

Tree Farm Licence 52

MANAGEMENT PLAN COMMITMENTS

2000 Summary of Progress

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|------|---|------------|------------|--|
| E | Bridge Replacement Schedule updated in FDP. | 3.4.3 | 23-24 | A bridge replacement schedule has not been included in the FDP. This is covered by FPC Forest Road Reg. Sec. 16 and 17 |
| F | Investigate/Demonstrate Performance & Report On rd and ldg rehab | 3.1.1.4 | 13 | An extensive air photo and map review was completed to ensure that all roads and trails were included on the TRIM II base. The classification of the roads and trails was completed in 2000. This was used to determine the area to removed from the timber harvesting land base in the timber supply analysis. |
| | Assess ldg rehabilitation, quantify results & make recommendations | 3.6.3.4 | 67 | |
| E | Success of rd & ldg programs reviewed in MP3 | 3.6.3.4 | 67 | Road deactivation and rehabilitation was carried out in the Umiti, John Boyd, Russian and Big Valley Creek drainages. Approximately 67 km. of road was permanently deactivated and seeded with grass. |
| F | Demonstrate/Document how have met timber & non-timber resource targets in CCLUP | 3.3.1 | 16-17 | Implementation of the CCLUP is an on-going project. Both the development plan and the management plan have to conform to the CCLUP or they will not be approved, and cutting permits will not be issued. The modified and no-harvest zones in the caribou habitat have been identified as part of the CCLUP caribou strategy. The CCLUP biodiversity conservation strategy has been followed. The backcountry recreation area targets have been met. |
| F | Investigate/Demonstrate Performance & Report on activities above caribou line | 3.1.1.4 | 13 | The modified harvesting procedures in caribou habitat have not been developed, and research is ongoing. Some areas of small patch (< 1 ha.) have been laid out on Mt. Tom as part of a research trial with MOF and MELP. At the end of 2000, the caribou no harvest/modified harvest lines were finalized. |
| F | Investigate/Demonstrate Performance & Report On: improved conifer utilization | 3.1.1.4 | 13 | Utilization standards have not changed since MP2 was approved. |
| F | Investigate/Demonstrate Performance & Report On: utilization of Ac and Birch | 3.1.1.4 | 13 | WFM is not, at this time, utilizing cottonwood and birch. These species are, in many cases being left on the blocks as either habitat for cavity nesters or as coarse woody debris. |
| F | Harvest species profile | 3.5.5.1 | 47 | WFM has harvested and continues to harvest the species profile. |
| F | Document utilization of Birch and Cottonwood | 3.5.5.1 | 48 | Utilization of birch and cottonwood are mostly dependent on the capability of the pulp mill and MDF plant to use these species. To date there is no indication that those mills have a need for them. |
| F | Utilize Aspen 15,100 m ³ /year; 68000-83100 over 5 years | 3.5.5.1 | 47-48 | Aspen consumption for the last four years has been approximately 9.000m ³ . Consumption in 2000 was only about 4000 m ³ , which is a reflection of low demand and a shift to harvesting beetle-infested stands. |
| F | Utilize Non-Traditional Silvicultural Systems. | 3.5.1 | 25 | Clearcutting with reserves is the primary silviculture system used. Opening sizes average about 35 ha. overall. Harvesting techniques in the caribou modified harvest zone have not been defined. |
| F | Submit fire pre-organization plan | 3.7.1 | 72 | A fire pre-organization plan is submitted annually. |
| F | Submit fuel management plans | 3.7.1 | 72 | Fuel management plans are prepared annually with the fire management plan. Burning of road side logging residue is an integral part of our fuel management strategy. Prescribed burning is still used as a silvicultural tool. |

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| F | Minimize damage from fire & maximize salvage | 3.7.1 | 72 | Four blocks were burned in 2000 and no escapes occurred. |
| F | Aggressively salvage blowdown | 3.7.2 | 72 | Blowdown salvage was dropped in order to the bigger forest health problem of mountain pine beetle on both the TFL and Forest Licence. The setting of priorities was done in cooperation with the Ministry of Forests. |
| F | CP 004 Single Tree Salvage | 3.7.2 | 73 | This salvage permit has been used most recently to recover small volumes from mining operations. |
| F | Prepare and submit Forest Health Plan each year | 3.7.2 | 72 | A forest health plan is included annually as a part of the FDP. Two-year cycle budworm was in the 2 nd year of its cycle. Defoliation was heavy in only a few small areas. Mountain pine beetle is active in several areas of the TFL. The infested areas are being logged on a priority basis. |
| F | Use soil mapping when completed | 4.8 | 91 | Terrestrial ecosystem mapping and terrain stability mapping was completed and approved. The TSM and TEM are used operationally to avoid unstable or sensitive areas when planning roads and cut blocks. |
| F | Achieve bio-diversity objectives of CCLUP & FPC | 4.10 | 92 | Biological diversity is addressed at the stand level with every cutting permit. There is a 9% reserved area, designated as wildlife tree patches, for all blocks harvested in the last 3 ½ years. Landscape level biodiversity is addressed through the FDP using seral stage distribution as an indicator of biodiversity. The procedures in the biodiversity guidebook and the CCLUP biodiversity conservation strategy are used to determine the old and mature components. |
| F | WFM goal : 2 Years approved CP 1 Year CP applications 2 Years field activities | 6.1 | 95 | WFM has 2 years of timber under approved cutting permit, and approximately 3 years of timber at various stages in the application process. |
| F | Submit FDP Feb 1 & update Sept 1 | 6.1 | 95 | The FDP for the TFL submitted in 2000 was approved by the District Manager for a two year period. |
| F | Submit annual report April 1 - Director THB - Regional Manager CFR - District Manager QFD | 10.1 | 100 | An annual report has been prepared and submitted as required. |
| G | G&Y: Analysis G&Y Program. ID steps to localize growth curves & strata to establish PSP. | 3.2.4 | 16 | Localized managed stand yield tables were developed for the TFL as part of a site index adjustment project. The final report was completed in 2000 and approved by the MOF. Thirty-five growth and yield plots were re-measured under contract from MOF. |
| G | Re-Inventory Using Vegetation Inventory Procedures: Completed & approved for use in MP3 | 3.2.3 | 15-16 | The timber re-inventory was completed for use in the timber supply analysis in 2000. The VRI procedures were followed but the VRI is not in a format that can be used in timber supply analysis. Therefore the VRI data had to be converted back into a format that could be used for timber supply analysis |
| I | Impact assessments where identified potential pre-historic site. | 4.4.1 | 82 | WFM has had consultants conduct archaeological surveys on a number of potential pre-historic sites. These surveys have been included as part of the documentation for cutting permits. A list is kept of all blocks where assessments have been done or where they are required, and a summary of findings is noted. The MOF has done an overview archaeological assessment, and has provided general maps (i.e. no detail) to WFM West Fraser provided digital files of the TFL to UNBC as part of a project with Barkerville Historic Townsite (BC Parks) to copy archived information into a digital format. This project is ongoing. |
| | Impact assessments future significance A or B | 4.4.2 | 83 | |
| I | Involvement in Cottonwood-Willow-Bowron Watershed Committees | 4.5 | 86 | Committee and assessment work is complete, and priorities have been established. Deactivation and restoration works have been done for the past 3 three years. Due to financial constraints, detailed watershed restoration |

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| | | | | plans for priority sub-basins were started in 2000 for the Little Swift watershed. Other plans will follow. |
| I | Complete Level I and II Watershed Assessments | 4.5 | 86 | Watershed assessments are complete. Thirteen sub-basins had indices that flagged the potential for hydrological problems as a result of past road building and harvesting. WFM, Weldwood and MOF cooperated on a project to do channel assessments to evaluate hydrological stability. The final report indicated that, because of the low gradients of the sub-basins and the natural buffering capacity that exists, the sub-basins were relatively stable. |
| I | Biophysical habitat mapping | 4.6 | 87 | The biophysical mapping project was split into two components: terrestrial ecosystem mapping and terrain stability mapping. Both projects were completed in 2000. Habitat capability and suitability mapping for nine indicator species was started. |
| P | Bush & Mill tours as interest merits | 5.1 | 93 | Field and mill tours are done according to demand. New interpretive signs were installed in 2000. A retired professional forester uses acts as a tour leader. Mill tours are provided to interested individuals or groups upon request. |
| P | Provide forestry related expertise to local schools & clubs | 5.2 | 93-94 | WFM staff assist with or provide forestry-related presentations at Quesnel schools upon request. |
| P | Install information road signs: cooperate to install hwy info signs | 5.3 | 94 | WFM cooperated with a group in Wells to produce area recreation maps, which have been installed on Highway 26 information signs. About 26 information signs are placed at cut blocks along a number of forest roads in the TFL. |
| P | Participate in tours, community & group events | 7.0 | 97 | This is an ongoing activity. |
| P | Provide public with opportunity to participate, review & develop operational & strategic plans beyond formal requirements | 7.0 | 97 | Open house meetings have been held in both Wells and Quesnel as an opportunity for interested members of the public to review plans, ask questions and discuss issues. In recent years, there has been little interest as indicated by the response. |
| R | Complete recreation analysis | 4.2.2 | 78 | This project was completed in 1999 to the most recent MOF standards by Timberline Forest Inventory Consultants. As part of the project, TFIC contacted local groups and interested individuals to get input to the update. The recreation opportunity spectrum (ROS) was updated in 2000 after the silviculture and harvesting update was completed. |
| R | Develop management guidelines for rec. units having significant recreation values. | 4.2.2 | 79 | A project is underway as part of the Wells Gateway Community initiative to do a tourism potential assessment in the Quesnel Highlands and to prepare a management strategy for the Groundhog Lake trails and warming hut. Groundhog lake has motorized and non-motorized winter use and non-motorized summer use. Conflicts between other recreation users are not an issue in other areas. |
| R | Recreation Funding - monetary amount | 4.2.3 | 80 | For the last several years, WFM has allocated FRBC funds to recreation projects on the TFL. This ended in 2000, as FRBC dropped recreation from its mandate. |
| R | Recreation Funding - terms of reference - appoint committee | 4.2.3 | 80 | There has been no need to pursue this because of the availability of FRBC funding. The need for such a committee will have to be re-evaluated in view of the loss of FRBC funding for recreation after 2000. |
| R | Develop interpretive trail near Wells | 7.0 | 97 | Development of skiing and hiking trails on Cornish Mountain has been underway for two or three years by the Wells and Area trails Society. In 2000 WFM helped in trail development by providing an excavator to prepare some trails that were inaccessible to the trail groomer. |
| R | Driving tours Quesnel - Barkerville | 7.0 | 97 | A primary concern with a self-guided tour is that Highway 26 is narrow and winding, with limited opportunities |

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| | | | | to pull well off the road when stopping. This is a significant obstacle to developing a comprehensive tour. We may drop this project because of safety concerns. |
| R | Develop recreational road map | 7.0 | 97 | The TRIM II update, with the enhanced road coverage will form the basis of a simple map showing main roads and recreation facilities and sites. WFM maintains a road map for the Nazko Road Users Committee which shows all roads in the Quesnel Forest District. This map is available for a nominal fee. |
| S | Locate information signs throughout TFL: Identify WFM management activities | 2.8 | 8 | West Fraser provided mapping and financial support to the Wells and Area trails Society to produce and install route information signs and outdoor recreation signs at several locations near Wells. |
| S | Signs to promote forest mgt. accomplishments | 7.0 | 97 | 26 signs have been installed at specific cut blocks on major forest roads to show treatments (and year) done on each site. 18 signs were replaced and 8 more were added in 1999. In general, highway signs have not been installed because there are not safe stopping areas at appropriate sites. No signs were added in 2000 because of poor lumber markets.. |
| S | Investigate/Demonstrate Performance & Report On: Planting Genetically Improved Stock | 3.1.1.4 | 13 | Approximately 50% of the seedlings planted on the TFL each year are spruce. About 95% of the spruce originate from improved seed produced at the Vernon Seed Orchard. Improved lodgepole pine seed from the Vernon orchard will be available in five years or so.. |
| S | Undertake or investigate genetically improved seed. | 3.6.3 | 65 | |
| S | Investigate/Demonstrate Performance & Report On: Rehabilitation of IU Logged Areas | 3.1.1.4 | 13 | Surveys have been completed on approximately 12,000 ha. of balsam IU stands. A final report was prepared and submitted in late 2000 which indicates that there are only about 2000 ha. of possible NSR residual stands. More detailed surveys will be done in 2001. The report provides some decision-making guidelines to help guide future management of the residual balsam areas.. |
| S | Undertake or Investigate rehabilitation of IU stands | 3.6.3 | 65 | |
| S | Report on Regeneration Success of Non-Traditional Harvest Systems | 3.5.1 | 26 | Non-traditional harvesting systems implies systems other than clearcutting. Some changes have been made in the last several years. Block size has shrunk to an average size of approximately 35 ha., wildlife tree patches equaling 9% of the block area are reserved either in or adjacent to each block; in some cases trees are stubbed and left as perch trees for raptor or song birds or as habitat for cavity nesters. WFM has allocated FRBC funds to a project (starting in 2000) to investigate regeneration in high elevation modified harvesting (small patches of less than 1 ha.) in the caribou zone. This research will continue for several more years. |
| S | Reduce MO backlog to 0 by 2000 | 3.6 | 49 | FRBC provides funding for backlog silviculture activities. WFM has worked steadily on surveys, site preparation, planting and brushing old sites. Our records indicate that the backlog NSR has diminished from approximately 1100 ha. in 1995 to about 775 ha. in 1998. In spite of planting 71 ha. of backlog are in 1999, extensive surveys located more NSR, raising the total to about 1070 ha. in 2000. Site prep. was done on 119 ha and 22 ha were planted. The 7000 ha. of surveys done in 2000 increased the backlog NSR total to 1305 ha. |
| | IO Lands Completely Reforested by 1997 | 3.6.1.2 | 59 | |
| | Undertake or Investigate reforest backlog NSR | 3.6.3 | 65 | |
| S | Seed SP 5 yrs, PI 5 yrs, DF 0 yrs, Ba 10 yrs | 3.6.2.1 | 54 | WFM has a good supply of Sx, Pl, and Fd seed. Balsam seed was collected in 1999 through a joint effort with the MOF and other licencees. |
| S | Seed transfer & VSO follow MOF guidelines | 3.6.2.1 | 54 | It is standard procedure to use seed according to the seed transfer guidelines. |
| S | Report in MP3 if VSO will meet all our needs | 3.6.2.1 | 54 | VSO is currently supplying about 95% of our spruce seed. The exception is the very high elevation seed. Pine seed from the VSO will be available in five to seven years. |
| S | Undertake or Investigate pruning | 3.6.3 | 65 | WFM completed an intensive silviculture management strategy in 1998. It recommends not embarking on a |

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| | | | | large scale pruning program in pine stands. A Type II Silviculture Analysis was started in late 2000 and will be completed in 2001. This will provide more direction on investment decisions. |
| S | Undertake or Investigate fertilization | 3.6.3 | 65 | The intensive silviculture management strategy for the TFL recommends fertilizing PI stands on an operational trial basis. The trials would be used to help develop which site series and soil orders should be treated, and to help quantify stand selection criteria. A Type II Silviculture Analysis was started in late 2000 and will be completed in 2001. This will provide more direction on investment decisions. |
| S | Undertake or Investigate commercial thinning | 3.6.3 | 65 | The intensive silviculture management strategy for the TFL recommends that plantation densities be established at 1800 to 2000 sph to ensure there are future opportunities for commercial thinning. A number of criteria for managing stands in different BGC sub-zones is provided in the strategy report. A Type II Silviculture Analysis was started in late 2000 and will be completed in 2001. This will provide more direction on investment decisions. |
| S | Establish commercial thinning trials & controls, exchange info., productivity of larger projects | 3.6.3.7 | 72 | WFM, in cooperation with the Science Council of BC conducted a commercial thinning trial in the fourth quarter of 1998. The stand fit within the commercial thinning trial matrix that was established by MOF. No further trials are anticipated at this time. |
| S | Maintain or Reduce Regen Delay (Currently is 2) | 3.6.2.4 | 59 | WFM is committed to doing site preparation and planting as soon as possible after harvesting. We are, on average, achieving the two year regeneration delay target. |
| S | Examine Increasing Planting Densities; Evaluate WFM Standards | 3.6.2.4 | 61-62 | The intensive silviculture management strategy for the TFL recommends that plantation densities be established at 1800 to 2000 sph. We are presently achieving a planting density at 1800 sph except in the wetter ecosystems. |
| S | Aspen - Mixed Wood Strategy | 3.6.2.7 | 64 | Interim Free growing standards have been put in place with respect to deciduous species as they relate to competition for conifers. A deciduous component is accepted on all regenerated sites. |
| S | Continue to rehabilitate lds during MP2 | 3.6.3.4 | 67 | Roadside harvesting systems are utilized on the greatest proportion of harvested areas. so landings are rarely built or used. Rehabilitation of landings was not identified as a priority in regional resource management planning. |
| S | Operational Trial Review - make recommendations. | 3.8 | 76 | An review of operational trials was completed in 1998. Recommendations have been made to drop some trials because of poor experimental design. Rre-measurement of the trials will be done in 2001. |
| S | Membership in RRAC | 3.8 | 74 | WFM is an active member of the RRAC |
| S | Discuss research opportunities with UNBC | 3.8 | 74 | WFM has reviewed and discussed research proposals with faculty and students at UNBC. To date, no cooperative projects have been undertaken. |
| S | Meet Basic Silviculture Requirements: Legislative and regulatory requirements | 2.2 | 6 | WFM consistently meets statutory requirements as a standard procedure. |
| | Maintain basic silviculture program | 3.6 | 49 | |
| | Commitment to meeting basic silviculture requirements | 3.6.2 | 53 | |
| S | Membership in FERIC | 3.8 | 74 | WFM continues to be a participating member of FERIC |