

BIG PIC FOREST – MONITORING SUMMARY

Forest Compliance Monitoring

The forest compliance monitoring program is carried out to ensure MNR and forest industry conduct forest operations according to legislation and approved plans and to prevent damage to Crown forests. Under this program, the MNR and forest industry inspect and report on access, harvest, renewal and maintenance activities. Forest compliance monitoring is integral to ensuring the sustainable management of Ontario's forests through continued improvement and adaptive management. The Forest Operations Information Program (FOIP) stores information collected through forest compliance monitoring for analysis and reporting to MNR, the forest industry and the public.

Phase II section 8.7.1 Forest Operations Inspections

Forest management plans are monitored to ensure compliance with the forest management plan to ensure adherence to such components as area of concern prescriptions or conditions on operations.

As discussed in Section 8.1 of the phase II FMP text, the Big Pic Forest was being managed under a SFL held by Marathon Pulp Inc. The Forest Operations Inspections (FMP text Section 4.7.1) and associated compliance plan (Supplementary Documentation 6.1.24) was prepared by Buchanan Forest Products Ltd. and 686860 Ontario Ltd. for Marathon Pulp Inc. Due to the change in the management of the Big Pic Forest, where MNR has assumed the forest management responsibilities, the forest operations compliance section needed to be updated to reflect this change in management. This was done through an amendment to the Big Pic Forest 2007-2017 FMP. Please refer to approved amendment #5 (see appendix III attached).

As per FMPM requirements, Annual Reports will record:

Instances of non-compliance (AR-6), including:

- i the type(s) of non-compliance which occurred;
- ii the cause(s) of those occurrences;
- iii the remedies applied; and
- iv how the sustainable forest licensee will improve the conduct of forest operations to minimize instances of non-compliance.

Silviculture Effectiveness Monitoring

Renewal activities are required to be reported annually. Renewal efforts are assessed at specific points in time to determine the success of establishing the new forest. These assessments involve a variety of techniques, including field measurements, aerial surveys, and remote sensing.

Phase II section 8.7.3 Assessment of Regeneration Success

As part of phase II planned operations, the Assessment of Regeneration Success and Silvicultural Effectiveness Monitoring Program from the Big Pic Forest 2007-2017 FMP (Section 4.7.3) was reviewed, and the planning team determined that it needed to be updated. This was done through an amendment to the Big Pic Forest 2007-2017 FMP. Please refer to approved amendment #5 (see Appendix II attached).

As described in Table FMP-25 (FMPM 2004), the forecast of regeneration success for phase I, it was expected that 72,540 hectares of assessment of regeneration success would be completed over the ten-year period of the FMP. To-date, 1,268.7 hectares have been assessed and reported (based on completed Annual Reports), with an additional 4,945.6 hectares expected to be reported in the 2011-2012 Annual Report. A total of 14,500 hectares was scheduled for assessment in 2012-2013 (now completed but not yet reported).

As per AR requirements, Part E Section 2.4.6 of 2009 FMPM

The assessments of regeneration success that were undertaken will be reported. (i.e. the progress towards completing the planned assessments of regeneration success, and any related concerns.)

Information products associated with the assessments of regeneration success will identify:

- (a) the disturbance group (e.g. harvest, natural);
- (b) the year of disturbance;
- (c) the depleted forest unit;
- (d) the silvicultural ground rule;
- (e) the target forest unit;
- (f) the free to grow indicator (e.g. successfully regenerated, not successfully regenerated);
- (g) the free to grow forest unit;
- (h) the species composition;
- (i) height; and
- (j) stocking/density.

Roads and Water Crossing Monitoring

Phase II section 8.7.4 Roads and Water Crossings

All new and existing roads (primary, branch and operational) and associated water crossings that are the responsibility of the management entity (currently the Nawiinginokiima Forest Management Corporation) are subject to an inspection and monitoring program to ensure:

- the safety, functionality and efficiency of roads and water crossings in active use; and
- that there are not any safety or environmental issues or impacts associated with any road or water crossing that are the responsibility of the management entity.

The planned monitoring program for each road/road network is identified in Table FMP-18 or Supplementary Documentation section 8.9.5.

While a road/road network is in use for forest management purposes (e.g. harvest, renewal, tending, transportation and hauling activities), it will be monitored on an ongoing basis for safety or environmental concerns. Bridges used for 'heavy truck hauls' will be inspected by a certified inspector at least once a year. When roads/road networks are not in use for forest management purposes, monitoring will be based on a yearly schedule of specific roads/crossings which will be inspected. This yearly schedule will be based upon a risk assessment approach with emphasis on the potential values which could be impacted (e.g. fish habitat) and the potential for public safety concerns and, at a minimum, these roads (including bridges open to public travel) will be inspected at least once every three years. Monitoring may occur as part of aerial assessments/surveys (e.g. free-to-grow surveys). In addition, all staff and contractors (harvest, renewal and tending contractors) are to report any existing or potential concerns regarding the road/road network and water crossings encountered while travelling on roads throughout the forest.

Reports from the general public and other user groups will also contribute to the monitoring of the condition of the roads and water crossings. Additional monitoring will be considered based upon a risk assessment approach following severe weather conditions (e.g. heavy rainfall).

Road-related FMPM requirements for Annual Report (every year)

Road construction and use management (i.e. maintenance, monitoring, access control and decommissioning) will be reported. Water crossings constructed, monitored and decommissioned will be reported.

Information products associated with road construction and use management, and water crossings will identify:

- (a) the road identifier;
- (b) the road class;
- (c) the road activity (e.g. construction, decommissioning, maintenance, monitoring, access control);
- (d) the water crossing identifier;
- (e) the water crossing type; and
- (f) the water crossing activity (e.g. construction, monitoring, removal).

Annual Reporting

Annual Report (every year)

Annual Report Text - a discussion of the progress to date in meeting the planned level of activity described in the Forest Management Plan, and a discussion of any significant events affecting the implementation of the plan. The text also includes a summary of monitoring and assessment activities; forest operations inspections and any instances of non-compliance.

Annual Report Tables - a summary of information supporting the annual report text; includes tables of wood utilization, renewal support, expenditures, pesticide use and forest operations inspections.

Information Products - the forest operations that were implemented during the year of the annual report will be provided in information products in accordance with the Forest Information Manual.

Annual Report Text Requirements

2.1.3 Discussion of Forest Operations

A discussion of the implementation of forest operations will address:

- (a) the progress towards harvest of the planned harvest area, and any related concerns that may have implications for wood supply;
- (b) the progress towards achievement of planned levels of renewal and tending, and any related concerns;
- (c) the progress towards achievement of planned levels of road construction and maintenance, and any related concerns; and
- (d) the progress towards utilization of the volume associated with the planned harvest area (AR-1) and achievement of the planned volume for each mill(AR-2), and any related concerns that may have implications for wood supply.

2.1.4 Monitoring and Assessment

The text will also include a discussion of:

- (a) any significant events (e.g. natural disturbances, markets, labour disruptions) that have affected the implementation of the forest management plan;
- (b) areas harvested under the clearcut silvicultural system, based on the standards in the applicable guide relating to the emulation of natural disturbance patterns;
- (c) the monitoring of roads and water crossings, including the effectiveness of access controls, and any related concerns;
- (d) instances of non-compliance (AR-6), including:
 - the type(s) of non-compliance which occurred;
 - the cause(s) of those occurrences;
 - the remedies applied; and
 - how the sustainable forest licensee will improve the conduct of forest operations to minimize instances of non-compliance.
- (e) the monitoring of exceptions (Part B, Section 4.7.2), if any, that was undertaken; and
- (f) the progress towards completing the planned assessments of regeneration success, and any related concerns.

Annual Report Table Requirements

AR-1: Annual Report of Wood Utilization by Licensee

This table summarizes the actual volumes utilized by licensee (or grouping), and by product. The source of this information is the provincial scaling and billing system.

AR-2: Annual Report of Wood Utilization by Mill

This table summarizes actual volume (harvest and salvage) utilized by mills which received wood from the management unit, by product and species. The source of this information is the provincial scaling and billing system.

AR-3: Annual Report of Renewal Support

This table summarizes renewal support, including volume of seeds and cones collected, the number of seeds used for direct seeding, and the number of trees planted. Seeds used and trees planted are recorded for renewal and retreatment/supplemental treatment.

AR-4: Annual Report of Expenditures

This table summarizes expenditures made by activity and funding source.

AR-5: Summary of Planned and Completed Pesticide Applications in Ontario Crown Forests

This table summarizes planned and completed pesticide applications, including spray period, site of application, pesticide used, exterminator, aircraft and incidents/complaints.

AR-6: Annual Report of Forest Compliance Inspection Reports, Non-Compliances and Remedies Applied

This table summarizes the forest operations inspection reports information collected by the SFL holder and MNR, and the Activities in which non-compliances occurred. It also summarizes the remedies applied during the fiscal year. The requirements for forest operations compliance inspections and reporting are described in the Forest Compliance Handbook. The inspections reported in this table are those which were conducted and submitted to FOIP during the period of the Annual Report regardless of the year in which the operation was conducted. The remedies reported in this table are those which were applied during the period of the Annual Report regardless of the year in which the non-compliance for which they were applied, occurred.

Annual Report Information Products

2.4.1 Harvest

Areas of harvest operations will be reported. Information products associated with areas of harvest will identify:

- (a) the forest unit;
- (b) the age class or stage of management;
- (c) the silvicultural ground rule, if applicable;
- (d) the silvicultural system;
- (e) the harvest category (e.g. regular, bridging, second-pass, salvage, redirected, accelerated, road right of way);
- (f) the harvest method; and
- (g) the logging method.

The areas of bridging operations planned to be harvested will be identified in the year-ten annual report, and will be associated with the available harvest area of that forest management plan. The area of bridging operations conducted during the first year of a forest management plan will be reported in the year one annual report, but will be counted against the available harvest area for the previous forest management plan.

Areas harvested in two passes will be reported in two annual reports. The first-pass harvest area will be reported as regular harvest area and will contribute to the achievement of available harvest area. The second-pass harvest area will be reported in a subsequent annual report and will not contribute to the achievement of the available harvest area.

2.4.2 Natural Disturbances

The report of natural disturbances will contain net natural disturbance areas. MNR will provide information on the gross natural disturbance area to the sustainable forest licensee, as per the requirements of the Forest Information Manual. The sustainable forest licensee will examine the gross natural disturbance area, and determine the net natural disturbance area. The information products associated with the net natural disturbance area will identify:

- (a) the forest unit;
- (b) the age class;
- (c) the estimated conifer and hardwood volume; and
- (d) the natural disturbance type (e.g. blowdown, disease, drought, fire, insects).

2.4.3 Renewal and Maintenance

Area of renewal, tending and protection operations will be reported.

Information products associated with areas of renewal, tending and protection will identify:

- (a) the disturbance group (i.e. harvest, natural disturbance);
- (b) the silvicultural system;
- (c) the regeneration treatment category (e.g. natural, artificial, artificial retreatment, artificial supplemental);
- (d) the regeneration treatment (e.g., planting, seeding, tending, protection);
- (e) the site preparation treatment (e.g., mechanical, chemical, prescribed burn);
- (f) the tending treatment (e.g. cleaning, spacing, pre-commercial thinning, improvement cutting); and
- (g) the protection treatment (e.g. harvest, manual, insecticide).

Areas harvested under the selection silvicultural system that are predominantly noncommercial improvement cuts will be identified as natural under regeneration treatment. The areas will also be

identified as improvement cutting under tending. Areas planned for natural regeneration will normally be reported in the year in which the disturbance (harvest or natural) occurred. If salvage harvest is being considered in areas of natural disturbance, reporting of natural regeneration may be delayed for one or two years.

2.4.4 Roads and Water Crossings

Road construction and use management (i.e. maintenance, monitoring, access control and decommissioning) will be reported. Water crossings constructed, monitored and decommissioned will be reported.

Information products associated with road construction and use management, and water crossings will identify:

- (a) the road identifier;
- (b) the road class;
- (c) the road activity (e.g. construction, decommissioning, maintenance, monitoring, access control);
- (d) the water crossing identifier;
- (e) the water crossing type; and
- (f) the water crossing activity (e.g. construction, monitoring, removal).

2.4.5 Forestry Aggregate Pits

Forestry Aggregate Pits that had aggregate extracted or rehabilitation activities will be reported.

Information products associated with Forestry Aggregate Pits will identify:

- (a) the unique aggregate pit identifier;
- (b) number of hectares requiring rehabilitation (current disturbed area);
- (c) number of hectares rehabilitated and the date the pit was completely rehabilitated (latest date of complete rehabilitation as aggregate pit may be rehabilitated more than once); and
- (d) number of tonnes of aggregate removed from the pit.

2.4.6 Assessment of Regeneration Success

The assessments of regeneration success that were undertaken will be reported.

Information products associated with the assessments of regeneration success will identify:

- (a) the disturbance group (e.g. harvest, natural);
- (b) the year of disturbance;
- (c) the depleted forest unit;
- (d) the silvicultural ground rule;
- (e) the target forest unit;
- (f) the free to grow indicator (e.g. successfully regenerated, not successfully regenerated);
- (g) the free to grow forest unit;
- (h) the species composition;
- (i) height; and
- (j) stocking/density.

Year Three Annual Report

The year three management unit annual report will serve as the mid-plan review by describing progress on implementation of the forest management plan to date. In this report, the registered professional forester, who is normally the plan author, will report on his or her determination as to whether or not the long-term management direction remains valid for the second five-year term.

In addition to the requirements of each management unit annual report (FMPM Part E, Section 2.0), the year three annual report will include:

- a summary of the discussion of the implementation of forest operations
- a discussion of how the analysis of renewal and tending activities from the year 7 and 10 ARs for the previous forest management plans has been implemented
- a summary of the monitoring and assessment program including any implications on the achievement of the LTMD
- recommendation relating to the validity of the LTMD – still valid vs. substantially valid with minor adjustments vs. no longer valid)

If the plan author's recommendation is that the long-term management direction remains substantially valid, the required minor adjustments will be documented in the text of the annual report.

Year Seven and Ten Annual Report

The year seven annual report will include an assessment, analysis and review of the implementation of the first seven years of the forest management plan. The year seven annual report will identify any significant events (e.g. natural disturbances, markets, labour disruptions) that have affected the achievement of objectives in the forest management plan. The year seven annual report will be used in the development of the next forest management plan.

The year ten annual report will update the assessment, analysis and review in the year seven annual report to reflect the full implementation of the forest management plan. The year ten annual report will be used in the development of the planned operations for the second five year term in the next forest management plan. For additional information on the additional requirements of the year three, seven and ten AR, see part E section 3.0 and 4.0 of the 2009 FMPM.

Independent Forest Audits

The Ministry of Natural Resources communicates information about the management of its forests through reports produced by the Independent Forest Audit (IFA) process. The purpose of these audits is to assess the compliance of forest management activities with the *Crown Forest Sustainability Act* and the Forest Management Planning process, compare planned versus actual forest management activities, and assess the effectiveness of forest management activities in achieving audit criteria and management objectives. Where applicable, a licensee's compliance with the terms and conditions of a sustainable forest licence is also assessed. These audits take place on a 5-year reoccurring cycle intended to encourage continual improvement.

The Audit Process and Protocol

An audit process and protocol document sets out the forest management principles, criteria, and procedures for undertaking independent forest audits. MNR's Independent Forest Audit Process & Protocol (2013) identifies eight guiding principles:

1 Commitment

Commitment is reflected in vision, mission and policy statements of the company and in the company's adherence to legislation and policies. Vision and mission statements are intended to provide long-term guidance for the organization. Policy statements reflect how the organization's vision and mission will be achieved. These statements must be reflected in the day-to-day operations of the organization.

2 Public Consultation and Aboriginal Involvement

The process of sustainable forest management planning, implementation and monitoring must be conducted in an open consultative fashion, with the involvement of the Local Citizens Committee, Aboriginal communities, and other parties with an interest in the operations of the forest management unit.

3 Forest Management Planning

The forest management planning process involves input from all members of the planning team as well as public consultation and Aboriginal involvement to describe the current forest condition, values and benefits to be obtained from the forest, the desired condition of the forest in the future, and the best methods to achieve that goal. Planning requirements have been established which must be followed by all forest management units.

4 Plan Assessment and Implementation

Verification of the actual results of operations in the field compared to the planned assumptions and planned operations is required to be able to assess planning as well as the effective achievement of plan objectives and compliance with laws and regulations.

5 System Support

System support concerns resources and activities needed to support plan development and implementation so as to achieve the desired objectives. The organization's human resources and information management systems must support sustainable forest management.

6 Monitoring

Monitoring programs must be developed and implemented to assess compliance and effectiveness of operations in relation to the FMP, laws and regulations. Operations must be reported regularly and reporting must examine the effectiveness of these operations in achieving management objectives.

7 Achievement of Management Objectives and Forest Sustainability

Periodic assessments of the forest management unit operations must be made in order to determine whether management objectives, including forest sustainability objectives, are being achieved. This includes comparing the values of the planned indicators against the actual values and assessing the reasons for any significant deviations.

8 Contractual Obligations

The licensee must comply with the specific licence requirements. Specific requirements, when relevant to MNR, must be followed.

The result of an IFA is a series of recommendations to both or either the Crown and SFL Holder. Based on these recommendations an Action Plan is developed and approved that will respond to and correct any issues identified by the process. This Action Plan is followed up by an Action Plan Status Report which is an interim report on the progress of an Action Plan between 5 year audits.

Forest Health and Disturbance Monitoring – MNR Lead

Ontario's Forest Health Monitoring Program is a partnership between the Ontario Ministry of Natural Resources (MNR) and the Canadian Forest Service (CFS). Through a systematic monitoring program including ground and aerial surveys, field staff record forest health status and disturbances across Ontario. Identification of forest health issues is assisted through insect and disease surveys. Insect and plant samples are collected in the field and submitted to the Canadian Forest Service, Great Lakes Forestry

Centre for identification. Disturbance (insect, fire, blowdown, etc.) are mapped and provided to industry for inclusion in annual reports.

Forest health updates are provided throughout the field season to client groups including industry, government, public and other resource stakeholders to provide timely information on developing forest health issues. An annual report (Forest Health Conditions 20xx) is produced each year outlining any major findings or insect/disease/disturbance related issues.

The latest report (2011) can be found at:

http://www.mnr.gov.on.ca/en/Business/Forests/2ColumnSubPage/STDPROD_095587.html

Ontario's growth and yield program – MNR Lead

Growth and yield is an empirical (i.e. based on data) branch of forest science that attempts to understand and predict the composition, growth and productivity of forest stands through time. This objective is accomplished through a consistent and continuous cycle of data collection, analysis and interpretation, and is most efficiently implemented through the use of long-term monitoring plots. An accurate and efficient method of determining growth and yield is with Permanent Sample Plots (PSPs) and Permanent Growth Plots (PGPs).

The Ontario Forest Growth and Yield Program establishes and monitors a network of PSPs and PGPs in managed and natural forests across the province. These plots have a broad ecosystem focus and serve as a benchmark network for provincial level information needs. Permanent plots serve a vital role in forest monitoring and modeling forests, as growth (including stand dynamics) can be estimated directly from repeated measurements of various ecosystem elements. To ensure the integrity of the permanent growth and yield plot network, the Forest Growth & Yield Program protects PSPs from vandalism, trespassing, logging and other types of human-caused damage.

Note: there are a number of PSP, PGP on the Big Pic Forest. They are identified on the operational maps and are protected by an Area of Concern (AOC) prescription. See FMP-10 or AOC supplementary documentation for more information.

Species at Risk – MNR Lead

On June 30th 2008 The *Endangered Species Act, 2007* came into effect, making Ontario a North American leader in the protection and recovery of species at risk and their habitat.

As soon as a species is listed as extirpated, endangered or threatened, it is automatically protected from harm. Also immediately upon listing, the general habitats of endangered and threatened species are automatically protected from damage or destruction. The government ensures the development of longer-term protection and recovery for all species on the list.

Recovery strategies identifying steps to protect and restore populations are developed within one year of being listed for endangered species and within two years of being listed for threatened species. Species-specific habitat regulations must be developed within two years of an endangered species of being listed, and within three years of being listed for threatened species. Management plans are also prepared for special concern species within five years of being listed, outlining ongoing population monitoring as well as future recovery and research goals.

To learn more about recovery projects and habitat regulation, please visit the MNR's Species At Risk Recovery Strategies page at:

http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/MNR_SAR_ENDNGR_SPC_TBSC_S_EN.html

Species at Risk Stewardship Program

We all have an important role to play in protecting and recovering species at risk. In recognition of this, the Endangered Species Act takes a “stewardship first” approach to the protection of species and their habitats. The Stewardship Program includes the Species at Risk Stewardship Fund. The fund supports projects and activities that protect and recover species at risk. Visit the MNR's Species at Risk Stewardship Program page for further details at:

http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/MNR_SAR_STEWAR_FUND_EN.html

Ontario Biodiversity Strategy

Biodiversity enriches our lives and provides us with clean air and water, as well as the food, fibre, medicine and other resources that we need to survive. Species at risk recovery is a key part of protecting our biodiversity. Ontario's Biodiversity Strategy includes a set of principles, goals and actions we all can take to protect and recover species at risk. More information on MNR's Biodiversity Strategy can be found at:

http://www.mnr.gov.on.ca/en/Business/Biodiversity/2ColumnSubPage/STEL02_166816.html

Ontario Invasive Species - Strategic Plan 2012

Invasive species are a growing environmental and economic threat to Ontario. Invasive species are defined as harmful alien species whose introduction or spread threatens the environment, the economy, or society, including human health. Once established, invasive species are extremely difficult and costly to control and eradicate, and their ecological effects are often irreversible.

The current threats posed by invasive species in Ontario are significant. In response to these threats, Ontario's Ministry of natural resources (lead), Ministry of agriculture, Food and rural affairs, Ministry of the environment, and Ministry of transportation developed the *Ontario Invasive Species Strategic Plan*. The objectives of this Strategic Plan are to prevent new invaders from arriving and surviving in Ontario, to slow and where possible reverse the spread of existing invasive species, and to reduce the harmful impacts of existing invasive species. This plan highlights work that has been undertaken, identifies gaps in current programs and policies, and outlines future actions necessary to meet the objectives of the Strategic Plan.

http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@biodiversity/documents/document/stdprod_097634.pdf

Forest Resource Inventory

Big Pic Forest Inventory

The planning inventory developed for the 2007 FMP was based on a 1989 FRI (refer to Section 2.2.3 of the FMP which outlines the development of the planning inventory). Field experience indicated that some areas of the inventory were out-of-date and/or inaccurate, especially related to species composition and age. These inaccuracies and field knowledge of actual stand conditions were considered in the allocation process. . In addition, some areas identified in the inventory as eligible were not feasible/available to harvest as they were small portions of forested area left adjacent to reserve areas.

Provincial Program Enhancements

In recent years, the public and users of the FRI have expressed a need for an improved inventory in terms of its ability to provide more timely information, meet the increasing demands of forest management planning, provincial reporting, industry operations, and corporate data management. In response to these needs, the Ontario Ministry of Natural Resources (MNR) announced plans to redesign the FRI program on September 29, 2005. As part of the response, responsibility for the production of the FRI has shifted from forest industry to MNR.

The new FRI program will apply to approximately 555,000 km² of forest land which includes licensed areas, non-licensed areas within designated forest management units, provincial parks, federal parks, and protected areas (see Figure 1).

Planned enhancements to the FRI program include:

- a move to a ten year re-inventory cycle from a twenty year cycle
- evolution to a continuous forest inventory from a periodic inventory
- an improved field sampling component intended to create closer linkages with the Growth and Yield program,
- provide additional, non-traditional information

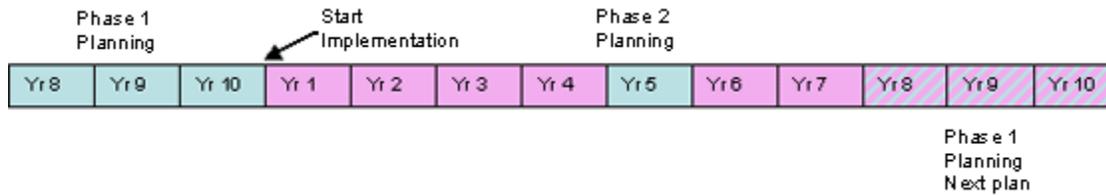
The new forest inventory product is ecologically based and incorporates the use of new technologies, data sources, and processes in an effort to achieve higher quality information. The latest inventory has been delivered for the Big Pic Forest but has not yet been incorporated into the forest management planning cycle.

FMP Review and Monitoring

Development of FMP - Plan Timelines

A 10 year forest management plan is prepared in two phases. Phase I includes the long-term management direction that provides for the sustainability of the forest with regard for plant and animal life, water, soil, air and social and economic values, including recreational values. It remains in effect for the 10 year period. As well, there is detailed planning of operations for the first five-year term of the plan. The Phase I planning process normally occurs in the last three years of the current plan.

Phase II includes detailed planning of operations for the second five year term (i.e., years 6 to 10) and occurs during the last two years of the first five-year term.



Schedule for Phase I and Phase II Planning

Forest management plans are renewed every 10 years. It generally takes 36 to 39 months to prepare a forest management plan (Phase I) and about 16 to 20 months for the detailed planning of operations for the second five year term (Phase II). These planning processes provide formal opportunities for public input at key stages in the development of the plan.

FMP Renewal

At any time during the implementation of a forest management plan, there may be circumstances which warrant preparation of a new forest management plan prior to the scheduled date. For instance, if the Year Three Annual Report finds that the long-term management direction is no longer valid, and an early plan renewal is required.

The year three annual report for the Big Pic Forest was completed for the 2009-2012 period. The recommendation on the validity of the LTMD was as follows: It is the Plan Author's recommendation that the Long-Term Management Direction remains substantially valid with minor changes to operational strategies (planned harvest areas, renewal and tending operations, planned road construction) implemented in order to meet the requirements and intent of the Ontario Woodland Caribou Conservation Plan. These minor operational strategies include planning harvest areas in locations that support the creation of larger even-aged patches for future caribou habitat and planned deferrals of larger landscape patches of mature forest with limited disturbance for caribou use in the continuous distribution (northern and coastal) and discontinuous distribution zones. This also includes the addition of conditions on regular operations and road use management strategies and a review of the silvicultural ground rules for Phase II of planned operations. Therefore, the plan author recommends that the long-term management direction remains valid and the planning of operations for the second five-year term proceeds.

FMP Amendment

If there has been a change to legislation and/or associated regulations (e.g. Endangered Species Act, 2007), the Director of Forest Management Branch, Ministry of Natural Resources, may require an amendment to the long-term management direction prior to the forest management plan renewal date. Otherwise FMP can and are periodically amendment to accommodate changes in operational planning, corporate/MNR directives or strategies. All FMP amendments are posted to the public website and if considered significant enough by the LCC, will be subject to public review prior to approval.

Forest Management Guide Updates and Renewal

Most of the forest management guides have recently been revised, which has resulted in a number of guides being replaced. A few more will be replaced once the Boreal Landscapes Guide is released. This amalgamation is in response to an independent review of all guides undertaken in 2000 and documented in the *Review of Ontario's Forest Management Guidelines* (2000). Based on this

consultants' report and recommendations from the Provincial Forest Technical Committee, the Ministry of Natural Resources decided to rewrite the guides as:

- Landscape Guides
- Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales
- Silvicultural Guides
- Management Guidelines for Forestry and Resource-Based Tourism
- Forest Management Guide for Cultural Heritage Values

As required by Condition 38(c) of the *Declaration Order regarding MNR's Class Environmental Assessment (EA) Approval for Forest Management on Crown Lands in Ontario (MNR-71)*, each guide will be reviewed within five years of its approval and thereafter at least every five years. This status summary has been prepared in accordance with condition 38(b) of the Forest Management Class EA approval.

Note: The Big Pic FMP is not using some of these guides (i.e. Landscape guide...) because they were not approved for use at the time of FMP preparation.

Since the preparation of the Big Pic Forest 2007-2017 FMP, a number of new guidelines and manuals have been approved for use in forest management planning. The *Forest Management Guide for Conserving Biodiversity at the Stand and Site Level (SSG)*, approved for use in 2010, replaces a number of previously employed guidelines used to develop area of concern prescriptions. In addition, updated guidelines/manuals such as the *Forest Management Guide for Cultural Heritage Values* (MNR, 2007) and the *OMNR Growth and Yield PSP Reference Manual* (MNR, 2009) have also been released. In addition, values and species at risk information were updated from phase I for phase II planning.

Status Summary of Ontario Forest Management Guides (May, 2013)

Guide/Supporting Document	Status	Comments	Relationship to new guides
Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales (2010)	completed in 2010	next review in 2015	
Forest Management Guide for Cultural Heritage Values (2007)	reviewed in 2012	no revision required, next review in 2017	
Forest Management Guide for Boreal Landscapes	in preparation		
Forest Management Guide for Great Lakes-St. Lawrence Landscapes (2010)	completed in 2010	next review in 2015	
* Forest Management Guide for Natural Disturbance Pattern Emulation (2001)	landscape level direction applicable in boreal forest region	revised direction to become part of the new Boreal Landscape Guide stand level direction has been incorporated into Stand and Site Guide	Boreal Landscape Guide Stand and Site Guide
* Forest Management Guidelines for the Conservation of Woodland Caribou Habitat: A Landscape Approach (1999)	reviewed in 2000	distributed and approved for use in Northwest Region revised direction to become part of the new Boreal Landscape Guide	Boreal Landscape Guide
* Forest Management Guidelines for the Provision of Marten Habitat (1996)	reviewed in 2000	revised direction to become part of the new Boreal Landscape Guide stand level direction has been incorporated into Stand and Site Guide	Boreal Landscape Guide Stand and Site Guide
* Forest Management Guidelines for the Provision of Pileated Woodpecker Habitat (1996)	reviewed in 2000	revised direction to become part of the new Boreal Landscape Guide stand level direction has been incorporated into Stand and Site Guide	Boreal Landscape Guide Stand and Site Guide
Management Guidelines for Forestry and Resource-Based Tourism (2001)	reviewed in 2006, 2011	revision underway	
Silvicultural Guide for the Great Lakes-St. Lawrence Conifer Forest in Ontario (1998)	reviewed in 2005	revision underway; four silvicultural guides used for the Area of the Undertaking (AOU) being amalgamated	
Silvicultural Guide for the Tolerant Hardwood Forest in Ontario (1998)	reviewed in 2005	revision underway; four silvicultural guides used for AOU being amalgamated	
Silvicultural Guide to Managing for Black Spruce, Jack Pine and Aspen on Boreal Forest Ecosites in Ontario (1997)	reviewed in 2005	revision underway; four silvicultural guides used for AOU being amalgamated	
Silvicultural Guide to Managing Spruce, Fir, Birch, and Aspen Mixedwoods in Ontario's Boreal Forest (2003)	reviewed in 2008	revision underway; four silviculture guides used for AOU being amalgamated	
Silvicultural Guide to Managing Southern Ontario Forests (2000)	reviewed in 2005, 2010	revision planned after amalgamation of the other four silvicultural guides	

Appendix II

Section 4.7.3

Assessment of Regeneration Success

4.7.3 Assessment of Regeneration Success

Table FMP-25 shows the free-to-grow area projected to be assessed during the plan period.

Details of the process for reaching the free-to-grow stage are located in the Silvicultural Effectiveness Monitoring Program section below. It is expected that the area to be successfully regenerated for each term will be 40,872 hectares in the first term and 31,668 in the second term.

The assessment methodology for free-to-grow surveys assesses the species, height, number of trees as well as determines the number of the target and acceptable species. Target species are those species that are going to make up the largest portion of the future forest unit and are the desired species on site. The acceptable species are compatible with the stand objectives and where competitive species are considered acceptable they are limited to align with the forest conditions represented in the applicable yield curve and in the stand characteristics at maturity. The methodology also assesses the site occupancy of a block and is used in the regeneration assessment and in determination of the FTG status of the area.

Free-to-grow/regeneration success assessments information will be collected in consultation with a Registered Professional Forester and the opportunity for an MNR staff person to accompany Company staff is available. Data collected must be consistent with the Silvicultural Effectiveness Monitoring Manual for Ontario to make the assessment of free-to-grow (or not), forecast stand development and make requisite updates to the Forest Resource Inventory.

The MNR's responsibilities include conducting spot checks of the areas as required. MNR employs the Well-spaced Free-growing Regeneration Assessment Procedure for Ontario (NWSI Technical Manual TM-007, Dec. 2005) which includes a complete description of the procedures for carrying out the WSFG assessment.

The amount of area to be surveyed in any given year will be determined based on the best available data of the regeneration condition. If an area is known to be clearly not free growing then the assessment will wait until another year.

Through the FMP planning process, the LCC has the opportunity to participate in the assessment program.

Silvicultural Effectiveness Monitoring Program

There are two main types of silvicultural treatments on the Big Pic Forest, the first being Extensive, areas that are left for natural regeneration; and Intensive, areas that are to be artificially regenerated.

Overall, there are five different monitoring surveys/assessments conducted, based on the site prescriptions. Extensive treatments receive a natural regeneration survey, followed by a FTG survey. Intensive treatments receive plant quality assessments during the tree plant, Survival/Competition Assessments, post-tending assessment (if required), and finally a free-to-

grow survey. All FTG survey information gathered will be compiled and summarized and reported in the Annual Reports indicating both regeneration and silvicultural success.

A silvicultural ground rule is assigned to each stand within the FMP. These normally are the most common SGR, however they will be reviewed and altered if necessary to better reflect the appropriate treatment requirements based on known site conditions of the forest and potential access patterns. This review and possible alteration will be done at the AWS stage.

These prescriptions will be reviewed during the preparation of the Annual Work Schedule, and based on known site information (i.e. SAP photos and or ground verification) may be updated to better reflect the actual site conditions prior to harvest. Once the harvest is completed, a field visit occurs to verify the prescription or alter the prescription of silvicultural activities. Based on these field visits, the SGR may be followed or updated to meet the site conditions. Once the activities are completed, the prescriptions are documented within the Annual Report for those years' activities.

All these surveys complete the silvicultural effectiveness monitoring program and ensure that all areas harvested are adequately regenerated. The following flow chart illustrates the decision process and lists the surveys / assessments that are completed.

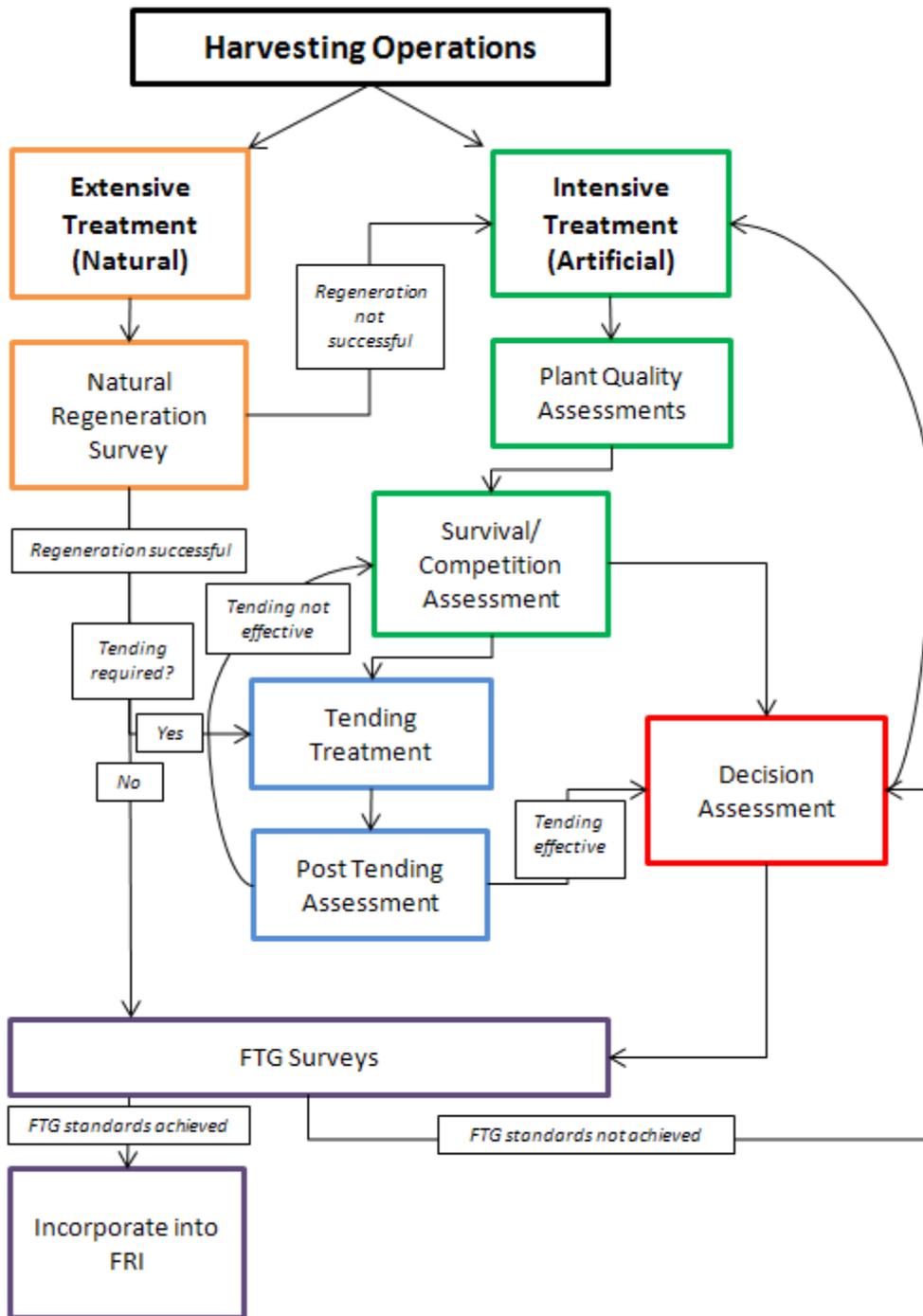


Figure 47. Silvicultural Effectiveness Monitoring Flow Chart

Natural Regeneration areas (Extensive treatments) will be surveyed between 3-5 years after harvesting operations are completed. In some cases of SB1, specifically wetter sites, surveys may occur between 5-7 years after harvest, to ensure that the site has been given ample time for the seed to germinate.

During the natural regeneration survey, areas that are regenerating with ample stock will be left until the free-to-grow survey; areas that are regenerating with ample stocking but have excessive competition that will hinder regeneration success, these areas will be tended; and areas that are not regenerating with ample stocking will be scheduled for an intensive treatment. This supplemental treatment will typically occur within two years of the assessment.

Artificial Regeneration areas (Intensive treatments) will be assessed with quality plots (approximately 1 plot per 4 hectares) during tree planting activities. These plots serve a dual purpose; determination of contract payment by means of measuring density, quality of the planting, and survival, and; to assess the quality of the stock and generally assess the site conditions. These assessments are normally completed during the tree plant, or shortly after the plant is completed.

Survival/Competition assessments are conducted normally the year following the tree plant. This assessment is documented and assesses the survival of the plantations and determines if a tending operation will be required to ensure that the crop trees (growing stock) will meet the regenerations standards of the desired future forest unit. A prescription will be developed from this survey that may recommend a tending treatment, or a re-treatment, or no treatment until the FTG survey. Areas identified as requiring a tending treatment will normally be included in the following years' AWS.

The Survival/Competition assessments allow for monitoring of areas to assess (competition and survival, prior to a FTG survey. By assessing regeneration success (density/stocking, competition, growth characteristics) these surveys can forecast the proposed year of the FTG survey.

If a tending operation is prescribed, a post tending assessment is normally completed one year post-treatment. This tending success results will be documented in the Annual report and the assessment will recommend the year that a FTG survey may be required, or if a follow-up survival/competition assessment may be required.

A summary of the area forecast to be assessed for regeneration success is located in FMP-25 (in Section 9.0). A total of 72,540 hectares is to be assessed during the period of this plan. FMP-25 shows the original and projected forest unit and the corresponding area. This table was produced using the record of silvicultural ground rules reflecting the harvest and silvicultural treatments. It is anticipated that the majority (>90%) of the area assessed will be successfully regenerated to the intended forest unit.

Appendix III

Section 4.7.1

Forest Operations Inspections

Big Pic Forest
April 1, 2007 to March 31, 2017

Part 1: Forest Compliance Plan
Ten Year Forest Compliance Strategy
FMPM, Part B Section 4.7 Monitoring
Section 4.7.1 Forest Operations Monitoring (Inspections and Reporting)

Prepared by: _____
Craig Schut
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Wawa MNR

Date: _____

Approved by: _____
Paul Bernier
District Manager
Wawa MNR

Date: _____

4.7.1.1 Compliance Goal

To encourage and ensure the adherence to rules and requirements which contribute to the sustainable management of Ontario's forests.

Compliance Goals for all forestry operations the Big Pic Forest are as follows:

- Reduce the number of non-compliance incidents, striving for zero;
- In cases of non-compliance, the incident will be promptly noted, recorded and reported to the MNR;
- Immediate corrective/preventative action is taken in the field;
- The effects of non-compliance are minimized and mitigated;
- Appropriate action is taken within the organization to prevent future occurrences of a similar nature.

4.7.1.2 Background

This compliance plan has been prepared in accordance with undated MNR 2010 Forest Compliance Handbook.

Due to the termination of Sustainable Forest License (SFL) on the Big Pic Forest in 2010, the forest is now managed by the Crown as a Crown Management Unit (CMU). As a result of the change in management, there are sections of the compliance plan in the April 1, 2007 to March 31, 2017 Big Pic Forest Management Plan (FMP) that are not applicable to the current situation. Given the current management situation a revised compliance plan was developed that reflects the existing compliance needs and responsibilities for the CMU. This will provide direction for all compliance activities carried out on the forest. Should the forest return to an SFL in the future this Compliance Plan would need to be amended at that time.

As a result of the Big Pic Forest becoming a CMU, all inspectors will require an MNR inspector account and will submit them to MNR for approval. More detail will be provided in section 4.7.1.5 (Roles and Responsibilities).

Purpose and Context

The purpose of the compliance plan is create an updated simple but effective document to ensure all forest operations are performed in compliance with the

Crown Forest Sustainability Act (CFSA) and its mandatory regulations, manuals and guidelines.

Past, Present and Anticipated Compliance Problem Areas

In the first 5 years of the 2007 Big Pic FMP there were 5 instances of Non-Compliance as follows:

- 3 instances of small (less than 1 ha) trespasses into unallocated stands with no values impacted. All 3 instances were self reported and were actioned properly by the Licensee.
- 1 instance of working in the water during the timing restriction to repair a culvert. As a result of the issue more wording was included in subsequent AWS's to clearly identify what can be done with and without approval.
- 1 instance of an area that was manually sprayed for vegetation control that was not identified to MOE, but was in an MNR approved chemical site preparation area.

More recently there have been two Licensees on the forest both with a long history of operations on the unit, however there is a potential for new Licensees and contractors who may be unfamiliar with the CMU. This is not an anticipated issue but may require more hands-on supervision than an operator that has more compliance experience.. This plan will describe the compliance requirements for all operators on the CMU once Licensees start harvesting.

4.7.1.3 COMPLIANCE OBJECTIVES

The compliance objective is “to encourage and ensure the adherence to rules and requirements which contribute to the sustainable management of Ontario’s forests”.

Compliance Objectives for all forestry operations the Big Pic Forest are as follows:

a. Resource protection

- To make the well being of the forest ecosystem a priority in compliance planning and implementation.
- To ensure that forest operations (access, harvest, renewal and maintenance activities) will not impair or negatively affect forest sustainability.
- To continuously evaluate the impact of forest operations on the natural environment and take all necessary corrective action to mitigate impacts and avoid future impacts.
- To contribute to the protection of the forest against fire, disease and insects through prevention and remedial action.

b. Overcoming historical compliance problems

- To actively monitor forest operations and undertake analysis and evaluation of results and take corrective action as required.
- To proactively overcome compliance problems.

c. Continuous improvement

- To develop operating benchmarks (calibration) in forest operations to measure continuous improvement and performance.
- To develop and implement an action plan to remedy recurring problems.
- To develop and contribute to a compliance database with the MNR to assist in performance evaluation.

d. Communications

- To maintain and develop methods of communication that ensures continued open and productive communications between the licensee(s) and the MNR regarding compliance of forest operations.
- To ensure compliance reporting reflects the nature and complexity of forest operations in a thorough and timely manner.
- To develop and implement methods that ensure MNR is continually apprised of the current status of operations.

4.7.1.4 STRATEGIES AND ACTIONS

The overall objective for compliance programs on Crown lands will be “to ensure compliance with rules and requirements that are designed to protect the forest ecosystem while allowing for use which does not compromise the long term health of the forest ecosystem.”

The following outlines the basic supporting strategies for the Compliance Program objectives. Section 4.1.7.5 entitled “Roles, Responsibilities and Actions” describes, in more precise details, who does what in the compliance effort.

1. To ensure that all forest operations (harvest, access, maintenance, renewal) are supervised by competent industry staff that has been trained in work practices that are designed to maximize compliance with plans and legislation for protecting and maintaining the long term health of the forest ecosystem.
 - Educate personnel regarding government legislation/policy and company policy to promote an attitude that fosters an awareness of environmental, forest management, and compliance issues in their specific tasks.
 - FRL holder will develop and implement a training program that will train forest workers in proper techniques of forest operations so that all operations follow approved guidelines/manuals/plans. New employees will be trained in a timely fashion and continued training for all staff will

be scheduled and documented to ensure all staff remain competent in their work practices.

- Establish in the minds of all forest workers that the well-being of the forest ecosystem is a priority.
- Keep abreast of legislation and policy development (with the assistance of the MNR) to ensure that new requirements are promptly incorporated into company policy.
- Maintain training records for forest workers to ensure they have the appropriate and relevant type of training.
- Keeping abreast of, and implementing where appropriate, new technology and techniques that would enhance environmentally sound forest practices.
- All FRL holders will ensure that the layout staff and Foreman/Certified Inspector have the required maps, photos, equipment and technology to carry out operations.
- After the completion of block layout, the layout staff will prepare a map for the Superintendent illustrating the Global Positioning System (GPS) block layout track as it corresponds with the approved harvest block boundary. This will verify that the block boundaries are properly located. Any discrepancies will be documented and addressed in accordance with the intent of the Forest Management Plan.
- Before forest operations can begin foreman are to ensure the layout is identified on the operations approved map in the woodlands office and verify the ribbons at time of start up with the forest operations operator (e.g. Feller Buncher Operator, Bulldozer operator).
- All new foremen will receive a formal orientation briefing in which approval maps will be reviewed, discussed and clarified. Foremen and layout staff are required to use appropriate tools such as GPS, compass, hip chain, aerial photographs and maps to ensure the accurate location of all lines.
- If layout staff are experiencing problems related to the interpretation of maps, photo, or local magnetic attraction, the MNR must be consulted for clarification.
- No boundaries are to be cut at night. It is also advisable for operators to communicate between shift changes to discuss the specifics of the area being harvested.
- A copy of the Approval Map of the area being harvested is to be kept in the feller buncher or skidder at all times.
- Foremen are to hang more flagging along boundaries where rough terrain is encountered, especially along AOC's.

The effectiveness of this strategy will be measured through regular compliance audits conducted Certified Inspectors.

2. To monitor forest management operations to determine the degree to which all applicable rules, regulations, operations, conditions, et cetera are implemented and to report on the findings.

- All forest workers will be required to promptly report instances of non-compliance that they are aware of.
- Employ trained & certified Inspectors to visit all forest operations, observe work performance, undertake detailed measurements, note and assess performance levels and report their findings to company and MNR personnel.
- Prepare an annual plan of action identifying compliance priorities and developing a monitoring schedule.

3. To analyse the results of the monitoring program to develop/modify annual training requirements and priorities and assess progress.

- Work together with MNR to ensure that there is a permanent record maintained of compliance monitoring results.
- Assess compliance results for short-term and longer-term trends using the Forest Operations Information Program (F.O.I.P.), evaluate the effectiveness of preventative/mitigative actions taken and employ the results of the analyses in the development of future 5-year and annual compliance plans.
- Consult with MNR regarding environmental mitigative measures.
- Joint inspections will be encouraged to ensure consistent interpretation of standards by industry and MNR inspectors.

4) To co-operate with MNR and other regulatory agencies to ensure that the Compliance program is efficient, effective and appropriate.

- Developing a spirit of co-operation in sharing information to minimize duplication of certain tasks
- Provide advice to Company staff and MNR policy makers regarding compliance matters
- Carry out joint inspections to facilitate a transfer of science and technology
- Invite MNR personnel to participate in Company workshops and training sessions
- Attend MNR training sessions

4.7.1.5 ROLES AND RESPONSIBILITIES

The following positions will be responsible for the described responsibilities:

MNR Forestry Technical Specialist

Prepares and maintains the compliance plan while it is a Crown forest. Over all is the lead for compliance on the unit and will be the contact for any industry issues.

MNR Technician

Conducts audits and field verification of issues. Will be responsible for ensuring all issues are followed up on and tracked for compliance.

MNR Operations Supervisor

Approves any FOIP reports (Industry/MNR inspectors) that have issues attached to the activity.

MNR Crown Forest Lead

Approves all Industry FOIP reports under the Industry/MNR FOIP account that have no issues.

Certified Industry Inspector

Responsible for completing FOIP reports as per the Forest Compliance Handbook. Also responsible for Industry Notification of Operational Status using the template attached titled Big Pic Forest Notification Status. The Industry inspector will be given a MNR FOIP account and will submit directly to MNR approver.

FRL Holder

Has the responsibility of all compliance actions on the area operated on under their FRL. Will view all reports prior to submission to MNR or delegate a representative who has the responsibilities of acting as the FRL holder. Is responsible to ensure all Strategies and Actions as described in section 4.7.1.4, 4.7.1.6 and 4.7.1.7 are implemented.

Industry Foreman for FRL Holder

Responsible for forestry operations that they are supervising. Any issues would be brought forward to superintendent or directly to MNR. If the FRL holder does not have an Industry Superintendent then the Foreman would fulfill those responsibilities as well.

Industry Superintendent

If the FRL Holder has an Industry Superintendent this position will be the main contact for compliance issues and correspondence. This position would be responsible for making sure all compliance is completed in accordance with the most recent Forest Compliance Hand Book. They will ensure all inspectors receive the updated training as required and ensure all issues are properly resolved`.

4.7.1.6 Notification of the Status of an Operation

For the proper assessment and evaluation of operational compliance, MNR must be made aware of operational status. This notification of operational status is an information item only to advise MNR of operational progress. For the Big Pic two spread sheets will be utilized for the notifications.

The "Big Pic Start up Notification Table" it will be sent in weekly and will indicate all operations on going on the unit. It will also serve as a start up notification for a new activity if submitted within the 5 day requirement.

The "Big Pic Notification Status Table" will be submitted when required to inform the MNR of any change of status for a block. Both of these notifications will be sent e-mail to the Forestry Technical Specialist and MNR Inspector.

The reporting timelines below are minimums and must be followed for all operations. In cases where blocks are being released to allow another activity such as site prep the sooner the MNR is notified the better so it hopefully will not impact future operations and MNR will have time to inspect if desired.

- **Start-Up:** The Licensee must provide written notification to the MNR Operations Supervisor prior to or within 5 working days of the beginning of a new operation.
- **Suspended:** The Licensee must provide written notification (as per the compliance plan) to the MNR prior to or within 20 working days of suspending an operation or activity. A suspended operation is one where the operational activities must be delayed and are not complete and therefore cannot be assessed for some aspects of compliance. That notification must clearly describe the operation being suspended, its location, and specify why the operation is being suspended and when it is proposed to be restarted. Operations may not be suspended for more than the balance of the period of the current AWS and one further AWS period.

• **Release:** A Release is where a Licensee wishes to provide the MNR Operations Supervisor a “Release to MNR for compliance audit” for any part of an operation’s Compliance Reporting Area. This release must be in writing. A Release Notification is required no less than 10 working days prior to the commencement of any new operation. A Release Notification must be clear and specific about what is being released, the area being released and why the release is being provided. This may be done where the Licensee wishes to:

- Commence a new operation on that area such as Renewal (e.g. mechanical site preparation or slash pile burning);
- To acknowledge harvest is finished but the wood has yet to be hauled;
- To allow compliance to be assessed for that portion of the operation that is finished.

In this context, a “release” is a confirmation by the FRL holder that the activity(ies) being released is finished on that portion of the area identified for release, is without Operational Issues, and is available to MNR for audit. It is possible to suspend a Harvest operation because it cannot be considered complete pending the haul of the wood and at the same time provide MNR a Release Notice for the harvesting activities so that site preparation can be undertaken.

4.7.1.7 PREVENTION, AVOIDANCE, AND MITIGATION

Emphasis will be on prevention of undesirable activities or occurrences and mitigation of any loss or damage. The root cause of an undesirable activity or event will be determined and appropriate action prescribed. Action will be consistent with the potential for non-conformance to legislation and the ability to adapt so that non-compliance does not become a recurring problem. This positive action will be delivered by forestry industry staff and will focus on learning and adapting to ensure that it does not occur again.

Where an undesirable activity has occurred, the FRL holder will be responsible to ensure that the actions described in this section are implemented . In areas with high values, such as waterways and wildlife habitat, the Ministry of Natural Resources will verify the identified Operational Issue. MNR may then determine and assign Corrective Action as appropriate. In instances where the Industry inspector determines a situation to be clearly non-compliant, the direction will be that work will stop on that part of the operation and the inspector will submit a report of an Operational Issue.

Where any Industry operating personnel, during ongoing monitoring of operations, identify a situation they believe could be an Operational Issue(s), they will undertake one of the following actions:

- If there is a violation of the approved FMP or AWS,(including supporting guidelines) or a threat to the environment, immediately stop the operation and take the necessary steps to stop further possible non-compliance/ harm.
- Report the situation to the company's Certified Inspector who will conduct a formal compliance inspection. The Certified Inspector will determine if the situation is a violation of an approved plan or a threat to the environment and what further action to take.
- If the situation cannot be immediately corrected, the company's Certified Inspector will submit a report to the MNR to approve in FOIP that documents their findings and an Operational Issue. Also identify the issue to the MNR and other regulatory agencies as appropriate.

4.7.1.8 COMPLIANCE REPORTING AREAS

Compliance Reporting Areas (CRA) will have a map created each year or carried forward from the previous years approved map. The CRA map will be created annually with the AWS and will require approval by the MNR prior to the implementation of that AWS. Industry and MNR compliance staff will work together to come up with the areas and coding system, keeping in mind once a block or CRA is operated in it can not be changed.

In areas where the total proposed harvest area exceeds 500 hectares the harvest area will be broken down into CRA's of less than 500 ha. When completing FOIP reports CRA's can be reported on individually or grouped together, but keeping in mind the 20 day no activity reporting timeframe.

4.7.1.9 MONITORING COMPLIANCE OF FOREST OPERATIONS

Due to the Big Pic being a Crown Forest all inspections are entered into FOIP as MNR inspections. All industry inspectors will require approval from MNR and a new account in FOIP set up to deal with the issue. For all purposes the reports submitted by industry staff will be considered as, and dealt with as industry reports. Only MNR staff will be able to verify operational issues on the CMU. Industry reports will require the name of the industry official who signed off the report, and are to indicate that the industry official is in agreement with the report as submitted to the MNR for approval. This information will be in the comments section of the report.