadequate hardwood stocking
				11) OGR compliance for understorey protection	100% compliance
	12) Contribution to future incidental yields	Replace incidental yields			
1.1 Ecosystem	1.1.2 Local/stand	1.1.2.1 Retain stand	13) Percent of retained	Stand retention of an average	



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
	Diversity	scale biodiversity	level structure	merchantable volume ( <b>Obj. 2.1a</b> ) ( <b>CSA 3</b> )	of 5% of all species utilized
				14) Coarse down woody debris levels by harvest area (low, moderate, high) ( <b>Obj. 2.1</b> )	100% of harvest areas retain down woody debris at or above preharvest levels
			1.1.2.2 Maintain integrity of sensitive sites	15) Unique biological or physical sites ( <b>Obj. 7.1</b> ) ( <b>CSA 11</b> )	Protect 100% of the sites as identified
			1.1.2.3 Maintain aquatic biodiversity by minimizing impacts of water crossings	16) Forestry water crossings in compliance with Code of Practice for Water Course Crossings within each Subunit ( <b>Obj. 4.1</b> ) ( <b>CSA 14, 15</b> )	100% of designs meet standards of the Code of Practice for Water Course Crossings
1. Biological Diversity	1.2 Species Diversity: Conserve species diversity by ensuring that habitats for native species found in the DFA are maintained throughout time	1.2.1 Maintain species diversity on the landscape	1.2.1.1 Maintain landscape level habitat for naturally occurring species of plants and animals	17) Species of Concern	Assess next DFMP
			1.2.1.2 Meet the Provincial reforestation standards for all corresponding stand types	18) Indicator species groups 1) Breeding birds 2) Nocturnal raptors ( <b>Obj. 2.3</b> ) ( <b>CSA 7</b> )	Maintain a monitoring program for the species listed
				19) Species used in reforestation ( <b>Obj 1.3</b> ) ( <b>CSA 8</b> )	100% of reforestation is with locally occurring species
1.2.1.3 Follow IRP guidelines for operating in critical wildlife areas	20) Compliance with guidelines ( <b>Obj. 2.4</b> )	100% compliance to OGR			
1. Biological	1.3 Genetic Diversity:	1.3.1 Genetic	1.3.1.1 Retain "wild	21) Number and area (ha) of in situ	Number (X) of genetic



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
Diversity	Conserve genetic diversity by maintaining the variation of genes with species	diversity across the landscape	forest populations” for each tree species in each seed zone through establishment of in-situ reserves by the organization with an approved controlled parentage program or in cooperation with Alberta	genetic conservation areas	conservation areas for each seed zone conforming with Section 20 of the Green Area section of Standards for Tree Improvement in Alberta (yet to be determined by ASRD)
			1.3.1.2 Retain wild forest genetic resources through ex-situ conservation	22) Number of provenances and genetic lines in ex-situ gene banks and trials	Active ex-situ conservation program for all Controlled Parentage Program plan species and other species in cooperation with Alberta
			1.3.1.3 Increase the level of forest production from the productive landbase	23) Opportunities for an Enhanced Forest Management (EFM) Program ( <b>Obj. 8.1</b> )	Report on identified EFM opportunities
	1.4 Protected Areas – respect protected areas identified through government processes	1.4.1 Areas with minimal human disturbances within managed landscapes	1.4.1.1 Integrate transboundary values and objectives into forest management	24) Stakeholder consultation	Ongoing consultations with relevant protected areas’ agencies
2. Ecosystem Productivity	2.1 Ecosystem resilience	2.1.1 Reforested harvest areas	2.1.1.1 Meet reforestation targets on all harvested areas	25) Annual % of area for SR establishment surveys ( <b>CSA 2</b> ) ( <b>Obj. 1.3</b> )	95% on an annual basis for establishment surveys
				26) Annual % of area for SR performance surveys	To be determined with the development of Alternative Regeneration Standards (ARS)
				27) Cumulative % of SR areas (establishment and performance)	100% of harvest areas that were harvested on or after May 1, 2001 meet Provincial or approved reforestation standards



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target	
				28) Reforestation effort	100% of harvest areas are reforested within two years	
				29) Maintain accurate silviculture records ( <b>Obj. 1.4</b> )	100% compliance	
		2.1.2 Maximizing the forest land base as a means of conserving the physical environment within the DFA	2.1.2.1 Forests on the DFA will be managed so as to minimize losses to non-forest uses.	30) Changes in DFA landbase ( <b>CSA 20</b> ) ( <b>Obj. 6.5</b> )	A program in place to return landbase lost through industrial activity to the forested landbase	
				2.1.2.2 Recognize lands affected by insects, disease or natural calamities	31) Amount of area affected ( <b>CSA 30</b> )	Area (ha) affected by significant outbreaks, infestations, natural calamities
				2.1.2.3 Salvage dead and dying timber	32) Area lost due to natural causes ( <b>Obj. 1.5</b> ) ( <b>CSA 30</b> )	<2.5% of total DFA landbase by decade
		2.1.3 Control invasive species	2.1.3.1 Control non-native plant species (weeds)	33) Noxious weed program ( <b>Obj. 6.11</b> ) ( <b>CSA 6</b> )	Maintain a noxious weed program	
3. Soil and water	3.1 Soil quantity and quality	3.1.1 Soil productivity	3.1.1.1 Minimize impact of roading and bared areas in forest operations	34) Compliance with Pembina ground rules	All blocks will have less than 5% soil disturbance unless prior approval is received from ASRD	
			3.1.1.2 Minimize incidence of soil erosion and slumping	35) Incidence of soil erosion and slumping ( <b>CSA 13</b> ) ( <b>Obj. 3.2</b> )	Complete compliance	
	3.2 Water quantity and quality	3.2.1 Water quantity	3.2.1.1 Limit impact of timber harvesting on water yield	36) Watershed yields ( <b>CSA 18</b> ) ( <b>Obj. 4.4</b> )	Modeled fourth-order watershed yields will be less than 120% of natural watershed yields	
			3.2.2.1 Minimize impact of operations in riparian areas	37) Riparian management zones ( <b>CSA 15</b> ) ( <b>Obj.14</b> )	Complete compliance	
4. Global Eco-logical	4.1 Carbon uptake and storage	4.1.1 Carbon uptake and storage	4.1.1.1 Maintain functioning forest	38) Impact on carbon production ( <b>CSA 19</b> )	Identify and review forest management activities as	





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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
Cycles			ecosystems capable of contributing to global carbon cycles		related to carbon storage and release
		4.1.2 Maximizing the forest land base as a means of conserving the physical environment with the DFA	4.1.2.1 Forests on the DFA will be managed so as to minimize losses to non-forest uses.	30) Changes in DFA landbase <b>(CSA 20) (Obj. 6.5)</b>	A program in place to return landbase lost through industrial activity to the forested landbase
	4.2 Forest Land conversion: Protect forestlands from deforestation or conversion to non-forests	4.2.1 Maximizing the forest land base as a means of conserving the physical environment within the DFA	4.2.1.1 Forests on the DFA will be managed so as to minimize losses to non-forest uses	39) Access development <b>(Obj. 6.4) (CSA 21)</b>	Coordinate and plan with other users
5. Multiple Benefits in Society	5.1 Timber and non-timber benefits	5.1.1 Sustainable timber supplies	5.1.1.1 Harvesting to be at a sustainable harvest level	40) Level of harvest <b>(CSA 12) (Obj. 1.1)</b>	Total timber drain does not exceed the periodic AAC except as specified in the FMA agreement
			5.1.1.2 Utilize salvage timber generated by exploration and land development	41) Utilization of salvaged merchantable volume <b>(Obj. 1.1b) (CSA 29)</b>	No penalties or warnings from ASRD as a result of poor timber utilization practices
			5.1.1.3 Include incidental birch in harvest designs	42) Area of birch identified in Final Harvest Plans <b>(Obj. 1.6)</b>	Identify birch stands in harvest designs
			5.1.1.4 Ensure utilization of deciduous volume from within harvest areas harvested by coniferous	43) Number of blocks where incidental deciduous (Aw and Pb) timber is not harvested <b>(Obj. 1.7)</b>	Zero



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
			quota or non-quota operators		
			5.1.1.5 Maintain the Sundance volume commitment as per FMA agreement	44) Volume delivered to Sundance <b>(Obj. 1.8)</b>	43,500 meters of deciduous and 43,500 meters of conifer annually
			5.1.1.6 Support the intent and guidelines of the Alberta Trapper Compensation Program Policy and Procedures	45) Trapper Compensation Claims <b>(Obj. 6.6)</b>	100% resolution of claims
5. Multiple Benefits in Society	5.2 Communities and Sustainability	5.2.1 Risk is low to communities and landscape values from wildfire and MPB	5.2.1.1 To reduce wildfire threat potential by reducing fire behaviour, fire occurrence, threats to values at risk and enhancing the suppression capability	46) Percentage reduction in Fire Behaviour Potential area (ha) within the Fire Smart Community Zone	Reduce the area (ha) in the extreme and high Fire Behaviour Potential rating categories by X% within the Fire Smart Community Zones
			5.2.1.2 To reduce the age class structure of pine forests to reduce the long-term susceptibility to mountain pine beetle (MPB) attack	47) Reduction of MPB susceptible stands	Follow the approved SHS from the MPB management plan
		5.2.2 Provide opportunities to derive benefits and participate in use and management	5.2.2.1 Maintain a forest management system that accommodates a variety of values and	48) Stakeholder review of harvest designs <b>(CSA 24)</b> <b>(Obj. 5.4, 5.5, 5.6, 5.7)</b>	Known affected stakeholders will be asked to review all harvest plans that impact their activities



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CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
			users	49) Direct consultation with the public regarding plans for and activities on the DFA ( <b>CSA 25</b> ) ( <b>Obj. 5.1</b> )	a) Address all issues as they arise during the consultation processes b) Update the current PIP by December 31, 2008
			5.2.2.2 Maintain a balance of haul distances	50) Average turn around times ( <b>Obj. 1.11</b> )	OSB – 4.5 hours SAW – 6.5 hours
			5.2.2.3 Ensure the Company's harvesting practices do not unduly impact on the viewshed in sensitive areas	51) Blocks within Primary or Secondary viewsheds ( <b>Obj. 6.10</b> )	Report number of blocks within primary or secondary viewsheds
5. Multiple Benefits in Society	5.2 Communities and Sustainability	5.2.2 Provide opportunities to derive benefits and participate in use and management	5.2.2.4 Prepare integrated operating plans for all grazing dispositions scheduled in the AOP	52) Grazing Timber Agreement (GTA) ( <b>Obj. 6.2</b> )	100% compliance
			5.2.2.5 Maintain current practices of access control when requested by ASRD	53) Access control ( <b>Obj. 6.8</b> )	100% compliance
		5.2.3 Forest Productivity	5.2.3.1 Maintain long run sustained yield average	54) Regenerated stand yield compared to natural stand yield ( <b>CSA 28</b> )	No net decrease from the natural stand productivity
6. Accepting society's responsibility for sustainable development	6.1 Aboriginal and treaty rights and aboriginal forest values	6.1.1 First Nations and Métis rights, interests and traditional uses in the land and natural resources	6.1.1.1 Forest management planning and activities will reflect First Nations and Métis rights, interests and traditional uses in the	55) First Nations or Métis Involvement or input into plans ( <b>CSA 34</b> ) ( <b>Obj. 5.4</b> )	Comply with all Provincial policy, framework and guidelines



November 1, 2016

CCFM Criterion	CSA SFM Element	Value	Objective	Indicator	Target
			land and natural resources		
		6.1.2 Métis and First Nations peoples' special and unique needs are respected and accommodated	6.1.2.1 Respect and protect known sites of historic, cultural and traditional significance	56) Number of identified First Nations and Métis sites <b>(Obj. 7.2) (CSA 38 and 39)</b>	Protect all known sites of historic, medicinal, spiritual, cultural or nutritional significance
	6.2 Public participation and information for decision-making	6.2.1 Public involvement in forest management planning	6.2.1.1 Meaningful involvement in certification and formal planning processes <b>(CSA 40) (Obj. 5.3)</b>	57) FAC review of Weyerhaeuser planning and operations	Produce an annual report for the FAC regarding Company activities and issues raised during the year



November 1, 2016

<b>Indicator 1</b>	<b>Target</b>
Area and percent of young, mature and late seral stages by cover types (DX, MX, PL, SW, PS and CX) in the net and gross landbase	Percent of Forested Landbase at 2015

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Acceptable  
Variance

By DFA, area (ha) of old (late, very late and over mature) and mature seral stage forests shall be between 90% and 100% of target areas.

By DFA, area of young (early and immature) seral stage forest shall not exceed 110% of target area.

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November 1, 2016

Current Status The following tables indicate seral stage distribution at 2015 for both the Net and the Gross Landbase (source 2008 MPB addendum):

Net landbase Summary	Species Groups	Area (ha)	Percent
Young	DX	28,642	9.3%
Young	MX	28,364	9.2%
Young	PL	32,660	10.6%
Young	SW	3,037	1.0%
Young	PS	12,567	4.1%
Young	CX	3,593	1.2%
Mature	DX	13,578	4.4%
Mature	MX	8,204	2.7%
Mature	PL	11,147	3.6%
Mature	SW	2,856	0.9%
Mature	PS	2,129	0.7%
Mature	CX	5,773	1.9%
Late	DX	37,278	12.1%
Late	MX	25,777	8.4%
Late	PL	43,123	14.0%
Late	SW	17,143	5.6%
Late	PS	21,734	7.0%
Late	CX	10,699	3.5%
	<b>Total</b>	<b>308,306</b>	<b>100.0%</b>



November 1, 2016

Current Status  
(continued)

Gross landbase Summary	Species Groups	Area (ha)	Percent
Young	DX	29,618	6.5%
Young	MX	29,031	6.4%
Young	PL	33,048	7.3%
Young	SW	3,078	0.7%
Young	PS	12,760	2.8%
Young	CX	4,775	1.1%
Mature	DX	16,643	3.7%
Mature	MX	9,710	2.1%
Mature	PL	12,514	2.8%
Mature	SW	3,882	0.9%
Mature	PS	2,373	0.5%
Mature	CX	31,212	6.9%
Late	DX	45,948	10.1%
Late	MX	30,702	6.8%
Late	PL	52,463	11.6%
Late	SW	23,565	5.2%
Late	PS	28,222	6.2%
Late	CX	83,650	18.5%
	<b>Total</b>	<b>453,193</b>	<b>100.0%</b>

Monitoring  
and  
Measurement

Regular updates to inventory. This occurs through the following activities:

- Updates to AVI as required by the planning standard
- Updates to harvest activities as they occur
- Updates to land use activities
- Updates to the landbase based on natural disturbance events i.e. fire, insect and disease, windthrow, etc.

Forest  
Management  
Activities

Follow the spatial harvest sequence from the 2008 MPB addendum.

Reporting  
Procedure

Analysis of gross and net forested landbase of actual areas and percents will occur at the next FMP in 2016.



November 1, 2016

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Linkages  
Between  
Strategic and  
Operational  
Plans

Following the Spatial Harvest Sequence should result in a fairly close match to the desired outputs at 2015 assuming non-harvest natural and man-made disturbances do not unduly impact the age class distribution.

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Forest  
Stewardship  
Comments

The DV FMA has been combined with the ED FMA, therefore no further analysis will be completed prior to the 2016 FMP.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 2</b>	<b>Target</b>
Size of harvest opening by DFA	Range of harvest areas reflect the approved SHS

Acceptable Variance <20% for each size category

Current Status Table 2-1: Average block class distribution by area classes

Year	Percent relative to total harvest area harvested					
	0-5.0	5.1-10.0	10.1-40.0	40.1-100.0	100.1-500.0	500.1 +
Target%	44%	24%	25%	5%	2%	0%
Target Range%	36-52	20-28	20-30	4-6	1-3	1-2
2006/07	21.7% 31/143	30.7% 44/143	43.4% 62/143	2.1% 3/143	2.1% 3/143	0% 0/143
2007/08	21% 13/62	16% 9/62	37% 23/62	19% 12/62	8% 5/62	0% 0/62
2008/09	4.5% 2/44	9.1% 4/44	45.6% 20/44	25% 11/44	15.9% 7/44	0% 0/44
2009/10	4.7% 2/43	7.0% 3/43	53.5% 23/43	20.9% 9/43	14.0% 6/43	0% 0/43
2010/11	11.1% 10/90	16.7% 15/90	46.7% 42/90	18.9% 17/90	6.7% 6/90	0% 0/90
2011/12	11.1% 10/90	16.7% 15/90	46.7% 42/90	18.9% 17/90	6.7% 6/90	0% 0/90
2012/13	8.3% 10/120	10.0% 12/120	56.7% 69/120	19.2% 23/120	5.0% 6/120	0% 0/120
2013/14	7.8% 5/64	18.8% 12/64	48.4% 31/64	12.5% 8/64	12.5% 8/64	0% 0/64
2014/15	2.9% 3/104	16.3% 17/104	49.0% 51/104	22.1% 23/104	9.6% 10/104	0% 0/104
2015/16	8.4% 13/154	14.9% 23/154	47.4% 73/154	22.7% 35/154	6.5% 10/154	0% 0/154
<b>Average</b>	<b>10.8%</b> <b>99/914</b>	<b>16.8%</b> <b>154/914</b>	<b>47.7%</b> <b>436/914</b>	<b>17.3%</b> <b>158/914</b>	<b>7.3%</b> <b>67/914</b>	<b>0%</b> <b>0/914</b>

Monitoring and Measurement Regular updates to actual harvest area inventory; ARIS updates.

Forest Management Activities Follow the spatial harvest sequence.



November 1, 2016

Reporting Procedure

Annual and stewardship reporting on distribution of harvest sizes by number and percent in each size category.

Linkages Between Strategic and Operational Plans

Following the Spatial Harvest Sequence should result in a fairly close match to the desired outputs at 2015.

Table 2-2: SHS block frequency, total area and percent distribution by area classes for periods 2 and 3 from the 2008 MPB Addendum

Block Size Class (ha)	Count/%	Area (ha)/%
0-5	1,549 (43.9%)	4,243 (8.0%)
6-10	839 (23.8%)	5,957 (11.25)
11-40	888 (25.2%)	16,491 (31.0%)
41-100	183 (5.2%)	11,399 (21.4%)
101-500	60 (1.7%)	10,161 (18.9%)
>500	8 (0.25)	5,131 (9.6%)
<b>Total</b>	<b>3,527(100.0%)</b>	<b>53,282 (100.0%)</b>

Forest Stewardship Comments

It appears that the data used to generate the tables were patch size, not block size. Patch size varies considerably from forecasted block size due to the amount of linear disturbances across the landscape, most notably seismic lines that broke blocks into patches.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 3	Target
Area of old interior forest (ignoring seismic lines) by total area and by selected major species groups: deciduous, mixedwood, Pine, Black Spruce and White Spruce	1) 25,218 ha (8.2% of total forest area) for the DFA  2) Area and relative % of each major species group for total forest area as follows: - DX*- 721 ha (0.8% of total DX) - MX *- 243 ha (0.3% of total MX) - PL – 14,996 ha (22% of total PL) -SB – 916 ha (0.7% of total SB) -SW – 8,342 ha (27% of total SW)  *DX and MX decline due to mortality function in yield curves

Acceptable Variance <20% of the target for each species group

Current Status Interior older forest summary by major species groups at end of period 3 (2015) – ignoring seismic lines :

DX – 721 ha (0.8% of total DX)  
 MX - 243 ha (0.3% of total MX)  
 PL – 14,996 ha (22% of total PL)  
 SB – 916 ha (0.7% of total SB)  
 SW – 8,342 ha (27% of total SW)

Monitoring and Measurement Regular updates to inventory and landuse cutover. Periodic updates to AVI.

Forest Management Activities Follow the spatial harvest sequence.

Reporting Procedure 2016 FMP will report on actual areas and percents for each species group.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Following the spatial harvest sequence should result in a fairly close match to the desired outputs at 2015. Non-forestry activities (Oil and Gas, fire, insects, etc.) could potentially have a much greater impact than forestry activities.

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Forest  
Stewardship  
Comments

Since the Edson FMA has been combined with the DV FMA, no further analysis will be completed.



November 1, 2016

Indicator 4	Target
Permanent forestry road density by DFA	Less than 0.075 km/km <sup>2</sup>

Acceptable Variance <20% by 2016

Current Status 2006 permanent forestry road density calculated as 0.068 km/km<sup>2</sup>.

Monitoring and Measurement Regular updates to inventory.

Forest Management Activities Timber operators will continue coordinated access plans with the energy sector where possible; reclaim disused permanent roads.

Reporting Procedure 2016 FMP will report on all permanent forestry and non-forestry roads.

Linkages Between Strategic and Operational Plans Minimizing permanent access will minimize impacts on future calculations of the net landbase.

Forest Stewardship Comments  
 Weyerhaeuser LOC roads = 265 km (Source:2015 WY GDP)  
 All other Forestry LOC roads = 10 km  
 Total permanent forestry roads = 275 km.  
 Density =275/5000 =0.055km/km<sup>2</sup>  
 No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 5</b>	<b>Target</b>
Kilometers of temporary (inter-block) access roads	Less than 165 km by DFA

Acceptable Variance <20% of the target

Current Status Table 5-1: Kilometers of open temporary roads open

Year	Kilometers of Temporary Road Open
2006/07	30
2007/08	6.0
2008/09	15.0
2009/10	12.0
2010/11	7.0
2011/12	10.0
2012/13	15.0
2013/14	1.2
2014/15	5.0
2015/16	13.9
<b>Total</b>	<b>115</b>
<b>Average</b>	<b>11.5</b>

Monitoring and Measurement The operational status reports will keep track of roads open.

Forest Management Activities Follow AOP and OGRs; monitor status of temporary roads.

Reporting Procedure Annual and stewardship report on estimated kilometers of open temporary roads on the DFA.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Temporary inter-block roads normally use existing linear disturbances, which have been removed from the productive forest landbase. If they go through existing timber, they will be reforested when the surrounding timber is harvested.

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Forest  
Stewardship  
Comments

The average kilometer of temporary open roads for the company was 13.4 km; normally, all roads are reclaimed within 2 years of harvest; roads are only kept open to facilitate access for silviculture purposes, and reclaimed thereafter.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 6</b>	<b>Target</b>
Unique biological or physical ecological sites	100% of sites are protected

Acceptable  
Variance

No variance; all known sites are protected from disturbance.





November 1, 2016

**Current Status** Known sites are buffered and remain outside of the block or are included with patches of structure retention. There have been no recent indications of disturbance of any known sites.

Table 6-1: Number of unique biological or physical sites protected from damage

Year	Percent of Sites protected
2006/07	No sites encounters; all known sites protected
2007/08	No sites encounters; all known sites protected
2008/09	No sites encounters; all known sites protected
2009/10	No sites encounters; all known sites protected
2010/11	No sites encounters; all known sites protected
2011/12	Three new springs protected in Wawa and Boundary H.D.A.'s
2012/13	13 spring protected in the Stevens Creek, South Rat Creek, Wawa, and West Rundell HDA's. 2 Bear dens protected in the West Rundell HDA.
2013/14	10 springs protected in the Crimson Lk, West Rundell. Rapid Creek and Stevens Creek HAD's. 1 bear den protected in the Crimson Lake HDA.
2014/15	21 springs protected in the Blackstone, Wawa, Canyon Creek, East Rundell, South Reservoir and Stevens Creek HDA's.
2015/16	23 active song bird nests were buffered, 10 stick nests were buffered, 10 springs protected, 1 bear den and 1 historical cabin all protected across the FMA.

**Monitoring and Measurement** Regular updates to inventory; descriptions included in harvest area details and Final Harvest Plans.



November 1, 2016

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Forest  
Management  
Activities

Follow OGR for protection of unique habitat features for rare plant species. Training of staff will occur upon identification of unique biological sites/ species that may occur on the DFA. Joyce Gould from ANHIC will provide direction for this indicator.

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Reporting  
Procedure

Annual and stewardship report on number and type of sites identified.

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Linkages  
Between  
Strategic and  
Operational  
Plans

There are no known sites within the DFA that have been removed from the productive landbase. Subsequent DFMPs will establish rules on how to handle sites identified since the last approved DFMP.

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Forest  
Stewardship  
Comments

All known sites received protection.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 7</b>	<b>Target</b>
Area of unsalvaged burned forest	<p>Live trees: Retain all unburned trees in green islands and retained patches</p> <p>Burned trees: (Landscape view) Retain &gt;10% of area with merchantable black (burnt) trees in salvage areas greater than 10 ha in size</p> <p>(Harvest Area Scale) Retain &gt;5% of area with merchantable black trees in salvage areas less than or equal to 10 ha in size</p>

Acceptable Variance      Greater than or equal to targeted percentages.

Current Status      No fire salvage has occurred recently on the DFA.

Table 7-1: Retention of live or black trees within blocks salvaged as a result of fire

Year	Percent of Black Trees Retained	
	Fire Area range from 0 to 10 hectares	Fire Area range from >= 10 hectares
2006/07	No salvage	No salvage
2007/08	No salvage	No salvage
2008/09	No salvage	No salvage
2009/10	No salvage	No salvage
2010/11	No salvage	No salvage
2011/12	No salvage	No salvage
2012/13	No salvage	No salvage
2013/14	No salvage	No salvage
2014/15	Lodgepole Fire 1295.1ha 3/14 blocks 5% Retention	Lodgepole Fire 1295.1ha 11/14 blocks 5% retention
2015/16	No salvage	No salvage

Monitoring and Measurement      Final harvest plans and AOPs will be used to estimate percent retentions of unsalvaged burned areas. ASRD will track all fires within the DFA, regardless of size. Weyerhaeuser will only track those fires for which ASRD has generated digital boundaries for.



November 1, 2016

Forest  
Management  
Activities

Salvage planning as required.

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Reporting  
Procedure

Annual and stewardship reporting on area retained as related to total area salvaged and total fire area.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Salvage areas will show up either in the harvest area history or in the updated AVI inventories as they occur. Provincial policy regarding unsalvaged fire areas will be used to determine their inclusion in the net productive landbase at each DFMP development stage.

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Forest  
Stewardship  
Comments

No salvage occurred, therefore no retention was required.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 8</b>	<b>Target</b>
Area of unsalvaged blowdown forest	In areas of blowdown exceeding 2 ha in size, an average of 10% of the area will be left unsalvaged

Acceptable Variance      Greater than or equal to targeted percentages.

Current Status      Table 8-1: Area of unsalvaged blowdown

Year	Percent of Unsalvaged Blowdown Area Retained
2006/07	382 of 604 ha unsalvaged – 63.2%
2007/08	Incidental salvage – no estimate of area
2008/09	Incidental salvage – no estimate of area
2009/10	Incidental salvage – no estimate of area
2010/11	Incidental salvage – no estimate of area
2011/12	Incidental salvage – no estimate of area
2012/13	Incidental salvage – no estimate of area
2013/14	Incidental salvage – no estimate of area
2014/15	Incidental salvage – no estimate of area
2015/16	Incidental salvage – no estimate of area

Monitoring and Measurement      Final harvest plans and AOPs will be used to estimate percent retentions of unsalvaged blowdown areas. Weyerhaeuser will only track those events that exceed 2 hectares and are known to have occurred recently.

Forest Management Activities      Salvage planning as required.

Reporting Procedure      Annual and stewardship reporting on area retained as related to total area salvaged and total blowdown area.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Salvage areas will show up either in the harvest area history or in the updated AVI inventories as they occur. Provincial policy regarding unsalvaged blown down areas will be used to determine their inclusion in the net productive landbase at each DFMP development stage.

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Forest  
Stewardship  
Comments

A small wind event created several patches of blowdown, of which approximately 40% was not salvaged.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 9</b>	<b>Target</b>
Riparian Management Zones	Full compliance with the OGRs

Acceptable Variance      None; full compliance with OGRs

Current Status      Table 9-1: Number of non-compliances within riparian management zones

Year	Compliance
2006/07	Full compliance
2007/08	Full compliance
2008/09	Full compliance
2009/10	Full compliance
2010/11	Full compliance
2011/12	Full compliance
2012/13	Full compliance
2013/14	Full compliance
2014/15	Full compliance
2015/16	Full compliance

Monitoring and Measurement      Will follow all self-reporting agreements.

Forest Management Activities      Follow final harvest plans, AOPs and OGRs.

Reporting Procedure      Annual and stewardship reporting on the number of incidents of non-conformance.

Linkages Between Strategic and Operational Plans      None



November 1, 2016

Forest Stewardship Comments Full compliance occurred.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 10</b>	<b>Target</b>
Areas planted within pure 'D' harvest areas	Plant areas having inadequate hardwood stocking

Acceptable Variance      None

Current Status      Generally, reclaimed roads within pure deciduous blocks are planted with either spruce or pine.

Table 10-1: Area of harvested pure deciduous planted with conifer seedlings

Year	Area of Harvested Pure Deciduous Planted with Conifer Seedlings
2006/07	25
2007/08	249
2008/09	31
2009/10	49
2010/11	9
2011/12	32
2012/13	21
2013/14	206
2014/15	62
2015/16	77
<b>Summary</b>	<b>761</b>

Monitoring and Measurement      Silviculture AOP and ARIS will be used.

Forest Management Activities      Planting activities will follow the silviculture AOP.

Reporting Procedure      Annual and stewardship reporting on area planted within the pure deciduous harvest areas.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Incidental species are reflected within natural and regenerated yield curves.

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Forest  
Stewardship  
Comments

Generally, only roads and associated landing within pure deciduous cutovers area planted. The DV OSB facility ceased operations in late 2007.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 11</b>	<b>Target</b>
OGR compliance for understorey protection	100% compliance

Acceptable Variance      None

Current Status      Table 11-1: Compliance to OGR regarding understorey protection (penalties only).

Year	Compliance
2006/07	No Penalties
2007/08	No Penalties
2008/09	No Penalties
2009/10	No Penalties
2010/11	No Penalties
2011/12	No Penalties
2012/13	No Penalties
2013/14	No Penalties
2014/15	No Penalties
2015/16	No Penalties

Monitoring and Measurement      ARIS or ARS

Forest Management Activities      Follow operating ground rules when defining avoidance or planned protection requirements.

Reporting Procedure      Annual and stewardship reporting on non-compliance of OGR relating to understorey protection; area and ocular estimate of density (stems per hectare) retained from planned understorey protection, by block.

Linkages Between Strategic and Operational Plans      Incidental species are reflected within natural and regenerated yield curves.



November 1, 2016

Forest  
Stewardship  
Comments

Generally, avoidance protection versus planned protection was practiced throughout.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 12	Target
Contribution to future incidental yields	Replace incidental yields

Acceptable Variance      NA

Current Status      Follow ARS standards

Monitoring and Measurement      ARS; ARIS

Forest Management Activities      Establishment and performance surveys will be completed on all harvested areas.

Reporting Procedure      Stewardship reporting to compare incidental volume contributions from performance surveys to DFMP yield assumptions.

Linkages Between Strategic and Operational Plans      Underperformance will reduce future annual allowable cuts.

Forest Stewardship Comments      Provincial regeneration standards are followed, based on provincial strata.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 13</b>	<b>Target</b>
Percent of retained merchantable volume	Stand retention of an average of 5% of all species utilized

Acceptable Variance      Retention on average should not drop below 3% merchantable retention in any given year.

Current Status      Table 13-1: Annual percent of retained merchantable volume by operator.

Year	Merchantable Retention Estimates* (Percentage)		
	Deciduous	Coniferous	Average
2006/07	4.77%	7.11%	6.3%
2007-09	3.2%	2.9%	6.1%
2009-11	4.3%	3.4%	7.7%
2012-13	TBD	TBD	TBD
2014-15	TBD	TBD	TBD
<b>average</b>	<b>3.8%</b>	<b>3.1%</b>	<b>6.9%</b>

\*Weyerhaeuser currently calculates retention every two to three years

Monitoring and Measurement      Periodic photo and ground surveys occur to estimate success of retention program.

Forest Management Activities      Machine operator awareness drives this program. Very few of the retention patches are ribboned out prior to harvest.

Reporting Procedure      Annual and stewardship report on actual retention as determined by the structure retention program. Periodic production volumes will be reconciled with monitoring results at the end of each production period.

Linkages Between Strategic and Operational Plans      Merchantable retention was removed from the AAC prior to approval. It was expected to be an estimate of success for the program, not an auditing tool. However, ASRD will apply it as such, and any retention in excess of the 5% average will be applied as production at the end of each period, based on the previous five years retention (for the period starting May 1, 2006). No credit will be given for retention less than 5%.



November 1, 2016

Forest Stewardship Comments	Stand retention numbers fluctuate from block to block and season to season. The overall estimates appear to suggest our targets were an over-estimate of expected results. Adjustments will be made to the targets in the next FMP.  No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

<b>Indicator 14</b>	<b>Target</b>
Coarse down woody debris levels by harvest area (low, moderate, high)	100% of harvest areas retain down woody debris at or above preharvest levels

Acceptable Variance      10% below preharvest levels

**Current Status**      Preharvest slash conditions are generally light to moderate at best throughout the DFA. Very few areas would be rated as heavy. It is never the intent to reduce DWD other than the breaking up and redistribution of slash within the harvest area from skidding activities. No slash reduction strategies have been used in the recent past.

Currently, levels of DWD are noted on block description sheets completed during layout.

Table 14-1: Estimate of DWD in pre/post harvest situations

Year	Percent of Down Woody Debris as compared to total harvested area					
	Low		Medium		High	
	Pre	Post	Pre	Post	Pre	Post
2006/07	100	100	0	0	0	0
2007/08	100	100	0	0	0	0
2008/09	100	100	0	0	0	0
2009/10	100	100	0	0	0	0
2010/11	100	100	0	0	0	0
2011/12	100	100	0	0	0	0
2012/13	100	100	0	0	0	0
2013/14	100	100	0	0	0	0
2014/15	100	100	0	0	0	0
2015/16	100	100	0	0	0	0

**Monitoring and Measurement**      Final Harvest Plans; Operations status reporting; Ocular determination at the pre (layout) and post (skid clearance) harvest intervals will occur.

**Forest Management Activities**      DWD will be left in the harvest areas. Reduction of DWD due to excessive amounts of slash would be identified in the silviculture AOP.





November 1, 2016

Reporting Procedure Annual and stewardship reporting on percent of harvest areas meeting or exceeding preharvest levels.

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Linkages Between Strategic and Operational Plans DWD retention aids biodiversity and soil properties.

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Forest Stewardship Comments 100% of harvest areas retained down woody debris at or above preharvest levels; all areas harvested had low levels of DWD present prior to logging.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 15</b>	<b>Target</b>
Unique biological or physical sites	Protect 100% of the sites as identified

Acceptable Variance      None; all known sites protected

Current Status      Table 15-1: Annual percent of unique biological or physical sites protected from damage.

Year	Percent of Sites protected
2006/07	100%; One raptor nest identified and protected
2007/08	All sites protected; no new ones identified
2008/09	All sites protected; no new ones identified
2009/10	All sites protected; no new ones identified
2010/11	All sites protected; no new ones identified
2011/12	All sites protected; no new ones identified
2012/13	All sites protected; no new ones identified
2013/14	All sites protected. One rocky outcrop (potential erratic) identified by first nations protected in the West Rundell HDA.
2014/15	All sites protected; no new ones identified
2015/16	All sites protected; no new ones identified

Monitoring and Measurement      Final Harvest Plans; AOPs; OGRs.

Forest Management Activities      Sites to be protected will be identified in the final harvest plans. Sites within harvest areas will appear on individual block description forms.

Reporting Procedure      Annual and stewardship reporting on the number of sites protected.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

These types of sites are normally confined to small areas that are not normally recognized in strategic plans geographically, other than as an objective to protect the sites.

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Forest  
Stewardship  
Comments

All known sites were protected by appropriate buffers.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 16</b>	<b>Target</b>
Forestry water crossings in compliance with Code of Practice for Water Course Crossings within each Subunit	100% of designs meet standards of the Code of Practice for Water Course Crossings.

Acceptable Variance      None; full compliance

Current Status      Table 16-1: Percentage of designs meetings standards of the Code of Practice for Watercourse Crossings

Year	Compliance
2006/07	WY - One FER -#06-06-PB – rain event in June 2006 caused stream to flood and wash out a portion of bridge abutment on Chambers Creek West Road, bridge #2 (NE 32-40-10-W5M)
2007/08	100% Compliance
2008/09	100% Compliance
2009/10	100% Compliance
2010/11	100% Compliance
2011/12	100% Compliance
2012/13	100% Compliance
2013/14	100% Compliance
2014/15	100% Compliance
2015/16	100% Compliance

Monitoring and Measurement      Self reporting by operators if non-compliances occur.

Forest Management Activities      Road construction, maintenance and reclamation.



November 1, 2016

Reporting Procedure Annual and stewardship reporting on percent of crossings meeting standards.

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Linkages Between Strategic and Operational Plans

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Forest Stewardship Comments 100% of designs met standards of the Code of Practice for Water Course Crossings.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 17	Target
Species of Concern	Assess next DFMP

Acceptable Variance Not applicable

Current Status After discussion with F&W, it was determined that the next DFMP will assess habitat for the following species

- Grizzly bear
- Barred owl
- Mature forest bird guild (species diversity index tracked over time)
- Cold water fish species

Monitoring and Measurement Not applicable

Forest Management Activities Assess next DFMP

Reporting Procedure Start after next DFMP.

Linkages Between Strategic and Operational Plans Not applicable

Forest Stewardship Comments Habitats for selected species of concern will be addressed in the 2016 DFMP, and may differ from those identified in this report.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 18</b>	<b>Target</b>
Indicator species groups 1) Breeding birds 2) Nocturnal raptors	Maintain a monitoring program for the species listed

Acceptable Variance      None

Current Status      Currently all guilds are monitored every three years.

Table 18-1: Summary of annual surveys for Breed Birds and Nocturnal Raptors

Year	Species Group Surveyed
2006/07	No surveys
2007/08	Breeding birds completed summer 2007 Nocturnal raptors spring 2008
2008/09	No surveys
2009/10	No surveys
2010/11	Raptors – spring 2011
2011/12	Songbird – summer 2011
2012/13	No surveys
2013/14	Raptors and songbirds
2014/15	No surveys
2015/16	No surveys

Monitoring and Measurement      Periodic surveys of species groups.

Forest Management Activities      Periodic surveys.

Reporting Procedure      Annual and stewardship reporting on monitoring results.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

The maintenance of a monitoring program for the species listed will be reviewed prior to the development of the 2016 DFMP.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 19</b>	<b>Target</b>
Species used in reforestation	100% of reforestation is with locally occurring species

Acceptable Variance      None

Current Status      Table 19-1: Summary of areas planted by species.

Year	Area Planted by Species			
	Sw	Sb	PI	Other
2006/07	1443	0	810	0
2007/08	371	0	724	0
2008/09	256	0	707	0
2009/10	122	0	143	0
2010/11	344	0	1208	0
2011/12	588	0	1343	0
2012/13	1257	0	1657	0
2013/14	825	0	1855	0
2014/15	339	0	1438	0
2015/16	117	0	1503	0
<b>Summary</b>	<b>5662</b>	<b>0</b>	<b>11388</b>	<b>0</b>

Monitoring and Measurement      ARIS

Forest Management Activities      Silviculture AOP identifies planned planting activities; information loaded into ARIS at end of the season.

Reporting Procedure      Annual and stewardship reporting of species used in reforestation.

Linkages Between Strategic and Operational Plans      Reforestation of landbase should be consistent with what was previously found on site, by BCG. Strategically, blocks transition to their same BCG, with the exception of stocking levels (crown closure assumed to be 'C'). Species within specific blocks will change, however there is no strategy to change species mix.



November 1, 2016

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Forest Stewardship Comments	100% of reforestation by planting used locally occurring species No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

<b>Indicator 20</b>	<b>Target</b>
Compliance with guidelines	100% compliance to OGR

Acceptable Variance      None; full compliance – no penalties

Current Status      Table 20-1: Summary of compliance of OGRs

Year	Compliance
2006/07	No penalties
2007/08	No penalties
2008/09	No penalties
2009/10	No penalties
2010/11	No penalties
2011/12	No penalties
2012/13	No penalties
2013/14	No penalties
2014/15	No penalties
2015/16	No penalties

Monitoring and Measurement      AOP, self reporting

Forest Management Activities      Follow OGR for operating in critical wildlife areas. Final harvest plans should identify blocks that are within these areas.

Reporting Procedure      Annual and stewardship reporting on non-compliances. Source for reporting is ESRD compliance web site.

Linkages Between Strategic and Operational Plans      These areas are not identified as strategic constraints, other than expanded buffers for Trumpeter Swans.



November 1, 2016

Forest Stewardship Comments	Full compliance to operating ground rules. No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

Indicator 21	Target
Number and area (ha) of in situ genetic conservation areas	Number (X) of genetic conservation areas for each seed zone conforming with Section 20 of the Green Area section of Standards for Tree Improvement in Alberta (yet to be determined by ASRD)

Acceptable Variance      None; provincial policy to be followed

Current Status      There are currently no genetic conservation areas identified on the DFA. Until they are, the Company will follow acceptable gene conservation strategies for in-situ genetic material as outlined in section 20.0 of the Standard, and is summarized for the entire DFA below:

- Existing reserves within the DFA, i.e. Wapiabi Provincial Recreation Area (3,151 ha), Marshybank Ecological Reserve (907 ha)
- Subjective deletions: i.e. streamside buffers (10,758 ha), river buffers (1,016 ha), lake buffers (1,646 ha), highway buffers for highway 11 and 22 (678 ha), steep areas (10,009 ha), etc. (source: 2005 landbase determination for the DFMP)
- Harvested areas dedicated to natural regeneration i.e. Leave For Natural (LFN) for deciduous blocks or LFN for pine drag blocks
- Harvested areas will use wild seed from the associated seed zones: this is the current approach by all operators on the DFA
- Understory protection (traditionally carried out across the DFA as encountered), and
- Variable retention (retention makes up approximately 5% of area harvested within each seed zone)

Table 21-1: Summary of seed collected

Year	Seed Collected
2006/07	No seed collected
2007/08	SW - 3.1kg.
2008/09	none
2009/10	none
2010/11	SW – 10 kg
2011/12	PL – 20- SW 26Kg.
2012/13	PL 113.7 kg SW 0kg
2013/14	PI 128.3 kg, Sw 34.5 kg
2014/15	PL 49.9 kg, SW 0 kg
2015/16	13.9 kg PL/ 65.1 kg of HASOC seed Region I Sw



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Monitoring and Measurement	AVI updates, ground or air checks to confirm status.
Forest Management Activities	Consistency with government policy. Conservation areas will be designated with a notation (PNT, CNT, ISP, etc.)
Reporting Procedure	Annual and stewardship reporting on number and area of sites per seed zone.
Linkages Between Strategic and Operational Plans	None
Forest Stewardship Comments	<p>There are currently no genetic conservation areas identified on the DFA. Until they are, the Company will follow acceptable gene conservation strategies for in-situ genetic material as outlined in section 20.0 of the Standard.</p> <p>No further analysis will be completed prior to the 2016 FMP.</p>



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Indicator 22	Target
Number of provenances and genetic lines in ex-situ gene banks and trials	Active ex-situ conservation program for all Controlled Parentage Program plan species and other species in cooperation with Alberta

Acceptable Variance

Confirmed Program Plan

Current Status

The only program that has trees for reforestation is our Region I white spruce program. There 165 families for this breeding region which are in Ex-situ conservation (planted off FMA) at this time. Long term (10 years from now) we may only target 10% of this population for conservation.

Monitoring and Measurement

Conservation activities identified as per '*Standards for Tree Improvement in Alberta*'.

Forest Management Activities

Work in cooperation with Alberta and in accordance with the '*Standards for Tree Improvement in Alberta*' (sections 17 and 29).

Reporting Procedure

Stewardship report on controlled parentage program.

Linkages Between Strategic and Operational Plans

None; no recognition of genetically improved stock impacts on AAC.

Forest Stewardship Comments

The only program that has trees for reforestation is our Region I white spruce program. There 165 families for this breeding region which are in Ex-situ conservation (planted off FMA) at this time. Long term (10 years from now) we may only target 10% of this population for conservation.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 23</b>	<b>Target</b>
Opportunities for an Enhanced Forest Management (EFM) Program	Report on identified EFM opportunities

Acceptable Variance      Not applicable; EFM strategies were not identified in the DFMP.

Current Status      No EFM strategies being applied on the DFA.

Table 23-1: Summary of EFM strategies utilized.

Year	EFM Strategies by Year
2006/07	No strategies applied
2007/08	No strategies applied
2008/09	No strategies applied
2009/10	No strategies applied
2010/11	No strategies applied
2011/12	No strategies applied
2012/13	No strategies applied
2013/14	No strategies applied
2014/15	No strategies applied
2015/16	No strategies applied

Monitoring and Measurement      Inventory updates, ARIS

Forest Management Activities      No activity.

Reporting Procedure      Annual and stewardship reporting on EFM initiatives.

Linkages Between Strategic and Operational Plans      None.





November 1, 2016

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Forest  
Stewardship  
Comments

No EFM strategies being applied on the DFA.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 24</b>	<b>Target</b>
Stakeholder consultation	Ongoing consultations with relevant protected areas' agencies

Acceptable Variance None

Current Status No current consultations are taking place. In the past, the Company has worked closely with Jasper National Park on harvesting activities in proximity to the park boundary.

Table 24-1: Summary of consultations regarding protected areas' agencies.

Year	Consultations with Protected Areas' Agencies
2006/07	No transboundary issues addressed
2007/08	No transboundary issues addressed
2008/09	No transboundary issues addressed
2009/10	No transboundary issues addressed
2010/11	No transboundary issues addressed
2011/12	No transboundary issues addressed
2012/13	No transboundary issues addressed
2013/14	No transboundary issues addressed
2014/15	No transboundary issues addressed
2015/16	No transboundary issues addressed

Monitoring and Measurement Documentation of consultation processes.

Forest Management Activities Consult with Federal and Provincial Park agencies as necessary. Integrate transboundary values and objectives into forest management practices.

Reporting Procedure Annual and stewardship report on issues addressed during consultations.

Linkages Between Strategic and Operational Plans None.



November 1, 2016

Forest Stewardship Comments      No transboundary issues identified.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 25</b>	<b>Target</b>
Annual percentage (%) of area for SR establishment surveys	95% on an annual basis for establishment surveys

Acceptable Variance      None

Current Status      Table 25-1: Summary of annual establishment survey results by operator

Year	Blocks Surveyed		Blocks Passed		Percentage	
	Number	Area (ha)	Number	Area (ha)	(by number)	(by area)
2006/07	125	1677	120	1615	96.0%	96.3%
2007/08	90	1886	87	1841	96.7%	97.6%
2008/09	129	1874	115	1778	89.1%	94.9%
2009/10	199	3487	193	3378	97.0%	96.9%
2010/11	50	543	37	448	70.0%	82.5%
2011/12	336	6362	286	5666	85.1%	89.1%
2012/13	134	3132	126	2991	94.0%	95.5%
2013/14	236	6719	214	6378	90.7%	94.9%
2014/15	186	4245	176	3707	94.6%	87.3%
2015/16	34	1076	30	911	88.2%	84.7%
	1519	31001	1384	28713	91.1%	92.6%

Monitoring and Measurement      Establishment surveys

Forest Management Activities      Establishment surveys to be completed as per provincial policy.

Reporting Procedure      Annual and stewardship reporting on number of blocks and area surveyed that are SR relative to the total area and number of harvest areas surveyed on an annual basis.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Successful establishment surveys act as a determining factor to define the length of regeneration lag used in the TSA.

Forest  
Stewardship  
Comments

Establishment survey success rates are on target, on a area basis, however below target on a block by block basis. Survey methods have changed since this indicator was developed.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 26</b>	<b>Target</b>
Annual % of area for SR performance surveys	To be determined with the development of Alternative Regeneration Standards (ARS)

Acceptable Variance      None (once the target has been set with ARS)

Current Status      Table 26-1: Summary of performance survey results

Year	Operator	Blocks Surveyed		Blocks Passed		Percentage	
		Number	Area (ha)	Number	Area (ha)	(by number)	(by area)
2006/07	WY	15	165	11	110	66.7%	66.7%
2007/08	WY	26	410	16	205	61.4%	50.0%
2008/09	WY	49	769	36	521	73.5%	67.8%
2009/10	WY	19	256	19	256	100.0%	100.0%
2010/11	WY	437	5347	436	5346	99.8%	99.8%
2011/12	WY	10	97	10	97	100%	100%
2012/13	WY	167	2070	166	2044	99.4%	98.7%
2013/14	WY	42	843	41	9	97.6%	99.9%
2014/15	WY	117	2241	116	2238	99.1%	99.9%
2015/16	WY	89	1387	89	1387	100.0%	100.0%
	<b>Total</b>	<b>971</b>	<b>13585</b>	<b>940</b>	<b>12213</b>	<b>96.8%</b>	<b>89.9%</b>

Monitoring and Measurement      Performance surveys; ARIS

Forest Management Activities      Performance surveys will be completed with required timelines.



November 1, 2016

Reporting Procedure      Annual and stewardship reporting on area and number of harvest areas surveyed that are SR relative to the total area and number of harvest areas surveyed.

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Linkages Between Strategic and Operational Plans      Degree of success in performance surveys will impact future AACs.

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Forest Stewardship Comments      No target was developed for this indicator. Provincial regeneration standards are used.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 27</b>	<b>Target</b>
Cumulative percentage (%) of SR areas (establishment and performance)	100% of harvest areas that were harvested on or after May 1, 2001 meet Provincial or approved reforestation standards

Acceptable Variance      None

Current Status      The Company carries liability on all reforested areas until success is achieved. All blocks must pass an establishment survey.

Table 27-1: Cumulative totals of Weyerhaeuser surveys since inception of the FMA on November 18, 1985 (IF and IQ only).

Calendar Year Harvested	Unsurveyed	PSC	RTD	SR	CSR	NSR	Total Area (ha)
1986/07	0	0	0	304	0	0	304
1987/08	0	0	0	1044	0	0	1044
1988/09	0	0	0	1324	0	0	1324
1989/90	0	0	0	2462	0	0	2462
1990/91	0	0	0	2015	0	0	2015
1991/92	0	0	0	992	0	0	992
1992/93	0	0	0	1396	0	0	1396
1993/94	0	0	0	1831	0	122	1953
1994/95	0	0	21	1718	13	22	1774
1995/96	0	28	0	2196	4	16	2244
1996/97	0	4	0	1744	1	0	1749
1997/98	0	0	3	1801	0	0	1804
1998/99	0	28	0	1478	26	0	1532
1999/00	0	49	0	1917	20	0	1986
2000/01	0	0	0	1631	0	0	1634
2001/02	0	0	13	2192	0	0	2205
2002/03	0	0	58	2294	3	46	2401
2003/04	0	0	119	1891	0	39	2049
2004/05	0	0	252	1856	0	115	2231
2005/06	0	0	16	1349	0	68	1962
2006/07	0	0	25	94	0	16	1808
2007/08	1895	0	0	0	0	0	1895
2008/09	1283	0	0	440	0	42	1764
2009/10*	2260	0	0	0	0	0	2260
2010/11	2321	0	0	0	0	0	2321
2011/12	2373	0	0	0	0	0	2373
2012/13	2489	0	0	0	0	0	2489
2013/14	2382	0	0	0	0	0	2382
2014/15	3508	0	0	0	0	0	3508
2015/16	4091	0	0	0	0	0	4091
Summary	17215.6	109	507	33969	67	486	52353
Percent	32.9%	0.2%	1.0 %	64.9%	0.1%	0.9%	100. %





November 1, 2016

Monitoring and  
Measurement

ARIS

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Forest  
Management  
Activities

None

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Reporting  
Procedure

Annual and stewardship report on percent of areas SR for areas harvested after May 1, 2001.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Poor regeneration performance will be identified in future AVI updates and impact future AACs accordingly.

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Forest  
Stewardship  
Comments

Company continues to reforest cutovers to the provincial standards.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 28</b>	<b>Target</b>
Reforestation effort	100% of harvest areas are reforested within two years

Acceptable Variance      None

Current Status      Table 28-1: Summary of reforestation effort compliance

Year	Compliance
2006/07	100%
2007/08	100%
2008/09	1 penalty for non-conformance
2009/10	100%
2010/11	100%
2011/12	100%
2012/13	100.0%
2013/14	100%
2014/15	100%
2015/16	100%

Monitoring and Measurement      ARIS

Forest Management Activities      All blocks harvested must complete silviculture treatments within 2 years of harvest.

Reporting Procedure      Annual and stewardship reporting on percent of blocks reforested within two years of harvest.

Linkages Between Strategic and Operational Plans      Prompt reforestation minimizes regeneration lag.



November 1, 2016

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Forest Stewardship Comments	One non-conformance. No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

<b>Indicator 29</b>	<b>Target</b>
Maintain accurate silviculture records	100% compliance

Acceptable Variance      None

Current Status      Table 29-1: Summary of penalties issued for non-compliance

Year	Compliance
2006/07	100%
2007/08	100%
2008/09	100%
2009/10	100%
2010/11	100%
2011/12	100%
2012/13	1 penalty for data issues
2013/14	1 penalty for data issues
2014/15	1 penalty for data issues
2015/16	100%

Monitoring and Measurement      ARIS

Forest Management Activities      Accurate updating of silviculture information into ARIS.

Reporting Procedure      Annual and stewardship reporting on of penalties issued for non-conformance.

Linkages Between Strategic and Operational Plans      Harvest area descriptions identified in ARIS are used to link these areas to yield curves; direct impact on AAC if inaccuracies occur.



November 1, 2016

Forest Stewardship Comments	Full compliance. No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

<b>Indicator 30</b>	<b>Target</b>
Changes in DFA landbase	A program in place to return landbase lost through industrial activity to the forested landbase

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Acceptable Variance      None

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November 1, 2016

**Current Status** Several permanent roads have been straightened in the last several years resulting in unused portions of older roads.

Table 30-1: Summary of roads reclaimed and planted

Year	Disposition Type	Area (ha)	Length (km)
2006/07	1) Petrocan Wawa – reclaimed and ready to plant 2) NRR – km 0-4 reclaimed and ready to plant 3) Silvestre Road – reclaimed and ready to plant 4) Billybog Road – reclaimed and ready to plant	9 6 9 5	6 4 6 3.3
2007/08	None	0	0
2008/09	None	0	0
2009/10	NRR – Km 19.5 NRR – Km 0	.78 3.1	.5 2
2010/11	Various LOC roads	35.78	17.9
2011/12	None	0	0
2012/13	None	0	0
2013/14	None	0	0
2014/15	None	0	0
2015/16	None	0	0
<b>Summary</b>		<b>68.66</b>	<b>37.2</b>

Table 30-2: Summary of Land use dispositions reclaimed annually

Year	Area Treated (ha)		Comments
	Site Prep	Planted	
2006/07	54	69	Well sites and access roads
2007/08	48.5	48.5	Well sites and access roads
2008/09	104.5	0	Well sites and access roads
2009/10	0	0	No reclamation activity
2010/11	0	0	No reclamation activity
2011/12	0	0	No reclamation activity
2012/13	0	0	No reclamation activity
2013/14	0	0	No reclamation activity
2014/15	0	0	No reclamation activity
2015/16	0	7.3	Portions of old alignment
<b>Summary</b>	<b>207</b>	<b>124.8</b>	



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Current Status  
(continued)

Table 30-3: Summary of net LU disposition area removed by year

Year	Area in Hectares						
	LOC/ DLO	MSL/ DML	PLA/ DPL	Other	Crown	Total	Percent of DFA
Pembina FMA - 890,000 ha							
06/07-07/06	338	457	658	21	0	1474	0.17%
07/06-08/06	191	351	560	81	0	1183	0.13%
08/07-09/06	88	198	294	76	0	656	0.07%
09/12-10/11	-1043.9	702.3	407.6	-500.5	12.06	-446.6	-0.05%
10/12-11/11	1507.8	665.1	722.9	657.4	0.1	3553.2	0.36%
11/12-12/11	268.7	573.2	872.8	101.5	78.1	1894.2	0.19
12/12-13/11	-1194.8	508.0	571.3	-478.6	4.37	589.7	0.06
13/12-14/11	1498	693	742	658	69.4	3660	0.41
14/12-15/11	0	0	0	0	0	0	0
15/12-16/11	0	0	0	0	0	0	0
<b>Summary</b>	<b>1652.8</b>	<b>4147.6</b>	<b>4828.6</b>	<b>615.8</b>	<b>164.03</b>	<b>12563.5</b>	<b>1.41%</b>

Combined FMAs: Approximate area of DFA – 890,000 hectares. Pembina FMA information provided by ESRD – Ted Edwards

Monitoring and  
Measurement

Inventory and landuse systems

Forest  
Management  
Activities

Actively pursue opportunities to reforest industrial areas returned to the DFA.

Reporting  
Procedure

Annual and stewardship reporting on areas afforested by program; report on additions to and deletions from the DFA.

Linkages  
Between  
Strategic and  
Operational  
Plans

Additions and deletions directly affect the net productive landbase, thereby having an impact on the calculated AAC.

Forest  
Stewardship  
Comments

A net 5/10 of 1% was removed from the entire landbase. Approximate 100 hectares of old industrial landbase was planted.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 31</b>	<b>Target</b>
Amount of area affected	Area (ha) affected by significant outbreaks, infestations, natural calamities

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Acceptable Variance      None

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November 1, 2016

Current Status **a) Loss due to Fire:**

Table 31-1: Amount of area affected by fire

Year	Hectares burned
2006/07	13
2007/08	3.0
2008/09	14
2009/10	6
2010/11	19
2011/12	687
2012/13	351
2013/14	838
2014/15	0
2015/16	0
<b>Summary</b>	<b>1093</b>

**b) Loss due to Insects:** Current insect outbreak on the DFA is limited to the aspen defoliator large aspen tortrix (*Choristoneura conflictana*). It is not considered as significant in terms of its impact on the long term health of the DFA or harvest levels. These are associated impacts, not landbase losses. There are no direct losses due to insects.

Table 31-2: Amount of area affected by insects by severity level

Year	Insect	Severity (ha)
2006/07	Large Aspen Tortrix	<ul style="list-style-type: none"> <li>• Light – 0</li> <li>• Moderate – 6,191</li> <li>• Severe – 29,269</li> </ul>
2007/08	Large Aspen Tortrix, Forest Tent Caterpillar, Bruce Spanworm, Linden Looper	<ul style="list-style-type: none"> <li>• Light – 67,560</li> <li>• Moderate – 306,636</li> <li>• Severe – 11,061</li> </ul>
2008/09	NA	No detectable infestations
2009/10	NA	No detectable infestations
2010/11	NA	No detectable infestations
2011/12	NA	No detectable infestations
2012/13	NA	No detectable infestations
2013/14	NA	No detectable infestations
2014/15	NA	No detectable infestations
2015/16	NA	No detectable infestations



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Current Status  
(continued)

**c) Disease:** Presently there is no disease outbreak on the DFA considered as significant.

**d) Windthrow:**

Table 31-3: Summary of area affected by windthrow.

Year	Area (ha)	Description
2006/07	627	One patch in Stevens Creek and one patch in Elke Summers
2007/08	0	NA
2008/09	0	NA
2009/10	0	NA
2010/11	0	NA
2011/12	0	NA
2012/13	0	NA
2013/14	0	NA
2014/15	0	NA
2015/16	0	NA
<b>Summary</b>	<b>627</b>	

**e) Summary**

Table 31-4: Summary of disturbance levels

Year	Fire (ha)	Insects (ha)	Disease (ha)	Wind throw (ha)	Total Area (ha)
2006/07	13	0	0	627	640
2007/08	3	0	0	0	3
2008/09	14	0	0	0	14
2009/10	6	0	0	0	7
2010/11	19	0	0	0	19
2011/12	687	0	0	0	687
2012/13	351	0	0	0	351
2013/14	838	0	0	0	838
2014/15	0	0	0	0	0
2015/16	0	0	0	0	0
<b>Summary</b>	<b>1931</b>	<b>0</b>	<b>0</b>	<b>627</b>	<b>2559</b>

Monitoring and Measurement

Annual detection surveys; fire suppression activities; by calendar year instead of operating year.

Forest Management Activities

Aerial surveys by ASRD; fire suppression activities by ASRD



November 1, 2016

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Reporting  
Procedure

Annual and stewardship reporting on areas affected by agent.

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Linkages  
Between  
Strategic and  
Operational  
Plans

All impacts will have some direct/indirect impact to forest health and forest growth.

Forest  
Stewardship  
Comments

Area (ha) affected by significant outbreaks, infestations, and other natural calamities was relatively small at approximately 1400 hectares, or 0.27% of the total FMA landbase.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 32</b>	<b>Target</b>
Area lost due to natural causes	<2.5% of total DFA landbase by decade

Acceptable Variance: None

Current Status: **Summary of Natural Losses:**

Table 32-1: Summary and percent of area affected by natural disturbances

Year	Fire (ha)	Insects (ha)	Disease (ha)	Windthrow (ha)	Total Area (ha)	Total Percent
2006/07	13	0	0	627	640	0.1300%
2007/08	3	0	0	0	3	0.0006%
2008/09	14	0	0	0	14	0.0028%
2009/10	7	0	0	0	7	0.0012%
2010/11	19	0	0	0	19	0.0038%
2011/12	687	0	0	0	687	0.1374%
2012/13	351	0	0	0	351	0.0702%
2013/14	838	0	0	0	838	0.1700%
2014/15	0	0	0	0	0	0
2015/16	0	0	0	0	0	0
<b>Sum</b>	<b>1932</b>	<b>0</b>	<b>0</b>	<b>627</b>	<b>2559</b>	<b>0.52%</b>

\*total DFA area rounded to 500,000 hectares for this calculation

Monitoring and Measurement: Final harvest plans, AOPs, ASRD reports

Forest Management Activities: Active planning and salvage harvesting of impacted areas.

Reporting Procedure: Annual and stewardship reporting on areas salvaged as a result of natural causes as compared to total area affected.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Salvage logging charged as production. If areas not salvaged, the potential long term impacts on AAC is high.

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Forest  
Stewardship  
Comments

Area (ha) affected by significant outbreaks, infestations, and other natural calamities was relatively small at approximately 1400 hectares, or 0.27% of the total DV FMA landbase.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 33</b>	<b>Target</b>
Noxious weed program	Maintain a noxious weed program

Acceptable Variance      None

Current Status      Table 33-1: Summary activities supporting the noxious weed program.

Year	Treatments
2006/07	WY - Spot treatments on <100 km of LOCs
2007/08	WY - Spot treatments on <100 km of LOCs
2008/09	No treatments
2009/10	Treated 15.9 ha. - Rose Creek Rd. and Sand Creek North Rd.
2010/11	Treated 16.86 ha – various LOC's
2011/12	Treated 4.0 ha – various LOC's
2012/13	Treated 135 ha on various LOC's
2013/14	Treated 12.8 ha – various LOC's
2014/15	Treated 8.5 ha on various pit sites. Treated 40 Km's on various DLO's within the Drayton Valley area.
2015/16	Treated a total of 17.1 km on various DLO's within the Drayton Valley area.

Monitoring and Measurement      Company will report on identified noxious weed infestations and control measures undertaken for invasive plants that have been identified as a concern.

Forest Management Activities      Active weed management program; co-operative programs with ASRD and other industrial operators.

Reporting Procedure      Annual and stewardship reporting on area or number of sites treated.



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Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

A noxious weed program was maintained, with treatments occurring on 10-15 hectares annually, mainly along LOC right-of-ways.

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 34</b>	<b>Target</b>
Compliance with Pembina ground rules	All blocks will have less than 5% soil disturbance unless prior approval is received from ASRD

Acceptable Variance      None

Current Status      Full compliance with OGRs

Table 34-1: Summary of compliance to OGRs relative to soil disturbance levels within cut blocks

Year	Compliance
2006/07	Full compliance
2007/08	Full compliance
2008/09	Full compliance
2009/10	NA – OGR change
2010/11	NA – OGR change
2011/12	NA – OGR change
2012/13	NA – OGR change
2013/14	NA – OGR change
2014/15	NA – OGR change
2015/16	NA – OGR change

Monitoring and Measurement      Self reporting

Forest Management Activities      Areas are calculated either at the AOP stage or harvest stage. Blocks that have in excess of 5% roads within them require approval as an OGR deviation.

Reporting Procedure      Annual and stewardship reporting on non-compliance to OGRs.

Linkages Between Strategic and Operational Plans      None



November 1, 2016

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Forest  
Stewardship  
Comments

This indicator became N/A in 2009 with the change in the operating ground rule concerning interior block road disturbance levels.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 35</b>	<b>Target</b>
Incidence of soil erosion and slumping	Complete compliance

Acceptable Variance      None

Current Status      Table 35-1: Summary of incidents of soil erosion or slumping

Year	Compliance
2006/07	Full compliance; no FERs created
2007/08	Full compliance; no FERs created
2008/09	Full compliance; no FERs created
2009/10	Full compliance; no FERs created
2010/11	Full compliance; no FERs created
2011/12	Full compliance; no FERs created
2012/13	Full compliance; no FERs created
2013/14	Full compliance; no FERs created
2014/15	Full compliance; no FERs created
2015/16	Full compliance; no FERs created

Monitoring and Measurement      Field inspections and audits; self reporting

Forest Management Activities      Forest operations should attempt to minimize all opportunities for soil erosion for soil slumping.

Reporting Procedure      Annual and stewardship reporting on any non-conformances.

Linkages Between Strategic and Operational Plans      None



November 1, 2016

Forest  
Stewardship  
Comments

There were no incidents of soil erosion or slumping.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 36</b>	<b>Target</b>
Watershed yields	Modeled fourth-order watershed yields will be less than 120% of natural watershed yields

Acceptable Variance      None

Current Status      Table 36-1: Summary of Watershed analysis completed

Year	Watershed Modeled
2006/07	No watershed modeled; consistent with the DFMP
2007/08	ECA analysis completed during development of the 2008 MPB plan
2008/09	No watershed modeled; consistent with the DFMP
2009/10	No watershed modeled; consistent with the DFMP
2010/11	No watershed modeled; consistent with the DFMP
2011/12	No watershed modeled; consistent with the DFMP
2012/13	No watershed modeled; consistent with the DFMP
2013/14	No watershed modeled; consistent with the DFMP
2014/15	No watershed modeled; consistent with the DFMP
2015/16	No watershed modeled; consistent with the DFMP

Monitoring and Measurement      Final harvest plans; GDP

Forest Management Activities      Follow the approved SHS and variance requirements.

Reporting Procedure      Annual and stewardship reporting on watersheds where ECA or WRENNS analysis has occurred.



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Linkages  
Between  
Strategic and  
Operational  
Plans

SHS analyzed to stay within threshold. Going beyond thresholds may initiate a change to the SHS, and have other long term impacts to the AAC.

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Forest  
Stewardship  
Comments

Watershed yields were completed on areas where SHS variances exceed 20%; analysis completed as described in the approved MPB dfmp.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 37</b>	<b>Target</b>
Riparian management zones	Complete compliance

Acceptable Variance      None

Current Status      See indicator 9 as well.

Table 37-1: Summary of compliance results regarding riparian management zones (no penalties)

Year	Compliance
2006/07	No penalties
2007/08	No penalties
2008/09	No penalties
2009/10	No penalties
2010/11	No penalties
2011/12	No penalties
2012/13	No penalties
2013/14	No penalties
2014/15	No penalties
2015/16	No penalties

Monitoring and Measurement      Self reporting

Forest Management Activities      Follow OGRs

Reporting Procedure      Annual and stewardship reporting on non-compliances.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest Stewardship Comments	Full compliance with OGR's regarding riparian areas. No further analysis will be completed prior to the 2016 FMP.
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November 1, 2016

Indicator 38	Target
Impact on carbon production	Identify and review forest management activities as related to carbon storage and release.

Acceptable Variance      Not applicable

Current Status      Forest management activities related to carbon storage:

- Harvesting older forest first, allowing the more thrifty, mature forest to continue to grow
- Protecting understorey during harvesting so that larger, thriftier trees occupy the site faster than replanted stock
- Harvesting forests to produce dimensional lumber and paneling for construction
- Retaining live structure that continues to grow
- Preventing large scale forest fire/ disease/ insect occurrences
- Retaining harvest debris piles for wildlife
- Coordinating road or other linear development between the Company and other resource industries so that impacts on forest growing stock is minimized
- Reforesting reclaimed industrial dispositions such as wellsites and LOCs so that a forest would occupy the site versus either shrub or grass
- Promptly reforesting harvest areas to minimize regeneration lag
- Leaving down woody debris throughout a cutover instead of piling and burning, and
- Minimizing temporary road development to minimize soil disturbance levels

Forest management activities related to carbon release:

- Small fires occurred throughout the DFA
- Endemic levels insects and disease affecting the thriftiness of forest
- Harvest debris piles burned annually
- Participation in the Firesmart Community Program
- Soil disturbance of temporary and permanent roads
- Clearing of land for industrial activity, and
- Fossil fuels burned during Company harvesting and planning operations

Monitoring and Measurement      Review forest management activities and the Weyerhaeuser CSA Sustainable Forest Management Plan



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Forest Management Activities

N/A

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Monitoring Procedure

Annual and stewardship reporting on activities that increase or decrease carbon storage.

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Linkages Between Strategic and Operational Plans

None

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Forest Stewardship Comments

Forest management activities as related to carbon storage and release were identified and reviewed.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 39	Target
Access development	Coordinate and plan with other users

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Acceptable Variance      None

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November 1, 2016

Current Status Table 39-1: Summary of the coordination of access development

Year	Operator	Co-ordination comments
2006/07	WY	<ol style="list-style-type: none"> <li>1. Canyon Creek West End – developed common corridor with Talisman 7 km</li> <li>2. Wawa Creek Road – extension to Petro Canada lease of 1 km</li> <li>3. Nordegg River Road (NRR) – completed development of km 6 through 13.5</li> <li>4. NRR – realigned ROW at km 49 with Husky</li> <li>5. Chungo south – realigned 1 km and installed crossing with Clearwater County</li> <li>6. Wapiabi – Brushing with Clearwater County</li> <li>7. Boundary Road – Replaced bridge with Burmis, North Rock and Rider</li> <li>8. NRR tributary – involved in route selection with Prime West</li> <li>9. Numerous pipeline route developmental discussions with the O&amp;G industry</li> </ol>
	TPTL	Baptiste River road with Weyerhaeuser
2007/08	WY	<ol style="list-style-type: none"> <li>1. O’Chiese LMU corridor development with EnCana</li> <li>2. Husky Dehy Road – preliminary plan for road realignment</li> <li>3. Nordegg River Road at KM 22 to 32 realignment</li> <li>4. Numerous pipeline route developmental discussions with the oil and gas industry</li> </ol>
	TPTL	Use current linear disturbances for access
2008/09	WY	<ul style="list-style-type: none"> <li>• One road with Husky</li> </ul>
	TPTL	Use current linear disturbances for access
2009/10	WY	Nordegg River Road at KM 11 – coordinated new road with Conoco Phillips
2010/11	WY	West end of Wawa construction - Husky
2011/12	WY	None
2012/13	WY	Upgraded Boundary and Rose Creek Roads using original alignments.
2013/14	WY	Upgraded Boundary Road using original alignments.
2014/15	WY	Pipeline route discussions with O&G.
2015/16	WY	<p>Pipeline route discussions with O&amp;G.                      Relife Rapid Creek Road with Peyto.                      Upgrade Chambers Creek West Road using original alignment.                      Canyon Creek winter road with West Fraser.                      Chungo Road with Yellowhead County and Direct Energy.</p>



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Monitoring and Measurement	Regular updates to inventory
Forest Management Activities	Coordinate access development through consultation with other industrial operators.
Monitoring Procedure	Annual and stewardship reporting on permanent roads developed in cooperation with other users on the DFA.
Linkages Between Strategic and Operational Plans	Access coordination will reduce the loss of productive forest landbase, directly impacting future AACs.
Forest Stewardship Comments	Numerous instances of co-operation have occurred. No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 40</b>	<b>Target</b>
Level of harvest	Total timber drain does not exceed the periodic AAC except as specified in the FMA agreement

Acceptable Variance Overproduction/underproduction applied to the following period to balance periodic harvest levels.

Current Status Table 40-1: Periodic and Quadrant Annual Allowable Cuts and production volumes commencing May 1, 2006 for all timber operators

Operator	Periodic or Quadrant AAC Conifer	Conifer Production to date	Periodic or Quadrant AAC Deciduous	Deciduous Production to date
<b>For the period May 1, 2006 to November 30, 2009 (3.58686 years)</b>				
WY R12 only	2,314,453	1,679,865 (72.6%)	1,126,056	427,590 (38.0%)
<b>For the period December 1, 2009 to April 30, 2015 (5.41347 years)</b>				
WY R12 only	5,281,653	4,251,904 (80.5%)	2,097,977	866,389 (41.3%)
<b>For the period May 1, 2015 to April 30, 2020 (5 years)</b>				
WY R12 only	5,281,653	1,042,030 (19.7%)	2,097,977	270,228 (12.9%)

Note: current quadrant allocation assumed to be same as previous quadrant available volume

Latest audit period completed: Dec. 1, 2009 to April 30, 2015

Monitoring and Measurement TPRS and timber production audits

Forest Management Activities Accurately report volumes produced from timber dispositions and industrial salvage activities.

Monitoring Procedure Annual and stewardship reporting on actual production.



November 1, 2016

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Linkages  
Between  
Strategic and  
Operational  
Plans

Volumes produced should accurately reflect volumes anticipated from approved yield curves

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Forest  
Stewardship  
Comments

Total timber drain has not exceeded the periodic AAC.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 41</b>	<b>Target</b>
Utilization of salvaged merchantable volume	No penalties or warnings from ASRD as a result of poor timber utilization practices.

Acceptable Variance      None

Current Status      Table 41-1: Summary of compliance to utilization standards.

Year	Compliance
2006/07	Full compliance
2007/08	Full compliance
2008/09	1 non-compliance
2009/10	Full compliance
2010/11	1 non-compliance
2011/12	Full compliance
2012/13	1 non-compliance
2013/14	Full compliance
2014/15	Full compliance
2015/16	Full compliance

Monitoring and Measurement      TDA volumes; TPRS

Forest Management Activities      Accurately report industrial salvage using approved tables.

Monitoring Procedure      Annual and stewardship reporting of non-compliances for poor utilization of industrial salvage; reporting of volumes charged against PAAC.

Linkages Between Strategic and Operational Plans      Volumes charged against production should accurately reflect actual volumes harvested and utilized.





November 1, 2016

Forest  
Stewardship  
Comments

Two penalties for non-compliance ofutilization of timber were issued.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 42</b>	<b>Target</b>
Area of birch identified in Final Harvest Plans	Identify birch stands in harvest designs

Acceptable Variance      None

Current Status      Table 42-1: Summary of area of birch stands identified for harvest.

Year	Harvest design	Number of Blocks
2006/07	None	N/A
2007/08	None	N/A
2008/09	None	N/A
2009/10	None	N/A
2010/11	None	N/A
2011/12	None	N/A
2012/13	None	N/A
2013/14	None	N/A
2014/15	None	N/A
2015/16	None	N/A

Monitoring and Measurement      Final Harvest Designs

Forest Management Activities      Indicate areas of birch in final harvest designs and detailed block information as they are identified. Information to be shared with ASRD.

Monitoring Procedure      Annual and stewardship reporting on areas of birch identified in final harvest plans.

Linkages Between Strategic and Operational Plans      Birch is chargeable to the deciduous AAC.



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Forest  
Stewardship  
Comments

The OSB facility ceased operations in 2007. No requests for birch were made (or were handled by the local ESRD offices.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 43</b>	<b>Target</b>
Number of blocks where incidental deciduous (AW and PB) timber is not harvested	Zero

Acceptable Variance      None

Current Status      Table 43-1: Summary of blocks where deciduous timber not harvested

Year	Number of Blocks Where Incidental Species not harvested
2006/07	None
2007/13	All deciduous, with the exception of volume generated as a result of building roads or landings, was unharvested. The OSB facility has ceased production. Incidental volumes are hauled to the Edson OSB facility. Stranded deciduous volume is charged as production.
2013/2015	Deciduous from mixedwood stands harvested primarily for conifer was for the most part utilized and hauled to the Edson OSB facility; all other deciduous volume charged as production
2015/16	Deciduous in TPTL blocks accounted as drain; arrangements to be made to have future deciduous hauled to Edson OSB facility

Monitoring and Measurement      Self reporting of non-compliance

Forest Management Activities      Integrated timber operations to minimize wastage of incidental species.

Monitoring Procedure      Annual and stewardship reporting on number of blocks where incidental deciduous volumes not harvested.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

Incidental timber volumes are chargeable to the periodic and quadrant AACs.

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Forest  
Stewardship  
Comments

The OSB facility ceased operations in 2007. Some aspen was hauled to the Edson OSB facility. Generally, D and DC stands were avoided.

No further analysis will be completed prior to the 2016 FMP.



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<b>Indicator 44</b>	<b>Target</b>
Volume delivered to Sundance	43,500 meters of deciduous and 43,500 meters of conifer annually

Acceptable Variance Not applicable

Current Status Table 44-1: Summary of deciduous and conifer volumes traded between Sundance and the DV facilities

Year	Deciduous volumes chargeable to Sundance but delivered to Weyerhaeuser (DV)	Conifer volumes chargeable to Weyerhaeuser but delivered to Sundance (DV)
2006/07	1,084	0
2007/08	6,413	0
2008/09	0	0
2009/10	0	0
2010/11	0	0
2011/12	0	0
2012/13	0	0
2013/14	0	0
2014/15	0	0
2015/16	0	0
<b>Summary</b>	<b>7,497</b>	<b>0</b>

Note: DV OSB facility ceased operations on December 7, 2007

Monitoring and Measurement TPRS, Timber Production Audits

Forest Management Activities Volumes sourced from final harvest plans and current AOPs

Monitoring Procedure Annual and stewardship reporting on volumes delivered to or received from Sundance.

Linkages Between Strategic and Operational Plans Volumes are chargeable to the FMA where the timber is sourced.



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Forest  
Stewardship  
Comments

The OSB facility ceased operations in 2007. All of the conifer volume going to Sundance is delivered from Pembina North (old ED FMA).

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 45</b>	<b>Target</b>
Trapper Compensation Claims	100% resolution of claims

Acceptable Variance None

Current Status Table 45-1: Summary of trapper compensation claims made.

Year	Percent Resolution of Claims
2006/07	No claims
2007/08	No claims
2008/09	No claims
2009/10	No claims
2010/11	No claims
2011/12	No claims
2012/13	No claims
2013/14	No claims
2014/15	No claims
2015/16	No claims

Monitoring and Measurement AOP

Forest Management Activities N/A

Monitoring Procedure Annual and stewardship reporting on percent of claims resolved.

Linkages Between Strategic and Operational Plans None

Forest Stewardship Comments  
 No trapper compensation claims have come to light.  
 No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

<b>Indicator 46</b>	<b>Target</b>
Percentage reduction in Fire Behaviour Potential area (ha) within the Fire Smart Community Zone	Reduce the area (ha) in the extreme and high Fire Behaviour Potential rating categories by X% within the Fire Smart Community Zones

Acceptable Variance      To be defined.

Current Status      Table 46-1: Summary of areas reduced via fire smarting programs.

Year	Percent Variance to SHS
2006/07	Area not determined by ASRD therefore no calculations made
2007/08	Area not determined by ASRD therefore no calculations made
2008/09	Area not determined by ASRD therefore no calculations made
2009/10	Area not determined by ASRD therefore no calculations made
2010/11	Lodgepole – 166 hectares treated in Fire Smart program
2011/12	No programs
2012/13	No programs
2013/14	No programs
2014/15	No programs
2015/16	No programs

Monitoring and Measurement      AOPs, FHPs, Compartment Assessments

Forest Management Activities      ASRD to model Fire Behavior Potential rating using the approved SHS. Follow the SHS.

Monitoring Procedure      Annual and stewardship reporting on variance of the SHS within the Firesmart Community Zones.



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Linkages  
Between  
Strategic and  
Operational  
Plans

Final harvest plans should follow the approved SHS.

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Forest  
Stewardship  
Comments

The community of Lodgepole received some Fire Smart activity.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 47</b>	<b>Target</b>
Reduction of MPB susceptible stands	Follow the approved SHS from the MPB management plan

Acceptable Variance +/- 20% by area of the approved SHS by LMU by decade

Current Status Table 47-1: Summary of variance to the approved SHS from the 2008 MPB addendum

Year	Cumulative variance
2007/08	No variances calculated; SHS Manager being developed with Silvacom
2008/09	6.58%
2009/10	9.43%
2010/11	9.87%
2011/12	10.22%
2012/13	11.41%
2013/14	11.46%
2014/15	11.70%
2015/16	11.85%

Monitoring and Measurement Regular updates to inventory and the GDP.

Forest Management Activities Follow the approved SHS.

Monitoring Procedure Annual and stewardship reporting on percent variance to the approved SHS by LMU.

Linkages Between Strategic and Operational Plans Following the approved SHS will mean a closer link between the actual and the theoretical AACs.



November 1, 2016

Forest  
Stewardship  
Comments

The approved SHS from the MPB management plan was followed to varying degrees; variances ranged from .01 to 21.9% within the 10 LMUs. Decade two of the SHS begins May 1, 2015, at which date the variance is reset to zero. Average SHS variance to date is 10.22%.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 48</b>	<b>Target</b>
Stakeholder review of harvest designs	Known affected stakeholders will be asked to review all harvest plans that impact their activities

Acceptable  
Variance  
Current Status

None; all issues identified through the stakeholder consultation process will be addressed.  
Table 48-1: Summary of issues addressed during final harvest plan development

Year	Issues addressed
2006/07	<ul style="list-style-type: none"> <li>• trapper concern regarding activities (2)</li> <li>• notification of road building activities</li> <li>• historical access for ATV/snowmobile use (2)</li> <li>• harvesting timelines in the Blackstone</li> <li>• protection of frogs on trapline</li> <li>• hauling near recreation area</li> <li>• road safety regarding loading of equipment (2)</li> <li>• damage to fenceline</li> <li>• notification at layout stage</li> <li>• meadow buffers</li> </ul>
2007/08	<ul style="list-style-type: none"> <li>▪ Trapper cabin in the HD area and the trapper requested WY move the cabin to a new location.</li> <li>▪ Trapper cabin in an active logging area but not inside the block.</li> <li>▪ MPB information package given and discussed with all trappers in active logging areas.</li> <li>▪ Trapper trails to be left open when completed logging blocks.</li> <li>▪ Home owner wants fire wood from the harvest block close to his home. Would like the in block road closed when logging complete. Logging road was reclaimed when logging was completed.</li> <li>▪ In block roads reclaimed too aggressively not allowing Quad use by trappers. Revisited after Silviculture treatment and it was ok for access.</li> </ul>
2008/09	<ul style="list-style-type: none"> <li>• Review of the Final plans and AOP with five Trappers. The two trappers wanted seismic lines left open for access to their trap lines and one trapper wanted a buffer places around a spring used as water for his cabin.</li> </ul>
2009/10	<ul style="list-style-type: none"> <li>• 26 trappers were notify and informed about the 2010 AOP.</li> <li>• 5 Trappers requested and reviewed FHP.</li> <li>• 8 trappers received 10 day notifications.</li> <li>• One trapper requested a boundry change and received it.</li> <li>• One trapper requested and received a trailer load of unfinished scrap lumber 2x6 for making martin boxes.</li> <li>• 1 Grazing disposition holder was met with to discuss harvesting.</li> </ul>



November 1, 2016

Current Status Table 48-1: Summary of issues addressed during final harvest plan development

Year	Operator	Issues addressed
2010/11	WY	<ul style="list-style-type: none"> <li>• 26 trappers were notify and informed about the 2011 AOP.</li> <li>• 11 Trappers were visited in person and reviewed the FHP or AOP for their areas.</li> <li>• 12 trappers received 10 day notifications.</li> <li>• One trapper requested a boundry change and received it.</li> <li>• One trapper received a half ton load of 2x6 for marten boxes</li> </ul>
2011/12	WY	<ul style="list-style-type: none"> <li>• 17 trapper were notified about the 2011/12 AOP and received information packages.</li> <li>• 1 Outfitter was notified about the 2011/12 AOP and received information packages.</li> <li>• 1 Grazing disposition notified about the 2011/12 AOP and received information packages.</li> <li>• 2 Trappers put Trapline access on our maps.</li> <li>• 14 trappers received 10 day notifications</li> <li>• 1 trapper was notified of a trapline access closure</li> <li>• 12 Trappers reviewed Final Harvest designs in their area.</li> <li>•</li> </ul>
2012/13		<ul style="list-style-type: none"> <li>• 8 Trappers reviewed FHP's on the FMA</li> <li>• 4 trappers did in person AOP reviews</li> <li>• 16 trappers received 10 day notivications.</li> <li>• 13 trappers received AOP packages.</li> <li>• 3 days in field with First Nations review.</li> <li>• 1 grazing disposition review and notification.</li> <li>• 1 trap line opened.</li> </ul>
2013/14		<ul style="list-style-type: none"> <li>• 16 trappers received 10 day notifications</li> <li>• 11 trappers received AOP packages</li> <li>• 9 trappers reviewed the AOP with staff</li> <li>• 1 quad trail was cleaned for use</li> <li>• 6 trappers reviewed upcoming FHP</li> </ul>
2014/15		<ul style="list-style-type: none"> <li>• 36 Trappers received AOP packages</li> <li>• 17 Trappers received FHP packages</li> <li>• 25 Trappers received 10 day notifications</li> <li>• 10 Grazers reviewed harvest palans</li> <li>• 1 outfitter reviewed harvest plans</li> </ul>
2015/16		<ul style="list-style-type: none"> <li>• 39 Trappers received AOP packages</li> <li>• 22 Trappers received FHP packages</li> <li>• 25 Trappers received 10 day notifications</li> <li>• 7 Grazers reviewed harvest palans</li> <li>• 1 outfitter reviewed harvest plans</li> <li>• 12 trappers had inperson Harvest plan reviews.</li> </ul>



November 1, 2016

Monitoring and Measurement	Record comments received during all stakeholder consultation processes.
Forest Management Activities	Process in place to record all stakeholder consultations/concerns regarding any forest practice.
Monitoring Procedure	Annual and stewardship reporting on all issues addressed as identified through the stakeholder consultation process.
Linkages Between Strategic and Operational Plans	None
Forest Stewardship Comments	All stakeholder concerns addressed as they occurred. No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 49</b>	<b>Target</b>
Direct consultation with the public regarding plans for and activities on the DFA	a) Address all issues as they arise during the consultation processes  b) Update the current Public Involvement Plan (PIP) by December 31, 2008

Acceptable Variance

None; all issues identified through the consultation process

Current Status

a) Table 49-1: Summary of direct consultation processes during the year and the resulting issues identified

Year	Activity	Issues/Concerns Raised
2006/07	Open houses held in Drayton Valley, Nordegg and Rocky Mountain House	<ul style="list-style-type: none"> <li>• type of pesticides and herbicides used at the tree improvement center</li> <li>• concerns over herbicide use and their affects on the environment, birds, and wildlife</li> <li>• interest in attending FAC meetings</li> <li>• request for more information regarding herbicide use, harvest plans, and aesthetics</li> <li>• economic opportunities for the Alexis and Sunchild bands</li> <li>• public access into the Blackstone area during operations</li> </ul>
2007/08	Internal communication with the public	<ul style="list-style-type: none"> <li>• Log being dragged behind the truck. Logger did a walk around at the last check stop before the mill and all was ok. No indication until arrival at the mill.</li> <li>• Public concern about logging truck speed on the Highway.</li> <li>• Lights at the mill too bright on surrounding Twp roads. Met with Brazeau County and resolved.</li> <li>• Two incidences of vehicles hitting logs in the road on our FMA.</li> </ul>
2008/09	Internal communication with the public	No issues raised with the public
2009/10	Internal communication with the public	<ul style="list-style-type: none"> <li>• Trapper notifications and follow-ups</li> <li>• First Nations GDP review</li> <li>• First Nations get-togethers</li> </ul>





November 1, 2016

Current Status a) Table 49-1 con't: Summary of direct consultation processes during the year and the resulting issues identified

Year	Operator	Activity	Issues/Concerns Raised
2010/11	WY	Internal communication with the public	No issues raised with the public
2011/12	WY	Three local newspaper advertisements inviting input into the AOP and FHPs and also internal communication with the public.	No issues were raised through the process.
2012/13	WY	Herbicide program advertized and open house held	No issues were raised through the process.
2013/14	WY	Herbicide program advertized and open house held	No issues were raised through the process.
2014/15	WY	Herbicide program advertized and open house held	No issues were raised through the process.
2015/16	WY	Herbicide program advertized and open house held	No issues were raised through the process.



November 1, 2016

Current Status (continued) b) Drayton Valley's PIP has not been updated during this reporting period. In lieu of the Province's Mountain Pine Beetle Action Plan, the Company and Alberta Sustainable Resource Development prepared the *Mountain Pine Beetle Prevention Public Involvement Plan*.

The goals of this MPB PIP are:

- i. To foster stakeholder understanding and support for the *Mountain Pine Beetle Action Plan for Alberta*.
- ii. Provide meaningful opportunities for the public and stakeholders to review and comment on MPB plans.
- iii. To provide staff the opportunity to obtain information on the *Mountain Pine Beetle Action Plan for Alberta* and implementation of forest management strategies.
- iv. Deliver the MPB message prior to final implementation of the Detailed Forest Management Plan amendment.

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Monitoring and Measurement Final harvest plans, AOPs, direct and indirect consultations during any planning process.

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Forest Management Activities Annual open houses, direct mailouts, etc.

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Monitoring Procedure Annual and stewardship reporting of list of issues addressed; provide update on status of the PIP.

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Linkages Between Strategic and Operational Plans N/A

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Forest Stewardship Comments All issues brought forward from stakeholders during consultation processes were addressed. The consultation Log for SRD changed in the spring of 2012, and was used to track FN GDP consultations. The Silvacom Consultation tracker was used for all other stakeholders.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 50</b>	<b>Target</b>
Average turn-around-time	OSB – 4.5 hours
	SAW – 6.5 hours

Acceptable Variance OSB +/-1.0 hours; Sawmill +/-1.5 hours

Current Status Table 50-1: Summary of average cycle times for the two Weyerhaeuser facilities in Drayton Valley:

Year	Average Turn-around Times	
	OSB	Sawmill
2006/07	4.3	5.2
2007/08	4.2	5.5
2008/09	NA	5.2
2009/10	NA	5.1
2010/11	NA	4.7
2011/12	NA	5.3
2012/13	NA	4.6
2013/14	NA	5.0
2014/15	NA	4.96
2015/16	NA	4.5

OSB mill in Drayton Valley shutdown on December 17, 2007.

Monitoring and Measurement Average turn-around times used in the AOP.

Forest Management Activities Average turn-around times calculated each spring for the AOP/GDP.

Monitoring Procedure Annual and stewardship reporting on average cycle times.

Linkages Between Strategic and Operational Plans The approved SHS to reflect desired average cycle times for the life of the DFMP (10 years).



November 1, 2016

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Forest  
Stewardship  
Comments

The average turn-around-time for conifer to DV was generally on the extreme variance limit below the average target anticipation, at 5.2 hours.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 51</b>	<b>Target</b>
Blocks within primary or secondary viewsheds	Report number of blocks within primary or secondary viewsheds

Acceptable Variance      None

Current Status      Table 51-1: Summary of blocks located within primary or secondary viewsheds.

Year	Number of Blocks	
	Primary Viewshed	Secondary Viewshed
2006/07	TPTL – 4 blocks along Brazeau Res SH 620	None
2007/08	None	None
2008/09	None	TPTL – 1 block
2009/10	None	None
2010/11	None	None
2011/12	None	Two blocks along Highway 11
2012/13	None	None
2013/14	None	None
2014/15	None	None
2015/16	None	None

Monitoring and Measurement      Final Harvest Plans

Forest Management Activities      FHP to address aesthetic concerns.

Monitoring Procedure      Annual and stewardship reporting on number of blocks in FHPs that fall within primary and secondary viewsheds, by LMU.



November 1, 2016

Linkages  
Between  
Strategic and  
Operational  
Plans

None

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Forest  
Stewardship  
Comments

A total of 7 blocks were identified within primary or secondary viewsheds.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 52</b>	<b>Target</b>
Grazing Timber Agreement (GTA)	100% compliance

Acceptable Variance None

Current Status Table 52-1: Summary of GTAs completed annually.

Year	Resolution of Claims
2006/07	No GTAs developed
2007/08	No GTAs developed
2008/09	No GTAs developed
2009/10	No GTAs developed
2010/11	No GTAs developed
2011/12	No GTAs developed
2012/13	No GTAs developed
2013/14	No GTAs developed
2014/15	No GTAs developed
2015/16	No GTAs developed

Monitoring and Measurement Final Harvest Plans; AOP

Forest Management Activities Grazing and Timber Agreements to be completed prior to each operating year.

Monitoring Procedure Annual and stewardship reporting on number on percent of completed GTAs relative to the number required.

Linkages Between Strategic and Operational Plans None

Forest Stewardship Comments No logging has occurred on grazing dispositions.  
No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 53</b>	<b>Target</b>
Access control	100% compliance

Acceptable Variance      None, full compliance

Current Status

Year	Access Control Compliance	# Access Points Established	Effectiveness of Access Control Points
2006/07	No access control measures identified	None	No issues
2007/08	No access control measures identified	None	No issues
2008/09	No access control measures identified	None	No issues
2009/10	Barricades	Access control points (barriers) established on following roads – 38 spur and 42 Spur	No issues
2010/11	Barricades	Access on Wawa – Grizzly Bear access control	No issues
2011/12	Barricades	Access Control on Yorky Road	No Issues
2012/13	Barricades	Access Control on Trunk Road Prebuild, Shepherd Road, Harlech Road Prebuild, Wawa Road	No Issues





November 1, 2016

Current Status Table 53-1(continued): Summary of access control issues

Year	Access Control Compliance	# Access Points Established	Effectiveness of Access Control Points
2013/14	Barricades	Access control on all AOP pre-builts	Issues with barriers being moved; heavier barricades being implemented.
2014/15	Barricades	Access control on all AOP Prebuilts	No Issues
2015/16	Barricades	Access control on all AOP Prebuilts	No Issues

Monitoring and Measurement

AOPs

Forest Management Activities

Access control points will be identified in the FHP.

Monitoring Procedure

Annual and stewardship reporting on percent of compliance and number of access controls implemented; effectiveness of access controls.

Linkages Between Strategic and Operational Plans

None

Forest Stewardship Comments

Access control measures (barriers) were put in place in the west country in association with grizzly bear management.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

Indicator 54	Target
Regenerated stand yield compared to natural stand yield	No net decrease from the natural stand productivity

Acceptable Variance      Not applicable

Current Status      **No analysis will occur until 2016**

Monitoring and Measurement      Growth and Yield Program, PSPs, ARS.

Forest Management Activities      Follow growth and yield program for establishment and remeasurement protocols.

Monitoring Procedure      Annual and stewardship reporting on the number of PSPs established or remeasured annually relative to the growth and yield monitoring program.

Linkages Between Strategic and Operational Plans      Data collected will validate the difference between natural stands and harvested stands.

Forest Stewardship Comments      Natural stand (PSPs) and Regenerating (GYMP's) continue to be re-measured or established. There are currently 421 PSPs and 90 GYMPs actively being managed.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 55</b>	<b>Target</b>
First Nations or Métis Involvement or input into plans	Comply with all Provincial policy, framework and guidelines

Acceptable Variance      None

Current Status      Table 55-1: Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2006/07	Alexis – met two times in 2006	Review of Memorandum of Understanding
	Sunchild – met four times	<ul style="list-style-type: none"> <li>• Employment opportunities</li> <li>• JFR program</li> <li>• School Career Day</li> </ul>
	O'Chiese – one meeting	Trapper notification
2007/08	GDP was shared with the O'Chiese, Sunchild and Alexis bands	No issues related to harvest areas that would constitute a change to the AOP
2008/09	GDP shared with the following bands: <ul style="list-style-type: none"> <li>• O'Chiese</li> <li>• Alexander</li> <li>• Alexis</li> <li>• Paul</li> <li>• Enoch</li> <li>• Sunchild</li> </ul>	No issues related to harvest areas that would constitute a change to the AOP
2009/10	2009/2010 GDP shared with: <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Sturgeon Lake Cree FN</li> <li>• Sucker Creek FN</li> <li>• Driftpile FN</li> <li>• Enoch FN</li> <li>• Swan River FN</li> </ul>	No issues related to harvest areas that would constitute a change to the AOP



November 1, 2016

Current Status Table 55-1(continued): Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2010/11	2010/2011 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> </ul>	No issues related to harvest areas that would constitute a change to the AOP
2011/12	2011/2012 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> </ul> Stoney (Wesley/Chiniki)	No issues related to harvest areas that would constitute a change to the AOP
2012/13	2012/2013 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> <li>• Enoch FN</li> </ul> Stoney (Wesley/Chiniki)	No issues related to harvest areas that would constitute a change to the AOP
2013/14	2013/2014 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O'Chiese FN</li> <li>• Sunchild FN</li> </ul> Stoney (Wesley/Chiniki)	No issues related to harvest areas that would constitute a change to the AOP



November 1, 2016

Current Status Table 55-1(cont’): Summary of activities consistent with the Provincial Policy, Framework and guidelines regarding First Nations input in plans

Year	Activity	Issues or concerns raised
2014/15	2014/2015 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O’Chiese FN</li> <li>• Sunchild FN</li> <li>• Stoney (Bears paw/Chiniki/Wesley)</li> </ul>	No issues related to harvest areas that would constitute a change to the AOP; two pipe ceremonies held with Stoney FN in Marshyband and Blackstone
2015/16	2015/2016 GDP shared with <ul style="list-style-type: none"> <li>• Alexander FN</li> <li>• Alexis FN</li> <li>• Paul FN</li> <li>• O’Chiese FN</li> <li>• Sunchild FN</li> </ul> Stoney (Bears paw/Chiniki/Wesley)	No issues related to harvest areas that would constitute a change to the AOP; pipe ceremony held with Stoney FN

Monitoring and Measurement Comments received during the consultation sessions and issues addressed.

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Forest Management Activities First Nations and Métis consultation will be consistent with the Provincial framework and guidelines.

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Monitoring Procedure Annual and stewardship reporting on the number of consultation sessions and the issues addressed.

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Linkages Between Strategic and Operational Plans None, unless changes occur to the approved SHS as a result of the consultation process.

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November 1, 2016

Forest  
Stewardship  
Comments

Company focus in on 7 First Nation bands that cover the entire FMA; all issues and concerns have been addressed. Interaction with certain bands is increasing (Sunchild, Stoney, Alexander), whereas the remaining are noticeably silent in their desire for consultation opportunities.

No further analysis will be completed prior to the 2016 FMP.



November 1, 2016

<b>Indicator 56</b>	<b>Target</b>
Number of identified First Nations and Métis sites	Protect all known sites of historic, medicinal, spiritual, cultural or nutritional significance

Acceptable Variance      None

Current Status      Table 56-1: Summary of Aboriginal sites identified and protected.

Year	# First Nations or Métis Sites Newly Identified	# First Nations or Métis Sites Protected
2006/07	None	All know sites protected
2007/08	None	All know sites protected
2008/09	None	All know sites protected
2009/10	None	All know sites protected
2010/11	None	All know sites protected
2011/12	2	All know sites protected
2012/13	None	All know sites protected
2013/14	Rock outcrop Rundell Creek	All know sites protected; 100 meter buffer along identified site.
2014/15	None	All know sites protected
2015/16	None	All know sites protected

Monitoring and Measurement      Updates to inventory

Forest Management Activities      Share plans as required. Track changes to the SHS as they occur.

Monitoring Procedure      Annual and stewardship reporting on the number of sites identified and protected.

Linkages Between Strategic and Operational Plans      Large changes to the SHS may result negatively on future AACs.



November 1, 2016

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Forest  
Stewardship  
Comments

No First Nations sites have been identified to date thru the consultation process..

No further analysis will be completed prior to the 2016 FMP.





November 1, 2016

Indicator 57	Target
Forest Advisory Committee (FAC) review of Weyerhaeuser planning and operations	Produce an annual report for the FAC regarding Company activities and issues raised during the year

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Acceptable Variance      None

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November 1, 2016

Current Status Table 57-1: Summary of FAC issues addressed

Year	Issues Addressed by the FAC
2006/07	<ul style="list-style-type: none"> <li>• Early summer logging and impacts on wildlife</li> <li>• Mountain pine beetle Action Plan</li> <li>• CSA Sustainable Forest Management Plan update</li> <li>• Brush pile disposal and smoke management</li> <li>• Environmental permitting to facility</li> <li>• Aboriginal Awareness Program</li> <li>• Alberta First Nations Consultation Guidelines</li> <li>• Effectiveness of the FAC</li> </ul>
2007/08	<ul style="list-style-type: none"> <li>• Mountain Pine Beetle</li> <li>• FAC effectiveness</li> <li>• Forest industry economics</li> </ul>
2008/09	<ul style="list-style-type: none"> <li>• CSA Sustainable Forest Management Plan update</li> <li>• Forest industry economics</li> <li>• Wetlands presentation by Ducks Unlimited</li> </ul>
2009/10	<ul style="list-style-type: none"> <li>• SFI Certification, and Audit results</li> <li>• 2010/11 AOP review</li> <li>• North Saskatchewan Watershed Alliance</li> <li>• Terms of reference review</li> <li>• Canadian Boreal Forest Agreement</li> </ul>
2010/11	<ul style="list-style-type: none"> <li>• Field tour of the herbicide spary program</li> <li>• Terms of reference review</li> <li>• AOP and operations update</li> <li>• MPB red/green attach and overall health condition of the FMA forest</li> </ul>
2011/12	<ul style="list-style-type: none"> <li>• No FAC meetings were held during the operating year.</li> </ul>
2012/13	<ul style="list-style-type: none"> <li>• No FAC meetings were held during the operating year.</li> </ul>
2013/14	<ul style="list-style-type: none"> <li>• No FAC meetings were held during the operating year.</li> </ul>
2014/15	<ul style="list-style-type: none"> <li>• No FAC meetings were held during the operating year.</li> </ul>
2015/16	<ul style="list-style-type: none"> <li>• No FAC meetings were held during the operating year.</li> </ul>

Monitoring and Measurement

Meeting minutes; annual reports

Forest Management Activities

Updates to the FAC regarding issues as they arise.



November 1, 2016

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Monitoring  
Procedure

Annual and stewardship reporting on issues addressed by the FAC.

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Linkages  
Between  
Strategic and  
Operational  
Plans

Large changes to the SHS may result negatively on future AACs.

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Forest  
Stewardship  
Comments

The FAC reviewed operational and strategic plans. The group is currently on hiatus as the company starts to develop plans for the 2016 FMP.

No further analysis will be completed prior to the 2016 FMP.

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