Miitigoog LP

ANNUAL WORK SCHEDULE
for the
KENORA FOREST SUSTAINABLE FOREST LICENCE (#550400)

MNRF Kenora District, Northwest Region

for the one-year period from April 1, 2021 to March 31, 2022

Kenora Forest Sustainable Forest License

2012 – 2022 Forest Management Plan

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Annual Work Schedule - Title, Certification and Approval Page

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KENORA FOREST SUSTAINABLE FOREST LICENCE
MNRF Kenora District, Northwestern Region

Miitigoog LP
for the one-year period from April 1, 2021 to March 31, 2022

We hereby confirm that this annual work schedule has been prepared in accordance with the requirements of the Forest Management Planning Manual and the Forest Information Manual, and is consistent with the approved forest management plan.

Prepared By: _____ March 12, 2021
Kurt Pochailo, R.P.F., (date)
Miisun Integrated Resource Management Co.

Submitted By: _____ March 12, 2021
Shannon Rawn, R.P.F. (date)
General Manager, Miisun IRM

I hereby certify that the access, harvest, renewal and maintenance operations which are scheduled in this annual work schedule have been developed in accordance with the requirements of the Forest Management Planning Manual.

_____ March 12, 2021
RPF Seal Kurt Pochailo, R.P.F. (date)
Miisun Integrated Resource Management Co.

NRIP Submission Identifier:

The original signed and stamped version of this page is retained at MNRF Kenora District office and the Miitigoog/Miisun office in Kenora.

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HIGHER RISK WATER CROSSING APPROVAL PAGE
for the
KENORA FOREST
MNRF Kenora District, Northwestern Region

Miitigoog LP
for the one-year period from April 1, 2021 to March 31, 2022

We hereby confirm that this annual work schedule has been prepared in accordance with the requirements of the Forest Management Planning Manual and the Forest Information Manual, and is consistent with the approved forest management plan.

Prepared By: _____ March 12, 2021
Kurt Pochailo, R.P.F., (date)
Miisun Integrated Resource Management Co.

Submitted By: _____ March 12, 2021
Shannon Rawn, R.P.F. (date)
General Manager, Miisun IRM

I hereby certify that the forest operations which are scheduled in this annual work schedule have been developed in accordance with the requirements of the Forest Management Planning Manual.

_____ March 12, 2021
RPF Seal Kurt Pochailo, R.P.F. (date)
Miisun Integrated Resource Management Co.

I have read this higher risk water crossing submission, and found it to be complete and consistent with the approved forest management plan.

Approved By: _____ _____
Brian Kilgour (date)
MNRF Kenora District Manager

NRIP Submission Identifier:

The original signed and stamped version of this page is retained at MNRF Kenora District office and the Miitigoog/Miisun office in Kenora.

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3.1 INTRODUCTION

The Kenora Forest is located in the Kenora District of the Northwestern Region of the Ontario Ministry of Natural Resources and Forestry (MNRF). The Kenora Forest Sustainable Forest License (SFL #550400) is held by Miitigoog Limited Partnership. Miitigoog General Partner Inc. has prepared this annual work schedule on behalf of the shareholders and partners of Miitigoog Limited Partnership, with support from Miisun Integrated Forest Management Co. The Miisun office is located in Kenora on Ninth Street North. This annual work schedule (AWS) encompasses forestry operations for the period from April 1, 2021 to March 31, 2022 on the Kenora Forest SFL. This Annual Work Schedule coincides with the ten-year 2012-2022 Forest Management Plan (FMP) for the Kenora Forest.

The AWS includes operations (harvest, renewal, tending, protection, road construction and maintenance, compliance) which were planned and approved in the FMP, and are scheduled for implementation during the AWS period. Conditions on regular operations identified in the 2012-2022 Forest Management Plan (FMP) for the Kenora Forest will be followed in the implementation of this AWS. The text, tables and information products associated with this AWS have been produced in accordance with the Forest Management Planning Manual for Ontario's Crown Forests (MNRF, 2020). All information products submitted with the annual work schedule are in accordance with the requirements of the current version of the Forest Information Manual and related Technical Specifications.

3.2 HARVEST AREA

The area scheduled for harvest in this AWS has been selected from the 2012 Forest Management Plan (FMP). Within this AWS there are 8,423 hectares of harvest area. The HMX forest unit is seemingly over-allocated, but when the under harvest of the past years is taken into consideration the total harvest by forest unit will balance throughout the 10-year term of the plan. The allocation by forest unit for the 2021-2022 AWS can be seen in the table below.

Forest Unit	2 Year AHA (ha)	AWS Area (ha)	Difference (ha)
BFM	29	38	9
CMX	1,736	1,411	-325
HMX	2,412	3,218	806
OTH	88	158	70
PJD	716	316	-400
PJM	1,490	1,305	-185
POD	1,077	1,073	-4
PRW	187	221	34
SBL	5	-	-5
SPD	112	215	103
SPM	464	469	5
TOTAL	8,316	8,423	107

The actual area harvested on the Kenora Forest in recent years has been well below the planned levels. Although Kenora Forest Products (KFP) sawmill has shut down for an undisclosed length of time the conifer from the Kenora Forest will continue to flow to EACOM in Ear Falls. Weyerhaeuser will continue to operate at between 80-100% capacity during the 2021-2022 operating season. Local contractors have purchased equipment to improve their ability to move wood to all available markets. The conifer market will increase production on the forest and get the AHA closer to the planned level of 4,100 hectares per year. It is believed that harvesting should be above average, although it is not expected to exceed 3,000 hectares total.

The reason for the high level of harvest area included in the AWS this year is because many blocks have been included for road construction purposes and for "clean-up" (areas partially harvested in a previous year). Miitigoog may be utilizing additional road building crews to build advanced roads for 2022-22, and as such additional harvest blocks were added to the AWS so that the right-of-ways may be cleared and advanced road constructed.

Conditions on regular operations are found in Section 8.2.2.2 of the FMP – Phase 2. These conditions include prescriptions for the following:

- Biofibre Harvest
- Downed Woody Material

- Erosion
- Forest Composition
- Furbearing Mammal Dens (other than red foxes, skunks, wolves, wolverines) – in caves, excavated burrows, under large piles of coarse woody material or other enduring features – known to have been occupied at least once within the past 5 years
- Furbearing Mammal Dens (other than red foxes, skunks, wolves, wolverines) – in tree cavities, hollow logs, brush piles, other transitory features – known to be occupied
- Hydrological Impacts
- Large Landscape Patches – Deer Emphasis Areas (DEAs) - in this Annual work schedule, there are eight harvest blocks in a DEA to which this direction applies.
- Large Landscape Patches – Moose Emphasis Areas (MEAs) – in this Annual work schedule, there are thirty harvest blocks in an MEA to which this direction applies.
- Loss of Productive Land
- Maintenance of S1, S2 and S3 Natural Heritage Information Centre vegetation communities, or other uncommon vegetation communities identified by MNRF, which are likely to occur in areas of planned operations
- Mapped Residual
- Nests – Inactive Nest - great grey owl, northern goshawk, red-shouldered hawk
- Nests - Unoccupied Stick Nests known or suspected to have been built or used by broad-winged hawk, merlin, sharp-shinned hawk, unknown species small stick nest <75cm diameter
- Nests - Unoccupied Stick Nests known or suspected to have been built or used by barred owl, Cooper's hawk, common raven, great horned owl, long-eared owl, red-tailed hawk, unknown species large stick nest >=75cm diameter
- Nests - Unoccupied Nests in cavities known or suspected to have been used by American kestrel, boreal owl, eastern screech-owl, northern hawk owl, northern saw-whet owl
- Nests – Unoccupied Nests/communal roosts in cavities known or suspected to have been used by barred owl, great horned owl, chimney swift
- Nests – waterfowl, grouse, wild turkeys – known nests containing eggs encountered during forest management operations
- Nests – Songbirds or other small birds – known nests containing eggs or young encountered during forest management operations
- Nutrient Retention on Shallow Soil Sites
- Residual, Unmapped
- Rich Lowland Hardwood-Dominated Forest (black ash)– mapped and unmapped pockets encountered during operations
- Rutting and Compaction
- Wetlands – mapped permanent non-forested (polygon types OMS, TMS, and BSH)
- Wildlife Trees – Clearcut Silvicultural System
- Woodland Pools

Areas of harvest blocks requiring additional residual to meet guidelines are shown on the FMP operations maps. These areas did not meet the guideline for 0.5 ha of residual forest in every 50 ha hexagon. For blocks in moose emphasis areas, further work was done during FMP development

to locate required residual patches. The location of these residual patches is shown on the AWS operations maps to guide their placement. In some cases, the residual patch has been placed outside of the "low residual area" where the MNRF biologist determined that moose habitat needs would be better served by retaining higher quality summer thermal cover near moose aquatic feeding areas, consistent with the moose habitat objectives. For all other blocks, residual patch placement will be determined during layout.

For the deer emphasis area, the following additional direction applies as per the FMP. If practical and feasible, the block will be scheduled for harvest in the winter season. All bur oak will be retained except where required to be cleared for road right-of-way. Operations will preferentially retain mature white spruce, white pine and cedar as wildlife trees, priority given to retaining small clumps of trees, as opposed to individual trees, if they occur.

The area of concern (AOC) prescriptions for lakes and streams allow for some limited harvesting, as per the direction in the Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales (MNRF 2010) and applicable AOCs in Table FMP-10.

As a result of First Nations input, harvest blocks within the Wabaseemoong Stewardship Area of the Kenora Forest require additional retention levels of 36 leave trees per hectare, compared to the requirement of 25 trees elsewhere. The additional leave tree requirements will not result in non-compliance in regards to utilization standards as the additional trees will be made up of dead trees or trees which fall below the minimum acceptable standard found within the Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales.

Areas available for Fuelwood - Fuelwood is available at any approved FMP block. Fuelwood from these areas includes cull wood brought to roadside or wood in slash piles. The public is to obtain personal use fuelwood permits from the MNRF prior to harvesting fuelwood.

Fuelwood will only be available if timber was not left on site for a specific reason. In all blocks, timber will be left standing intentionally to enhance wildlife habitat and natural disturbance patterns and will be unavailable for fuelwood. No fuelwood will be considered available within a block once renewal activities have commenced, or after a period of two years after harvest operations have ended. This strategy is intended for the protection of regenerating trees, whether they were initiated naturally or artificially.

An index map (1:200,000 scale) and detailed operations maps (1:20,000 scale) of harvest areas are found in the submission folder labeled as per the Forest Information Manual (FIM) Technical Specification requirements and made available on the eFMP website.

3.2.1 WOOD STORAGE YARDS

There are no wood storage yards identified for this AWS.

3.2.2 RENEWAL AND MAINTENANCE

Renewal, tending and protection operations within the Kenora Forest scheduled for the 2021-2022 period are shown on the index and operations maps. The operations maps show gross areas for renewal and tending. Activities scheduled for 2021-2022 include mechanical site preparation, seeding, tree planting, tending (either ground herbicide application or manual brushing), and slash pile burning.

The mechanical site preparation program will involve power disk trenching. The area proposed for 2021 is approximately 304 hectares. These areas have received a post-harvest silvicultural prescription and, in some cases, only portions of a block have been identified for site preparation. This area may be increased through a revision, if required, as our site preparation program continues to shift from spring work to fall work.

The tree planting program consists of planting approximately 430,170 seedlings on both site prepared and non-site prepared ground. This AWS identifies 363 hectares for planting. Seedlings are black spruce and jack pine container stock (309 and 207 size, a.k.a. minis), red pine container stock (309 size) and white spruce container stock (309 size).

A tending program may be carried out in the late summer of 2021. The method of tending (i.e. ground herbicide application, manual brushing or aerial herbicide application) will be determined by conditions in the block and availability of contractors. Currently the AWS identifies 59 hectares for tending, this area will be refined following ground surveys that are scheduled to be conducted throughout the spring and early summer. The area that is included for tending in this AWS is an area that was previously seeded but had poor germination due to heavy grass taking over the site. A tending program is required so that this site can be planted in the future.

There are approximately 144 hectares prescribed for seeding in this AWS. Previously harvested areas that are not planted or seeded will be left to regenerate naturally. The area naturally regenerated will be included in subsequent annual reports following Forest Operations Prescription (FOP) verification.

Slash piles created in blocks harvested between 2020-2021 and any areas not burned during the 2020 Low Complexity Prescribed Burn Plan will be included in the Low Complexity Prescribed Burn Plan for the fall 2021. The slash pile burning program will be completed as per direction in the FMP. Once exact site locations and hectares are known, following submission (target submission of July 15th) and approval of the 2021-2022 Low Complexity Prescribed Burn Plan, it will be appended to this AWS.

In addition to the areas identified for renewal activities, all areas identified for harvest are eligible for renewal and tending activities.

3.2.3 ROADS

The construction of the Westway Road on the Western Peninsula will continue throughout the winter of 2021-2022. The total length that will be constructed within this AWS will depend upon the conifer market for wood from this location. The Talbot road will be completed during this AWS, as there is approximately 2.5 kilometers left to construct. The Jessie road will also see a low level of continued construction as operations target hardwood south of Kenora. Goshawk road has been included in this AWS and there is potential to have construction started during this AWS.

Operational and winter roads will be constructed within harvest areas and operational road boundaries for short-term use. Operational road boundaries are shown on the operations maps. Operational maps also indicate areas where Forestry Aggregate Pits may be located outside of harvest blocks and to indicate the general location of access into harvest blocks.

3.2.3.1 Water Crossings

The water crossings for the current year have been included in table AWS-1. All proposed water crossings listed in table AWS-1 are shown on the 1:20,000 annual operations maps.

Miitigoog will obtain approval from MNRF for all bridges (temporary and permanent) prior to their installation. Miitigoog will provide bridge design drawings and details two weeks in advance of bridge construction and installation. If MNRF design drawings are being used, Miitigoog will specify which design and dimensions are being used.

Unless specified in Tables AWS-1 or AWS-2, all water crossings will be constructed, maintained and decommissioned in accordance with Appendix C – Water Crossing Standards for the Kenora Forest.

There are no water crossings currently scheduled for removal in this AWS, should water crossings be removed a revision to the AWS will be submitted.

3.2.3.2 Other Crossings of Areas of Concern

There are currently no crossings of areas of concern other than water crossings identified for this AWS.

3.2.3.3 Water Crossing Decommissioning

The water crossings decommissioning for the current year have been included in table AWS-2. All proposed water crossing decommissioning listed in table AWS-2 are shown on the 1:20,000 annual operations maps.

3.2.3.4 Aggregates

The existing Forestry Aggregate Pits that will be used for construction and maintenance of roads during the year are identified on the AWS maps and coverage.

New Forestry Aggregate Pits may be added throughout the year within approved harvest blocks, primary and branch road corridors, aggregate extraction corridors or operational road boundaries.

Aggregate pits no longer required will be rehabilitated. This will include aggregate pits established during this AWS period. Aggregate pits for operational roads are often rehabilitated in the same year they are created. There are currently no aggregate pits for which Category 9 permit application will be prepared.

3.2.3.5 Existing Roads

Maintenance will occur on large portions of the existing primary and branch road systems. The primary and branch roads identified in table FMP-18 of the Kenora Forest 2012-2022 Forest Management Plan are eligible for funding in accordance with the Road Construction and Maintenance Agreement.

Routine maintenance operations may include any one or combination of the following: summer grading, ditching, drainage, brush clearing with mechanical or chemical methods (e.g. application of chemical herbicides for vegetation control along road shoulders), gravelling, re-shaping of road bed, dust control measures, signage, snow plowing, sanding/salting and clearing existing right-of-ways including the harvest of merchantable trees as required. Maintenance may also include non-emergency repairs of existing water crossings to clean culverts, remove blockages caused by beavers, and to apply material (e.g. gravel, riprap) to mitigate or enhance long-term erosion protection around water crossings.

For safety/engineering concerns minor road re-alignment and bypass construction may also be required for existing roads during the implementation of the AWS. This is permitted within the existing right-of-way, subject to the confirmation of values and the application of all applicable AOCs to the proposed work area. If an appropriate AOC does not exist in the FMP, it will be amended into the FMP and then applied.

Emergency maintenance is defined as “road maintenance that requires immediate attention to restore access and reduce the chance of personal injury, damage to equipment, inconvenience to road users and further road damage” (2020 FMPM). Emergency maintenance will be necessary where public safety and/or environmental damage have occurred unexpectedly. Emergency repairs can proceed immediately without MNRF approval provided the emergency works are limited in scope to only what is necessary to address essential public safety concerns and restrict further environmental damage. All emergency actions will be reported to MNRF as soon as practical and any further actions (e.g. restoration, reconstruction, abandonment) will be subject to normal planning approvals. Where sediment has been released into a watercourse, the Ministry of the Environment is to be informed.

Access to areas impacted by unplanned events could be disrupted at any time and there is no obligation on the Crown or the Forest Industry to undertake repair work to restore infrastructure and access. Where water crossings have been adversely impacted by unplanned events, water crossings may not be restored in a timely manner and remedial work may be limited to only eliminating or reducing safety hazards and/or interim measures to stop environmental damage. However, all actions must be consistent with the Use Management Strategy for the road/road network. Situations could also arise where it is determined that a damaged/deteriorating infrastructure is unsafe and continued use must be prohibited until a permanent solution is implemented.

3.2.4 FIRE PREVENTION AND PREPAREDNESS

The forest fire prevention and preparedness measures described in Section 8.8 of the FMP will apply to the entire management unit and all licensees.

It is the policy of Miitigoog to take all reasonable precautions to prevent forest fires during the course of its operations and to take immediate action to minimize losses should fire occur on or near its operations. Miitigoog, its contractors and overlapping licencees will work in close liaison and co-operation with the Ministry of Natural Resources and Forestry in the prevention, detection, and suppression of forest fires.

Appendix B *2021-2022 Miisun Fire Plan* goes into greater detail on the requirements for all contractors, and will be distributed to each of them. It is the responsibility of Miitigoog, its contractors and overlapping licencees to understand and comply with the *Forest Fires Prevention Act* and the Modifying Industrial Operations Protocol.

To enhance the compliance and understanding of fire prevention the following measures are implemented:

(a) Daily communication detailing fire activity and fire hazard is carried out with all contractors and overlapping licencees.
(b) Miitigoog/Miisun field personnel or consultants conduct periodic fire inspections on mechanical equipment and forest fire suppression equipment at each operation to assure compliance with the *Forest Fires Prevention Act* and company standards.
(c) Patrols of public use areas and after lightning events (during extreme conditions) will be conducted by Miitigoog/Miisun in conjunction with operations where they overlap.

Personnel in harvesting and site preparation operations will be trained to the SP-102 Industry certification. Trainees will be instructed by qualified persons (as deemed so by MNRF and Miisun) covering the two-day induction for new employees and a one-day refresher course for previously trained personnel. All sub-contractors (planting, thinning, ground spray) will be trained by their respective contractors to a competent level of fire knowledge based on the fire equipment in their operations.

As per the *Forest Fires Prevention Act* and the Modifying Industrial Operations Protocol, Miitigoog, its contractors and overlapping licencees will be considered: 1) trained and capable, or 2) limited operators.

If an overlapping licencee would like to be considered trained and capable, the licencee must provide a completed Kenora Forest Independent Operator / Contractor Fire Information form to Miitigoog prior to April 1, 2021. Miitigoog will forward any completed forms to the MNRF so the appropriate classification is made.

The following table describes the fire suppression equipment that will be available and maintained where operations are occurring.

Operations	Number of Machines	Number of Equipment Caches	Backpack Pumps*
Heavy equipment with tire chains, tracks, working in forest fuels	1-5 6+	0 1	1/machine
OR**: Heavy Equipment at work within a 10km radius of each other (includes hot work)	1-9 10+	0 1	1/machine or hot work operation
Tree plant, manual tending or other labour-intensive operations		0	1 for every 4 workers, to a maximum of 10/site

*A serviceable pressurized *water delivery system* located on a machine can replace a backpack pump.

**Only one fire equipment cache will be required on site, providing it is within 20 minutes (by ground transportation) of all equipment.

3.2.5 MONITORING AND ASSESSMENT

Annual Component of the Compliance Plan

Areas where harvest, access, renewal and maintenance operations will occur during the 2021-2022 year are identified in the Annual Work Schedule (AWS) for the Kenora Forest. Miitigoog/Miisun will conduct on-site compliance inspections of harvest operations, road construction operations and renewal and maintenance. Miitigoog/Miisun will gather the compliance information and submit the information to the MNRF through FOIP to ensure the Compliance Plan is followed and the applicable legislative requirements are met. Appendix A goes into greater detail on the reporting requirements and responsibilities for the 2021-2022 AWS.

All AWS operations are consistent with the approved Forest Management Plan (FMP). All special measures required to protect specific values have been identified in the approved FMP. The supervisor of each operation will be provided with the required information relating to the AWS, Forest Operations Prescriptions and Areas of Concern. Monitoring and Inspection, Annual Monitoring, and Reporting will be conducted in accordance with the requirements described in Section 8.7.1 of the FMP Compliance Plan.

Monitoring of Exceptions

The following table contains additional annual monitoring programs that will be conducted on the Kenora Forest and who is responsible for them.

Program	Monitoring Method	Responsibility	Time
Road Inspections Inspect SFL Primary and Branch roads	Ground	Miitigoog/ Miisun	Prior to Freeze-up.
ES 11 and 12 Shallow soil	Pre-work, Ongoing inspections, Compliance inspections, Continue participation in the Regional Monitoring Program, Annual Reporting	Miitigoog/ Miisun	On-going
Aggregate Pit Inspections	Ground	Miitigoog/ Miisun	On-going

Regeneration Assessments

All areas harvested between four and five years ago will have an assessment completed to determine if any supplemental treatments are required prior to meeting regeneration standards as determined in the 2012-2022 Kenora Forest Management Plan.

All areas harvested between nine and twelve years ago are eligible to be assessed for establishment during the period of this AWS. These FTG assessments may be conducted on the ground or with the use of Large Scale Photography (LSP). When utilizing LSP the contractor will be required to complete calibration/verification on the ground to ensure the results are suitably adequate. The results of the survey will be reported in the 2021-2022 annual report. Areas identified for establishment assessments may be revised into the AWS by June 1st.

Roads and Water Crossings

Monitoring will be carried out as specified below:

While the 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' inspected at least once a year by a competent person (following the inspection guidelines in Appendix E of the Crown Land Bridge Management Guidelines or by a professional engineer). When the road or road network is not in use for forest management purposes, monitoring will be based on a yearly schedule of specific roads to be inspected. This yearly schedule will be based upon a risk assessment approach with emphasis on the potential values which could be impacted (i.e. 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 of reforestation (e.g. Free to Grow (FTG) surveys). In addition, all staff and contractors (harvest, renewal and tending contractors) are to report any existing or potential concerns regarding the road or road network and water crossings encountered while travelling on roads throughout the forest.

Miitigoog/Miisun, as part of their normal field duties, will observe, on a continual basis, the condition of water crossings on maintained roads, particularly with respect to the potential for washouts or blockages of culverts. Problems will be reported to the party responsible for the road.

All roads which are not being maintained and are listed in this AWS for monitoring will be inspected at least once during this AWS period and more frequently where circumstances, such as abnormal rainfall, warrant.

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).

APPENDIX A

2021-2022 COMPLIANCE PLAN

KENORA FOREST

Compliance planning and monitoring for the period of April 1, 2021 to March 31, 2022 will follow the procedures outlined in the Ten-Year Compliance Plan prepared to cover operations from April 1, 2012 to March 31, 2022. The Ten Year Kenora Compliance Plan can be found in the FMP text.

Areas where operations, such as harvest, haul, road construction, and renewal will occur during the 2021-2022 year are identified in text, tables and on the operational maps in the Annual Work Schedule for the Kenora Forest. All Annual Work Schedule operations are consistent with the approved Forest Management Plan. All special measures required to protect specific values have been identified in the approved 2012-2022 Kenora Forest Management Plan. Additional specific conditions not covered within the approved Forest Management Plan will be noted in the approved Annual Work Schedule. The supervisor of each operation will be provided with the required information relating to the Annual Work Schedule, Forest Operating Prescriptions and Areas of Concern prescriptions and operational considerations.

Compliance priorities are identified based on assessment of past years' compliance history. Issues and resolutions that evolved from the previous operating year are:

Identification of WS02 water crossings which need to be roaded, there is a lack of pre block planning on the Kenora Forest. Contractors need to be months ahead to ensure there is not a delay in the planned harvest operations. The onus is on the contractor to pre-identify any potential issues moving forward in a block, this will be corrected by Miisun and contractors beginning to pre walk blocks and locate advanced roads into spring/summer/fall/winter blocks for future operating years

Amendment and revision data will be immediately distributed to contractors to prevent ribboning errors. This includes updated maps and GPS data. The company STOP WORK procedure will be reviewed regularly in situations where operator is not sure of directions or locations. Miisun will implement and provide additional information and training to ensure other historical compliance issues continue to be addressed. The following outlines these ongoing priorities and what actions are being done to stay focused on correcting these occurrences:

1. Harvest Block Boundary Layout – Miisun will provide an annual review of the procedures for harvest block boundary layout with all overlapping licensees. This will include a review of common water quality area of concern and the associated prescriptions.

2. Site damage – Miisun will provide annual compliance training to contractors and will emphasize this potential operational issue with harvesting and Site preparation (SIP) contractors.

3. Snag tree retention – Miisun will provide compliance training to contractors regarding the requirement for snag tree retention and assessment. The training will emphasize the requirement

to assess snag trees during active harvest operations in order to immediately share information with feller buncher operator(s) before it becomes an operational issue.

Risk Analysis

A risk analysis has been completed. (See **Table 1** for ranking of harvest areas.) Harvest operations were analyzed to determine the level of operational and environmental risk. The risk ranking system utilized, assigns a numeric value to a harvest operation based on criteria such as, season of operation, forest stand and soil conditions, water crossings and the number of Area of Concerns or values present.

Water quality AOC's are scored individually and are given a numeric value from zero to three based on the complexity and amount of AOC. All other AOC's are given a numeric value of 2 per occurrence. Each operation is tallied for a total score, which ranks the operations risk from high to low, high rankings have a greater chance of having a compliance issue, therefore requiring a higher level of monitoring while low rankings will require less monitoring.

Forest Operations Inspection Reports (FOIRs) for harvest activities are required, at a minimum, for every 500 hectares harvested, but Miisun has scheduled FOIRs at a rate of 1 for every 250 hectares harvested. Although more than the Annual Harvest Allocation (AHA) level has been allocated within this AWS, as described in Section 2.0 above, the expected harvest levels will be closer to the AHA level (i.e. approximately 3,000 ha or 12 reports). Additional reports will be submitted if actual harvest levels are higher than anticipated. Miisun will continue to monitor 100% of the operations and will complete forest operations inspections for all water crossings and renewal activities.

The forest operations inspections that will be completed will be dependent upon the risk analysis. The risk analysis, that is prepared, ranks the risk for each harvest block and assists the inspectors to determine the intensity of monitoring required.

Table 1 – Risk Based Block Evaluation

Block id	X-ings	Water AOC	Other AOC	Season	Soils	Total
12.010	2	1	0	2	1	6
12.012	0	3	2	1	1	7
12.017	0	1	0	1	1	3
12.019	0	1	0	2	1	4
12.021	0	1	0	2	1	4
12.022	0	1	0	2	1	4
12.023	0	2	2	2	1	7
12.028	0	2	0	1	1	4
12.031	0	1	0	2	1	4
12.039	4	2	2	2	1	11
12.040	0	1	4	2	0	7
12.041	0	1	2	1	0	4
12.044	0	3	2	1	1	7
12.051	0	1	2	2	1	6
12.053	6	2	4	1	0	13
12.058	0	2	2	2	2	8
12.102	0	2	2	2	1	7
12.103	0	2	4	1	2	9
12.104	0	2	2	1	2	7
12.117	0	2	4	2	0	8
12.118	2	3	2	2	2	11
12.119	2	2	4	2	2	12
12.12	0	2	2	2	2	8
12.125	8	2	6	2	0	18
12.126	0	1	8	2	1	12
12.127	0	3	8	2	1	14
12.146	0	2	4	2	1	9
12.233	0	2	0	1	2	5
12.237	0	3	4	2	2	11
12.238	0	3	4	2	2	11
12.239	0	1	2	1	1	5
12.243	4	1	2	1	1	9
12.244	4	1	0	1	1	7
12.253	0	0	2	1	1	4
12.255	16	1	0	1	1	19
12.256	0	0	0	1	0	1
12.258	0	3	2	2	1	8
12.259	0	3	4	2	0	9
12.271	0	3	4	1	0	8
12.281	0	3	6	2	0	11
12.282	2	1	2	2	0	7
12.283	0	2	4	2	0	8
12.297	0	2	0	2	1	5
12.324	10	2	10	2	1	25
12.364	0	2	0	2	1	5
12.450	4	3	8	2	1	18
12.473	2	3	6	2	1	14
12.493	2	2	0	2	0	6
12.494	0	1	10	2	0	13
12.499	2	1	8	2	1	14
12.500	8	2	0	1	1	12
12.501	2	1	0	1	1	5
12.523	0	3	10	2	0	15
12.526	0	3	0	2	1	6
12.527	0	1	0	2	1	4
12.528	0	2	2	2	1	7
12.531	0	1	0	1	0	2
12.536	0	2	0	2	0	4
12.624	2	2	0	2	1	7
12.633	2	2	2	2	1	9
12.651	0	2	14	1	1	18
12.653	2	2	4	1	0	9
12.664	2	2	0	2	0	6
12.705	2	1	0	1	0	4
12.999	2	1	2	2	1	8

X-ings - 2 per occurance
Water AOC - 0-3 depending on amount of AOC
Other AOC - 2 per occurance
Season - Summer - 2 Winter - 1
Soils - ES11/12 and fine texture soils - 1

Inspection Reporting Timelines

Activity Status	MNRF Reporting Requirement	Timeline	Responsibility
Commencement Start-up Notification of new harvest, road construction, renewal and silviculture operations (ie: Start Up Notification)	Notify the MNRF of the commencement of new operations through email	Within 5 working days prior to start up	Operations Forester
Water Crossing Installation	Notify MNRF of intent to install water crossing by email. Information will also be updated in Notification of Status of Operations Table.	Minimum 5 days prior to commencement of operations	Operations Forester
Harvest or road Construction operations suspended	Notify MNRF by email. Document details of suspension, wood remaining (species and volume), and intended date of return.	Within twenty working days of suspension of operations.	Operations Forester
Harvest, Renewal and Access (road construction, aggregates) operations completed.	Submit FOIP report or update existing “Suspended” Report to “Completed” (for reports pertaining to operations that occurred prior to 2010)	Within twenty working days of completion of operations.	Operations Forester

Water Crossing Operations\ completed.	Submit FOIP report identifying operations as completed.	Within ten working days of completion of operations.	Operations Forester
Renewal and maintenance activities on suspended harvest blocks	Operations are allowed as long as future forest units are not compromised. Company is to notify MNRF through email identifying which harvest areas they want to release for renewal to occur.	Notify MNRF that silviculture activities will proceed within 10 days of start up.	Operations Forester
Discovery of an Operational Issue.	Written notification to the MNRF within 5 working days of discovery.	A written report must be completed within 10 working days. If noncompliance is significant or very significant, the MNRF must be notified within 24 hours	Operations Forester
Discovery of New Values	All new values or changes in values encountered during operations are to be reported to MNRF upon discovery	Upon discovery	Operations Forester

COMPLIANCE REPORTING AREAS (CRA's)

Compliance Report Areas will not be utilized during this AWS. Harvest areas will be reported by harvest block. Silviculture areas will be grouped by the type of activity. i.e. tree plant, SIP and reported on one compliance report as a single activity.

MONITORING COMPLIANCE OF FOREST OPERATIONS

The status of operations will be tracked through the *Notification of Status of Operations Table* which was introduced in 2011. This table will also assist in tracking where operations are not completed in this AWS or where operations have carried over from the previous year. This supports the direction that states operations cannot be suspended for longer than the AWS year which operations started plus one further AWS year. MNRF and Miisun will review any areas where it is required that operations remain suspended beyond this timeframe.

Miisun and MNRF will cooperatively manage the information and function of this table. Miisun will continue to update the status of the reporting throughout the year.

Roles and Responsibilities

Compliance Plan Preparation and Updates

As the SFL holder Miitigoog is responsible for the compliance plan and any amendments to the plan. Miisun Integrated Resource Management through its ongoing service agreement with Miitigoog will complete any required amendments to the compliance plan.

Identification of Certified Inspectors

As the SFL holder Miitigoog is responsible for ensuring that certified inspectors are identified to the MNRF prior to conducting inspections on the SFL. Miisun Integrated Resource Management through its ongoing service agreement with Miitigoog will identify all such inspectors to MNRF prior to their involvement in any compliance auditing on the SFL. Currently there are four approved inspectors that will be conducting compliance inspections on this Kenora SFL, those being; Kurt Pochailo (Miisun), Krista Prosser (MNRF), Kaitlin Moncrief (MNRF), Ivan Kendrick (MNRF), James Williams (MNRF) and John Myshrall (MNRF). Shannon Rawn (Miisun) is designated to sign off on behalf of Miitigoog to review and approve FOIP inspections reports for submission into the MNRF database.

Prevention, Monitoring and Reporting

As the SFL holder Miitigoog is responsible for all prevention, monitoring, and reporting activities in relation to compliance obligations on the SFL. Miisun Integrated Resource Management through its ongoing service agreement with Miitigoog will conduct all monitoring and reporting activities. The Miisun Management Forester (Kurt Pochailo) role will be the main communications linkage with MNRF for this area of responsibility.

Preventative, Mitigative and Follow-Up Action

As the SFL holder Miitigoog is responsible for all preventative, mitigative, and follow-up activities in relation to compliance obligations on the SFL. Miisun Integrated Resource Management through its ongoing service agreement with Miitigoog will manage all such

compliance requirements on the SFL. Kurt Pochailo (Miisun Management Forester) & Shannon Rawn (Miisun SFL Manager) will act as the communications linkage with MNRF for this area of responsibility.

Company Representation

Kurt Pochailo (Miisun Management Forester) & Shannon Rawn (Miisun SFL Manager) will act as the communications linkage with MNRF for this area of responsibility. Where non-compliance issues arise the Miitigoog President (Chief Lorraine Cobiness) and Vice President (Erik Holmstrom) will be brought into the situation. For ongoing regular communications linked to compliances, Miisun staff will represent Miitigoog to MNRF in support of all compliance requirements on the SFL.

Training Responsibilities

As the SFL holder Miitigoog is responsible for ensuring that those who operate on the SFL are properly trained. Miisun Integrated Resource Management through its ongoing service agreement with Miitigoog will manage these responsibilities ongoing. This will involve annual safety and environmental training, regular meetings with operators, pre-work reviews, and inclusion in any focused training offered by the MNRF or other entities in the region.

APPENDIX I

Logging Debris Pads and Landings Management Protocol

Reclamation of Slash Piles

Option 1

Roadside slash will be piled (aerated) for burning. Soil mixing will be minimized during the piling process Slash will be piled in areas suitable for burning (not alongside standing timber, in wet areas, nor on or adjacent to chipper debris piles or pads) All piles ignited will be GPS'd and all piles not burned within the area due to safety or environmental reasons (i.e. too close to standing timber), will also be GPS'd. These piles will be left as they are. Depending on the amount of roundwood processing, slash pile burning may occur every second or third year to make it efficient (administrative and cost-wise) and worthwhile for burn contractor. FOIP inspector will indicate and record in Harvest FOIP report if slash areas require piling or if piling is completed.

Option 2

Leave slash debris un-piled where areas are targeted for grinding operation

Preferred option: **Option 1** unless area targeted for grinding

Reclamation of Chip Piles

Skidder operator to take a clam of debris each time (as long as safety is not compromised) and drop the clam in cut-over or at next bundle to be retrieved. This will distribute chip debris throughout the cut-over not impacting plantable spots. Before leaving chip pad, contractor is to ensure that chip pad depth at roadside/landing is equal or less than 20 cm to mineral soil Windrow and/or pile up any remaining chipper debris on landings where chip debris remains greater than 20 cm in depth to mineral soils to minimize loss of productive land. FOIP inspector will GPS each chip pad. Inspector will take depth readings of approximately 50 % of the chip pads within the area and record in Harvest FOIP. Where chip pads are not meeting specifications contractor will be required to return to site ensure it is to specification.

Site Preparation Operations

Where Site preparation (SIP) is scheduled, using TTS disk trenchers will create furrows on landings or pads where debris has been spread out in order to create plantable sites. If logging equipment did not spread out chip pads enough to create plantable sites, SIP will if able push debris in one pile to minimize loss of productive land. Areas will be recorded in renewal FOIP report where pads have been treated and/or renewed.

Reclamation of Landings

Operations will be conducted to recover production landbase from landings. Landings may include pit rehabilitation areas or road landings/pull-outs. Landing assessment will be done at time of renewal assessment for areas

Renewal Operations

Scheduled artificial renewal of landings after SIP and/or burning will take place. Boot screef and plant is an option where SIP has already been to area and will not be returning.

APPENDIX II

Block List of Planned Activities

HARVEST			RENEWAL
12.010	12.120	12.364	12.009
12.012	12.125	12.450	12.013
12.017	12.126	12.473	12.042
12.019	12.127	12.493	12.052
12.021	12.146	12.494	12.054
12.022	12.233	12.499	12.108
12.023	12.237	12.500	12.145
12.028	12.238	12.501	12.202
12.031	12.239	12.523	12.213
12.039	12.243	12.526	12.214
12.040	12.244	12.527	12.402
12.041	12.253	12.528	12.403
12.044	12.255	12.531	12.404
12.051	12.256	12.536	12.407
12.053	12.258	12.625	12.415
12.058	12.259	12.633	12.504
12.102	12.271	12.651	12.520
12.103	12.281	12.653	Salv01
12.104	12.282	12.664	
12.117	12.283	12.705	
12.118	12.297	12.999	
12.119	12.324		

APPENDIX III

CONTACT DETAILS FOR PERSONNEL LINKED WITH COMPLIANCE PLAN

MNRF, Kenora,ON, P9N 3X9, Fax: 468 2736		
Scott McAughey Resource Management Supervisor Kenora District 468-2543	Kyle Myschowoda Management Forester Kenora Forest 468-2559	
Krista Prosser Compliance Technician Kenora District 468-2544	Chris Martin Management Biologist Kenora District 468-2706	

MIITIGOOG

Chief Lorraine Cobiness President – Miitigoog General Partner Inc. K-85 Mining Location Box 1730 Kenora, ON P9N 3X8	Erik Holmstrom Vice President - Miitigoog General Partner Inc. Box 1730 Hwy 17 West Kenora, ON, P9N 3X8 548-7140

MIISUN

Shannon Rawn R.P.F. SFL Manager Miisun IRM 510 9th Street North Kenora, ON, P9N 2S8 467-3351	Kurt Pochailo R.P.F. Management Forester Miisun IRM 510 9th Street North Kenora, ON, P9N 2S8 467-3351	Johnathon Beauchamp Forest Technician Miisun IRM 510 9th Street North Kenora, ON, P9N 2S8 467-3351
Donna Puls GIS Specialist Miisun IRM 510 9th Street North Kenora, ON, P9N 2S8 467-3351		

APPENDIX B

2021-2022 MIISUN FIRE PLAN

2021-2022 MIISUN FIRE PLAN

DECLARATION

The following Fire Plan has been prepared for the year 2021 fire season (April 01 to October 31), within the 2021-2022 AWS planning period.

Contractors are responsible for abiding by the conditions and requirements as outlined in this plan, unless the Contractor has an MNRF approved Fire Prevention & Preparedness Plan (FP&PP) of their own to cover their operations.

In the interest of fire prevention and preparedness the Crown staff may, at any time and at their discretion, impose upon any operations or activities covered under this plan:

Additional modifications relating to woodlands operations, above and beyond those that may be required as per the Modifying Industrial Operations Protocol and / or

Additional requirements with respect to fire suppression equipment, training and overall fire preparedness

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1.0 INTRODUCTION

All forest operations undertaken in Ontario must be performed with careful consideration to the prevention of forest fires. Accidental wildfire can have a considerable impact on both short term and long-term forest operations and forest sustainability. In the incidence of accidental fire, operators must be prepared to safely take initial action to prevent fire spread. Under the authority of the *Forest Management Planning Manual* and the Crown Forest Sustainability Act, conditions are placed on forest operations through the Annual Work Schedule (AWS) to provide Forest Fire Prevention and Preparedness. Contractors shall follow these guidelines to develop and describe conditions for forest operations which will prevent forest fires and/or will minimize damage from a fire, should one occur. Forest operators must also be aware of other prevention measures in the Forest Fires Prevention Act and associated regulations, Modifying Industrial Operations Protocol, Forest Fire Operations By Forest Industry – Business Practices", and the Crown Forest Sustainability Act, Part B: Annual Operations

2.0 SCOPE

Forestry operations are illustrated on a variety of maps, available from the Company, SFL holders or MNRF District offices.

3.0 FIRE POLICY

Contractors are to take all necessary precautions to prevent forest fires during the course of its operations; to detect, report, and where possible take immediate initial suppression action to minimize any loss resulting from forest fires. Every reasonable attempt will be made to take action on fires on or near the Company's operating areas, to remain on site until the fire is considered to be out *or* until relieved by the MNRF *or* the situation becomes too dangerous to handle with the available level of skill and/or training.

4.0 FIRE PREVENTION

Contractors will utilize the information provided in the Modifying Industrial Operations Protocol to modify operations for the next day. When determining what modifications may be applicable for a particular operation, the closest operating weather station will be used as a default. If another weather station (other than the closest) is to be used to determine the modification(s) for a particular operation, this must be identified and agreed upon by the local Fire Management Headquarters and Company personnel prior to operations commencing.

Forestry Operations personnel will comply with the relevant regional or provincial guidelines for *Modifying Industrial Operations* based on the fire danger, the Forest Fires Prevention Act (FFPA) and the *Forest Fire Operations by Forest Industry – Business Practices*. Operations staff will be responsible for determining the danger classification, as per the modification guidelines. Each operation will follow the guidelines as they relate to their operation, and any required modifications to forest operations will be relayed to the relevant personnel by Operations staff.

A number of Fire Prevention and Fire Hazard signs are maintained throughout the district, which are an effective tool for advising staff, as well as other forest users, of the local fire conditions on any given day. During periods of high fire danger, Company staff will conduct patrols of the operating area including, wherever possible, public use areas such as major access points and camping sites. Staff may also conduct patrols of operating areas after significant lightning events, to aid in the detection of any fire starts.

Fire related inspections and audits of operations will continue throughout the fire season to ensure compliance with the AWS, FFPA & Regulations and Company policy. Any deficiencies found will be addressed, and noted in Forest Operation Inspection Program (F.O.I.P) as quickly as possible and may result in immediate corrective action(s) and/or a self-imposed shutdown of the activity in question. Fire suppression equipment may be removed from machinery or equipment while not being operated. As the fire hazard increases, Company staff will increase fire prevention and preparedness levels.

4.1 ***Fire Prevention Rules***

1) Abide by the "No Smoking" rule. “No person shall smoke while walking or working in a forest woodland during the fire season”.
2) No person shall throw or drop, in or within 300 meters of a forest or woodland:
    a) A lighted match, cigarette, cigar or other smoking material;
    b) Live coals, or;
    c) Hot ashes.
3) No person shall use or operate in or within 300 meters of a forest or woodland- any burner, chimney, engine, incinerator or other spark-emitting outlet that is not provided with an adequate device for arresting sparks.
4) A person who operates equipment or machinery involved in forest operations or the processing of forest resources in a forest or woodland during the fire season shall keep a fire extinguisher on the equipment or machinery or within five meters from it. The extinguisher must be a dry chemical extinguisher, in serviceable condition with a minimum rating of 6A:80B:C.
5) A person who operates equipment or machinery involved in forest operations or the processing of forest resources in a forest or woodland during the fire season must also comply with the minimum suppression equipment requirements, as outlined in FFPA.
6) A person who operates a power saw in a forest or woodland during the fire season:
    a) Shall not start the saw within 3 meters of the place where it is fuelled;
    b) Shall not place the saw on flammable material(s);
    c) Shall keep available, as a minimum, a serviceable dry chemical ABC type fire extinguisher of at least 225 grams.
7) All exhaust systems must have an adequate device for arresting sparks, to prevent burning carbon from coming in contact with forest fuels.
8) Heavy equipment / machinery, when not in use, are to be left in an area that is free of flammable material.
9) All heavy equipment are to be checked daily for any accumulation of flammable material and any accumulation found is to be removed and disposed of safely.
10) All welding is to be carried out on a site cleared to mineral soil, to a minimum of 3 meters in all directions from the point of welding, and at least 1 full / serviceable backpack pump, 1 axe, 1 shovel and 1 serviceable dry chemical fire extinguisher, with a rating of at least 6A:80B: C, is to be readily available. Fire watch should be maintained during welding operations.
11) Organize crews and assign key personnel duties that they are qualified to perform, maintain an active list of personnel and suppression training (SP-102), functions they shall perform in the event of a fire.

12) Serviceable firefighting equipment must be available for immediate use throughout the fire season, as required.
13) Ensure that regular and frequent fire prevention inspections are conducted including equipment, work sites, fire suppression equipment, personnel and campsites.
14) Ensure that workers know the location of the nearest fire cache and phone, as well as the contact / reporting numbers for the MNRF and the Company.
15) Ensure that workers are knowledgeable as to the location of water sources within their particular area of operation.

5.0 FIRE AWARENESS AND EDUCATION

(a) The daily message will be utilized on the Kenora Forest. The MNRF Modifying Industrial Operations Protocol will be the source for modification information
(b) Contractor Principals/Owners are expected to call after 1500 (3:00pm) to the MNRF Modifying Industrial Operations Protocol Hotline at the **Kenora Fire Management Headquarters** (807-465-5311) or use website (https://www.ontario.ca/environment-and-energy/fire-intensity-codes#section-3) on a daily basis during fire season for information on the hazard rating, codes and recommended practices.
(c) Contractors Principals/Owners will inform their Supervisor of prevention and implementation plans prior to shift.
(d) Contractor Supervisors will inform employees of prevention plans and their implementation - prior to work commencement.

6.0 FIRE PREPARDNESS TRAININNG

Personnel in harvesting and site preparation operations will be trained to the SP-102 Industry Certification with refresher training required every four years (see Appendix G). Planting and Manual Tending operations will be trained by their respective Contractors to a competent level of fire knowledge based on the fire equipment in their operations. The Company will strive to ensure that all operations meet the criteria for “trained and capable” designation, including the requirement that at least 25% of the workers on any particular site be trained to a minimum SP-102 standard. Operations that are unable to satisfy all of the “trained and capable” criteria will be considered as “limited”.

7.0 FIRE DETECTION

When employees/supervisor locate a forest fire they will:

1) If safe to do so extinguish or contain the fire to the best of their ability and resources on hand.
2) Report the fire directly to: Kenora Fire Management Headquarters SRO Line 548-5837 or 310-FIRE
3) Report the fire to Company Personnel.

The following information is to be provided:

1. YOUR NAME (and # where you may be contacted)

2. LOCATION of fire (preferably UTM Basemap & block number)
3. CONDITION OF FIRE
4. FUEL TYPE
5. SIZE
6. VALUES
7. ACTION TAKEN

Reference will be made to the *Forest Fire Operations by Forest Industry – Business Practices*, to address such matters as:

Hiring rates
Conditions for the use of Company personnel
Conditions for the use of Company equipment
Working relationship, and the transition of responsibility, between the Company and MNRF
Compensation to which the Company may be entitled

8.0 EQUIPMENT & TRAINING STANDARDS - LIST FOR THE KENORA FOREST

Each Independent Operator is responsible to have the minimum Forest Fire Suppression Equipment available and maintained, as per F.F.P.A. Regulations (Section 3.3).

9.0 COMMUNICATIONS

A comprehensive communication plan must address ability to call out and be able to receive messages. Options currently available to users of the Kenora Forest are:

i) 24-hour response line
ii) Telephones
iii) Satellite phones
iv) Cellular phones
v) Radio phones
vi) FAX
vii) E-mail
viii) Two-way FM radios

10.0 AREAS OF OPERATION

During the annual spring fire meeting between the Company and MNRF, maps showing the Company's intended areas of operation will be reviewed and made available to MNRF Fire Managers - in digital format. If at any time throughout the fire season additional copies of maps are required, please direct requests to the Forester, or the primary/alternate contact for the given operating area, as listed in this plan.

The following items should be considered for discussion during the annual spring fire meeting:

- Operating schedule, by block (harvest & silviculture)
- Forest composition, fuel types of the operating areas
- Risk classification
- Scale of operation
- Type of equipment
- Class of operation (Trained &Capable or Limited)
- Modifying Industrial Operations Protocol review
- Weather stations
- Communication strategy
- Values (priorities)
- Road maintenance and development
- Forestry camps (location, fuel caches, values)

11.0 COMPANY RESOURCES – Requisition & Transfer

Resource Requests

To request Company resources, please contact primary and or provide all alternate Company personnel as listed within *Appendix B – Company Contacts* -Transferring of Company Resources

Anytime that the MNRF wishes to assume care and control of Company equipment and resources, which would result in absence of direct Company involvement, the transferring of said equipment and resources should be documented in writing in a manner that would provide both the Company and the MNRF with an itemized hard copy of the details of the transfer. The MNRF *Transfer Record of Equipment and Supplies Loaned ("195")* form will be used.

See appendix D for Forest Industry Protocol

Appendix A – Ontario Ministry of Natural Resources and Forestry Contact Information

Kenora Fire Management Headquarters **1-807-548-1919**
MNRF Modifying Industrial Operations Protocol (MIOP) **1-800-465-5311**
MNRF MIOP – Sat Phone Users **1-807-548-1423**
24-Hour Forest Fire Reporting Line **310-FIRE (3473)**
24-Hour Forest Fire Reporting Line - Sat Phone Users **1-807-937-5261**
Sector Response Officer (S.R.O) **1-807-548-5837**

	WORK	HOME	CELL	POSITION
Pat Harvey	548-5720	464-2450	467-1297	Fire Management Supervisor
Doug McClain	548-8416	548-2689	465-4477	Fire Operations Supervisor
John Mash	548-6195	464-0754	464-0754	Fire Operations Supervisor
Kyle Myschowoda	468-2559			Management Forester
Scott McAughey	468-2517			Resources Management Supervisor

Appendix B – Industry Contact Information

COMPANY CONTACTS

Company Contacts	Contact	Phone #	Fax #
Miitigoog	Dale Munro	466-1550 466-1874 (cell)	
Miisun Integrated Resource Management	Shannon Rawn Kurt Pochailo Donna Puls	467-3551 ext. 1 464-0066 (cell) 467-3351 ext. 2 466-3802 (cell) 467-3551 ext. 3	

Contractors / Licensees	Contact	Phone #	Fax #
Clarke Anderson		548-5241	
Dave Burt General Contracting Ltd	Dave Burt Sr Dave Burt Jr	487-1534 464-1030	487-1534
Devlin Timber Co. (1992) Ltd.	Mark Scott Howie Adams	543-7676 (w) 543-3276 (h) 547-2941 (h)	543-7667
1506705 Ontario Inc	Willy Mowe	548-5977	548-1826
Wabaseemoong	Waylon Scott	927-2000	927-2037
Perchuk Lumber	Bill Perchuk	807-733-2287	807-733-2543
Russell Banning		548-7663	
William Lougheed Trucking	Bill Lougheed	468-8601	468-7695
Robert Horley	Rob Horley Jr.	226-5742	226-5712
Shoal Lake #39	Gerald Lewis	733-2560	
W5 Logging Ltd.	Rudy Witzke	548-8900 (h) 467-1495 Cell	548-8349
Dorsey Contracting	Mark Illott	548-8785 467-0540 (Cell)	548-8789
Doug Riffel Harvesting	Doug Riffel	529-3026 221-6019 (Cell)	
Weyerhaeuser	Matt Wilkie	548-7142 466-3097 (Cell)	548-7200

Additional silviculture contractor contact numbers will be made available if working on forest.

Appendix C – Modifying Industry Operations Protocol

The Modifying Industrial Operations Protocol is broken into six keys (Appendix H). These keys will determine the degree of fire risk for each operation and site, and the level of forest operations modifications (restrictions) required. An actual field verification done prior to or at the time of operations will take place at the work site for that day. This will then guide the operations to the level of work modification that will be required. The keys account for leaf off and leaf on conditions in addition to the following:

Spring/Summer Conditions:

The following daily activities may be implemented based on the Protocol:

- High risk operations being moved to medium or low risk sites.
- Short shifting part or all operations as conditions require. “SS = Short Shift Operations are not permitted between 12:00 and 19:00, local daylight savings time. Prevention measures still apply and a dedicated patrol*of the area must be carried out for one hour after operations shut down.”
- Consolidating operations where practical.
- Suspending part or all Kenora Forest Operations as conditions require.
- Implementation of Patrols and Fire Watch.

The Modifying Industrial Operations Protocol are implemented in the following sequence:

- The Modifying Industrial Operations Protocol is monitored on a daily basis.
- Forest operators are notified as to increasing conditions.
- Modifying Industrial Operations Protocol Charts are consulted to see what modifications apply.
- Direction to modify (move equipment to lower risk sites, shutdown, modified work hours, short shift, extra patrols, staff advisories) are considered by Company and Ministry fire management personnel.
- Considerations must be made as to “limited operators” (untrained) and to trained and capable operators.

6.1.1. Low to Moderate Fire Hazard:

- Normal operations will be carried out with the Modifying Industrial Operations Protocol reviewed daily with concern for high risk sites and operations.
- Forest fire suppression equipment as per F.F.P.A. Regulations, and Section 3.3 will be on site at operations.
- Chain Saw and Brush Saw Operators will have a dry chemical fire extinguisher readily available during the fire season. This extinguisher will be either on their person or at their power saw fueling site.
- Mechanical equipment will have serviceable dry chemical fire extinguishers mounted on the machine as per the Company's Fire Protection Plan. Pack pumps will be located on each machine or work site.
- Mechanical equipment will be washed at the beginning of the fire season and regularly as required.
- Forest debris will be removed from mechanical equipment as required, but at least at the end of the shift.
- Mechanical equipment will be parked on mineral soil as per company fire standards 30m apart for all large harvesting equipment.
- Master switches will be in the “OFF” position when the machine is parked.

6.1.2. High and Very High Fire Hazard:

- Supervisors remind their employees daily of the increase in the fire hazard.

- Supervisors check power saws and mechanical equipment under their control daily to assure that a fire hazard does not exist.
- Supervisors are to increase their efforts to assure that Company regulations pertaining to fire prevention and preparedness are being carried out.
- Supervisor will check fire equipment and caches for location and readiness.
- Utilizing patrols and fire watch crews as needed, a minimum of **one hour** after operations end.
- Short shifting or suspending part or all operations based on the Modifying Industrial Operations Protocol in consultation with the M.N.R.F.

Appendix D - Forest Fire Operations by Forest Industry – Business Practices

PURPOSE

To ensure consistent operations with all forest management licensees and companies regarding the prevention, suppression and service of forest fires.

GENERAL PRINCIPLES

To ensure consistent operations with all forest management licensees and companies regarding the prevention, suppression and service of forest fires, the *Ministry of Natural Resources and Forestry* (MNRF) and forest industry will follow the procedures described below.
These procedures were developed with the understanding that the forest industry is a partner in forest fire management with a vested interest in fire prevention and effective fire suppression.
Forest operations are regulated through the *Crown Forest Sustainability Act* (CFSA), *Forest Management Planning* (FMP), and associated approvals under the *Environmental Assessment (EA) Act*. Nothing in this procedure constitutes further requirements under the CFSA or Forest Management Planning system.
Under the authority of the *FMP Manual* and the *CFSA,* the *Annual Work Schedule (AWS)* must describe plans for forest fire prevention and suppression preparedness. The intent of these requirements is to:

• minimize the impacts of wildfires in forested areas;

• minimize loss of wood supply, equipment, and wages for forestry workers;

• minimize impacts on communities (safety and economic impact);

• allow operations to continue, as long as safely possible.

The *Forest Fires Prevention Act (FFPA)* requires all persons who start a fire outdoors to keep the fire under control and to extinguish the fire before leaving the site. Also, any person that has started a fire that is not kept under control shall report the fire without undue delay.
To provide for the safety of all workers involved in forest fire suppression, consistent standards must be in place for forest fire suppression activities.

1. NORMAL OPERATIONS

The following procedures apply when forest operations are focused on their normal business. Under Normal Operations, forest industry involvement in forest fire management is focused on forest fire prevention and being prepared for action on a new fire they might discover.

The *"Fire Prevention and Preparedness Plan" is submitted as a* portion of the *AWS* and will be reviewed by the local Fire Management Supervisor prior to the *AWS* being approved by the District Manager.

1.2 Forest industry will report all fires found on or adjacent to their limits to the nearest OM Office or the MNRF Fire Reporting Line at 310-FIRE (3473) (West Fire Region310-FIRE (3473) (East Fire Region) as quickly as possible and will take action on the fire according to their capabilities.

1.3 One of the key features of fire fighter training is the ability to recognize unsafe situations. If forest industry personnel are not able to work safely and productively on the forest fire, they should leave the scene to a safe distance. MNRF fire staff arriving on the scene may direct forest industry personnel to leave the scene for safety reasons.

1.4 If industry personnel find, contain and extinguish a fire caused by lightening or human activity not associated with forest industry operations and if the forest company has reported the fire as soon to: the nearest MNRF Fire Office or the MNRF Fire Reporting Line at 310-FIRE (3473) (West Fire Region) 310-FIRE (3473) (East Fire Region)

a. The MNRF will compensate the forest company for action on these fires at a flat rate of $600.

b. Where the company incurs costs in excess of $600, the company may submit a detailed invoice within 30 days of the incident, itemizing its costs on the fire.

c. The MNRF will, with consideration of the investigation policies and operational limits, investigate the fire cause and create a fire report.

Note: Industry must report all fires to the local MNRF Fire Office to assist in the evaluation of the daily fire danger.

1.5 If under Subsection 1.4 (above) industry personnel take initial action or incur expenses trying to contain a forest fire but are unable to contain or extinguish the fire. The company must reported the fire as soon as possible to:

The nearest MNRF Fire Office or the MNRF Fire Reporting Line at:

310-FIRE (3473) - West Fire Region)

310-FIRE (3473) - East Fire Region,

a. The local Ministry Fire Office will send assistance, investigate the fire cause and create a fire report.
b. The MNRF will compensate the forest company for action on these fires at a flat rate of $600.
c. Where the company incurs costs in excess of $600, the company may submit a detailed invoice within 30 days of the incident, itemizing its costs on the fire.

1.6 During normal operations when forest industry employees take initial action on a fire they remain employees of the forest industry for WSIB purposes.

2. ESCALATED FIRE OPERATIONS

Fire Operations are “escalated” when fire danger has increased to a critical level and/or a major fire situation has developed. The following procedures will prepare both the Ministry of Natural Resources and the forest industry to better respond to emergency situations where the Ministry may need to requests industry support or assistance.

2.1 In order for equipment and staff to be used on short notice during escalated operations, forest industry will provide rental and wage rates to the MNRF annually as part of the AWS. Forest industry should list all heavy equipment, fire fighting equipment, vehicles, chain saw operators, support personnel and camp facilities that will be available under escalated operations.

- Rates for vehicles and heavy equipment (bulldozers, skidders, trucks, etc.) should include the float, working and a stand-by-rental rate of the machine including the operator wages, current fuel prices and maintenance costs.
- If an hourly float rate is identified in the rate schedule, float times will be calculated from the equipments originating location to a designated staging area or off-loading point nearest the fire line
- Per Diem rates for room and board at forest industry camps or facilities will include cooking, food, camp support, supplies, etc.
- Rates for chainsaw operators will include wages, saw rentals and saw maintenance.

Note: When companies are supplying rates which include fuel costs, the rates should reflect the most current fuel prices available. In view of the volatile nature of current fuel prices local fire managers may renegotiate fuel costs at the time of hire (if conditions warrant).

2.2 If forest industry and the local MNRF Fire Office agree; agreed upon rates outlined in section 2.1 (above) can be submitted separately from the AWS submission. If industry cannot supply rates due to special circumstances, a standard rental offer for the use of heavy equipment will be completed at the time of hire, to establish a rental rate for the piece of equipment.

2.3 MNRF will compensate companies for services, personnel and equipment where the MNRF has approved the use of the services in writing. The written approval will also describe the rates for special services not included in annual plans and conditions that have been negotiated on the scene (e.g. helicopters, buses, GIS services, road graders, etc.).

2.4 MNRF will compensate forest industry for employees working directly as fire fighters only if they are certified SP-100 fire fighters. Staff trained to the SP-102 training standard for the purposes of fire prevention and initial action are not considered as trained for the purposes of extended fire suppression duties during Escalated Fire Operations.

Equipment operators, chain saw operators, and other forest industry personnel not directly fighting the fire do not require SP-100 to carry out their duties.

Heavy equipment operators and heavy equipment technical specialists (line locators) hired to construct fire line or fire guards must be trained to the SP-160 and SP-403 standards respectively. Heavy equipment operators without training may be used under direct supervision by MNRF or trained forest industry staff.

2.5 Forest industry employees working as crew bosses (supervising fire fighters on the fire line) must have SP-200 training.

2.6 MNRF will compensate the forest industry for fire fighters and crew bosses identified in Subsections 2.4 and 2.5, engaged in sustained fire fighting duties at the established rate as outlined in section 2.1 or 2.2(above).

2.7 Forest industry employees identified in Subsections 2.4 and 2.5 will be paid overtime of time and one half for all hours worked in excess of 8 hours per day, and for all hours worked on scheduled days off and statutory holidays.

2.8 If the *AWS* does not specifically set rates for personnel mentioned in subsections 2.6, the rate identified for the equivalent position in the current "PROVINCIAL EFF WAGE RATES" will be used.

2.9 MNRF will compensate the company for supervisors and management personnel directly involved in fire operations at the rates established in the AWS annually. Company personnel visiting the fire to observe operations or assess impacts on company interests will not be considered for compensation.

2.10 If not specified as being covered as part of the compensation rates as described in Subsections 2.5 or 2.8, MNRF will compensate the forest industry for employee benefits at the rate of 13.0% of total wage earnings.

2.11 For forest fires within designated fire regions, the MNRF is considered to be the summoning authority for WSIB purposes. Persons summoned in these circumstances are deemed as a worker for the MNRF. The MNRF will provide WSIB coverage for persons hired directly from forest industry during Escalated Fire Operations. This includes forest industry personnel engaged in ground fire fighting duties, heavy equipment operators and operators of contract equipment hired by the forest industry. In this regard, forest industry workers hired under this procedure are different from contractors because contracts for services provide for WSIB coverage under the contract. In the event of an injury, the employee must report that injury to the MNRF representative on site ensure that the proper WSIB reporting timeframes are met. The MNRF supervisor on site will investigate all injuries.

2.12 Where MNRF requests forest industry owned forest fire suppression equipment to be used in Escalated Fire Operations, the MNRF will pay the daily rates set according to Subsection 2.1 for the use of that equipment and will recycle all the equipment at no charge to the forest industry if the rental rate does not explicitly include the cost of recycle of the equipment by the forest industry.

For portable forest fire fighting equipment (e.g. power pumps), MNRF will provide mixed fuel for the operation of the equipment (rented "dry"). Fuel for vehicles and heavy equipment will be included in the vehicle rental rate (rented "wet") according to Subsection 2.1.

MNRF will replace or repair, forest industry owned forest fire suppression equipment that has been lost or damaged during the suppression of a forest fire. MNRF will not repair or replace any equipment damaged due to age or normal wear and tear (compensation for wear and tear should be factored into the rental rates established by the forest industry annually), or due to negligence, improper maintenance or improper operation by forest industry employees.

2.13 MNRF has the authority under the FFPA to use any equipment available in emergency situations (FFPA, Sections 7 and 26). Compensation for equipment used under these circumstances will be at the rates set according to Subsection 2.1 and 2.2.

2.14 When the MNRF contracts for the use of heavy equipment from the forest industry, the forest industry will be compensated for use according to rates quoted in advance, usually within the *AWS.* If the forest industry hires additional heavy equipment and/or support to assist MNRF in suppression efforts, compensation for any additional hires will be at the rates as defined within the applicable *AWS.*

- Payment to any subcontractors will be organized through the hiring agent.
- MNRF will not directly accept invoices from any additional hires by forest industry.
- Invoices received directly by the MNRF will be returned to the company for processing.

2.15 If equipment that is not insured for use in forest fire suppression, including subsequent loss or damage, directed to work on a forest fire by Ministry personnel in an emergency situation the MNRF will proceed as follows:

a) MNRF will compensate the forest industry for equipment that is lost or damaged by the wildfire, or directly as a result of suppression activities using "actual cash value".

b) If equipment is required for an extended operational period, equipment that is not insured for use in forest fire suppression, including subsequent loss or damage, will be replaced by properly insured equipment as soon as possible.

c) MNRF will not compensate the forest industry for equipment that is lost or damaged due to mechanical failure or operator error.

2.16 The forest industry will be required to submit, on a daily basis, a report detailing all costs incurred for that day. This report is to be approved and signed upon its receipt by the MNRF representative on site. A copy of the approved report will be provided back to the forest industry for their records.

2.17 The forest industry will invoice the designated MNRF office within thirty (30) days of when the costs were incurred.

2.18 The MNRF will process forest industry invoice(s) upon receipt and forward payment. Ministry payment terms are net 30 days from the date that the ministry office receives the company invoice.

Appendix E - FIRE DETECTION REPORT- FORM:

Time Fire Noted: _____Date: _____

Reported By: _____Camp:_____

Location of Fire: (General) _____
(Geographic) _____

Access: Nearest Landable Lake _____

Nearest Drivable Road _____

Other Means _____

Size of Fire:_____

Fire Behaviour: _____

Is There Spread Potential: _____

Fresh Cutover _____ Standing Timber _____ Natural Boundaries _____

Wind Direction/Speed _____

Values to be Protected:
_____
_____
_____

Buildings _____

Machinery _____

Wood _____

Water Sources: Pumping Units _____ Distance _____

Personnel on Fire, or Action you have in mind:
_____
_____
_____
_____
_____

Person Taking Report: _____

Appendix F - Retrieval of Company/Contractor Fire Equipment by MNRF (Letter from MNRF)

To ensure consistency in dealing with the maintenance and repair of Forest Industry fire equipment, this letter will provide you with the guidelines our program will follow this year. We will continue to retrieve your fire equipment that is used to fight forest fires at no cost, and retrieve any fire equipment used for training or other purposes, at our current billing rates.

We have found there is a continual problem in distinguishing the equipment used on forest fires from equipment used for other purposes, when it is brought into the Thunder Bay Service Centre for repairs. To rectify this problem, we will require that, on a fire with an MNRF Incident Commander, your company representative must **complete a form 195 (Transfer Record of Equipment and Supplies Loaned) or prepare a letter**, listing the company equipment assigned to that fire. This form must be **signed by the MNRF Incident Commander** to be eligible for MNRF to cover the cost of equipment retrieval.

If a fire has **no MNRF Incident Commander** on site, your **Company representative must prepare either a form 195 or a letter** containing the same information, **for signature by the appropriate Fire Management Supervisor**, to be eligible for MNRF to cover the cost of equipment retrieval. This system will help expedite the retrieval of your equipment and reduce the chance of error in billing your Company for equipment retrieval work. We appreciate your cooperation and effort.

Pat Harvey
Fire Management Supervisor (MNRF)
Kenora Fire Management Headquarters

Appendix G - Kenora Forest Independent Operator / Contractor Fire Information

1. Operation Description

1.1. Operation Type:
(Harvest, Road Construction, Site Preparation)_____

1.2. Company Name:_____

1.3. Operation Contact Name and Mailing Address:
_____
_____
_____
_____

1.4. Contact Phone / Radio #s:
(Telephone)_____
(Radio)_____

1.5. Block Description: (If you require assistance completing this section, call your local planner.)

Block No. and Map Sheet:	Operating Period (by block)	Location of Block: (describe as simply as possible)	# of personnel on site each shift ***
Example: Block # 35	*July - August*	*10 km. up the Example road from Hwy?*	*6*

*** Note: This column indicates personnel normally available on the site for fire suppression. Temporary personnel, i.e. haul truck drivers, would not count.

2. Communications

2.1. Able to meet the communications requirements for Trained and Capable status?
(Circle answer)
Yes **No**

2.2. Are personnel on site aware of fire reporting procedures? **Yes** **No**

2.3. Fire Reporting Numbers: **Ministry of Natural Resources and Forestry: 310-FIRE (3473)**

Fire Reporting Information

When reporting a forest fire, as much of the following information as possible will be provided:

• Your name and phone number. • The location - Road, Lake, etc. • Size of the fire. • Spread of the fire - ground, crowning, etc. • Fuel type - muskeg, swamp, cut-over, plantation or good timber. • Identify any property values in immediate danger.	• Location, name and size of the nearest lake and distance to the fire. • Wind direction and strength. • Access to fight the fire - roads, water, air • People already present and available to fight the fire. • Experience level of the people present. • Equipment already on hand.

3. **Equipment on site**

(Please use the extra spaces provided or back of second page to describe equipment not listed.)

Type of Equipment on Operation:	Make, Model, Year	Fire fighting rental rate / hour including fuel and operator (Highlighted equipment only)	# of units	On-board FireSuppression system? Yes or No?	Tracked Vehicle? (Includes rubber tired vehicles with bogey tracks or using chains) Yes or No?
Processor					
Feller Buncher					
Delimber					
Slasher					
Chipper					
Loader					
Forwarder					
Bulldozer					
Grapple Skidder					
Cable Skidder					
Backhoe					
Chainsaw					

Note: On-board fire suppression systems and fire extinguishers should be serviced regularly to ensure their operating status. Contact your supplier for details.

4. Fire Equipment

4.1 In compliance with minimum suppression equipment requirements as per Kenora SFL. Fire Plan? (circle answer)

Yes No

4.2 List of Fire Equipment available on site:

Fire Equipment Type	# of units	Fire Equipment Type	# of units
Back Pack Pumps		5 lb. ABC	
Shovels		10 lb. ABC	
Axes		20 lb. ABC	
Pulaskis		Fire Pump (as per fire plan requirements)	
Fire Extinguishers		Hose (100 ft. lengths)	
232 gm. ABC		Radios	

5. Fire Training – SP-102*

(Please list the names of the personnel on the operation and their respective fire training.)

Employee	Date of Training	Trainer
Howie Adams	May 14, 2018	Kurt Pochailo
Mark Scott	May 14, 2018	Kurt Pochailo
Shannon Rawn	May 14, 2018	Kurt Pochailo
Martin Wilcott	May 14, 2018	Kurt Pochailo
Gerald Ross	May 14, 2018	Kurt Pochailo
Rudy Witzke	May 14, 2018	Kurt Pochailo
Fred Witzke	May 14, 2018	Kurt Pochailo
Noah Witzke	May 14, 2018	Kurt Pochailo
Robert Flamand	May 14, 2018	Kurt Pochailo
Scott Minaker	May 14, 2018	Kurt Pochailo
Chris Jansen	May 14, 2018	Kurt Pochailo
Malcom Graham	May 14, 2018	Kurt Pochailo
Alec Medicine Jr.	May 14, 2018	Kurt Pochailo
Tim Kulachole	May 14, 2018	Kurt Pochailo
Dave Witzke	May 14, 2018	Kurt Pochailo
Rick Witzke	May 14, 2018	Kurt Pochailo
Roland Witzke	May 14, 2018	Kurt Pochailo
Genny Smitt	May 14, 2018	Kurt Pochailo
Sarah Martin	May 14, 2018	Kurt Pochailo
Madelaine Kennedy	May 14, 2018	Kurt Pochailo
Derian Caron	May 14, 2018	Kurt Pochailo
Dave Burt Jr.	May 14, 2018	Kurt Pochailo
Dave Burt	May 14, 2018	Kurt Pochailo
Greg Mosioner	May 14, 2018	Kurt Pochailo
Shaun Morrison	May 14, 2018	Kurt Pochailo
Matt Wilkie	May 14, 2018	Kurt Pochailo

Mike Van Damm	May 14, 2018	Kurt Pochailo
Andrew Jameson	May 14, 2018	Kurt Pochailo
Lawrence Feilberg	May 14, 2018	Kurt Pochailo
Bob Garaud	May 14, 2018	Kurt Pochailo
Fred Kulachok	May 14, 2018	Kurt Pochailo
Harry Proceviat	May 14, 2018	Kurt Pochailo
Johnathan Beauchamp	May 14, 2018	Kurt Pochailo
Erik Holmstrom	May 14, 2018	Kurt Pochailo
Jon Wilson	May 14, 2018	Kurt Pochailo
Les Alcock	May 14, 2018	Kurt Pochailo
Ben Scott	May 14, 2018	Kurt Pochailo
Philip Boucha	May 14, 2018	Kurt Pochailo
Richard Schiebler	May 14, 2018	Kurt Pochailo
Lorne Poulin	May 14, 2018	Kurt Pochailo
Mel Michalchuk	May 14, 2018	Kurt Pochailo

*** List may be updated if SP-102 training takes place during the spring of 2021**
**** Other fire training (SP-160, SP- 403) can also be tracked**

6. Prevention

6.1 Personnel aware of Company general prevention procedures as per Kenora SFL. Fire Plan? (Circle answer)

Yes No

6.2 Are personnel familiar with the Guidelines for Modifying Forest Operations in Response to Fire Danger with the Modifying Industrial Operations Protocol and how to obtain the Modification codes for their operations?
(Circle answer)

Yes No

6.3 Are personnel familiar with and willing to carry out enhanced prevention measures outlined in the Kenora SFL Fire Plan when deemed necessary by the Modifying Industrial Operations Protocol?
(Circle answer)

Yes No

7. Fire Safety

If operation threatened by fire are on site personnel aware of the evacuation procedures?
(Circle answer)

Yes No

8. Acknowledgment

I understand that the information presented in this package will be used to initially classify the operation as “Trained and Capable” or “Limited” as per the Modifying Industrial Operations Protocol.

Name: _____ Date: _____

Appendix H - CONTRACTOR EQUIPMENT RATES

The following equipment list shows contractor owned machines categorized into three weight classes. Factors considered when arriving at these rates were: horsepower, size and capabilities.

Equipment rates are "WET" rates and include the fuel costs associated with the operation of the equipment, as well as the operators' and mechanics' wages.

Equipment rates **do not include:** travel time, pick-up trucks, meals, accommodation or the costs associated with the retrieval / recycling of equipment. For requisitions that do not have an established rate, new rates may be negotiated between the Company and MNRF as required.

Equipment Rates

EQUIPMENT	**Regular Time Per (per hour)**	**Rate after 8 hours (per hour)**	**Standby Rate / Rate (per hour)**
All terrain vehicle	$ 50 / day		N/A
Bulldozer, _ D6 size	$160	$180	$95
Bulldozer, D7 size	$ 175	$195	$100
Bulldozer, D8 size	$ 200	$220	$125
Chainsaw & Feller	$ 45	$65	N/A
Excavator	$ 180	$200	$110
Backhoe Loader	$ 110	$130	$60
Feller Buncher	$ 180	$200	$110
Grader > 21,000 kg	$ 135	$155	$95
Grader < 21,000 kg	$ 100	$120	$60
Loader, rubber tired (bucket)	$ 95	$115	$60
Pumping Unit (excluding hose)	$ 100 / day		N/A
Skidder	$ 100	$125	$60
Tanker Forwarder (<2,000 gal)	$ 130	$140	$75
Tanker Forwarder (2,001 – 3,000 gal)	$ 150	$170	$90
Tanker Forwarder (>3,001 – 5,000 gal)	$ 180	$200	$110
Truck, escort	$ 50	$105	$30
Truck, float	$ 130	$140	N/A
Truck, gravel	$ 85	$105	$60
Truck with tank for fuelling equipment	$150 / day		N/A
Truck, pickup	$100 / day *		N/A
Washer, pressure	$ 65	$85	N/A

*** Additional cost of $0.45 per km after 225km/day**

APPENDIX C

WATER CROSSING STANDARDS

FOR THE

KENORA FOREST

Water Crossing Standards

The Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings, 2017 (the Protocol) provides a risk-informed Proponent self-screening approach for lower-risk water crossings that utilizes pre-determined and mandatory technical water crossing standards to direct routine water crossing construction and decommissioning activities in a manner that protects the productivity of Ontario's commercial, recreational or Aboriginal (CRA) fisheries or fish that support such a fishery. Adopting this type of risk-informed and modernized approach will allow government and industry stakeholders to focus resources towards planning and reviewing water crossing activities that pose a greater potential risk of serious harm to Ontario's CRA fisheries or fish that support such a fishery.

The approved water crossing standards in the Protocol have been developed collaboratively with input from the Ministry of Natural Resources and Forestry (MNRF), Department of Fisheries and Oceans (DFO) and representatives from Ontario's forest industry. They represent minimum levels of performance requirements that must be met by the proponent when constructing and decommissioning water crossings using a proponent self-screening approval framework.

The conditions and requirements included in the general and specific water crossing standards have been deemed by MNRF and DFO staff as the necessary mitigation measures required to classify the water crossing project as not likely to result in serious harm to CRA fisheries or fish that support such a fishery. If a proponent determines that the requisite water crossing standards that apply to their specific project can be implemented, they may proceed with their activity, so long as the water crossing standards notification requirements are met, and forest management approval processes outlined in this Protocol and the appropriate version of FMPM are followed.

In cases where a Proponent determines that the requisite water crossing standards that apply to their specific project cannot be implemented, a review and approval will be required by either MNRF and/or DFO as per the Protocol.

Failure to follow the requirements of these water crossing standards could result in compliance and enforcement actions under both the *Fisheries Act* and the *Crown Forest Sustainability Act* (CFSA).

Water crossings in which a water crossing standard is being proposed for construction or decommissioning will be approved in conjunction with the approval of, or revision to, the Annual Work Schedule (AWS).

1.1 General Water Crossing Standards That Apply to All Water Crossings

This general water crossing standard applies to all water crossings constructed or decommissioned under the authority of the CFSA for which a self-screening approval approach is being implemented. Additional measures that are specific to certain water crossing types or structures must also be implemented.

General Standards

- The implementation of water crossing standards (i.e. type and location of project) must be consistent with the applicable and approved FMP.
- The implementation of water crossing standards must be overseen or carried out by individuals who are trained and competent to:
  - Understand the intent and objectives of the specification's standards;
  - ensure that specification's water crossing standards and appropriate mitigation measures are satisfactorily applied; and
  - Recognize when water crossing standards and appropriate mitigation measures have not been satisfactorily implemented and understand the requirements to report and correct any mistakes that have occurred.
- The project must be compliant with applicable water crossing standards and guidelines in the most recent versions of Ontario's forest management guide(s) that address the conservation of biodiversity at the landscape scale and the stand and site scales and MNRF's Crown Land Bridge Manual.

Design and Location

- The project does not include watercourse realignment.
- Projects are designed and constructed in a way that minimizes loss or disturbance to riparian vegetation. The removal of riparian vegetation must be restricted to the disturbance footprint required for the construction, maintenance and decommissioning of water crossings.

Erosion and Sediment Control

- Erosion and sediment control measures must be installed prior to the commencement of construction or decommissioning activities to prevent the release of sediment or other deleterious substances to the watercourse. Erosion and sediment control measures will be:
  - Effective and installed properly with respect to the site conditions;
  - Inspected regularly during the course of construction with any necessary repairs being made if any damage occurs;
  - Maintained until the site has become stabilized through the permanent re-establishment of vegetation (i.e., a root mass has been established that ensures site stabilization), either naturally or through planting and tending activities within disturbed areas and approaches, and/or they have been stabilized with rip-rap, or appropriately sized non-erodible aggregate material.
- Fill material placed below the normal high water mark will be erosion-resistant and/or protected from erosion.
- Water crossings are to be constructed and decommissioned to help ensure that storm water runoff from bridge decks, side slopes, and road approaches and ditches are directed away from the watercourse and into a retention pond or vegetated areas to remove

suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering the watercourse. Erosion and siltation in ditch lines adjacent to watercourse crossing approaches are to be controlled by using sediment traps such as rock/soil dams or log jams as site conditions warrant.

- Crossing sites are to be stabilized during and post construction and decommissioning, including any material stockpiling, spoil, and/or other waste materials to prevent sediment or other deleterious substances from entering the watercourse. Cut and fill slopes around the water crossing structure and decommissioned sites are to be stabilized at a 2:1 slope or stable angle of repose for the materials used using site appropriate methods.

CRA fisheries or fish that support such a fishery

- At any time of year, the free movement of water and the passage of fish may not be blocked or otherwise impeded up and down stream of the crossing, with the exception of potential and temporary blockage due to water crossing construction/decommissioning activities.
- All in-water construction and decommissioning activities must abide by the appropriate fisheries in-water timing windows documented in approved FMPs and/or forest management guides in order to avoid disrupting sensitive fish life stages. In cases where the fishery community inventories at the location of the proposed project are not well documented, the most restrictive in-water timing window must be used.
- All in-water construction and decommissioning activities must be undertaken in an uninterrupted fashion and be completed in an appropriate timeframe so as to minimize the potential for site disturbance.
- The construction and decommissioning activities must not employ the use of any explosives.

Construction and Maintenance

- Machinery must be maintained free of fluid and fuel leaks.
- Machinery must be operated on land with tracks/wheels above the normal high water mark, or on ice in a manner that avoids disturbance to the banks of the watercourse and adjacent riparian vegetation areas.
- Machinery must be washed, refueled and serviced a minimum of 30 metres away from the watercourse. Fuel and other materials for the machinery are to be stored a minimum of 30 metres away from the watercourse to minimize the chance of any deleterious substance from entering the water.
- Removal of riparian vegetation must be restricted to the disturbance footprint required for the construction, maintenance and decommissioning of water crossings. Site-specific operational and/or safety concerns that warrant the removal of additional riparian vegetation will be determined on a case-by-case basis and will be kept to a minimum within the road right-of-way in order to help maintain the stability of watercourse banks.

- All debris resulting from construction and decommissioning activities must be removed from the work site following the completion of the undertaking.
- If machinery fording the watercourse is required during the course of construction activities, it will be limited to a one-time event (over and back) per piece of equipment that is essential to implementation of the project, and must occur only if an existing crossing at another location is not available or practical to use.
  - If minor rutting is likely to occur, watercourse bank and bed protection methods (e.g., swamp mats, pads) are to be used provided they do not constrict flows or block fish passage;
  - Grading of the watercourse banks for the approaches is not permitted;
  - If the watercourse bed and banks are steep and highly erodible (e.g., dominated by organic materials and silts) and erosion and degradation are likely to occur as a result of equipment fording, a temporary crossing structure or other practice must be used to protect these areas;
  - The one-time fording must adhere to the appropriate in-water timing windows; Fording must occur under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding.

1.2 Water Crossing Standards That Apply to Specific Water Crossings Structures/Practices

The following water crossing standards apply to specific water crossing structures and/or practices and **must be implemented in addition to the general water crossing standards**.

1.2.1 *Water Crossing Standard Identifier:* CONST-CLR-BRDG

1.2.2 Water Crossing Standards for the Construction of Clearspan Bridges

This water crossing standard applies to the construction of clear span bridges and their footprints, including associated abutments, cribs and/or sill logs.

General Standards

- The conditions and requirements of the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.

Design and Location

- Bridges must not be located on meander bends, braided watercourses, alluvial fans, or any other area that is inherently unstable and may result in the alteration of natural stream functions or erosion and scouring of the water crossing structure.

Erosion and Sediment Control

- Appropriate site-specific mitigation measures must be enacted to ensure the construction of clearspan bridges, including bridge cribs, abutments, and associated fill slopes are not subjected to the impacts of long-term or ongoing erosion. At a minimum, measures must include:
  - Clearspan bridges, including bridge cribs and fill slopes must be stabilized with appropriately sized non-erodible material (e.g., rocks, cobble sized stones). Rock used to stabilize crossings and watercourse banks will be clean, free of fine materials, and of sufficient size to resist displacement during peak flood events. The rock must be placed at the original watercourse bank grade to ensure there is no infilling or narrowing of the watercourse.
  - Fill material placed below the normal high water mark of the watercourse must be erosion resistant and/or protected from erosion.

CRA Fisheries or Fish that Support Such a Fishery

- The project must not be located within 100 metres of fisheries spawning or sensitive habitat if any in-water work is a requirement of the project.

Construction and Maintenance

- The bridge, including its abutments, must be placed entirely outside the normal high water mark.
- The construction of clearspan bridges must not result in the alteration of the bed or banks of the watercourse or infilling or narrowing of the watercourse channel.

1.2.3 *Water Crossing Standard Identifier:* DECOM-CLR-BRDG

1.2.4 Water Crossing Standards for the Decommissioning of Clearspan Bridges

This water crossing standard applies to the decommissioning of clear span bridges and their footprints, including associated abutments, cribs and/or sill logs. In certain cases, local site conditions may create a higher likelihood for potential damage to watercourse banks and/or fish habitat when bridges abutments, cribs, and/or sill logs are completely removed as opposed to leaving them in place. In these cases, Proponents must ensure that appropriate sedimentation and erosion mitigation approaches, in addition to any necessary public safety actions, continue to be implemented.

General Standards

- The conditions and requirements in the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.
- Decommissioning of water crossings will only occur if it is consistent with the approved road use management strategy in the applicable FMP and is scheduled for decommissioning in the current AWS (Table AWS-2).

Erosion and Sediment Control

- Upon decommissioning, including the removal of bridge abutments, cribs, and/or sill logs, the site must be stabilized and protected against erosion.
- Bridge abutments and cribs may be left in place if they are in good condition, stable for the long term, are not affecting watercourse or fish community dynamics, and are permissible in the approved FMP and/or AWS-2 table.
- Surface water runoff and road approaches and ditches must be directed away from the watercourse and into vegetated areas. Diagonal berms or waterbars must be installed where the erosion potential of the road approaches is likely to result in the road's gravel surface and underlying fill being deposited into the watercourse over time. Sediment traps used within ditch lines adjacent to the watercourse crossing approach should be replaced and/or maintained to their original condition at the time of crossing decommissioning.

CRA Fisheries or Fish that Support Such a Fishery

- The project must not be located within 100 metres of fisheries spawning or sensitive habitat if any in-water work is a requirement of the project.

Construction and Maintenance

- The decommissioning of clearspan bridges, including the removal of bridge abutments, cribs and/or sill logs will not result in the alteration of the bed or banks of the watercourse or infilling or narrowing of the watercourse channel.

1.2.5 *Water Crossing Standard Identifier:* CONST-OPN-ARCH

1.2.6 Water Crossing Standards for the Construction of Open Bottom Arch Culverts

Arch culverts are open-bottom structures that typically span the width of the waterbody channel, require minimal in-water construction activities and result in minimal impacts to the banks of the waterbody.

General Standards

- The conditions and requirements in the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.

Design and Location

- The arch culvert must not be located on meander bends, braided watercourses, alluvial fans, or any other area that is inherently unstable and may result in the alteration of natural steam functions or erosion and scouring of the water crossing structure.

- Culverts must be sized to a minimum Q25 design flow using MNRF water engineering/calculation software, or equivalent software programs deemed acceptable by the MNRF.

Erosion and Sediment Control

- Appropriate site-specific mitigation measures must be enacted to ensure the construction of arch culverts and associated footings and fill slopes are not subjected to the impacts of long-term or ongoing erosion. At a minimum, measures must include:
  - Stabilizing the crossing, including footings and fill slopes, with appropriately sized non-erodible material (e.g., rocks, cobble sized stones). Rock used to stabilize crossings and watercourse banks must be clean, free of fine materials, and of sufficient size to resist displacement during peak flood events. The rock must be placed at the original watercourse bank grade to ensure there is no infilling or narrowing of the watercourse.
  - Fill material placed below the normal high water mark of the watercourse will be erosion resistant and/or protected from erosion.

CRA Fisheries or Fish that Support Such a Fishery

- The project must not be located within 100 metres of fisheries spawning or sensitive habitat if any in-water work is a requirement of the project.

Construction and Maintenance

- The project cannot result in any excavation and/or reconstruction of the streambed.
- The crossing must be installed under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding.
- The culvert must be secured on continuous footings outside of the normal high water mark and will be constructed according to the manufacturer's specifications using materials that are appropriate for the site and expected loads.
- Where footings are constructed with concrete, appropriate measures must be taken to ensure concrete materials do not encroach into the bed of the watercourse.
- The construction of arch culverts must not result in the alteration of the bed or banks of the watercourse or infilling or narrowing of the watercourse channel.

1.2.7 *Water Crossing Standard Identifier:* CONST-SNOW-ICE

1.2.8 Water Crossing Standards for the Construction of Snow Fill and Ice Bridge Crossings

Snow fills and ice bridges, two types of water crossings that provide cost-effective access when lakes, rivers and streams are frozen, are typically used for temporary winter access in remote

areas. Ice bridges are normally constructed on larger watercourses that have sufficient stream flow and water depth to prevent the ice bridge from coming into contact with the stream bed or restricting water movement beneath the ice. Snow fills, however, are temporary crossings constructed by filling the channel of a watercourse with clean compacted snow.

General Standards

- The conditions and requirements of the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.

Design and Location

- The work must not include dredging, placing fill, or grading or excavating the bed or banks of the watercourse.

Erosion and Sediment Control

- No earth fill or aggregate is permitted below the normal high water mark of the watercourse. Crossings must be constructed of clean water, ice and snow that are free of dirt and debris.

CRA fisheries or fish that support such a fishery

- Snow fills and ice crossings must not restrict water flow within the watercourse where it occurs naturally during winter conditions, or otherwise completely obstruct fish passage at any time.
- The project must not be located within 100 metres of fisheries spawning or sensitive habitat.

Construction and Maintenance

- Appropriate seasonal conditions must be present (e.g., adequate depth of snow and ice, winter temperatures) to provide certainty that the construction and removal water crossing standards can be satisfactorily implemented.
- Aggregate or loose woody material cannot be used to top the crossing.
- If logs or corduroy are used to stabilize the approaches of ice and snow fill crossings:
  - The logs must be clean;
  - The logs may be securely bound together to facilitate removal and minimize site disturbance;
  - No logs or woody debris can be left within the watercourse;
  - Corduroy (if used) adjacent to the watercourse banks must be removed and placed outside the floodplain to help prevent a damming effect on the site. Corduroy that is frozen or embedded into the road approaches or watercourse banks must be left in place so as to not expose mineral soil adjacent to the watercourse. The remaining snow and ice can be left to melt in the spring. If required, remedial work will be carried out on the site after the crossing is removed to ensure that no logs or woody debris can wash back into the watercourse.

  - Logs may be placed on road approaches to assist in diverting runoff away from the watercourse; however, they must be placed outside of the floodplain and in such a manner as to ensure that they do wash back into the watercourse.
- Sanding of snow and ice crossings must be kept to a minimum and within the bounds of operational health and safety considerations.
- Corduroy logs or brush mats must be installed on the approaches to the watercourse crossing when conditions are soft in order to avoid disturbing the banks and crossing approaches.
- If water is being pumped from a watercourse to reinforce the crossing, the intakes must be sized and adequately screened to prevent debris blockage and fish entrainment.

1.2.9 *Water Crossing Standard Identifier:* CONST-SM-CULV

1.2.10 Water Crossing Standards for the Construction of Single, Small Closed-Bottom Round Culverts

This water crossing approval specification applies to the construction of single, round, corrugated, closed-bottom steel, aluminum, or plastic culverts that are less than or equal to 1200 millimeters (4') in diameter and do not require site-specific engineering approval (i.e., span less than three (9.8')), as per MNRF's Crown Land Bridge Manual, 2008.

General Standards

- The conditions and requirements in the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.
- The project does not:
  - Replace an existing open-bottom crossing (e.g., clear span bridge, arch culvert);
  - Replace an existing closed-bottom culvert that is larger in diameter than that being installed; or
  - Involve the installation of more than one closed-bottom culvert at the crossing location.

Design and Location

- Culvert crossings must be located, designed and constructed to minimize the likelihood of ongoing outlet scour, culvert undermining and/or the erosion of fill in order to provide for stable and non-perched crossing sites that can provide for fish passage.
- The culvert must not be located on meander bends, braided watercourses, alluvial fans, or any other area that is inherently unstable and may result in the alteration of natural stream functions or erosion and scouring of the crossing structure.
- Culverts must be sized to a minimum Q25 design flow using MNRF water engineering/calculation software, or equivalent software programs deemed acceptable by MNRF.

  - In cases where an unmapped watercourse is encountered during the construction of a road, and where a proper watershed analysis cannot be completed to determine the Q25 design flow, the culvert must be sized to ensure that it spans from bank to bank within the watercourse.
- Culverts must not be installed where the channel slope at the crossing location (i.e., physical rise over run of the culvert footprint prior to construction) is of a gradient greater than 2.0%.
- Culverts must not be installed where the slope of road approaches or either of the bank approaches is greater than 30%/17˚.
- Crossing locations must be selected where culverts can be embedded below the grade of the watercourse bed. The amount of embedment should be determined by local conditions.

Erosion and Sediment Control

- Appropriate site-specific mitigation measures must be enacted to ensure the construction of the culvert crossing does not result in the ongoing erosion of fill. At a minimum, measures must include:
  - Both the inlet and outlet ends of the culvert must be stabilized with appropriately sized non-erodible material (e.g., rocks, cobble sized stones) to prevent erosion of the fill slope and the watercourse bed. Rock used to stabilize crossings and watercourse banks must be clean, free of fine materials and of sufficient size to resist displacement during peak flood events. The rock shall be placed at the original watercourse bank grade to ensure that there is no infilling or narrowing of the watercourse.
  - Fill material placed below the normal high water mark of the watercourse must be erosion resistant and/or protected from erosion.

CRA fisheries or fish that support such a fishery

- The project must not be located within 100 metres of fisheries spawning or sensitive habitat.
- The project must not be located within 500 metres of any brook trout spawning or upwelling areas.
- The project must not be located on any watercourses or tributaries that flow into, and are within 500 metres, of known naturally reproducing brook trout lakes.
- The combination of culvert size, length, slope and drainage area will not create accelerated water velocities that will consistently and predictably impede the passage of fish.

Construction and Maintenance

- The crossing must be installed under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding.

- Both the interior and exterior of round, closed bottom culverts that are installed on CRA fisheries or fish that support such a fishery waterbodies must be corrugated to ensure structural stability and facilitate fish passage.
- The grade of the culvert must reflect the grade of the natural watercourse bed.
- Backfill must be adequately compacted around the culvert. Only clean sand or gravel can be used as backfill and must be compacted around the culvert in layers.
- Culverts must be the correct length to permit banks to be sloped at an angle of 2:1 or a stable angle of repose for the materials used.

1.2.11 *Water Crossing Standard Identifier:* DECOM-SM-CULV

1.2.12 Water Crossing Standards for the Decommissioning of Single, Small Closed-Bottom Round Culverts

This water crossing approval specification applies to the decommissioning of all round, closed-bottom steel, aluminum, or plastic culverts that are less than or equal to 1200 millimeters (4') in diameter.

General Standards

- The conditions and requirements in the general water crossing standards must be implemented in addition to, and in conjunction with, this water crossing standard.
- Decommissioning of water crossings will only occur if it is consistent with the approved road use management strategy in the applicable FMP and is scheduled for decommissioning in the current AWS (Table AWS-2).
- If the construction of the crossing was originally reviewed and approved by MNRF and/or DFO, all applicable conditions of approval must be fulfilled.

Erosion and Sediment Control

- Upon decommissioning, the site must be stabilized and protected against erosion. Approaches to the watercourse should be stabilized at a 2:1 slope or stable angle of repose for the materials used using site appropriate methods.
- All exposed soil must be seeded and/or stabilized immediately following completion of activities. Erosion and sediment control measures must be appropriate for the site conditions and maintained until vegetation has become permanently re-established within disturbed areas and/or exposed mineral soils have been stabilized with rip-rap or appropriately sized non-erodible rock material.
- Materials removed or stockpiled during decommissioning (e.g. grubbing, overburden fill) must be deposited outside the floodplain and stabilized/protected against erosion to ensure material does not enter the watercourse.

- Surface water runoff and road approaches and ditches must continue to be directed away from the watercourse and into vegetated areas. Diagonal berms or waterbars must be installed where the erosion potential of the road approaches is likely to result in the road's gravel surface and underlying fill being deposited into the watercourse over time. Sediment traps used within ditch lines adjacent to the watercourse crossing approach must be replaced and/or maintained to their original condition prior to the construction of the crossing.
- Appropriately sized erosion-resistant materials must be used below the normal high water mark for stream bank rehabilitation.

CRA Fisheries or Fish that Support Such a Fishery

- The project must not be located within 100 metres of fisheries spawning or sensitive habitat if any in-water work is a requirement of the project.

Construction and Maintenance

- The crossing must be decommissioned under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding.
- The watercourse must be restored as closely as possible to its original condition prior to the construction of the crossing, including retaining as close as possible the original stream alignment.
- All crossing infrastructure must be completely removed from the site.
- Grubbing must be minimized to leave as much of the existing vegetation intact.