Ministry of Natural Resources and Forestry

Forest Information Manual 2020

Annual Work Schedule Technical Specifications

September 2020

Crown Forests and Lands Policy Branch

Policy Division

Ontario

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1.0 Introduction

The Forest Information Manual (FIM) sets out the mandatory requirements, standards, roles and responsibilities, timelines and conditions for providing information in respect of Crown forests. The requirements for information set out in the FIM complement the planning and operational requirements of the Forest Management Planning Manual (FMPM). The FMPM and the FIM describe information that must be prepared and submitted for consultation, information that will be included in a forest management plan (FMP), and information that will be used by the Ministry of Natural Resources and Forestry (MNRF) to fulfill its obligations under the *Crown Forest Sustainability Act* (CFSA).

The FIM provides a description of the information requirement, references the source of the requirement, describes the rationale for the requirement and, on a general level, discusses the format of the information and the party responsible for providing the information. It is organized into four sections, and references five associated technical specifications:

- FIM Base and Values Technical Specifications;
- FIM Forest Management Planning Technical Specifications;
- FIM Forest Resources Inventory Technical Specifications;
- FIM Annual Work Schedule Technical Specifications; and
- FIM Annual Report Technical Specifications.

The Annual Work Schedule (AWS) Technical Specifications as identified in the Forest Information Manual (FIM) describes the standards (e.g. data attributes, format) for the information requirements, and the conditions for provision (e.g. naming conventions, exchange parameters, validation standards) for the exchange of AWS information. Annual work schedules are prepared for a one-year period normally starting April 1 but always ending March 31.

This document describes the digital information exchange standards for the sustainable forest licensee (Sustainable Forest Licence (SFL) Holders, Plan holders or other forest resource licence holders with forest management responsibilities) and MNRF.

These specifications describe the data exchange standards only and do not affect how information may be stored or maintained by either the sustainable forest licensee or MNRF. Each party is expected to generate the required information products in the specified data exchange format from their proprietary system.

Technical specifications and any revisions are approved by the Director of the Crown Forests and Lands Policy Branch. The FIM sets out the process and parameters for periodic revision of the technical specifications.

A list of current the FIM technical specifications and the scope of information to which they apply will be maintained and available on the Natural Resources Information Portal (NRIP). The MNRF and sustainable forest licensee are required to use the technical specifications listed on the NRIP.

For the purposes of information exchange the reference to the establishment surveys and stands being established based on the results of these surveys is the same as the free-to-grow survey and the designation of areas being free to grow.

2.0 Roles and Responsibilities

The roles and responsibilities as defined in the FIM and further in these technical specifications are the default. At the management unit level, roles and responsibilities may be adapted to best meet the circumstances of the unit and maintain the established relationships between the MNRF and the sustainable forest licensee.

2.1 Sustainable Forest Licensee

The Sustainable Forest Licensee (referred to as Licensees in the remainder of this document) is responsible for production and submission of all components of the AWS submission and AWS changes . AWS changes include revisions, establishment assessment surveys, appended documents (i.e., prescribed burn plans, aerial herbicide or insecticide project plans), and changes to values. Submission is to be via the NRIP.

2.2 Ministry of Natural Resources and Forestry

The MNRF is responsible for providing water crossing review results, if applicable, based on the *Fisheries Act* review, to the Licensee for inclusion in table AWS-1 and AWS-2, Annual Schedule of Water Crossings to be constructed, replaced or removed.

The MNRF will verify that all information products submitted by the Licensee meet the standards defined in these FIM AWS Technical Specifications and are complete.

3.0 Implementation

These FIM AWS Technical Specifications are in effect upon regulation of the FIM. These technical specifications apply until this document is replaced. The requirements of these FIM Annual Work Schedule Technical Specifications will come into effect according to all applicable phase in provisions identified in the 2020 FMPM. Specific phase in requirements for information products will be identified in section 4.0 of this technical specification.

3.1 Revision Notes

Revisions to the FIM AWS Technical Specifications include:

2020 revisions

- Wording changes to align with 2020 FMPM revisions
- Addition of wood storage yard layer
- Inclusion of the AWS tables with instructions and a format
- Removed requirement to zip product submission
- Clarifications and corrections to validation logic statements;
- General formatting, clarification and typographical corrections

4.0 Product Descriptions

4.1 Water Crossing Review Results

4.1.1 Description, Intent and Intended Use

Where an MNRF review is required for the location and conditions of construction for water crossings identified in table AWS-1, Annual Schedule of Water Crossings To Be Constructed or Replaced, the review will follow the direction provided in the Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings, in accordance with the FMPM Part D. MNRF's review results are a requirement of table AWS-1 in the year the water crossing is scheduled for construction or replacement.

Where an MNRF review is required for the conditions of the removal of water crossings identified in table AWS-2, Annual Work Schedule of Water Crossing to be removed, the review will follow the direction provided in the Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings, in accordance with the FMPM Part D. MNRF's review results are a requirement of table AWS-2 in the year the water crossing is scheduled for removal.

4.1.2 Packaging and Naming Convention

There is no standard packaging and/or naming convention for this product. MNRF Districts and Licensees will exchange this product in a manner that best suits their processes and local situation.

4.1.3 Metadata

There is no specific metadata requirement as this is not a stand-alone information product. This information will be incorporated into other AWS information products and the metadata for that product will apply.

4.1.4 Format

There is no standard format for this product. MNRF Districts and Licensees will exchange this product in a format that best suits their processes and local situation.

4.1.5 Data Transfer and Schedule

MNRF will provide water crossing review results, for those higher risk crossings identified in the current AWS as being planned to be constructed, replaced or removed.

4.2 Scheduled Operations Spatial Information Specifications

4.2.1 Description, Intent and Intended Use

The scheduled operations information is a set of spatial data layers which identify and provide information on areas specific to the AWS operating year on:

- Harvest;
- Areas of concern (AOCs);
- Residual patches;
- Road corridors;
- Operational road boundaries;
- Existing roads;
- Water crossings;
- Aggregate extraction areas;
- Site preparation treatments;
- Regeneration treatments;
- Tending treatments;
- Protection treatments;
- Existing forestry aggregate pits;
- Establishment Assessments; and
- Wood storage yards.

These products will be used to support First Nation and Métis communities review and aid MNRF staff in the performance of their duties throughout the year. These products will also be used to aid in the identification of persons who may be directly affected by forest management operations during the year of the AWS, and in particular those persons who have requested notice of specific activities that will occur in specific areas (e.g., trappers, mining claim holders).

The details of each of these spatial information products are described in the individual product sections starting with Section 4.2.7.

Additional non-standard spatial information products may be included in the AWS submission.

4.2.2 Packaging and Naming Convention

The scheduled operations spatial information will be included in the submission according to Section 5.0.

Naming conventions for the individual AWS spatial information products are discussed in the individual product sections.

Additional non-standard spatial information products should follow a similar naming convention and must only contain numeric values from 0 to 9, characters from A to Z and underscores.

File extensions are defined by the ESRI supported file exchange format chosen. Examples of ESRI supported file formats accepted by the NRIP are:

1. Shapefiles: the shapefile consists of 4 mandatory file extensions (.shp, .shx., .dbf, .prj)

   Example:

   - MU123_28SHR00.shp
   - MU123_28SHR00.shx
   - MU123_28SHR00.dbf
   - MU123_28SHR00.prj

2. File Geodatabase (FGDB): is a container that can hold single or multiple feature classes. All feature classes must be in the root of the FGDB.

   Example:

   - MU123_28SHR.gdb (single feature class in a FGDB)
     - MU123_28SHR00
   - MU123_AWS.gdb (mulitple feature classes in FGDB)
     - MU123_28SHR00

- MU123_28AOC000

3. ESRI ArcInfo interchange file (E00) is a proprietary ESRI file format intended to support the transfer between ESRI systems of different types of spatial data used in ESRI software.

   Example:

   - MU123_28SHR00.E00

     OR

   - MU123_28SHR01.E00 (first multiple layer submitted)
   - MU123_28SHR02.E00 (second multiple layer submitted)

4.2.3 Metadata

Metadata requirements include the use of standard naming conventions and submission details that are collected when AWS files are submitted to the NRIP.

4.2.4 Format

- Spatial information and associated tabular attributes are to be submitted in an ESRI supported file format. This format will be consistent with the formats defined by the NRIP. A single ESRI supported file format will be used within the submission.
- Each spatial data layer must contain a defined projection. The selected projection is to be used for all spatial products associated with an AWS.
- Information managed in the UTM projection, where management units span more than one UTM zone, must be projected to a single UTM zone.
- Information is to be provided in a projection recognized by a well-known spatial reference system standards body. Typical projection choices will be EPSG: 26915 – EPSG: 26918 (UTM Zones 15-18, NAD83 Datum), or EPSG: 3161 (NAD83 / Ontario MNR Lambert).

- Spatial information will be submitted in a seamless format or as a map-joined product with or without the tile lines removed (i.e., dissolved).
- Additional attributes can be appended to the tabular file.
- Format requirements specific to each product are discussed in the individual product sections.
- Spatial data layers will respect spatial integrity.

Validation

Stage 1 validation routines assess AWS information products for meeting mandatory requirements. The process will assess all the mandatory products to identify as many non-compliance instances as possible. These instances will be provided in a Stage 1 report. **A non-compliance will result in a resubmission of the information product(s).**

Stage 2 validation routines assess AWS products for anomalies and uncommon data relationships. These warnings will be provided in a Stage 2 report. Anomalies identified at Stage 2 **do not result in a rejection.**

4.2.5 Data Transfer and Schedule

The scheduled operations spatial information products are a required component of the AWS submission and is subject to those timelines. Refer to Section 5.4.1 for more information.

4.2.6 Scheduled Harvest Layer

4.2.6.1 Description, Intent and Intended Use

The scheduled harvest layer identifies areas scheduled for harvest operations during the year. In order to provide flexibility for unforeseen circumstances, up to three years of the average annual available harvest area by forest unit may be identified. Areas will be identified by silvicultural system, harvest category, and non-commercial fuelwood availability.

Licensees must include all harvest areas in the approved FMP including all approved amendments received prior to December 1st (e.g. December 1, 2019 for the 2020-2021 AWS). An attribute identifying the AWS fiscal year will distinguish the areas scheduled in the applicable AWS.

4.2.6.2 Naming Convention

A standard naming convention will be used for the scheduled harvest layer. The file name is composed of the following parts:

MU<management unit>_<year>SHR<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SHR	Letters "SHR" representing **S**cheduled **Har**vest.
<file number>	This value is used where multiple layers are required due to overlapping areas being identified. The default value is 00 when the layer is submitted as a single entity.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.6.3 Format

Spatial Requirements

The scheduled harvest layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled harvest layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
BLOCKID	25	character	--	harvest block identifier
SILVSYS	2	character	--	silviculture system
HARVCAT	8	character	--	harvest category
FUELWOOD	1	character	--	fuelwood area

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated with a non-zero value.

Format:

- YYYY
- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code

- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

BLOCKID

Definition: The **harvest block identifier** attribute is a unique user defined label associated with polygons scheduled for harvest that are in proximity of each other for practical implementation of operations.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory where plan start is greater than or equal to 2019
- A blank or null value is not a valid code where plan start is greater than or equal to 2019

SILVSYS

Definition: The **silviculture system** attribute indicates the process by which a productive forest stand will be managed for timber production purposes. The process/system is classified according to the method of harvesting that will be used.

Format:

Code	Option	Definition
CC	**c**lear**c**ut	A system of regenerating an even-aged forest stand in which new seedlings become established in fully exposed micro-environments after most or all of the existing trees have been removed. Regeneration is artificial or natural.
SE	**se**lection	An uneven aged system where mature and/or undesirable trees are removed individually or in small groups over the whole area. Regeneration is generally natural.

Code	Option	Definition
SH	**sh**elterwood	An even-aged silvicultural system where mature trees are harvested in a series of two or more cuts (i.e. preparatory, seed, first removal, final removal or successive regeneration cuts) for the purpose of establishing regeneration under shelter of the residual trees, either by cutting uniformly over the entire stand area or, in narrow strips or irregularly. Regeneration is natural or artificial. The regeneration interval determines the degree of even-aged uniformity.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- SILVSYS can only be null when FUELWOOD = Y

HARVCAT

Definition: The **harvest category** attribute indicates the planned type of harvest that is being scheduled.

Format:

Code	Option	Definition
REGULAR	**regular** harvest	Harvest areas categorized as regular under the FMP.
BRIDGING	**bridging** harvest areas	Areas which were scheduled for harvest in the previous forest management plan, but were not harvested and are now planned for harvest in the current forest management plan.

Code	Option	Definition
CONTNGNT	**conting**ency harvest area	The area set aside to accommodate unforeseeable circumstances (e.g., wildfire). Contingency area will serve as replacement for harvest area, and only be used if needed. The area must be sufficient to provide for a minimum of one year and a maximum of two years of harvest operations.
REDIRECT	**redirect**ed harvest	Areas to be harvested under an insect pest management plan and count against the available harvest area of the FMP.
ACCELER	**acceler**ated harvest	Areas to be harvested under an insect pest management plan and are areas in addition to the available harvest area of the FMP.
FRSTPASS	modified cut: **first pass**	For areas managed using the clearcut silvicultural system, harvest may be planned in two passes. This is normally when species within the stand are harvested and utilized by different logger/contractor/forest resource licensee in different years (e.g., first pass is conifer and second pass is hardwood). The first pass should be recorded if merchantable tree species will remain in the forest stands which have been allocated for harvest, but not yet harvested.
SCNDPASS	**Second-pass** harvest	For areas managed using the clearcut silvicultural system, harvest may be planned in two passes. This is normally when species within the stand are harvested and utilized by different logger/contractor/licensee in different years (e.g., first pass is conifer and second pass is hardwood). Second pass harvest should be identified when merchantable tree species will be harvested from forest stands which have been previously reported as harvested.
SALVAGE	**salvage** harvest	The salvage harvest is the area where the recovery or harvesting of timber that has been killed or damaged by natural causes (such as fire, wind, flood, insects, and disease) are planned. The salvage area, as defined in the FMPM, does not contribute to the available harvest area.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- HARVCAT can only be null when FUELWOOD = Y
- If the harvest category is second pass (HARVCAT = SCNDPASS), then the silvicultural system must be clearcut (SILVSYS = CC)

FUELWOOD

Definition: The **fuelwood area** attribute identifies areas where non-commercial fuelwood can be obtained by the public for their personal use during the AWS operating year.

Format: Y (for yes) or N (for no)

Stage 1 Validation (where AWS_YR = fiscal year to which the AWS applies):

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- If the FUELWOOD attribute is Y then the SILVSYS and HARVCAT attributes can be null

4.2.7 Areas of Concern in Scheduled Operations Layer

4.2.7.1 Description, Intent and Intended Use

The areas of concern (AOC) in scheduled operations layer is submitted as one or more spatial data layers. Examples of multiple layers may include but are not limited to:

- Individual layers based on the area of concern identification (e.g. eagle nest, fisheries values, etc.)
- Individual layers based on the area of concern type (reserve or modified)

This layer(s) includes AOCs associated with scheduled areas of operations harvest, renewal and maintenance, road construction, water crossings, existing roads planned to be used for forest management purposes, aggregate pits, wood storage yards and aggregate extraction areas. Licensees must include all AOCs in the approved FMP including all approved amendments received prior to December 1st (e.g. December 1, 2019 for the 2020-2021 AWS). Any changes to AOCs in scheduled areas of operations, as a result of changes to values will also be reflected in the layer(s).

Areas of concern for renewal and maintenance activities are normally only required for modified operations or where a value may be impacted by renewal and maintenance activities (e.g., timing restrictions, herbicide application restrictions or site disturbance restrictions).

4.2.7.2 Naming Convention

A standard naming convention will be used for the AOCs in scheduled operations layer. The file name is composed of the following parts:

MU<management unit>_<year>SAC<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.

Part	Description
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SAC	Letters "SAC" representing **S**cheduled **A**reas of **C**oncern.
<file number>	This value is used where multiple layers are required due to overlapping areas being identified. The default value is 000 when the layer is submitted as a single entity.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.7.3 Format

Spatial Requirements

The AOCs in scheduled operations layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

The tabular attributes associated with the AOC for scheduled operations layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed.

field name	maximum width	field type	decimal places	attribute description
AOCID	15	character	--	AOC identifier
AOCTYPE	1	character	--	AOC type

AOCID

Definition: The **AOC identifier** attribute is the label assigned to a specific AOC prescription which must correspond to the label on FMP and AWS Areas Selected for Operations maps and the area of concern prescriptions in table FMP-11. The

prescription can represent either a group of areas of concern with a common prescription or an individual area of concern with a unique prescription.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- A blank or null value is not a valid code
- The population of this attribute is mandatory

AOCTYPE

Definition: The **AOC type** attribute indicates the type of AOC prescription as either modified or reserved.

Format:

Code	Option	Definition
M	**m**odified	Areas which are scheduled for operations but have specific conditions or restrictions on operations as required by an AOC prescription.
R	**r**eserved	Areas which are reserved (prohibited) from operations as required by an AOC prescription.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code

4.2.8 Scheduled Residual Patches Layer

4.2.8.1 Description, Intent and Intended Use

The Scheduled Residual Patches layer will identify areas within the planned harvest that are not part of the allowable harvest area. The text of the FMP will describe the conditions applied to the residual areas. This layer is required if stand level residual requirements were identified in the FMP to be addressed during the implementation of operations.

4.2.8.2 Naming Convention

A standard naming convention will be used for the scheduled residual patches layer. The file name is composed of the following parts:

MU<management unit>_<year>SRP<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SRP	Letters "SRP" representing **S**cheduled **R**esidual **P**atches.
<file number>	This value will always be 00 (default) as multiple layers cannot exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.8.3 Format

Spatial Requirements

The scheduled residual patches layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled residual patches layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
RESID	10	character	--	residual patch identifier

RESID

Definition: The **residual patch identifier** attribute is a number, label or name assigned to a residual patch (es) as defined in the FMP.

Format: User defined content

- Must be defined in the associated FMP

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

4.2.9 Scheduled Road Corridors Layer

4.2.9.1 Description, Intent and Intended Use

The scheduled roads corridors layer contains primary and branch road corridors in which road construction is scheduled to occur. This layer also identifies which corridors are scheduled to have access controls implemented or removed in the same year as construction.

Licensees must include all road corridors in the approved FMP including all approved amendments received prior to December 1 (e.g. December 1, 2019 for the 2020-2021 AWS). An attribute identifying the AWS fiscal year will distinguish the areas scheduled for activities in the applicable AWS. The attributes identified for this AWS year may not be identical to the Planned Road Corridors layer from the approved FMP. For example, if multiple activities are planned in the approved FMP the layer may only show the activities scheduled for the fiscal year to which the AWS applies. (e.g. ACCESS = BOTH in the FMP while ACCESS = APPLY in the AWS)

Monitoring and maintenance activities are not required to be identified in the same year as construction. Newly constructed roads are not the responsibility of the Crown until a formal transfer of responsibility has occurred.

4.2.9.2 Naming Convention

A standard naming convention will be used for the scheduled road corridors layer. The file name is composed of the following parts:

MU<management unit>_<year>SRC<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).

Part	Description
SRC	Letters "SRC" representing **S**cheduled **R**oad **C**orridors.
<file number>	This value is used where multiple layers are required due to overlapping areas being identified. The default value is 00 when the layer is submitted as a single entity.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.9.3 Format

Spatial Requirements

The scheduled road corridors layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

The tabular attributes associated with the scheduled road corridors layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
ROADID	30	character	--	road identifier
ROADCLAS	1	character	--	road class
TRANS	4	integer	--	road transfer year
ACYEAR	4	integer	--	access control year
ACCESS		character	--	access control
DECOM	4	character	--	decommissioning type
INTENT	30	character	--	MNRF intent
MAINTAIN	1	character	--	road maintenance
MONITOR	1	character	-	road monitoring
CONTROL1	4	character	--	road access control type
CONTROL2	4	character	--	road access control type

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Features where the AWS_YR is not populated are considered to not be scheduled.
- Example: the 2028-2029 AWS operating year would be recorded as 2028

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

ROADID

Definition: The **road identifier** attribute is the unique number, label or name assigned to the forest access road that this polygon is a part of.

Format:

- user defined
- for plans prepared under the 2009 FMPM and 2017 FMPM and 2020 FMPM, this value must match a ROADID in table FMP-18, Road Construction and Use Management

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

ROADCLAS

Definition: The **road class** attribute identifies the class of the proposed forest access road or road network, in terms of the road use management strategy in the FMP.

Format:

Code	Option	Definition
P	**p**rimary	Primary roads are roads that provide principal access for the management unit, and are constructed, maintained and used as part of the main road system on the management unit. Primary roads are normally permanent roads.
B	**b**ranch	A branch road is a road, other than a primary road, that branches off an existing or new primary or branch road, providing access to, through or between areas of operations on a management unit

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme.
- A blank or null value is not a valid code

TRANS

Definition: The **road transfer year** attribute indicates a four-digit number representing the first year of the 10 year planning period that the transfer of responsibility to the MNRF is anticipated to take effect. If there is no intent to transfer responsibility to MNRF during the future 20-year plan period there is no need to specify a year. The presence of this field is to facilitate the update of the spatial operational FMP layers as a result of approved amendments.

Format: YYYY

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A zero or null value is a valid code
- If road transfer year does not equal zero (TRANS ≠ 0) then INTENT must be populated
- The value must be greater than or equal to the 10 year plan period start year

ACYEAR

Attribute Name: access control year

Definition: The **access control year** attribute indicates a four-digit number representing the expected **fiscal** year (April 1 to March 31) that the access control is anticipated to take effect. The presence of this field is to facilitate the update of the spatial operational FMP layers as a result of approved amendments.

Format: YYYY

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A zero or null value is a valid code
- The value must be greater than or equal to the plan period start year and less than or equal to the plan end year
- If access control year does not equal zero (ACYEAR ≠ 0) then access control must not be null

ACCESS

Definition: The **access control** attribute identifies where new access control activities are scheduled to be implemented during the year on primary or branch roads. This attribute is to be used when scheduled activities will restrict road use for the purposes other than meeting the conditions required for transferring responsibility for the road to the Crown.

Format:

Code	Option	Definition
APPLY	**apply**	This indicates that an access control is being applied to the road segment.
REMOVE	**remove**	This indicates that an access control is being removed from the road segment.
BOTH	**both**	This indicates that an access control is being applied and removed from the road segment in the same year and will be reported on in the same annual report year.

Stage 1 Validation (where AWS_YR = fiscal year to which the AWS applies):

- The presence of this attribute in the file structure of the layer is mandatory.
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code
- When the road access control status is apply or both (ACCESS = APPLY or BOTH) then the control type must be a code other than null (CONTROL1 is not null)

Stage 2 Validation:

- When the road access control status is remove (ACCESS = REMOVE) then the control type should be null (CONTROL1 = null and CONTROL2 = null)

DECOM

Definition: The **decommissioning type** attribute identifies where decommissioning activities are scheduled to occur during the year on primary or branch roads.

Format:

Code	Option
BERM	**berm** and/or ditch
SCAR	**scar**ify road and/or plant and/or seed

Code	Option
SLSH	pile **sla**sh
WATX	**wat**er crossing (**x**) removal

Stage 1 Validation (where AWS_YR = fiscal year to which the AWS applies):

- The presence of DECOM in the file structure of the layer is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code

INTENT

Definition: The **MNRF Intent** attribute indicates the MNRF's future management intent for the road corridor as identified in table FMP-18. The presence of this field is to facilitate the update of the spatial operational FMP layers as a result of approved amendments.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- A blank or null value is a valid code
- If TRANS value is populated, then INTENT must be populated

CONTROL1 and CONTROL2

Definition: The **road access control type** attributes indicate the method of access control to be implemented on primary or branch roads that will be constructed during the year.

Format:

Code	Option
BERM	**berm** and/or ditch
GATE	**gate**d / physical barrier
SCAR	**scar**ify and/or plant and /or seed road
SIGN	**Sign**ed
PRIV	**priv**ate land
SLSH	pile **sl**a**sh**
WATX	**wat**er crossing (**x**) removal

If two access controls apply to the same road, then both access control types must be recorded in the CONTROL1 and CONTROL2 attributes accordingly.

If there are more than two access control types on the same road, then choose two of the controls and record them in the CONTROL1 and CONTROL2 attributes. When picking which two controls to identify, choose the ones which are deemed to be the most restrictive (i.e., the most physically limiting to accessibility).

Stage 1 Validation:

- The presence of CONTROL1 or CONTROL2 in the file structure of the layer is mandatory
- The population of CONTROL1 or CONTROL2 is mandatory where ACCESS = BOTH or ACCESS = APPLY
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code

4.2.10 Scheduled Operational Road Boundaries Layer

4.2.10.1 Description, Intent and intended Use

The scheduled operational road boundaries (ORB) layer will establish the limits within which areas where new operational roads and forestry aggregate pits may be constructed/established during the year. An ORB may include planned areas of operations, and the area from an existing road or planned road corridor to the planned areas of operations within which an operational road is planned to be constructed. ORB are intended to identify where operational roads may be constructed and should provide flexibility in operational road location where necessary (e.g., terrain limitations). This layer may also include area between planned operations or between planned/existing roads and planned operations. The intent is not to remove water features or AOCs from the ORB layer. This layer only includes Crown land. The operational road boundary identifier (ORBID) will be linked to the road use management strategy.

Licensees must include all ORBs in the approved FMP including all approved amendments received prior to December 1(e.g. December 1, 2019 for the 2020-2021 AWS). An attribute identifying the AWS fiscal year will distinguish the areas scheduled for activities during the year.

4.2.10.2 Naming Convention

A standard naming convention will be used for the scheduled operational road boundaries layer. The file name is composed of the following parts:

MU<management unit>_<year>SOR<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).

Part	Description
SOR	Letters "SOR" representing **S**cheduled **O**perational **R**oad Boundaries.
<file number>	This value is used where multiple layers are required due to overlapping areas being identified. The default value is 00 when the layer is submitted as a single entity.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.10.3 Format

Spatial Requirements

The scheduled operational road boundaries layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled operational road boundaries layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
ORBID	20	character	--	operational road boundary identifier

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Valid values are the ten years of the FMP
- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

ORBID

Definition: The **operational road boundary identifier** attribute indicates the user defined unique number, label or name assigned to the operational road boundaries.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

4.2.11 Scheduled Existing Road Activities Layer

4.2.11.1 Description, Intent and Intended Use

The scheduled existing road activities layer identifies existing roads or existing road segments where use management activities are scheduled to occur. It will also identify existing roads that are scheduled to be transferred to MNRF and/or decommissioned during the AWS year.

An attribute identifying the AWS fiscal year will distinguish the roads scheduled for activities in the applicable AWS.

4.2.11.2 Naming Convention

A standard naming convention will be used for the scheduled existing road activities layer. The file name is composed of the following parts:

MU<management unit>_<year>SRA<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SRA	Letters "SRA" representing **S**cheduled Existing **R**oad **A**ctivities
<file number>	This value will always be 00 (default) as multiple layers cannot exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.11.3 Format

Spatial Requirements

The scheduled existing road activities layer contains only line features. The line feature class must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled existing road activities layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
ROADID	30	character	--	road identifier
ROADCLAS	1	character	--	road class
TRANS	1	character	--	road transfer
ACCESS	9	character	--	access control
DECOM	4	character	--	decommissioning type
MAINTAIN	1	character	--	road maintenance
MONITOR	1	character	--	road monitoring
CONTROL1	4	character	--	road access control type
CONTROL2	4	character	--	road access control type

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

ROADID

Definition: The **road identifier** attribute is the unique number, label or name assigned to the forest access road or network of roads that the identified segment is a part of.

Format: user defined

- for plans prepared under the 2009 and the 2017 Forest Management Planning Manual, this value must match a ROADID in table FMP-18, Road Construction and Use Management

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

ROADCLAS

Definition: The **road class** attribute identifies the class of the existing forest access road or road network, in terms of the road use management strategy in the FMP.

Format:

Code	Option	Definition
P	**p**rimary	Primary roads are roads that provide principal access for the management unit, and are constructed, maintained and used as part of the main road system on the management unit. Primary roads are normally permanent roads.
B	**b**ranch	A branch road is a road, other than a primary road, that branches off an existing or new primary or branch road, providing access to, through or between areas of operations on a management unit
O	**o**perational	Operational roads are roads within operational road boundaries, other than primary or branch roads, that provide short-term access for harvest, renewal and tending operations. Operational roads are normally not maintained after they are no longer required for forest management purposes, and are often site prepared and regenerated.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code

TRANS

Definition: The **road transfer** attribute indicates that the transfer of responsibility to the MNRF is scheduled in this AWS year.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme

- A blank or null value is not a valid code

ACCESS

Definition: The **access control** attribute is a field used to identify where access control activities are scheduled or already in effect.

Format:

Code	Option	Definition
APPLY	**apply** new	This indicates that a new access control is being applied to the road segment.
REMOVE	**remove**	This indicates that an access control is being removed from the road segment.
ADD	**add**itional	This indicates that an access control exists on the road segment and that a new access control is being applied to the road segment.
EXISTING	**existing**	This indicates that an access control exists on the road segment.
BOTH	**both** apply new and remove	This indicates that a new access control is being applied and removed from the road segment in the plan period.
ADDREMOVE	**add**itional with **remov**al	This indicates that an access control exists on the road segment, that a new access control is being applied to the road segment and that an access control is being removed from the road segment.

Stage 1 Validation:

- The presence of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code
- When the road access control status is apply, additional, both, or additional with removal (ACCESS = APPLY or ADD or BOTH or ADDREMOVE) then the control type must be a code other than null (CONTROL1 is not null)

- At a minimum, one of Decommissioning, Maintenance, Monitoring or Access Control must occur for each record (DECOM is not null or MAINTAIN = Y or MONITOR = Y or ACCESS is not null)

Stage 2 Validation:

- When the road access control status is remove (ACCESS = REMOVE) then the control type should be null (CONTROL1 = null and CONTROL2 = null)

DECOM

Definition: The **decommissioning type** attribute is to identify the type of decommissioning activities scheduled for an existing road during the year.

Format:

Code	Option
BERM	**berm** and/or ditch
SCAR	**scar**ify and/or plant and /or seed road
SLSH	pile **sl**a**sh**
WATX	**wat**er crossing (**x**) removal

Stage 1 Validation:

- The presence of DECOM in the file structure of the layer is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code
- At a minimum, one of Decommissioning, Maintenance, Monitoring or Access Control must occur for each record (DECOM is not blank or null or MAINTAIN = Y or MONITOR = Y or ACCESS is not blank or null)

MAINTAIN

Definition: The **road maintenance** attribute identifies where road maintenance activities are scheduled to occur on existing roads during the year.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional
- If present, the population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code
- At a minimum, one of Decommissioning, Maintenance, Monitoring or Access Control must occur for each record (DECOM is not blank or null or MAINTAIN = Y or MONITOR = Y or ACCESS is not blank or null)

MONITOR

Definition: The **road monitoring** attribute identifies where road monitoring activities are scheduled to occur during the year on existing roads.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional
- If present, the population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code
- At a minimum, one of Decommissioning, Maintenance, Monitoring or Access Control must occur for each record (DECOM is not null or MAINTAIN = Y or MONITOR = Y or ACCESS is not null)

CONTROL1 and CONTROL2

Definition: The **road access control type** attributes indicate the method of access control to be implemented during the year on existing roads.

Format:

Code	Option
BERM	**berm** and/or ditch
GATE	**gate**d / physical barrier
SCAR	**scar**ify and/or plant and /or seed road
SIGN	**Sign**ed
PRIV	**Priv**ate land
SLSH	pile **sl**a**sh**
WATX	**wat**er crossing (**x**) removal

If two access controls apply to the same road segment, then both access control types must be recorded in the CONTROL1 and CONTROL2 attributes accordingly.

If there are more than two access control types on the same road segment, then choose two of the controls and record them in the CONTROL1 and CONTROL2 attributes. When picking which two controls to identify, choose the ones which are deemed to be the most restrictive (i.e., the most limiting to accessibility).

Stage 1 Validation:

- The presence of CONTROL1 or CONTROL2 in the file structure of the layer is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is a valid code

4.2.12 Scheduled Water Crossing Activities Layer

4.2.12.1 Description, Intent and Intended Use

The scheduled water crossing activities layer contains the locations of water crossings that will be constructed or replaced during the year. Higher risk water crossings planned to be constructed or replaced in the following year may be submitted to provide MNRF with an ice-free season to conduct a review with respect to the Fisheries Act. The scheduled water crossing activities layer will also contain the locations of water crossings to be removed during the year to enable a review by MNRF, if applicable, with respect to the *Fisheries Act*.

An attribute identifying the AWS fiscal year will distinguish the water crossings scheduled for activities in the applicable AWS.

The scheduled water crossing activities layer contains point features only. The actual water crossing location may be constructed within 100 metres of the point location identified.

4.2.12.2 Naming Convention

A standard naming convention will be used for the scheduled water crossing activities layer. The file name is composed of the following parts:

MU<management unit>_<year>SWC<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SWC	Letters "SWC" representing **S**cheduled **W**ater **C**rossings Activities.
<file number>	This value will always be 00 (default) as multiple layers cannot exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.12.3 Format

Spatial Requirements

The scheduled water crossing activities layer contains only point features. The point feature class must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled water crossing activities layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
WATXID	12	character	--	water crossing identifier
WATXTYPE	5	character	--	water crossing type
CONSTRCT	1	character	--	construction
TRANS	1	character	--	water crossing transfer
MONITOR	1	character	--	monitoring
REMOVE	1	character	--	removal
REPLACE	1	character	--	replacement
ROADID	30	character	--	road identifier

If more than one crossing structure is scheduled to have activity at the same location during the AWS year and/or the following year, two records are required; one for each crossing structure, with both structures using the same crossing ID.

Example: (WATXID =5, WATXTYPE = CULV, REMOVE = Y AND WATXID = 5, WATXTYPE = BRID, CONST= Y)

Example: Ice crossings are reported as being built and removed in the same year (WATXTYPE = ICE, CONST = Y, REMOVE = Y).

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the scheduled activity applies. Only those water crossing activities scheduled to be implemented during the year require this field to be populated.

Format: YYYY

- Valid values are the ten years of the FMP
- Example: the 2028-2029 AWS operating year would be recorded as 2028

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

WATXID

Definition: The **water crossing identifier** attribute is a unique identifier label assigned to the crossing location. This water crossing ID will be unique in perpetuity.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

WATXTYPE

Definition: The **water crossing type** attribute identifies the type of water crossing structure being scheduled.

Format:

Code	Option
BRID	**brid**ge
TEMP	**temp**orary Bridge
CULV	**culv**ert (Span <3m)
MULTI	**multi**ple Culvert
FORD	engineered **ford**
ICE	**ice** crossing
BOX	**box** culvert
ARCH	open bottom **arch** culvert

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code

CONSTRCT

Definition: The water crossing **construction** attribute identifies water crossings which are scheduled to be constructed during the operating year of the AWS.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional.
- If present, the attribute population must follow the correct coding scheme where AWS_YR equals the fiscal year to which the AWS applies or the following year.
- At a minimum, one of Construction, Monitoring, Remove or Replace must occur for each record (CONSTRCT = Y or MONITOR = Y or REMOVE = Y or REPLACE = Y) where AWS_YR equals the fiscal year to which the AWS applies or the following year.

TRANS

Definition: The **water crossing transfer** attribute indicates that the transfer of responsibility to the MNRF is scheduled in this AWS year.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code

MONITOR

Definition: The water crossing **monitoring** attribute identifies water crossings scheduled to be monitored during the operating year of the AWS.

Format: Y (for yes) or N (for no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional.
- If present, the attribute population must follow the correct coding scheme where AWS_YR equals the fiscal year to which the AWS applies or the following year.
- At a minimum, one of Construction, Monitoring, Remove or Replace must occur for each record (CONSTRCT = Y or MONITOR = Y or REMOVE = Y or REPLACE = Y) where AWS_YR equals the fiscal year to which the AWS applies or the following year.

REMOVE

Definition: The water crossing **removal** attribute identifies water crossings scheduled to be removed during the operating year of the AWS.

Format: Y (yes) or N (no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional.
- If present, the attribute population must follow the correct coding scheme where AWS_YR equals the fiscal year to which the AWS applies or the following year.
- At a minimum, one of Construction, Monitoring, Remove or Replace must occur for each record (CONSTRCT = Y or MONITOR = Y or REMOVE = Y or REPLACE = Y) where AWS_YR equals the fiscal year to which the AWS applies or the following year.

REPLACE

Definition: The water crossing **replacement** attribute identifies water crossings scheduled to be replaced during the operating year of the AWS.

Format: Y (yes) or N (no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is optional.
- If present, the attribute population must follow the correct coding scheme where AWS_YR equals the fiscal year to which the AWS applies or the following year.
- At a minimum, one of Construction, Monitoring, Remove or Replace must occur for each record (CONSTRCT = Y or MONITOR = Y or REMOVE = Y or REPLACE = Y) where AWS_YR equals the fiscal year to which the AWS applies or the following year.

ROADID

Definition: The **road identifier** attribute is the unique label or name assigned to the road or network of roads that the water crossing feature is located on.

Format: User defined

- For plans prepared under the 2009 FMPM and the 2017 FMPM and the FMPM 2020, this value must match a ROADID in table FMP-18, Road Construction and Use Management

- If the road segment that this crossing is associated with has been included in the road corridor layer, then the ROADID values must match

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

4.2.13 Scheduled Aggregate Extraction Areas Layer

4.2.13.1 Description, Intent and Intended Use

The scheduled aggregate extraction areas layer contains areas where forestry aggregate pits are scheduled to be established. Aggregate extraction areas are areas outside of road corridors, harvest areas and operational road boundaries where the Licensee has scheduled to extract aggregate material. An aggregate extraction area is defined as an individual polygon depicting a planned pit location within 500 meters of an existing forest access road.

Licensees must include all aggregate extraction areas in the approved FMP including all approved amendments received prior to December 1(e.g. December 1, 2019 for the 2020-2021 AWS). An attribute identifying the AWS fiscal year will distinguish the areas scheduled for activities in the applicable AWS.

4.2.13.2 Naming Convention

A standard naming convention will be used for the scheduled aggregate extraction areas layer. The file name is composed of the following parts:

MU<management unit>_<year>SAG<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SAG	Letters "SAG" representing **S**cheduled **Ag**gregate Extraction Areas.
<file number>	This value will always be 00 (default) as multiple layers cannot exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.13.3 Format

Spatial Requirements

The scheduled aggregate extraction areas layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the scheduled aggregate extraction areas layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
AGAREAID	15	character	--	aggregate extraction area identifier

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the scheduled activity applies. Only those aggregate extraction areas scheduled to have forestry aggregate pits established during the year require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code

- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

AGAREAID

Definition: The **aggregate extraction area identifier** attribute indicates the unique identifier for the area where forestry aggregate pits are scheduled to be established.

Format: user defined

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- A blank or null value is a valid code

4.2.14 Scheduled Site Preparation Treatments Layer

4.2.14.1 Description, Intent and Intended Use

The scheduled site preparation treatments layer is one of four spatial data layers that identify the areas where renewal and maintenance operations are scheduled during the year. This layer will identify renewal and maintenance operations related to site preparation treatments. The treatment method will be identified for each area.

4.2.14.2 Naming Convention

A standard naming convention will be used for the scheduled site preparation treatments layer. The file name is composed of the following parts:

MU<management unit>_<year>SSP<file number>.<file extension>

where:

Part	Description
MU	Letters "MU" representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SSP	Letters "SSP" representing **S**cheduled **S**ite **P**reparation Treatments.
<file number>	This value will always be 00 (default). Overlapping areas are accommodated using additional attributes.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.14.3 Format

Spatial Requirements

The scheduled site preparation treatments layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

It is possible that more than one treatment method may occur on the same area in a given operational year. When data are exchanged as an e00 additional attributes are required for resolving the technical issue of spatially overlapping polygons for multiple silvicultural activities occurring on the same area in the same operational year.

The tabular attributes associated with the scheduled site preparation treatments layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
TRTMTHD1	8	character	--	silvicultural treatment method
TRTMTHD2*	8	character	--	silvicultural treatment method
TRTMTHD3*	8	character	--	silvicultural treatment method

*These fields are not required if there are no overlapping site preparation treatments scheduled or if the layer is exchanged as a file geodatabase or shapefile. If the fields are included, they can be left blank. Additional TRTMTHD fields may be added if needed.

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

TRTMTHD1, TRTMTHD2 and TRTMTHD3

Definition: The **silvicultural treatment method** attribute indicates the general type of silvicultural activity and the specific treatment or method to be applied to the site.

Format:

Code	Option	Definition
SIPMECH	**si**te **p**reparation **mech**anical	The use of machinery to disturb the forest floor and expose topsoil or mineral soil to create suitable conditions for artificial regeneration of a forest stand.
SIPCHEMA	**si**te **p**reparation **chem**ical : **a**erial application	The application of herbicides, by aerial methods, to reduce undesirable competition, prepare sites for further site preparation treatment, or create suitable conditions for regeneration of a forest stand.
SIPCHEMG	**si**te **p**reparation **chem**ical : **g**round application	The application of herbicides, by ground methods, to reduce undesirable competition, prepare sites for further site preparation treatment, or create suitable conditions for regeneration of a forest stand.
SIPPB	**si**te **p**reparation **p**rescribed **b**urn – conventional burn / high complexity burn	Use of the knowledgeable application of fire to a specific area to create suitable conditions for forest renewal and regeneration of a forest stand.

If there are more than three treatment methods occurring on the same polygon, additional TRTMTHD fields may be added (e.g., TRTMTHD4, TRTMTHD5).

Stage 1 Validation:

- For TRTMTHD1, the presence of this attribute in the file structure of the layer is mandatory
- For TRTMTHD1 or TRTMTHD2 or TRTMTHD3, the population of one of these attributes is mandatory where AWS_YR equals the fiscal year to which the AWS applies.
- The attribute population must follow the correct coding scheme

4.2.15 Scheduled Regeneration Treatments Layer

4.2.15.1 Description, Intent and Intended Use

The scheduled regeneration treatments layer is one of four spatial data layers that identify the areas where renewal and maintenance operations are scheduled during the year. This layer will identify renewal and maintenance operations related to regeneration treatments. The treatment method will be identified for each area.

4.2.15.2 Naming Convention

A standard naming convention will be used for the scheduled regeneration treatments layer. The file name is composed of the following parts:

MU<management unit>_<year>SRG<file number>.<file extension>

where:

Part	Description
MU	Letters "MU" representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SRG	Letters "SRG" representing **S**cheduled **Reg**eneration Treatments.
<file number>	This value will always be 00 (default). Overlapping areas are accommodated using additional attributes.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.15.3 Format

Spatial Requirements

The scheduled regeneration treatments layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

It is possible that more than one treatment method may occur on the same area in a given operational year. When data are exchanged as an e00 additional attributes are required for resolving the technical issue of spatially overlapping polygons for multiple silvicultural activities occurring on the same area in the same operational year.

The tabular attributes associated with the scheduled regeneration treatments layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
TRTMTHD1	8	character	--	silvicultural treatment method
TRTMTHD2*	8	character	--	silvicultural treatment method
TRTMTHD3*	8	character	--	silvicultural treatment method

*These fields are not required if there are no overlapping regeneration treatments scheduled or if the layer is exchanged as a file geodatabase or shapefile. If they are included, they can be left blank. Additional TRTMTHD fields may be added if needed.

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

TRTMTHD1, TRTMTHD2 and TRTMTHD3

Definition: The **silvicultural treatment method** attribute indicates the general type of silvicultural activity and the specific treatment or method scheduled to be applied to the site.

Format:

Code	Option	Definition
PLANT	artificial regeneration – **plant**ing	The establishment of trees on a site by planting seedlings, transplants or cuttings.
SCARIFY	artificial regeneration – **scarif**ication	The mechanical loosening or exposure of the topsoil or mineral soil, or breaking up the forest floor, in preparation for natural stand renewal.
SEED	artificial regeneration – **seed**ing	The scattering of tree seed (ground broadcast or aerial) over an area to promote new stand growth.
SEEDSIP	artificial regeneration – **seed**ing with **si**te **p**reparation	The dispersal or sowing of seed at the same time as the site preparation activity occurs, such as when using a bracke with seed hopper.

If there are more than three treatment methods occurring on the same polygon, additional TRTMTHD fields may be added (e.g., TRTMTHD3, TRTMTHD4).

Stage 1 Validation:

- For TRTMTHD1, the presence of this attribute in the file structure of the layer is mandatory
- For TRTMTHD1 or TRTMTHD2 or TRTMTHD3, the population of one of these attributes is mandatory where AWS_YR equals the fiscal year to which the AWS applies.
- The attribute population must follow the correct coding scheme

4.2.16 Scheduled Tending Treatments Layer

4.2.16.1 Description, Intent and Intended Use

The scheduled tending treatments layer is one of four spatial data layers that identify the areas where renewal and maintenance operations are scheduled during the year. This layer will identify renewal and maintenance operations related to tending treatments. The treatment method will be identified for each area.

4.2.16.2 Naming Convention

A standard naming convention will be used for the scheduled tending treatments layer. The file name is composed of the following parts:

MU<management unit>_<year>STT<file number>.<file extension>

where:

Part	Description
MU	Letters "MU" representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
STT	Letters "STT" representing **S**cheduled **T**ending **T**reatments.
<file number>	This value will always be 00 (default). Overlapping areas are accommodated using additional attributes.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.16.3 Format

Spatial Requirements

The scheduled tending treatments layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

It is possible that more than one treatment method may occur on the same area in a given operational year. When data are exchanged as an e00 additional attributes are required for resolving the technical issue of spatially overlapping polygons for multiple silvicultural activities occurring on the same area in the same operational year.

The tabular attributes associated with the scheduled tending treatments layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
TRTMTHD1	8	character	--	silvicultural treatment method
TRTMTHD2*	8	character	--	silvicultural treatment method
TRTMTHD3*	8	character	--	silvicultural treatment method

*These fields are not required if there are no overlapping tending treatments scheduled or if the layer is exchanged as a file geodatabase or shapefile. If they are included, they can be left blank. Additional TRTMTHD fields may be added if needed.

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2019 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

TRTMTHD1, TRTMTHD2 and TRTMTHD3

Definition: The **silvicultural treatment method** attribute indicates the general type of silvicultural activity and the specific treatment or method to be applied to the site.

Format:

Code	Option	Definition
CLCHEMA	**cl**eaning – **chem**ical: **a**erial application	The application of herbicides from an aircraft to a young stand, not past the sapling stage, to free the favoured trees from competition by eliminating undesirable vegetation.
CLCHEMG	**cl**eaning – **chem**ical: **g**round application	The ground application of herbicides in a young stand, not past the sapling stage, to free the favoured trees from competition by eliminating undesirable vegetation.
CLMANUAL	**cl**eaning – **manual**	The use of hand operations in a young stand, not past the sapling stage, to free the favoured trees from competition by eliminating undesirable vegetation.
CLMECH	**cl**eaning – **mech**anical	The use of machinery in a young stand, not past the sapling stage, to free the favoured trees from competition by eliminating undesirable vegetation.
CLPB	**cl**eaning – **p**rescribed **b**urn / high complexity prescribed burn	The use of the knowledgeable application of fire in a young stand, not past the sapling stage, to free the favoured trees from competition by eliminating undesirable vegetation.

Code	Option	Definition
IMPROVE	spacing / pre-commercial thin / **improve**ment cut – uneven-aged	A cutting made in an uneven-aged stand primarily to accelerate diameter increments, but also, by suitable selection, to improve the composition and the average form of the trees that remain.
THINPRE	spacing / **pre**-commercial **thin** / improvement cut – even aged	A cutting made in an immature even-aged stand primarily to reduce competition and to accelerate diameter increments, but also, by suitable selection, to improve the average form of the trees that remain.
CULTIVAT	**cultivat**ion	The act of loosening or breaking up the soil about growing plants to reduce competing vegetation and to foster growth in an established stand.
PRUNE	**prun**ing	The removal of live or dead branches from standing trees, usually the lower branches of young trees and the removal of multiple leaders in plantation trees, for the improvement of the tree or its timber quality; to reduce risk of disease, or includes the cutting away of superfluous growth, including roots, from any tree to improve its development.

If there are more than three treatment methods occurring on the same polygon, additional TRTMTHD fields may be added (e.g., TRTMTHD4, TRTMTHD5).

Stage 1 Validation:

- For TRTMTHD1, the presence of this attribute in the file structure of the layer is mandatory
- For TRTMTHD1 or TRTMTHD2 or TRTMTHD3, the population of one of these attributes is mandatory where AWS_YR equals the fiscal year to which the AWS applies.
- The attribute population must follow the correct coding scheme

4.2.17 Scheduled Protection Treatments Layer

4.2.17.1 Description, Intent and Intended Use

The scheduled protection treatments layer is one of five spatial data layers that identify the areas where renewal and maintenance operations are scheduled during the year. This layer will identify renewal and maintenance operations related to scheduled protection treatments. The treatment method will be identified for each area.

4.2.17.2 Naming Convention

A standard naming convention will be used for the scheduled protection treatments layer. The file name is composed of the following parts:

MU<management unit>_<year>SPT<file number>.<file extension>

where:

Part	Description
MU	Letters "MU" representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SPT	Letters "SPT" representing **S**cheduled **P**rotection **T**reatments.
<file number>	This value will always be 00 (default). Overlapping areas are accommodated using additional attributes.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.17.3 Format

Spatial Requirements

The scheduled protection treatments layer contains only polygon features. The spatial data layer must be created in accordance with the direction specified in Section 4.2.4. This layer may

contain overlapping features when submitted as a shapefile or as a feature class in a file geodatabase.

Tabular Requirements

It is possible that more than one treatment method may occur on the same area in a given operational year. When data are exchanged as an e00 additional attributes are required for resolving the technical issue of spatially overlapping polygons for multiple silvicultural activities occurring on the same area in the same operational year.

The tabular attributes associated with the scheduled protection treatments layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
TRTMTHD1	8	character	--	silvicultural treatment method
TRTMTHD2*	8	character	--	silvicultural treatment method
TRTMTHD3*	8	character	--	silvicultural treatment method

*These fields are not required if there are no overlapping protection treatments scheduled or if the layer is exchanged as a file geodatabase or shapefile. If they are included, they can be left blank. Additional TRTMTHD fields may be added if needed.

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

TRTMTHD1, TRTMTHD2 and TRTMTHD3

Definition: The **silvicultural treatment method** attribute indicates the general type of silvicultural activity and the specific treatment or method to be applied to the site.

Format:

Code	Option	Definition
PCHEMA	**p**rotection **chem**ical – **a**erial spraying	Application of chemicals from an aircraft to prevent, control or manage the spread of, and/or the damage caused by, insects and disease.
PCHEMG	**p**rotection **chem**ical – **g**round insecticide	Ground application of chemicals to prevent, control or manage the spread of, and/or the damage caused by, insects and disease.
PMANUAL	protection **manual**	The removal of (healthy) trees or tree limbs as a preventative measure to reduce the risk of a specific insect or disease occurring in an area, or the removal of infected trees or tree limbs from an area to clean the area and reduce the spread of insects or disease.

If there are more than three treatment methods occurring on the same polygon, additional TRTMTHD fields may be added (e.g., TRTMTHD4, TRTMTHD5).

Stage 1 Validation:

- For TRTMTHD1, the presence of this attribute in the file structure of the layer is mandatory
- For TRTMTHD1 or TRTMTHD2 or TRTMTHD3, the population of one of these attributes is mandatory where AWS_YR equals the fiscal year to which the AWS applies.
- The attribute population must follow the correct coding scheme

4.2.18 Existing Forestry Aggregate Pits Layer

4.2.18.1 Description, Intent and Intended Use

The existing forestry aggregate pits layer contains the locations of all existing forestry aggregate pits on the management unit. Aggregate resources can be removed from forestry aggregate pits by the forest industry without the requirement for an aggregate permit under the *Aggregate Resources Act*.

The locations of new forestry aggregate pits established prior to submission of this AWS (e.g., January 1) will be identified in this layer. Pits established after submission of the AWS will appear in the next AWS. New forestry aggregate pits will be identified in the applicable annual report. Closed pits are not eligible for aggregate extraction and therefore should not be included in this layer.

4.2.18.2 Naming Convention

A standard naming convention will be used for the forestry aggregate pits layer. The file name is composed of the following parts:

MU<management unit>_<year>AGP<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
AGP	Letters "AGP" representing Forestry **Ag**gregate **P**its.
<file number>	This value will always be 00 (default) as multiple layers cannot exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.18.3 Format

Spatial Requirements

The forestry aggregate pits layer contains only point features which will identify the centre of the pit extraction area. The point feature class must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the forestry aggregate pits layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
PITID	15	character	--	aggregate pit identifier
PITOPEN	9	character	--	aggregate pit opening date
PITCLOSE	1	character	--	aggregate pit closure
CAT9APP	9	character	--	Category 9 application date

PITID

Definition: The **aggregate pit identifier** attribute is the unique identifier / label assigned to an existing forestry aggregate pit.

Format: user defined content

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory

PITOPEN

Definition: The **aggregate pit opening date** attribute is the date when the forestry aggregate pit was established.

Format:

- the date will be recorded as year/month/day following this format:
    - YYYYMMMDD (e.g., 2028MAR01)
- the day will always be recorded as a two digit number padded left with zero. (e.g.,01, 04)
- the month will always be recorded as a three letter abbreviation

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme

PITCLOSE

Definition: The **aggregate pit closure** attribute identifies that a pit will be closed and will receive final rehabilitation during this AWS year.

Format: Y (yes) or N (no)

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.

If PITCLOSE is YES, CAT9APP must be null.

CAT9APP

Definition: The **Category 9 application date** attribute is the projected date within this annual work schedule when an application will be made for a Category 9 Aggregate Pit Permit.

Format: YYYYMMMDD

- The date will be recorded as year/month/day following this format:
    - YYYYMMMDD (e.g., 2028MAR01)

- The day will always be recorded as a two digit number padded left with a zero (e.g.,01, 04)
- the month will always be recorded as a three letter abbreviation

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- This field may contain null values.
- If CAT9APP is not null, PITCLOSE must be NO.

4.2.19 Scheduled Establishment Assessment Layer

4.2.19.1 Description, Intent and Intended Use

This spatial layer denotes harvested areas including salvage that are scheduled to be assessed for establishment. Establishment is defined in the regeneration standards as the early indicator of observable measures of a regenerating area to provide confidence that the target (i.e. mature) stand condition can be achieved.

The identified areas will be used by MNRF to complete sampling within the same operational season as the licensee. This layer will be submitted as part of an AWS changes submission (Regeneration Assessment) by June 1st to accommodate the completion of business processes required to identify areas for establishment surveys in the Annual Work Schedule.

Target yield attribute for the polygon will be populated with the Silviculture Intensity attribute described in the SGR from the approved FMP.

4.2.19.2 Naming Convention

A standardized naming convention will be used for the scheduled establishment assessment layer. The file name is composed of the following parts:

MU<management unit>_<year>SEA<file number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Two digit numeric start year of the AWS (e.g., 2028 is 28).
SEA	Letters “SEA” representing **S**cheduled **E**stablishment **A**ssessment.
<file number>	This value will always be 00 (default). Overlapping areas are not permissible and therefore multiple layers will not exist.

Part	Description
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.19.3 Format

Spatial Requirements

The establishment assessment layer contains only polygon features. The spatial data layer must be created in accordance with the direction in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the establishment assessment layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed. The ESRI generated fields are not listed in the attribute table.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
YRDEP	4	integer	-	year of last disturbance
TARGETFU	15	character	-	target forest unit
TARGETYD	10	character	-	target yield

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory

- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

YRDEP

Definition: The **year of last disturbance** attribute indicates a four digit number of the fiscal year that a productive forest area was disturbed, completely or partially, by harvest or by natural causes. For the shelterwood silvicultural system, the year of last disturbance is the year of stand initiation (regeneration cut). Although subsequent cuts are reported as harvest the regenerating stand age is normally based on the original regeneration cut. This value will contribute to the determination of the regeneration delay for the applicable silvicultural stratum in the FMP.

Format: YYYY

- As an example, the 2028/2029 fiscal year is recorded as 2028 in the year of last disturbance attribute. A shelterwood example would report the year of the regeneration cut regardless of subsequent removal cut(s).

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct format
- A zero or null value is not a valid code

TARGETFU

Definition: The **target forest unit** attribute contains the short form label used to reference the forest unit in the future condition section of the associated SGR applied to the area. This attribute in combination with the TARGETYD identifies the intended result of silviculture efforts.

Format: user defined

- must be a FU defined in the FMP

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

TARGETYD

Definition: The **target yield** attribute contains the same label used in the base model inventory from the YIELD attribute used in the approved forest model of the FMP at the time of harvest or SGR update. This provides an indicator of productivity and the expected growth and development pattern.

Format: user defined (e.g. PRSNT, High, Med, and Low)

- must be a YIELD defined in the FMP at the time of harvest or SGR update
- Target Yields apply only to even-aged forest stands that are managed under the clear-cut silvicultural system and the shelterwood silvicultural system.
- For forest stands that are managed under the shelterwood silvicultural system, the stage of development, understorey, and next stage attributes, describe the silvicultural regimes and provide equivalent information to indicate silvicultural intensity. Similarly, for stands managed under the selection silvicultural system, the stage of development, acceptable growing stock, unacceptable growing stock, and next stage attributes describe the silvicultural regimes and provide equivalent information to indicate silvicultural intensity.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory

- A blank or null value is not a valid code

4.2.20 Scheduled Wood Storage Yards

4.2.20.1 Description, Intent and Intended Use

The scheduled wood storage yards layer contains areas where wood storage yards are scheduled to be established. A wood storage yard is defined as a site that is geographically separated from the harvest location that may be used for slashing, sorting, storage and other wood measurement activities of forest resources prior to the movement to final processing destination(s).

Licensees must include all wood storage yards in the approved FMP including all approved amendments received prior to December 1st (e.g. December 1, 2019 for the 2020-2021 AWS). An attribute identifying the AWS fiscal year will distinguish the areas scheduled in the applicable AWS.

If the approved FMP does not include a wood storage yard layer there is no requirement for this to be submitted.

4.2.20.2 Naming Convention

A standard naming convention will be used for the wood storage yard layer information. The naming convention will assist in the automated validation and use of the information. The file name is composed of the following parts:

MU<management unit>_<year>WSY<part number>.<file extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, pad left with zeros as required (e.g., 001).
_	Underscore character as a separator.

Part	Description
<year>	Two digit numeric start year of the FMP planning period (e.g., 2028 is 28).
IMP	Letters "WSY" representing **W**ood **S**torage **Y**ards.
<part number>	This value will always be 00 (default). Overlapping areas are not permissible and therefore multiple layers will not exist.
<file extension>	Include a file extension if required as described in Section 4.2.2

4.2.20.3 Format

Spatial Requirements

The wood storage yard layer contains only polygon features. This layer must be created in accordance with the direction specified in Section 4.2.4.

Tabular Requirements

The tabular attributes associated with the wood storage yard layer are to be included in the feature attribute table described below. The fields listed in the table below are a minimum requirement for this feature attribute table and additional fields can be included as needed.

field name	maximum width	field type	decimal places	attribute description
AWS_YR	4	integer	--	AWS fiscal year
WSYID	15	character	--	wood storage yards identifier
TYPE	3	character	-	wood storage yard type

AWS_YR

Definition: The **AWS fiscal year** attribute identifies the fiscal year to which the AWS applies. Only those areas scheduled in the AWS require this field to be populated.

Format: YYYY

- Example: the 2028-2029 AWS operating year would be recorded as 2028
- Features where the AWS_YR is not populated are considered to not be scheduled.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory.
- The population of this attribute is mandatory
- A blank or null value is not a valid code
- There cannot be any values less than the FMP start year (except for 0 on areas not scheduled) or greater than the plan end year minus 1.

WSYID

Definition: The **wood storage yard identifier** attribute indicates the unique identifier for the area where wood storage yards may be located.

Format: user defined content

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- A blank or null value is not a valid code

TYPE

Definition: The **wood storage yard type** attribute indicates the type of use intended for the wood storage yard identified.

Format:

Code	Option	Definition
THY	t**emporary** h**olding** y**ard**	Temporary holding yards for forest resources are storage sites which are removed from the harvesting location, i.e. outside of the harvest approval area. These yards are generally used annually for the short-term storage of forest resources prior to movement to the final processing destination. Wood from more than one license and/or Harvest Approval area may be stored at these sites

Code	Option	Definition
TMY	t**emporary** m**erchandizing** y**ard**	Merchandizing yards are sites which are also removed from the harvesting location. These yards may temporary and are used for slashing, sorting, log improvement and wood measurement activities, as applicable, that occur prior to delivery to the final processing destinations. Forest resources from more than one license and/or Harvest Approval area may be processed at these sites.
LMY	l**ong-term** m**erchandizing** y**ard**	Merchandizing yards are sites which are also removed from the harvesting location. These yards may be long-term and are used for slashing, sorting, log improvement and wood measurement activities, as applicable, that occur prior to delivery to the final processing destinations. Forest resources from more than one license and/or Harvest Approval area may be processed at these sites.

Stage 1 Validation:

- The presence of this attribute in the file structure of the layer is mandatory
- The population of this attribute is mandatory
- The attribute population must follow the correct coding scheme
- A blank or null value is not a valid code

4.3 Map Specifications

4.3.1 Description, Intent and Intended Use

Maps are required for portraying information about operations that were previously planned and approved in the FMP, and are scheduled for implementation during the fiscal year, as well as information on operations that are planned (e.g., water crossings). All maps, except for the public notice maps, will be submitted as described in Section 5.0.

It is not a requirement to produce French language versions of all maps for areas designated under the *French Language Services Act.* A French language version of the public notice map is required for areas designated under the *French Language Services Act.* A French language version of the summary map is required for all areas.

Information about when each map is required, and for what purpose, is provided in the detailed map description sections (Sections 4.3.5 - 4.3.8).

4.3.2 Packaging and Naming Convention

Maps that are a required component of an AWS submission will use a standard naming convention. A standard naming convention must be used to permit an automated validation of the information product. Standardized naming of files also facilitates internet viewing, file retention and data discovery. The file name is composed of the following parts:

MU<management unit>_<year>_AWS_MAP_<description>_<file number>.pdf

where:

Part	Description
MU	Letters “MU” representing Management unit.
<management unit>	The three digit MU number, padded left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Four digit numeric start year of the AWS (e.g., 2028).

Part	Description
_	Underscore character as a separator.
AWS	Letters representing the information products being submitted: "AWS" for **A**nnual **W**ork **S**chedule
_	Underscore character as a separator.
MAP	Letters representing the type of product being submitted: “MAP” for map.
_	Underscore character as a separator.
<description>	Letters representing the required standard component being submitted: For non-standard additional maps, the description is user defined.
_	Underscore character as a separator.
<file number>	A two-digit numeric place holder for identifying situations where maps have been split into more than one file, based on map extent or theme. If only one map file exists, the file number will remain at “00”. If more than one map file exists, the first map will contain “01” in the file number, the second map “02”, and so on. If operational scale maps have been produced with a consistent theme split, all of the maps showing the same theme should have the same file number. For example, if harvest operations are displayed on one set of maps and renewal and maintenance operations are on a second set of maps, all of the harvest maps would have a file number of “01” and all of the renewal and maintenance maps would have a file number of “02”, even if there is not both a “01” and a “02” for all areas.
.pdf	Portable document format (PDF)

Sample naming conventions for the individual map file components are provided in the detailed map descriptions below.

For maps that are not a required component of an AWS submission, a standard name has not been provided.

4.3.3 Metadata

Metadata requirements for map products are met by the required information contained in the map surround, use of a standard naming convention, as well as the submission details that are captured when AWS information products are submitted via the NRIP.

4.3.4 Format

Maps that are a required component of an AWS submission will be produced in an Adobe portable document format (PDF) that does not exceed 100 MB in file size with the fonts and symbols successfully imbedded.

Note: Some problems have been encountered when generating PDF files, ensure that the ESRI fonts and symbols have been imbedded properly by viewing the file on a computer that does not have the font file installed.

4.3.4.1 Map Scale Standards

Each map produced for inclusion in the AWS must be prepared according to one of three map scale types:

Operational Map Scale

Acceptable operational map scales range from 1:10,000 to 1:50,000. Operational scale maps are also referred to as large scale maps.

Composite Map Scale

Acceptable composite map scales range from 1:50,000 to 1:250,000. The composite scale chosen must allow for easy, clear interpretation of map themes and ease of reproduction. The scale chosen for these small scale maps should be one that minimizes the number of maps required to display the entire management unit.

Summary Map Scale

Acceptable summary map scales generally allow for portrayal of the target area on an 11”x 17” or smaller sheet of paper and allow for the appropriate resolution of information and ease of reproduction. These very small scale maps are designed and created for public distribution.

The detailed map description sections (Sections 4.3.5 - 4.3.8) identify a required map scale type for each map as operational, composite, or summary. The scales chosen from the operational and composite scale ranges for the FMP maps are also to be used for the AWS. If the plan author feels it appropriate to produce some maps at scales other than the one chosen for the FMP, these maps will be in addition to the maps produced at the chosen scale. Use of a consistent scale for the summary map(s) is not required.

4.3.4.2 Map Surround Standards

All maps will have a similar map surround. Where particular features of these map surround standards do not apply to a map, it will be noted in the detailed map descriptions. Additional guidance can be obtained from the Map Design Considerations for Accessibility.

Map surround components are as follows:

Logo - Ontario Government logo or forest company logo (or combination) as appropriate.

Example:

Title Block - includes the management unit name, the term of the FMP, and the map name. For operational maps, the mapsheet identifier must also be included. The naming standard for the map is indicated in the detailed map descriptions.

Index Map - indicates the extent of the area shown on the map in relation to a larger area. Composite maps will show their extent in relation to the rest of Ontario. Operational scale maps (1:20,000, 1:10,000) will show their extent in relation to the management unit.

Legend - provides a list of map symbols used for theme and base features.

Disclaimer - required for safeguarding against liability on the part of the MNRF or the forest industry companies. A disclaimer is of particular importance with the take-home summary maps.

Example:

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

Scale bar and/or statement - provides the relationship between map distance and true (ground) distance. Both a scale bar and text scale statement are required.

Example:

Map Publication Date - indicates the date the map was created. The date will display the month in text and the year in four digits.

Example: March 22, 2006

22/MAR/2006

Copyright - indicates who maintains ownership of the data/information or a contact name for more information on copyright applicable to the map data.

Example: © Queen's Printer for Ontario, 2006

Datum - identifies the projection and datum of the map information

Example: NAD83 UTM Zone 17

North Arrow - grid north direction indicator. This information is not required if map is oriented with north to the top of page.

Border - map frame

4.3.4.3 Symbology

The FIM does not prescribe standards for the symbology of features other than values. Map symbology will be selected based on the clear portrayal of map features with consideration for reproducibility and display on digital media.

4.3.4.4 Sensitive and Confidential Information

The portrayal of sensitive values information on forest management planning maps will be specific to individual data sets. Portrayal will reflect the standards for values symbology in Appendix 1 of the FIM Forest Management Planning Technical Specifications and will be in accordance with the FIM, Part B, Section 3.1.4 Requirements Respecting Classified Values Information and Section 3.1.5 Requirements Respecting Personal Information.

Direction on the portrayal of sensitive values on forest management planning maps will be provided by the Information Owner of the specific data set. If direction has not been provided for a specific data set, it is the responsibility of the appropriate task team to ensure that representation of sensitive data on FMP maps is not detrimental to the conservation of the value.

The method for portraying area of concern prescriptions for values classified as sensitive on the operations maps is described in Section 4.3.7, Annual Work Schedule Operations Map.

4.3.4.5 Page Size Standards

Summary maps are to be designed for tabloid size paper (11”x17”) or smaller.

Operational scale maps will be designed with the horizontal or vertical border width fitting a standard paper roll size of 36 inches. There is no maximum limit on the length (portrait) or width (landscape) for operational scale maps.

Composite scale maps will be designed to fit standard paper roll sizes of 36, 42, or 60 inches, in either the horizontal or vertical direction. There is no maximum limit on the length (portrait) or width (landscape) for composite scale maps.

4.3.5 Public Notice Map

4.3.5.1 Description, Intent and Intended Use

The Public Notice Map is a map of the management unit, containing sufficient detail to allow for the identification of the location of the management unit. This map presents the general location of the management unit boundary in relation to large, well known features such as highways, large lakes/rivers, and communities.

This map accompanies all public notices, including direct written notices and media notices, for AWSs, prescribed burns, aerial herbicide and insecticide projects, and insect pest management programs. The same map that was used during FMP notification may also be used for AWS notification.

A French language version of the map is required for designated areas under the *French Language Services Act*.

Map Name: Public Notice Map (not required in map surround)

Scale: summary

Map Surround Components: none

Information Displayed: content varies based on type of notification

AWS Public Notice Map

Theme Features

- Management Unit Boundary

Base Features

- Communities (labels)
- Highways/Major Roads (labels)

- Large lakes and rivers

Prescribed Burns Public Notice Map

Theme Features

- Management Unit Boundary
- Location of Prescribed Burn Project

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Large lakes and rivers

Aerial Pesticide Projects Public Notice Map

Theme Features

- Management Unit Boundary
- Location of Pesticide Project

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Large lakes and rivers

Insect Pest Management Program Public Notice Map

Theme Features

- MNR District

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Large lakes and rivers

4.3.5.2 Packaging and Naming Convention

None

4.3.5.3 Format

The Public Notice Map must be designed in high contrast black and white with textual components readable when the map is produced at a size of 2 by 3 inches. The Public notice maps should be simple, largely composed of lines and only the necessary geographic reference points.

The digital image file must be 300 dpi and either a jpeg or an encapsulated postscript (EPS) file format in order for the Advertising Coordinator, MNRF's Communications Services Branch to generate the public notices in the relevant media. A copy of this public notice will also be issued to interested and affected persons and organizations on MNRF's mailing list.

4.3.5.4 Data Transfer and Schedule

A minimum of two weeks is required by the Communications Services Branch to generate the public notice. Additional time must be allotted depending upon the publication schedule of the local media being used and the desired mail-out date of direct written notices.

If the production of the digital map file is the responsibility of the Licensee, subsequent submissions are not required if there are no changes or corrections to be made to this map following the original submission for forest management planning notification.

The Public Notice Map is not a required component of AWS submission.

4.3.5.5 Review and Approval

MNRF is responsible for submitting the digital map file to the Advertising Coordinator, Communications Services Branch. If the production of the digital map file is the responsibility of the Licensee, MNRF will review and approve the map prior to submitting it to the Advertising Coordinator.

4.3.6 Annual Work Schedule Index Map

4.3.6.1 Description, Intent and Intended Use

The AWS Index Map provides an overview of scheduled activities for the one-year period of the AWS and provides an index/grid for identifying specific AWS operations maps. This map will aid the public, and First Nation and Métis communities in accessing specific operations maps on the NRIP. The amount of information to be displayed and differentiated on this composite scale map should be kept to a minimum.

In order for this map to be effective as an index map on the NRIP, the Operational Map Grid label must coincide with the user-defined description (<description>) in the operations maps file names and be easily identifiable on the map as described in section 4.3.2.

The AWS Index Map is also used for other public consultation purposes, especially with First Nation or Métis communities, local citizen's committees, trapper associations, bear management area operators, and local fire centres.

Map Name: Annual Work Schedule Index Map

Scale: composite

Map Surround Components: all

Information Displayed: Unless indicated otherwise, all theme features are limited to the one-year period of the AWS.

Theme Features

- Scheduled Harvest Activities
- Scheduled Renewal & Maintenance Activities
- Scheduled Primary & Branch Road Corridors

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Large lakes and rivers (labels)

Administrative Boundary Features

- Parks and Reserves
- Federal Land
- Operational Map Grid (label)
- Management Unit Boundary

4.3.6.2 Packaging and Naming Convention

The <description> component of the file name for this map is **Index**. The following is a sample of the mandatory file naming convention:

- MU123_2028_AWS_MAP_Index_00.PDF

4.3.6.3 Format

For the format for this map product, as a component of the AWS submission refer to Section 4.3.4.

4.3.6.4 Data Transfer and Schedule

This map is a mandatory component of the AWS submission.

4.3.7 Annual Work Schedule Operations Maps

4.3.7.1 Description, Intent and Intended Use

The Annual Work Schedule Operations maps display the detailed activities scheduled for the one-year period of the AWS. The amount of information to be displayed and differentiated on these operational scale operations maps is significant. The plan author has the option of producing a separate set(s) of operations maps (not composite scale) for specific themes, in order to improve the readability of the operational scale operations maps. A common example of multiple operations maps for the same geographic area is when Harvest Operations and Renewal and Maintenance Operations are depicted on separate maps. If separate, operational scale maps are produced, the title blocks must include a sub-title identifying the theme(s) being displayed.

The silvicultural system must be identified on the AWS operations maps if more than one silvicultural system is being used to manage the forest during the year. Renewal and maintenance areas will be portrayed by treatment layer (i.e., regeneration, site preparation, tending and protection).

Operational Prescriptions and conditions for Areas of Concern (AOC) will be portrayed on the operations maps for all scheduled areas of operations for the one-year period. This includes all harvest areas, primary and branch road corridors, aggregate extraction areas, operational road boundaries, existing roads to be used during the year, wood storage yards and renewal and maintenance areas. Area of concern prescriptions will be differentiated on the map as reserve or modified operations. Areas of concern will be labelled and/or symbolized in such a way as to identify their AOC or AOC group as documented in table FMP-11, Operational Prescriptions for Areas of Concern and Conditions on Roads, Landings, and Forestry Aggregate Pits.

AOCs for renewal and maintenance activities are normally only required for modified operations or where a value may be impacted by renewal and maintenance activities (e.g., timing restrictions, herbicide applications, or site disturbance restrictions) or road activities.

AOCs for values classified as sensitive, the AOC identifier and the corresponding prescription will not directly identify the value that is being protected. For example, all values classified as sensitive that are to receive a reserve of 250 meters and modified operations of an additional 250 meters could have a CV1 identifier on the operations maps and a corresponding operational prescriptions and conditions for AOC in table FMP-11 called CV1. Alternatively, individual AOCs could have unique identifiers (e.g., CV1, CV2, CV3, etc.) and the identifiers listed in table FMP-11 with the appropriate prescription. The confidential detailed information about the value will be available at the appropriate MNRF office and will be shared with the Licensee on a need-to-know basis in order to conduct operations as prescribed. If the planning team considers the portrayal of an AOC as detrimental to the conservation of the sensitive value, it is not required on the operations maps available to the public. Detailed documentation on the type and location of the AOC will be kept on file at the MNRF district and/or area office and at the office of the Licensee and made available on a need-to-know basis.

All scheduled road corridors, operational road boundaries and existing road activities must be labelled with the identifier documented in table FMP-18.

All scheduled water crossing activities with the exception of monitoring (i.e., construction, replacement, removal) will be portrayed on the operations maps and labelled with identifier as documented in table FMP-11, AWS-1 and/or AWS-2.

All roads, including primary and branch corridors, and operational road boundaries, which will have access controls (under the *Public Lands Act* or any other form of regulation) implemented during the one-year period of the AWS, will be differentiated on the operations maps. Access control is the closure of a road to public travel or the restricted access to a road for certain specified uses for given periods of time.

All roads that will be rendered impassable by decommissioning activities scheduled to occur during the one-year period of the AWS, will be identified on the maps.

Forestry aggregate pits are pits established by the Licensee under an exemption from obtaining an aggregate permit for Crown aggregate used in the construction and maintenance of forest

access roads that are open to the public. Forestry aggregate pits included on this map must not be closed. All existing pits will be identified and labelled on the operations maps with a unique identifier.

Map Name: Annual Work Schedule Operations Map

Scale: operational

Map Surround Components: all

Information Displayed: Unless indicated otherwise, all theme features are limited to the scheduled operations for the one-year period of the AWS.

Theme Features

- Harvest Area by Harvest Category & Silvicultural System*
- Harvest Block Identifier
- AOC reserves (not limited to AWS year)
- AOC modified operations (not limited to AWS year)
- Stand Level Residual Requirements
- Renewal & Maintenance Activities by treatment layer
- Fuelwood Areas
- Primary & Branch Road Corridors (ID's)
- Operational Road Boundaries (ID's)
- Water crossings to be constructed in following year where applicable (ID's)
- Water crossings to be constructed (ID's)
- Water crossings to be replaced (ID's)
- Water crossings to be removed (IDs)
- Roads Scheduled for Access Control (IDs)
- Roads Scheduled for Decommissioning (IDs)
- Aggregate Extraction Areas (IDs)
- Forestry Aggregate Pits (ID's)

- Wood storage yard(ID's)

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Other roads
- Railways
- Utility Lines
- Lakes, rivers and streams (labels)
- Forest Stand Boundaries**

Administrative Boundary Features

- Parks and Reserves
- Federal Land
- Management Unit Boundary
- Other non-Crown Land
- Townships**
- Operational Map Grid (label or key)

*Only required if more than one system is being used to manage the forest during the year

**Optional

4.3.7.2 Packaging and Naming Convention

The <description> component of the file name for this map is **Ops extent** where <extent> is user-defined and gives an indication of the map extent, such as an OBM tile number (i.e.,54530), township, or operational road identifier and is to be used as the Operational Grid label on the FMP Index Map.

The following are samples of the mandatory file naming convention:

- MU123_2028_AWS_MAP_Ops54530_00.PDF (Single map)
- MU123_2028_AWS_MAP_Ops54530_01.PDF (Harvest Operations)
- MU123_2028_AWS_MAP_Ops54530_02.PDF (Renewal & Maintenance Operations)

4.3.7.3 Format

For the format for this map product, as a component of the AWS submission, refer to Section 4.3.4.

4.3.7.4 Data Transfer and Schedule

This map product is a required component of the AWS submission.

4.3.8 AWS Summary Map

4.3.8.1 Description, Intent and Intended Use

The AWS Summary Map portrays a summary of areas that are scheduled for operations during the year and is intended to be a take-home style map available to the public and First Nation and Métis communities. This map must be available for public distribution, upon request, at the appropriate MNRF office, and the office of the Licensee.

The plan author may choose to display some themes on separate summary maps to facilitate readability. In these cases, the separate theme of each map must be reflected in the title block. Although this map is to be designed with ease of reproduction in mind, it is recommended that colour be used to best communicate the information required on these maps.

A French language version of the map is required for all areas.

Map Name: AWS Summary Map

Scale: summary

Map Surround Components: all

Information Displayed: Unless indicated otherwise, all theme features are limited to the one-year period of the AWS.

Theme Features

- Scheduled Harvest Activities
- Scheduled Renewal & Maintenance Activities
- Available Fuelwood Areas
- Scheduled Primary & Branch Road Corridors
- Roads Scheduled for Access Control Implementation
- Roads Scheduled for Decommissioning Activities

Base Features

- Communities (labels)
- Highways/Major Roads (labels)
- Large lakes and rivers

Administrative Boundary Features

- Parks and Reserves
- Federal Land
- Operational Map Grid (label or key)
- Management Unit Boundary

4.3.8.2 Packaging and Naming Convention

The <description> component of the file name for this **Sum** for the English version and **SumFR** for the French language version. The following are samples of the mandatory file naming convention:

- MU123_2028_AWS_MAP_Sum_00.PDF
- MU123_2028_AWS_MAP_SumFR_00.PDF (French language version)

4.3.8.3 Format

For the format for this map product, as a component of the AWS submission, refer to Section 4.3.4.

4.3.8.4 Data Transfer and Schedule

This map is a required component of the AWS submission.

4.4 AWS Documentation

4.4.1 Description, Intent and Intended Use

The mandatory documentation components of the AWS have been structured to facilitate efficient organization, retention, access and use of the information on the NRIP.

Additional non-standard files may be included in the AWS submission.

4.4.2 Packaging and Naming Convention

AWS documentation will be included in AWS submission according to the standards described in Section 5.0.

AWS documentation will be submitted using the standardized naming convention. A standard naming convention must be used to permit an automated validation of the information product. Standardized naming of files also facilitates internet viewing, file retention and data discovery. The file name is composed of the following parts:

MU<management unit>_<year>_AWS_<product type>_<description>.<extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, padded left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Four digit numeric start year of the AWS (e.g., 2028).
_	Underscore character as a separator.
AWS	Letters representing the information product being submitted: "AWS" for **A**nnual **W**ork **S**chedule
_	Underscore character as a separator.
<product type>	Letters representing the type of product being submitted, either “TXT” for text.

Part	Description
_	Underscore character as a separator.
<description>	Letters representing the required standard component being submitted. For non-standard additional files that are being submitted, the description is user defined.
.<extension>	File format extension of .PDF.

The following is a sample of the mandatory file naming convention:

MU123_2028_AWS_TXT_Text.PDF

4.4.3 Metadata

Part of the metadata requirements will be met by use of the standard naming convention as well as the submission details that are collected when the AWS submission is submitted via the NRIP.

4.4.4 Format

All AWS documentation, as components of the submission to the NRIP, will be submitted as an Adobe portable document file (PDF). To meet the requirements of the Accessibility for Ontarians with Disabilities Act (AODA) and more specifically the Integrated Accessibility Standards Regulation, the MNRF will provide sustainable forest licensees with guidance to enhance the accessibility of PDFs. This guidance can be found in the Digital Document Accessibility Guide. As technology advances and offers practical improvements for the production of AODA compliant FIM information products this technical specification will be updated to reflect these advancements.

4.4.5 Data Transfer and Schedule

AWS documentation in the AWS submission is subject to those timelines. Refer to Section 5.0 for more information.

4.4.6 Title, Certification Page

4.4.6.1 Description, Intent and Intended Use

The AWS and AWS revisions that do not require MNRF approval will require a title, certification page in the format of template D-1. The title, certification page will be signed by the person who prepared the AWS, normally the plan author, the senior official of the sustainable forest licensee, and where applicable the MNRF. If the MNRF district manager directs other people with expertise beyond the standard expertise of a registered professional forester to develop parts of an annual work schedule (e.g., water crossings), those people will certify the parts of the annual work schedule that they prepared in the format prescribed in template D-1B.

4.4.6.2 Naming Convention

As part of a single file, the standardized naming convention will be as described in 4.4.2.

4.4.6.3 Template Format

Figure D-1: Annual Work Schedule - Title, Certification Page

[ANNUAL WORK SCHEDULE / REVISION TO ANNUAL WORK SCHEDULE]

for the[NAME OF MANAGEMENT UNIT]

[MNRF Administrative District and Region]

[Name of plan author's organization]

for the one-year period from April 1, [year] to March 31, [year]

I/We hereby confirm that this [AWS /Revision] has been prepared in accordance with the requirements of the Forest Management Planning Manual and the FIM, and is consistent with the approved forest management plan.

Prepared by:	[name]	[date]
Submitted by:	[name]	[date]
(where applicable)	Plan Author [or senior official of plan author's organization, if other than MNRF]	

I hereby certify that the access, harvest, renewal and maintenance operations which are scheduled in this [AWS \Revision] have been developed in accordance with the requirements of the Forest Management Planning Manual.

[R.P.F. Seal]	[Plan Author]	[date]

NRIP Submission Identifier: [ID]

Figure D-1B: Annual Work Schedule - Title and Certification Page

For Sections of the Annual Work Schedule not Prepared by the Plan Author

ANNUAL WORK SCHEDULE

for the[NAME OF MANAGEMENT UNIT]

[MNRF Administrative District and Region]

[Name of plan author's organization]

for the one-year period from April 1, [date] to March 31, [date]

I hereby certify that I have prepared the sections of the annual work schedule as indicated, to the best of my professional skill and judgement, in accordance with the requirements of the Forest Management Planning Manual.

[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date

4.4.7 Approval Page

4.4.7.1 Description, Intent and Intended Use

The approval page is a template to be included in the approval or revision of higher risk water crossings, aerial insecticide and herbicide project plans, and the prescribed burn plans. The approval page will be in the format of template D-2. The approval page will be signed by the person who prepared the project plan (e.g., prescribed burn plan), normally the plan author, the senior official of the sustainable forest licensee, where applicable, and the MNRF district manager. If the MNRF district manager directs other people with expertise beyond the standard expertise of a registered professional forester to develop parts of a project plan (e.g., higher risk water crossings), those people will certify the parts of the project plan that they prepared in the format prescribed in template D-2B.

4.4.7.2 Naming Convention

As part of a single file, the standardized naming convention will be as described in 4.4.2.

4.4.7.3 Template Format

Figure D-2: Approval Page

[AERIAL HERBICIDE OR INSECTICIDE PLAN, PRESCRIBED BURN PLAN OR HIGHER RISK WATER CROSSING / REVISION]

for the[NAME OF MANAGEMENT UNIT]

[MNRF Administrative District and Region]

[Name of plan author's organization]

for the one-year period from April 1, [year] to March 31, [year]

I/We hereby confirm that this [AWS /Revision] has been prepared in accordance with the requirements of the Forest Management Planning Manual and the FIM, and is consistent with the approved forest management plan.

Prepared by:	[name]	[date]
Submitted by:	[name]	[date]
(where applicable)	Plan Author [or senior official of plan author's organization, if other than MNRF]	

I hereby certify that the forest operations which are scheduled in this [AWS /Revision] have been developed in accordance with the requirements of the Forest Management Planning Manual.

[R.P.F. Seal]	[Plan Author]	[date]

I have read this [aerial herbicide or insecticide plan, prescribed burn plan or higher risk water crossing submission / revision], and found it to be complete and consistent with the approved forest management plan.

Approved by:	[MNRF District Manager]	[date]

NRIP Submission Identifier: [ID]

Figure D-2B: Annual Work Schedule – Approval Page

For Sections of the Annual Work Schedule not Prepared by the Plan Author

[AERIAL HERBICIDE OR INSECTICIDE PLAN, PRESCRIBED BURN PLAN OR HIGHER RISK WATER CROSSING / REVISION]

for the[NAME OF MANAGEMENT UNIT]

[MNRF Administrative District and Region]

[Name of plan author's organization]

for the one-year period from April 1, [date] to March 31, [date]

I hereby certify that I have prepared the sections of the [Project Plan] as indicated, to the best of my professional skill and judgement, in accordance with the requirements of the Forest Management Planning Manual.

[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date
[name]	[title]	[sections]	[name]	[date]
Name	Job Title	Sections prepared	Signature	Date

4.5 AWS Tables

4.5.1 Description, Intent and Intended Use

The AWS submission table components will be incorporated into a single file. The AWS submission has been structured to facilitate efficient organization, retention, access and use of the information on the Natural Resource Information Portal (NRIP). The following rules apply to the table components of AWS submission. Additional non-standard files may be included in the AWS submission.

4.5.2 Packaging and Naming Convention

AWS tables will be included in the AWS submission according to the standards described in Section 5.0.

The AWS table files will be submitted using the standardized naming convention. A standard naming convention must be used to permit an automated validation of the information product. Standardized naming of files also facilitates internet viewing, file retention and data discovery. The file name is composed of the following parts:

MU<management unit>_<year>_AWS_TBL_Tables.PDF

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, padded left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Four digit numeric start year of the AWS (e.g., 2028).
_	Underscore character as a separator.
AWS	Letters representing the information product being submitted: "AWS" for **A**nnual **W**ork **S**chedule
_	Underscore character as a separator.

TBL	Letters representing the type of product being submitted “TBL” for table
_	Underscore character as a separator.
Tables	Letters representing the required standard component being submitted: “Tables” for the AWS tables For non-standard additional files that are being submitted, the description is user defined.
.PDF	File format extension for Adobe portable document files

The following is a sample of the mandatory file naming convention:

- MU123_2028_AWS_TBL_Tables.PDF

4.5.3 Metadata

Metadata requirements will be met by use of the standard naming convention as well as the submission details that are collected when the AWS submission is submitted via the NRIP.

4.5.4 Format

All AWS table files, as components of the submission to the NRIP, will be submitted as an Adobe portable document files (PDF). To meet the requirements of the *Accessibility for Ontarians with Disabilities Act* (AODA) and more specifically the Integrated Accessibility Standards Regulation, the MNRF will provide sustainable forest licensees with guidance to enhance the accessibility of PDFs. This guidance can be found in the Digital Document Accessibility Guide.

As technology advances and offers practical improvements for the production of AODA compliant FIM information products this technical specification will be updated to reflect these advancements.

4.5.5 Data Transfer and Schedule

AWS tables are included in the AWS submission and are subject to those timelines. Refer to Section 5.0 for more information.

4.5.6 Annual Schedule of Water Crossings to be Constructed or Replaced

4.5.6.1 Description, Intent and Intended Use

This table summarizes the scheduled water crossings to be constructed or replaced in the current year. Water crossings planned for the following year may be identified to provide MNRF an ice-free season to conduct a review, if applicable, with respect to the Fisheries Act. For each water crossing planned for the following year, this table should be completed to the extent reasonably possible. Each table entry represents a road crossing of areas of concern with a unique/common prescription. A source of information for this table is FMP-11.

4.5.6.2 Naming Convention

As part of a single file, the standardized naming convention will be as described in 4.4.2.

4.5.6.3 Instructions

Complete the table as follows:

Enter the management unit name, plan period and AWS year.

Year of Construction:

List individual water crossings by the anticipated year of construction (i.e., A. Current Year or B. Future Year).

Water Crossing Identifier:

Enter a unique code to identify each water crossing scheduled for installation or replacement.

Road Identifier:

Enter a unique name or code that the road can be identified by.

Water Crossing Structure:

Enter a description of the type of water crossing structure (e.g., bridge, culvert, temporary bridge) proposed.

Culvert Diameter:

Enter the culvert diameter from water crossing calculation. Enter not applicable (NA) if a culvert is not being installed.

Water Crossing Standard Identifier:

Enter the identifier from the FMP to be implemented. Enter not applicable (NA) if a water crossing standard is not being implemented.

Construction Conditions:

Enter conditions on the construction of the water crossing.

Future Removal:

If yes, enter Y and indicate the projected year of the water crossing removal. If no, enter N.

Fisheries Act Review Completed:

Indicate if the water crossing has been reviewed (Yes/No/NA).

Fisheries Act Review Results:

Enter the results of the review of the proposed water crossing, if completed (i.e., (i.e., Unacceptable (U) or Acceptable (A) likelihood of a Fisheries Act contravention).

4.5.6.4 Format

MANAGEMENT UNIT NAME: _____
PLAN PERIOD: _____ TO _____
ANNUAL WORK SCHEDULE: _____ TO _____

AWS – 1 Annual Schedule of Water Crossings to be Constructed or Replaced

Year of Construction	Water Crossing Identifier	Road Identifier	Water Crossing Structure	Culvert Diameter (mm)	Water Crossing Standard Identifier	Construction Conditions	Future Removal (Y/N)	*Fisheries Act* Review Completed (Y/N/NA)	*Fisheries Act* Review Results
A. Current Year									
B. Future Year									

4.5.7 Annual Schedule of Water Crossings to be Removed

4.4.7.1 Description, Intent and Intended Use

This table summarizes the water crossings scheduled to be removed. Each table entry represents a water crossing that will be removed.

4.4.7.2 Naming Convention

As part of a single file, the standardized naming convention will be as described in 4.4.2.

4.4.7.3 Instructions

Complete the table as follows:

Enter the management unit name, plan period and AWS year.

Water Crossing Identifier:

For each water crossing to be removed, enter the unique code to identify the crossing.

Road Identifier:

For each road, enter the unique name or code that the road can be identified by.

Water Crossing Structure:

Enter a description of the type of water crossing structure (e.g., bridge, culvert, temporary bridge) to be removed.

Water Crossing Standard Identifier:

Enter the water crossing standard identifier from the FMP to be implemented. Enter not applicable (NA) if a water crossing standard is not being implemented.

Removal Activities/Conditions:

Enter conditions on the removal of the water crossing.

Fisheries Act Review Completed:

Indicate if the water crossing has been reviewed (Yes/No/NA).

Fisheries Act Review Results:

Enter the results of the review of the proposed water crossing removal, if completed (i.e., Unacceptable (U) or Acceptable (A) likelihood of a *Fisheries Act* contravention)

4.4.7.4 Format

MANAGEMENT UNIT NAME: _____
PLAN PERIOD: _____ TO _____
ANNUAL WORK SCHEDULE: _____ TO _____

AWS – 2 Annual Schedule of Water Crossings to be Removed

Water Crossing Identifier	Road Identifier	Water Crossing Structure	Water Crossing Standard Identifier	Removal Activities/Conditions	*Fisheres Act* Review Completed (Y/N/NA)	*Fisheries Act* Review Results

4.6 AWS Changes

4.6.1 Description, Intent and Intended Use

AWS changes include four types of information - AWS revisions, appended documents, appended spatial data layers and changes to values. As with the AWS, documentation of changes to the AWS will be submitted through the NRIP. Documentation may be a combination of maps, text, spatial data or tables. A change to the AWS and updated information on operations is required to maintain the integrity of the official copy of the AWS, for compliance monitoring and to support review of annual reports. Also, updated values information facilitates the update of the values database and identifies values for which MNRF staff may need to collect additional information.

Examples of AWS revisions are additions of new areas of operations from an approved FMP, changes to water crossing locations, or changes to tables or maps.

Appended documents are higher risk water crossing, prescribed burn plans and aerial herbicide and insecticide project plans.

The Scheduled Establishment Assessment Layer is to be part the AWS changes submission as described in section 4.2.20.

Changes to values occur when new values information (e.g., new value, changed value, non-existent value) result in an adjustment to an AOC, but where no amendment or revision is required. Information on the location and description of the values that were previously unidentified (i.e., unmapped) or incorrectly mapped, or that no longer exist, must be provided to the MNRF by the Licensee when encountered during implementation of operations (refer to the FIM Base and Values Technical Specifications, Section 2.3). Updated information on the operational prescriptions and conditions for areas of concern will be provided to the MNRF District office on maps, with text that references the applicable operational prescriptions for areas of concern in the FMP.

Requirements for title pages, R.P.F. certification or other signed approval pages are as per the AWS submission (see Section 4.4.6 and 4.4.7).

4.6.2 Packaging and Naming Convention

Each component of the AWS change document is to be created using the standard naming convention. Non-standard components must also follow the standard naming convention pattern, but will have a user-defined description. The same general format rules for submitting AWS components will be followed for non-standard components as well. For example, text, including the consultation components, will be submitted as a single PDF file. Tables will be submitted as a single PDF file. Each map will be submitted as a separate PDF file.

Each component of the AWS Changes submission will be created using the standard naming convention except for the Scheduled Establishment Assessment layer which will use the naming convention from Section 4.2.20.

The file name is composed of the following parts:

MU<management unit>_<year>_<info product>_<sequence number>_<product type>_<description>.<extension>

where:

Part	Description
MU	Letters “MU” representing **M**anagement **U**nit.
<management unit>	The three digit MU number, padded left with zeros as required (e.g., 001).
_	Underscore character as a separator.
<year>	Four digit numeric start year of the AWS (e.g., 2028).
_	Underscore character as a separator.
<info product>	Letters representing the information product being submitted. “AWSRV” for **AWS Re**v**i**sions “AWSPB” for **AWS P**rescribed **B**urn Plan “AWSWTX” for higher risk **wa**t**e**r crossings (**X**) “AWSHP” for **AWS** Aerial **H**erbicide Project **P**lan

Part	Description
	"AWSIP" for **AWS** Aerial **I**nsecticide Project **P**lan "AWSCH" for **AWS Ch**anges to Values "AWSRA" for **AWS R**egeneration **A**ssessment
_	Underscore character as a separator.
<sequence number>	A three digit consecutive numbering system for organizing and tracking change documents, padded left with zeros (e.g., 001). This sequence number **must be unique** for all change documents **within an operating year**, regardless of the product type. It is not required that this number be consecutive. For example, if it is desirable for the sequence number to be the same as the Revision number, the first 100 numbers could be used for Revisions only, the next 100 for Changes to Operations documentation, and so on. Although it was intended that this number start at "001" at the beginning of each operating year, this is not a requirement.
_	Underscore character as a separator.
<product type>	Type of product being submitted, either "TXT" for **te**x**t**, "TBL" for **ta**b**l**e, or "MAP" for **map**.
_	Underscore character as a separator.
<description>	Letters representing the required component being submitted or a user defined description for non-standard components: "Text" to describe changes "Tables" for changes to AWS Tables "Ops<extent>_<file number> for operational scale operations maps For operational scale operations maps, the description is the letters "OPS" followed by a user-defined extent, an underscore character, and a file number (e.g. OPS<extent>_<file number>). The <file number> is a two-digit place holder which identifies if the map has been split into more than one file or not. If only one map file exists, the file number is "00". If the map is split into more than file, the first map file will contain "01" in the file name, the second map "02", etc.
.<extension>	File format extension of .PDF

5.0 Submission

5.1 Description, Intent and Intended Use

The FMPM and FIM require that an Annual Work Schedule be prepared and submitted for each management unit. The AWS contains information on annual operations from April 1st to March 31st.

All AWS information products (i.e., AWS revisions, appended documents, appended spatial data layers, and changes to values documentation), will be submitted in a digital format, through the NRIP, to improve the efficiency of production, distribution, and storage of the information. The official copy of all AWS information products is the digital version submitted through the NRIP.

A change to the AWS and updated information on operations is required to maintain the integrity of the official copy of the AWS, for compliance monitoring and to support review of annual reports. Also, updated values information facilitates the update of the values database and identifies values for which MNRF staff may need to collect additional information. AWS revisions, appended documents, and changes to values documentation will be maintained individually; there will be no replacement or substitution of original sections of the AWS information products.

For all documents requiring a title, certification page or approval page, an original hard copy with all required signatures and the NRIP Submission Identifier will be kept on file at the appropriate MNRF office(s) and the office of the Licensee. The electronic submissions of all documents requiring a title, certification page or approval page will contain an electronic version of this page identifying the names and titles of the signatories, and details on where the original signed hard copies are filed. This is not meant to be a scanned version of the original page with signatures.

For all changes to forest operation prescriptions requiring a registered professional forester (R.P.F.) certification, an original hard copy with the required certification will be kept on file at the office of the Licensee. The digital submissions of all changes to forest operation

prescriptions requiring a certification page will contain a digital version of this page identifying the name and title of the signatory, and details on where the original certified document is filed.

The intent is to reduce the requirement for paper copies of AWSs and the costs associated with printing and storing. The digital submission of products supports MNRF's strategic direction to develop digital service delivery channels and to improve access to information by the public via the internet. Data and information standards are mandatory in ensuring files can be handled efficiently and meet requirements for internet accessibility.

AWS documentation will be accessible for public and First Nation and Métis community viewing and/or downloading on the NRIP. All files available on the NRIP will be in Adobe's portable document file format (PDF). Documentation or information that contains, or is considered to be, private or classified as sensitive **must not** be included in the submission. This documentation will be kept at the appropriate MNRF offices.

5.2 Metadata

Part of the metadata requirements will be met by use of the standard naming convention as well as the submission details that are collected when AWS is submitted via the NRIP. Metadata directly related to new natural resource features or values information will be contained in the submitted documentation as part of the standard format requirement.

5.3 Annual Work Schedule Components

A standard naming convention must be used to permit an automated validation of the information products. Mandatory file components have been structured to facilitate efficient organization, retention, access and use of the information on the NRIP.

The following is a list of mandatory file components with sample file names:

- MU123_2028_AWS_TXT_TEXT.PDF
- MU123_2028_AWS_TBL_Tables.PDF

- MU123_2028_AWS_MAP_Index_00.PDF
- MU123_2028_AWS_MAP_Ops54530_00.PDF
- MU123_2028_AWS_MAP_Sum_00.PDF
- MU123_2028_AWS_MAP_SumFR_00.PDF

Spatial data layers are not considered mandatory components as their requirement is dependent on the types of operations being scheduled for the year.

- MU123_28SHR00 – (Scheduled Harvest)
- MU123_28SRP00 – (Scheduled Residual Patches)
- MU123_28SRG00 – (Scheduled Regeneration Treatments)
- MU123_28SSP00 – (Scheduled Site Preparation Treatments)
- MU123_28STT00 – (Scheduled Tending Treatments)
- MU123_28SPT00 – (Scheduled Protection Treatments)
- MU12328SAC000 – (Areas of Concern in Scheduled Operations)
- MU123_28SRC00 – (Scheduled Road Corridors)
- MU123_28SAG00 – (Scheduled Aggregate Extraction Areas)
- MU123_28SRA00 – (Scheduled Existing Road Activities)
- MU123_28SOR00 – (Scheduled Operational Road Boundaries)
- MU123_28AGP00 – (Existing Forestry Aggregate Pits)
- MU123_28SWC00 – (Scheduled Water Crossing Activities)
- MU123_28WSY00 – (Scheduled Wood Storage Yards)

5.3.1 Data Transfer and Schedule

All AWS information products will be submitted via the NRIP.

The information is to be submitted at least three months prior to its implementation that normally commences on April 1 (FMPM, Part D, Section.3.4).

5.3.2 Validation

The MNRF will ensure that information contained in the products meet the standards of FIM and the associated technical specifications (i.e. validation).

5.4 AWS Changes Product Components

A standard naming convention must be used to permit an automated validation of the information products. Mandatory file components have been structured to facilitate efficient organization, retention, access and use of the information on the NRIP.

The following are samples of file component file names:

AWS Revisions

- MU123_2028_AWSRV_001_TXT_Text.PDF (Mandatory)
- MU123_2028_AWSRV_001_TBL_Tables.PDF
- MU123_2028_AWSRV_001_MAP_Ops54530_00.PDF

AWS Higher Risk Water Crossing

- MU123_2028_AWSWTX_002_TXT_Plan.PDF (Mandatory)
- MU123_2028_AWSWTX_002_MAP_Ops54530_00.PDF

AWS Prescribed Burn Plan

- MU123_2028_AWSPB_002_TXT_Plan.PDF (Mandatory)
- MU123_2028_AWSPB_002_MAP_Index_00.PDF
- MU123_2028_AWSPB_002_MAP_Ops54530_00.PDF

AWS Herbicide Plan

- MU123_2028_AWSHP_003_TXT_Plan.PDF (Mandatory)
- MU123_2028_AWSHP_003_MAP_Ops54530_00.PDF

AWS Insecticide Plan

- MU123_2028_AWSIP_005_TXT_Plan.PDF (Mandatory)
- MU123_2028_AWSIP_005_MAP_Ops60562_00.PDF

AWS Changes Values

- MU123_2028_AWSCH_006_TXT_ChangeVal.PDF
- MU123_2028_AWSCH_006_TBL_DataForm.PDF (Mandatory)
- MU123_2028_AWSCH_006_MAP_Ops55541_00.PDF (Mandatory)

Regeneration Assessments

- MU123_28SEA00 (Mandatory)

5.4.2 Data Transfer and Schedule

Information in support of revisions or appended documents must be submitted in advance of operations.

Documentation to support changes to values not associated with a revision or an appended document will be provided to the MNRF within 10 days of the completion of operations as outlined in the FMPM, Part D, Section 3.5.5. Provision and submission to meet the 10 day requirement may be as a submission via the NRIP, or other locally agreed to transfer media/protocol. Regardless of the local transfer mechanisms or protocol, the content of the submission/transfer must meet the requirements of these technical specifications; the format may vary if the submission occurs outside of the NRIP. At least once per year, documentation supporting all changes to values must be submitted via the NRIP, as per the technical specifications, to update the official version of the AWS and the FMP. These changes may be received as single or multiple submissions. If multiple occurrences of changes to values are submitted in a single submission zip file, the files contained in the zip will require an identifier to link all files relevant to a specific occurrence.

More detailed information about the process and timeline requirements for identifying changes to values can be found in the FIM Base and Values Technical Specifications, Section 2.3, Identify and Confirm - Values.

5.4.3 Revision Notification and Project Plan Approval

Revision notifications will be consistent with the FMP including any amendments to the FMP.

Determination of duty to consult will be completed by MNRF as per FMPM Part D 8.2.2. Revisions will be available with the AWS on the NRIP.

Revisions to the AWS involving aerial herbicide and insecticide project plans, prescribed burn plans and higher risk water crossings will be submitted to NRIP. Upon approval the revisions will be available with the AWS on the NRIP.

Changes to values documentation will be available with the approved FMP on the NRIP.

Appendix 1 Data Identification Form

Contact Information	
First Name /Last Name	Telephone Number
Licensee Name	Address

Data Details	
Data Type Description	Location Source
Change Type	Location Description
Observation Date	
Comments	Geographic Coordinate System
	Datum

Data Accuracy >>> Select one from the list			
Within 1 metre		Within 50 metres	
Within 2 metres		Within 100 metres	
Within 5 metres		Within 200 metres	
Within 10 metres		Within 500 metres	
Within 20 metres		Within 1,000 metres	

Data Identification Form Instructions

This form may be used by the Licensee when providing updated values information. If the updated value(s) results in changes to operations, this form will accompany the changes to values documentation and may reference the map, if applicable, included in the documentation. This document will not be available to the public on the NRIP.

Contact Information

First Name/Last Name: The Licensee representative that is familiar with the information contained in the form.

Telephone Number: The telephone number where the Licensee representative can be reached.

Licensee Name: The company name of the Licensee.

Address: The mailing address of the Licensee.

Data Details

Data Type Description: Provide a description of the natural resource feature or value type that has been identified. The description need only be detailed enough to relate to a specific AOC prescription in the FMP (e.g., osprey nest, cool water stream).

Change Type: Enter one of the following change types for the information being provided:

- new value
- value no longer exists
- location correction
- data type (e.g., osprey nest to hawk nest)

Observation Date: Provide the date the new or changed information was observed. The format is dd/mmm/yyyy. The month is recorded as text. For example: 05/JUN/2007

Location Source: Provide a general description of the source (methodology) for the location information being provided. For example: estimated in relation to base features, or GPS, or ortho-rectified imagery. Not required if the value is being identified as no longer exists or as a change in type.

Location Description: As a minimum, provide a textual description of the location of the value in relation to existing base features or values. Other acceptable location descriptions could be geographic coordinates, a reference to an attached photo or map (this could be the same map, or a map meeting the same standards, as required for changes to operations documentation, as per the FIM AWS Technical Specifications) or reference to an accompanying digital spatial data product. This information is required for all changes.

Geographic Coordinate System: If coordinates have been provided in the Location Description section of the form, identify the geographic coordinate system (e.g., lat/long, UTM/Zone). If a digital spatial data product has been provided, this information will be contained in the associated projection file.

Datum: If coordinates have been provided in the Location Description section of the form, identify the projection datum (e.g., NAD83). If a digital spatial data product has been provided, this information will be contained in the associated projection file.

Comments: Provide any additional comments that may be relevant to the natural resource feature or value that has been identified.

Data Accuracy: Indicate the general accuracy of the location information being provided by selecting/marking one of the categories listed on the form.