

Short Version
Woodlot Licensee Guide to the Submission of Silviculture
Reporting Requirements to RESULTS
via the Electronic Submission Framework (ESF)

Version 1.1

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BRITISH
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Ministry of Forests and Range
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Quick Reference Guide

Use the graphic below for quick navigation to critical parts of the document.

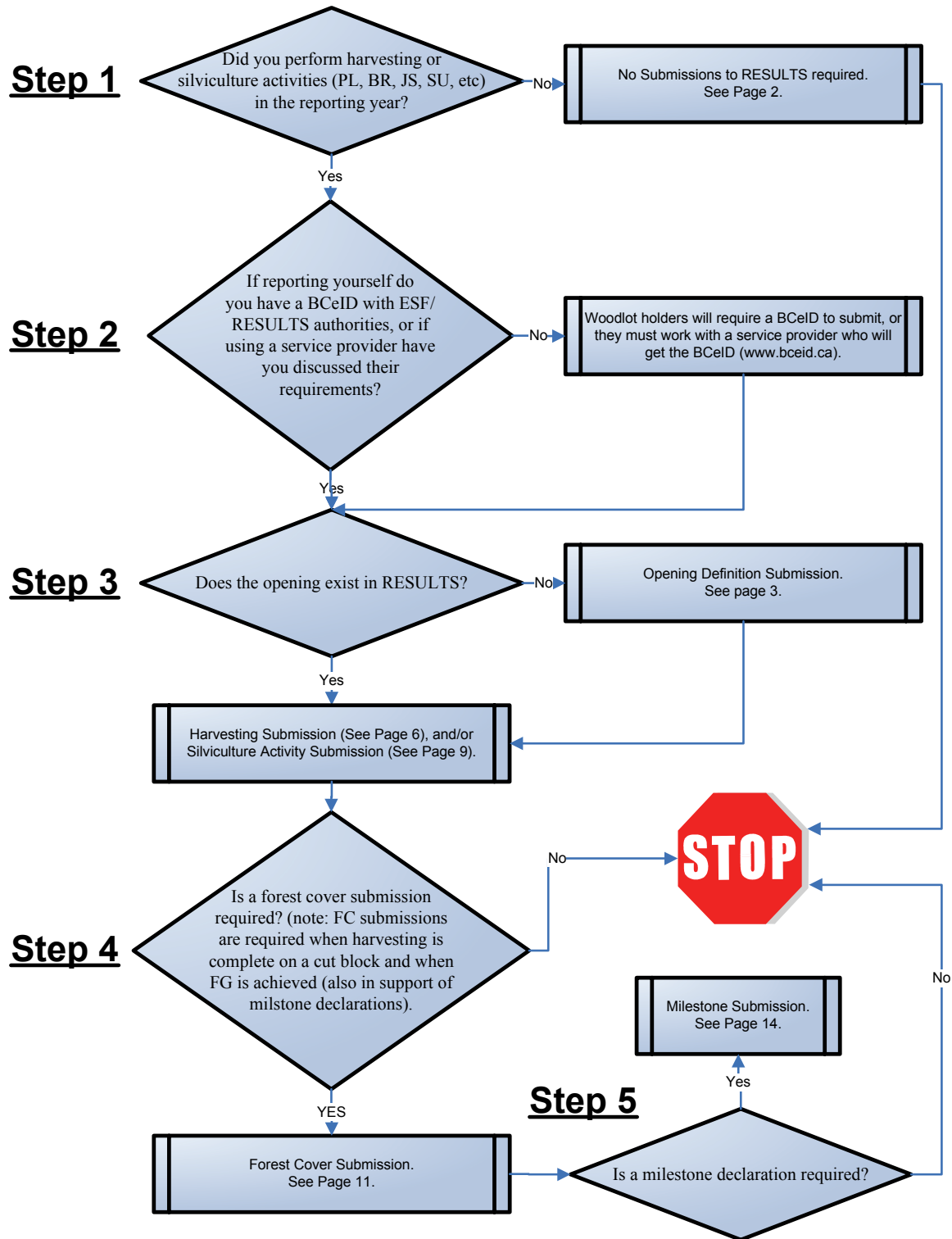


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Introduction

This document outlines the requirements for annual silviculture reporting for woodlot licence holders or those working on behalf of woodlot licence holders.

It is important to realize that this document outlines the requirements of the woodlot business area and the RESULTS application. The requirements outlined in this document may not meet the needs of other business areas (e.g. the Forests for Tomorrow (FFT) and Forest Investment Account (FIA) business areas have more laborious submission requirements). Users may need to consult other business areas in order to ensure the needs of those business areas are met.

Document Layout

This document is divided into three sections.

- The Introduction section outlines the purpose of the document.
- The Silviculture Reporting Section provides a summary of the different submission types, as well as the reporting deadline and outlines situations when no silviculture report is required.
- The Silviculture Submission Requirements Section provides a detailed breakdown of each submission type, and the related administrative information.

Silviculture Reporting

Under the current framework there are 5 types of silviculture data submissions that must be submitted to government at various stages in the lifecycle of a cut block. These submissions are outlined in Table 1.

Table 1: Summary of the five Required Woodlot Licence Submissions

| Submission Type | Mandatory (Y/N) | Timing (approx) | Spatial (i.e. Map) Required | Description | Reference Page |
|---------------------------------------|-----------------|--|-----------------------------|--|--------------------|
| Opening Definition | Yes | Following Harvest Completion, Amendments Or by Annual Report deadline | Yes | Generally contains the core components of the site plan document including Tenure, Permanent Access %, Standard Units, Stocking Standard Regime. The opening must be created in RESULTS prior to any activity submissions. | 10 |
| Disturbance | Yes | Following Harvest Completion or at time of Annual Report | Optional | Identifies key harvesting information including Silviculture System, Area, Start/End Dates Tenure. | 15 |
| Silviculture Activity | Yes | Activity completion or Annually | Optional | Identifies silviculture activity, objective, date, funding source, treatment area. | 17 |
| Forest Cover | Yes | Harvest Completion, achievement of free growing stand or Annual Report | Yes | Identifies forest cover polygon inventory and silviculture labels as well as damage agents. Supports milestone declaration | 19 |
| Milestone | Yes | Milestone declaration Annual Report | N/A | Used to declare key milestones have been met by Licensee. | 23 |

Deadline for Woodlot Licence Annual Report Submission

The deadline for submitting annual silviculture reports has not changed. It remains as April 30 as per the [Woodlot Licence Forest Management Regulation \(WLFMR\) Section 89](#) and the [Woodlot Planning and Practices Regulation \(WPPR\) Section 76](#). Table 2 outlines the specific types of RESULTS submissions that must be submitted in relation to real world tasks. These submissions must be reported to MoFR on or before the reporting deadline.

Under the ESF Woodlot Licensees have the option of submitting all of their information at one time at the end of the year, or they may report periodically throughout the year. It will be at the discretion of the woodlot holder to determine whether they will report incrementally throughout the year or at one time.

Although the annual report form is designed so that activities that were carried out between January 1st and December 31st should be reported, some interior Licensees have indicated that they would like the end of the reporting period to coincide with the end of the winter harvesting season. Licensees can change the dates of the reporting period as long as the following conditions are met:

- The commencement date for any reporting period provides continuity with the end of the previous reporting period.
- A reporting period must consist of no less than 12 months.
- Where the end of a reporting period is extended past December 31st, it cannot be extended past the April 30th submission deadline for the year.

Table 2: Summary of required silviculture submissions to RESULTS as they relate to various events in the lifecycle of an opening.

| Pre Harvest | | Occurrence of Post Harvest Activities | | | | |
|---|------------------------|---|--|--|--|--|
| Exhibit A document and Appraisal Rate set | Real World Tasks | Harvesting Completed | Site Preparation Planting | Regeneration Delay | Brushing Spacing Fertilization | Free Growing |
| | | Year 0 through year 20 | | | | |
| FTA and ECAS submissions RESULTS opening could also be created at this time | Electronic Submissions | RESULTS Submissions Required | | | | |
| | | Opening Definition Disturbance Forest Cover | Silviculture Activity(s) | Silviculture Activity Forest Cover Milestone Declaration | Silviculture Activity(s) | Silviculture Activity Forest Cover Milestone Declaration |

No Activities to Report

If no harvesting or silviculture activities were carried out during the reporting period, then no submissions to RESULTS are required

Silviculture Submission Requirements

This section outlines the silviculture submission requirements for submission to RESULTS. It is important to note that the requirements outlined below are required regardless of whether the data is submitted to RESULTS using an XML/GML submission document uploaded via the ESF, or if the data is manually entered directly in to RESULTS. The field naming conventions and layout of this section best match the XML/GML submission document, but generally equate to the fields as they are displayed in the RESULTS application as well.

Within each submission type a description of the purpose of the data elements, any critical notes, attribute details, and spatial details (if applicable) will be discussed. Within the attribute details each field will be identified with a brief description and the 'Required' column will indicate whether the field is required. Fields labeled as conditional will be required in certain situations, and optional in other situations. The situations in which the conditional field is required will be outlined using examples, but not all possible examples are shown in this document.

Submission Information (aka Opening Items)

From the previous sections of this document woodlot Licensees were introduced to the five different types of submissions and the general timing that these submissions were required. These different types of submissions are also known as opening items. This section will provide details on each type of submission.

From the previous sections of the document, the five different types of submissions that may be included in a submission document are:

- Opening Definition Submissions,
- Disturbance Submissions,
- Silviculture Activity Submissions,
- Forest Cover Submissions, and
- Milestone Submissions.

In a given submission document there may be multiple opening items (e.g. one opening definition, and one disturbance, and two silviculture activities, and four milestones). Generally these opening items must refer to the same opening, unless they fall under a different opening key.

Opening Definition (aka Site Plan information)

Upon successful submission, the Opening Definition serves to create the opening in RESULTS, create the link to the tenure information stored in FTA, provide previous stand information, and provide site plan information including standard units and stocking standard regimes. The Opening Definition submission will be discussed in three parts: the Opening data, the Tenure data, and the Stocking Standard Unit data.

- The Opening data portion of the opening definition identifies the spatial location and shape of the opening, the purpose of the submission, previous stand information etc.
- The Tenure portion of the opening definition identifies the tenures that apply to this opening. Generally this will be a single Licence/CP/Cut block, but RESULTS allows for situations (i.e. multi-tenure situations) where there may be multiple Licence/CP/Cut blocks that will need to be identified through the opening definition submission. This will be rare for woodlots but may be

encountered if a licensee chooses to manage two adjacent cut blocks as one opening (e.g. a cut block and an adjacent salvage cut block).

- The Stocking Standard Unit portion of the opening definition submission identifies the standard units (SU), the SU location/shape, the Biogeoclimatic information, and the stocking standard regime (i.e. the stocking standards).

Critical notes:

- An opening definition can contain one or more tenures provided they are within the same opening
- An opening definition can contain one or more SUs provided they are within the same opening
- In a submission document only one set of opening definition data can be present for a given opening key
- The cut block gross area (aka opening gross area) includes everything within the mapped cut block boundary. Within the total cut block area there may be non-productive areas that have been identified for roads and landings, gravel pits, rock outcrops, swamps, reserve areas, contiguous patches of non-commercial cover and the productive growing site where harvesting creates an obligation to establish a free growing stand.
- The portion of the opening gross area where a free growing stand of trees must be established is referred to as the net area to be reforested.
- Since opening definitions serve to create the openings in the RESULTS database an opening definition must be successfully accepted by RESULTS before harvesting, or silviculture activities, or forest cover or milestones are reported, or the opening definition must be included with the harvesting/silviculture activity submission.
- Opening definitions must be submitted to RESULTS via an XML/GML document. They cannot be entered directly in RESULTS. The XML/GML document is the only way to provide spatial data. Subsequent amendments can be performed directly in RESULTS; however, they may require follow-up XML/GML submissions to provide the spatial data if the amendment impacts areas.

Opening Definition Attribute Details

Table 3: Detailed field requirement information for the Opening Definition (aka Site Plan Information).

| Field | Required | Details |
|-------------|----------|--|
| Action Code | Yes | A one-letter code used to identify the purpose of this opening definition submission. I - Insert (for new opening definitions being submitted for the first time) U - Update (for updating opening definition fields in RESULTS) O - Opening Amalgamation (for proposing opening amalgamations via the XML document) V - Variation (for including a previously approved variation to stocking standard regime associated with a site plan) A - Amendment (Major) (for major amendments to silviculture prescriptions that require approval from MoFR) M - Amendment (Minor) (for minor amendments (as per OSPR 7.1) to silviculture prescriptions that do not require approval from MoFR). |

| Field | Required | Details |
|--|-------------|--|
| Licensee ID | No | The Licensee ID field is a text field that Licensees can use to enter any value they choose. This can be used for identification purposes subsequently. |
| Opening Category | Yes | The opening category of the opening. Must be a valid code as per the opening category code table. For woodlot holders this should generally be defaulted to FTWL - Forest Tenure Woodlot. |
| Opening Location | No | This is a text field that can be used to store the location of the opening. E.g. Big Creek. |
| Opening Gross Area | Yes | The area in Ha of the opening inclusive of all productive areas, natural and non-natural areas, internal and external WTPs and reserves, etc. Areas must be rounded to the nearest tenth of a hectare. E.g. 8.3. |
| Previous Stand Type | Yes | The stocking status of the stand prior to harvest. Must be a valid code as per the stocking status code table. Typical values include IMM - Immature, MAT - Mature. |
| Previous Species 1 | Yes | The dominant species within the opening prior to harvest. Must be a valid code as per the species code table. |
| Previous Species 2 | Yes | The secondary species within the opening prior to harvest. Must be a valid code as per the species code table. |
| Previous Age Class | Yes | The previous age class of the dominant species within the opening prior to harvest. Must be a valid code as per the age class code table. |
| Previous Height Class | Yes | The previous height class of the dominant species within the opening prior to harvest. Must be a valid code as per the height class code table. |
| Previous Stock Class | Yes | The previous stocking class code within the opening prior to harvest. Must be a valid code as per the stocking class code table. |
| Previous Site Index | Yes | The previous site index within the opening prior to harvest. |
| Previous Site Index Source | Conditional | The source of the previous site index within the opening prior to harvest. Must be a valid code as per the previous site index source code table. Note the previous site index is required if the previous site index is supplied. |
| Maximum Allowable Permanent Access Structure Percent | Yes | The maximum percent of the gross area of the opening that can be occupied by permanent access structures. If left blank, a default value of 7 will be generated by the application. |
| Site Plan Exempt | Yes | A yes/no field used to identify if the opening is exempt from having to have a site plan prepared. Typically this will be set to No. |
| Licence | Yes | The Woodlot Licence Number. E.g. W1205, W0801. |
| CP | Conditional | The Cutting Permit as shown on the legal Exhibit A document. Note this is required for cut blocks that are authorized under cutting permits. This must be the same as the CP identifier used in the FTA submission document. |
| Cut Block | Yes | The Cut Block identifier as shown on the legal Exhibit A document. This must be the same as the cut block identifier used in the FTA submission document. |

| Field | Required | Details |
|----------------------------|-------------|---|
| Is Prime Licence | Yes | Use this field to identify if the tenure listed above is the prime tenure for the opening (i.e. value = yes), or if the tenure listed above is a secondary tenure for the opening (i.e. value = no). Note that if there is a secondary tenure present this implies there also needs to be a prime tenure. |
| SU ID | Yes | A combination of numbers and/or letters up to four characters in length used to identify a standard unit (SU). E.g. 1, or A, or B4, etc. For woodlots it is recommended that woodlot holders name each SU sequentially starting with 1. |
| Net Area | Yes | The net area, in Ha, to be reforested within the standard unit |
| BGC Zone | Yes | The biogeoclimatic zone for the standard unit. |
| BGC Subzone | Yes | The biogeoclimatic subzone for the standard unit. |
| BGC Variant | Conditional | The biogeoclimatic variant for the standard unit. This is required for certain biogeoclimatic zone/subzone combinations. |
| BGC Site Series | Yes | The site series for the standard unit. |
| BGC Site Type | No | The site type for the standard unit. This is an optional field. |
| Seral | No | The seral state for the standard unit. This is an optional field. |
| Max Allow Soil Disturbance | Yes | The maximum allowable soil disturbance percent within the SU. If left blank this will default to 5 %. |
| Standards Regime ID | Yes | The stocking standard regime ID number. This must be an approved Standards ID in RESULTS. This number uniquely identifies a set of series of Regen/FG offsets, target/minimum stocking levels, species/heights, etc that make up a stocking standard. |

Opening Definition Spatial Details

An Opening Definition Submission requires two spatial data components:

- a representation of the outer most boundary of the opening inclusive of all productive areas, natural and non-natural areas, WTPs, reserves, etc; as well as
- a spatial representation of each standard unit.

Disturbance Submission (aka Harvesting Report)

The Disturbance Submission serves to report harvesting activities that have been completed in the opening. For each cut block/opening on which harvesting occurred during the reporting period the attribute and spatial information must be submitted as outlined below. This data is used by the ministry to meet provincial, federal, and international reporting requirements.

Critical notes:

- In situations where only part of an opening was harvested in a reporting year, and the remainder will be harvested in a future year Licensees have two options:
 - Report the area that was harvested, and report the subsequent harvesting in the applicable reporting year. This will result in multiple harvest reports over time.

- Wait until harvesting is complete on the entire opening and report the disturbance for the reporting year in which the harvesting was completed. This will limit harvesting reporting to a single disturbance report.
- An opening may have multiple disturbance submissions within the same submission document, and/or over time.
- Disturbances are reported by tenure. In situations where there is only one tenured cut block Licensees do not have to identify the tenured cut block in the disturbance submission. This will be the case for most woodlot licence holders. In multi-tenured situations (not common for woodlots) Licensees will have to report multiple disturbance submissions; one for each tenure. In those submissions the tenures must be identified.
- If multiple silviculture systems are applied within an opening a disturbance report will be required for each area with a different silviculture system.
- Disturbances do not need to be reported by standard unit (unless each standard unit has a different silviculture system or tenure).
- The disturbance area (i.e. harvest area) includes the productive forest area as well as any newly constructed roads. It does not include reserve areas, and existing non-productive areas. It is the actual area that was modified during the current disturbance activity.
- The date when harvesting initially started on a cut block is used as the starting point to measure regeneration date and the free growing date. For example, a cut block with a 4-year regeneration date where harvesting commenced in June 1998 would have to be regenerated by June 2002. If the only harvesting that occurred on a cut block was the pre-development of roads and/or landings, then it is not necessary to report that harvesting has commenced until additional harvesting occurs on the cut block.
- For small scale salvage harvesting within the Woodlot Licence area, woodlot holders must report SSS harvesting in situations where there will be an obligation to produce a free growing stand on the harvested area. If there will be no obligation to produce a free growing stand, then there is no requirement to report SSS harvesting.
- Harvesting activity reporting can be completed by entering the data directly into RESULTS, or via the submission of an XML/GML document.
- The opening must exist in RESULTS before a disturbance activity can be reported, or an opening definition must be included in the XML/GML document.
- Harvesting submissions must be supported by a forest cover submission that accurately depicts the post-harvest stand composition/structure.
- Failing to report a harvest completion date will result in the block status not being changed to LC automatically.

Disturbance Attribute Details

Table 4: Detailed field requirement information for the Disturbance Submission (aka Harvest Information).

| Field | Required | Details |
|-----------------------------|---|--|
| Action Code | Yes | A one-letter code used to identify the purpose of this opening definition submission. I - Insert (for disturbance being submitted for the first time) U - Update (for updating disturbance fields in RESULTS) |
| Licensee ID | No | The Licensee ID field is a text field that Licensees can use to enter any value they choose. This can be used for identification purposes subsequently. |
| Licence Number | Conditional - required for multi-tenure | Harvesting activities must be reported by the tenure that allowed the activity to occur. Users can supply this value (i.e. the woodlot Licence number), or a default value will be assigned. The default value will be the primary Licence number (see opening definition) and it will be automatically supplied by ESF/RESULTS. In multi-tenure situations where the user is reporting the harvesting that took place on the secondary tenure(s) the secondary Licence must be provided in this field. |
| Cutting Permit | Conditional - required for multi-tenure | Harvesting activities must be reported by the tenure that allowed the activity to occur. Users can supply this value (i.e. the cutting permit), or a default value will be assigned. The default value will be the cutting permit from the primary tenure of the opening and it will be automatically supplied by ESF/RESULTS. In multi-tenure situations where the user is reporting the harvesting that took place on the secondary tenure(s) the secondary cutting permit must be provided in this field. This must be the same as the CP identifier used in the FTA submission document. |
| Cut Block | Conditional - required for multi-tenure | Harvesting activities must be reported by the tenure that allowed the activity to occur. Users can supply this value (i.e. the cut block), or a default value will be assigned. The default value will be the cut block from the primary tenure of the opening and it will be automatically supplied by ESF/RESULTS. In multi-tenure situations where the user is reporting the harvesting that took place on the secondary tenure(s) the secondary cut block must be provided in this field. This must be the same as the cut block identifier used in the FTA submission document. |
| Disturbance Code | Yes | The disturbance code identifies the type of disturbance that is being reported. Must be a valid code as per the disturbance code table. Most common value for woodlots = L (Logging). |
| Disturbance Start Date | Yes | The start date for the harvesting activity in the format: YYYY-MM-DD. E.g. 2007-01-21. |
| Disturbance Completion Date | Conditional | The completion date for the harvesting activity in the format: YYYY-MM-DD. E.g. 2007-01-21. This field is required when harvesting in the opening is completed. It is not required when harvesting is not complete. If this date is not included the cut block status will not be updated to LC – Logging Complete. |
| Disturbance Area | Yes | The area in Hectares being disturbed in the current harvesting activity. Generally it is the sum of the productive area (NAR) and any newly disturbed permanent access structures (roads and landings, or NP UNN). |

| Field | Required | Details |
|------------------------------------|--------------------------------|---|
| Is Harvest (entire Block) Complete | Yes | Use this field to identify if the harvesting on the opening is complete. This is a Y(es) / N(o) field. |
| Silviculture System | Yes | Identify the silviculture system applied to the opening. Must be a valid code as per the silviculture system code table. The silviculture system can be found in the site plan. |
| Silviculture Variant | Optional (confirm if possible) | Identify the silviculture system variant applied to the opening. If included in the submission, must be a valid code as per the silviculture variant code table. |
| Silviculture Cut Phase | Optional (confirm if possible) | Identify the silviculture system cut phase applied to the opening. If included in the submission, must be a valid code as per the silviculture cut phase code table. |

Disturbance Submission Spatial Details

Spatial data identifying the disturbed area is not a required submission element. Licensees may choose to submit a spatial representation, and RESULTS will accept that data.

Silviculture Activity Submission (aka Treatment Report)

The Silviculture Activity Submission serves to report silviculture activities that have been completed in the opening. This data is used by the ministry to meet provincial, federal, and international reporting requirements.

Critical notes:

- Only Silviculture Treatments need to be reported to RESULTS. Silviculture Treatments include:
 - Site Preparation
 - Planting Trees
 - Brushing
 - Juvenile Spacing
 - Fertilization
 - Pruning
 - Sanitation treatments
 - Pest Management
- Note Silviculture Surveys are not specifically identified as a silviculture treatment, and therefore not required to be submitted to RESULTS; however, they may be submitted. The submission of silviculture surveys is recommended when forest cover updates are provided, and/or when milestone declarations are provided.
- Multiple silviculture treatments may be submitted to a given opening in a given submission document.
- The area for a silviculture activity will generally equal the Net Area to Reforest (NAR).

- Silviculture activity reporting can be completed by entering the data directly into RESULTS, or via the submission of an XML/GML document.
- The opening must exist in RESULTS before a silviculture activity can be reported, or an opening definition must be included in the XML/GML document.

Silviculture Activity Attribute Details

Table 5: Detailed field requirement information for the Silviculture Activity Submission (aka Treatment Information).

| Field | Required | Details |
|----------------------------|----------|---|
| Action Code | Yes | A one-letter code used to identify the purpose of this activity submission. I - Insert (for activities being submitted for the first time) U - Update (for updating activities fields in RESULTS) |
| Activity Base | Yes | A two letter code used to identify the primary type of activity performed. Must be a valid activity base code as per the activity base code table. E.g. BR, JS, PL, SU. |
| Activity Technique | Yes | Identifies a general technique for accomplishing silvicultural work and may be a descriptor of the base activity. Must be a valid activity technique code as per the activity technique table, and must be used in a valid combination with the activity base code. E.g. MA, FP, RG. |
| Activity Method | No | Identifies a specific method for accomplishing silvicultural work and is a subdivision of the activity technique. Methods describe the physical process for accomplishing work. Must be a valid activity method code as per the activity method code table, and must be used in a valid combination with the activity base and method. E.g. POWER, MANUAL, CTNAIR, CPPER, PLOT, WALK. |
| Activity Cost | No | The total cost of the activity in dollars. |
| Activity (completion) Date | Yes | The date for the activity. If the activity is complete (as indicated by a Y in the 'is actual date' field) this field populates the completion date field in RESULTS. If the activity is not complete (as indicated by an N in the 'is actual date' field) this field populates the planned activity date field in RESULTS. |
| Is Actual Date | Yes | A Y/N field identifying if this activity is completed (= Y), or if it is not complete (= N). If left blank default value of Y is supplied by the application. |
| Objective 1 | No | Objectives are the reasons/purposes for doing the silviculture treatment/activity. Must be a valid objective code as per the objective field code table, and must be used as a valid code combination with the activity base. Up to three objectives per activity are allowed. E.g. CGE, CE, FG, RG, BR, JS, FH. |
| Objective 2 | No | Objectives are the reasons/purposes for doing the silviculture treatment/activity. Must be a valid objective code as per the objective field code table, and must be used as a valid code combination with the activity base. Up to three objectives per activity are allowed. E.g. CGE, CE, FG, RG, BR, JS, FH. |
| Objective 3 | No | Objectives are the reasons/purposes for doing the silviculture treatment/activity. Must be a valid objective code as per the objective field code table, and must be used as a valid code combination with the activity base. Up to three objectives per activity are allowed. E.g. CGE, CE, FG, RG, BR, JS, FH. |

| Field | Required | Details |
|--------------------------|-------------|--|
| Licensee ID | No | The Licensee ID field is a text field that the Licensee can use to enter any value they choose. This can be used for identification purposes subsequently. |
| Funding Source | Yes | The funding source for the silvicultural treatment or activity. Must be a valid funding source as per the funding source code table. If the activity is performed as part of silviculture obligation where the establishment of a free growing stand is required for an area harvested under the woodlot Licence, then indicate that the funding is from industrial appraisal (use the code IA). If Forests for Tomorrow, or the Forest Investment Account or another source provided funding then use FTM, or FIM, or other code. If the silviculture activity is being funded by the Licensee on an area where the Licensee is not obligated to establish a free growing stand, indicate that the funding is "Voluntary" using the XXX code. |
| Funding Project ID | Conditional | The funding project for the silvicultural treatment or activity. Typically this is only required for FIA or FFT funded activities. Note there may be other submission requirements for FIA, FFT or other government funded activities. Refer to the specific program for details. |
| Net Area Treated | Yes | The area treated during this activity. That is, the total hectares actually receiving the treatment to the nearest tenth of a hectare. E.g. 7.6. |
| Seedlot-VegLot | Yes | A unique number assigned to a quantity of seed of a particular species and quality from a given location collected at a given time. RESULTS will not accept planting information unless seedlot information is included. Must be a valid seedlot as per SPAR. Typically 5 digits in length. |
| Species | Yes | The tree species of the seedlot-vegplot. Must be a valid tree species from the tree species code table. |
| Number Planted | Yes | The number of stems of a particular seedlot-vegplot planted during a particular activity. |
| Excess of Transfer Limit | No | The number of stems of a particular seedlot-vegplot planted in excess of the Chief Foresters seed transfer limits. |

Silviculture Activity Submission Spatial Details

Spatial data identifying the area on which the activity was performed is not a required submission element. Licensees may choose to submit a spatial representation, and RESULTS will accept that data.

Forest Cover Submission (aka Stratum Inventory/Silviculture Labels)

The RESULTS Forest Cover Submission serves to provide current inventory and silviculture information about each stratum in the opening. This information is critical for inventory reporting provincially, federally, and internationally and ultimately impacts such things as timber supply. Core forest cover data is also used for compliance purposes. Historically this information was reported to MoFR in the form of a copy of a Regen, or FG survey package.

Critical notes:

- Forest Cover submissions for woodlots are required upon completion of harvest, and upon achieving the free growing milestone. Forest cover information may be updated at anytime in between at the discretion of the Licensee (e.g. upon achieving the regen delay milestone).

- Each time forest cover information is submitted to RESULTS the forest cover for the entire opening must be submitted. The forest cover submission deletes and replaces past forest cover submissions. If a partial submission of forest cover information is submitted, the entire forest cover will be deleted and replaced with the partial forest cover in the current submission.
- The initial forest cover submission must be submitted to RESULTS as an XML/GML document. This is the only way to upload the spatial data. Once the FC spatial data has been loaded, subsequent updates to the forest cover can be done directly in RESULTS (assuming there is no change in the forest cover spatial data).
- The opening must exist in RESULTS before a forest cover submission can be reported, or an opening definition must be included in the XML/GML document.

Forest Cover Submission Attribute Details

Table 6: Detailed field requirement information for the Forest Cover Submission (aka Stratum Inventory/Silviculture label Information).

| Field | Required | Details |
|--------------------------|-------------|---|
| Polygon ID (Licensee ID) | Yes | A unique identifier for the forest cover polygon. This is defined by the Licensee and can be up to 30 characters in length. For Woodlots it is recommended that each forest cover polygon be labeled sequentially with letters from the alphabet starting with A. E.g. A, B, C. |
| Polygon Area | Yes | The area of the forest cover polygon. |
| Reference Year | Yes | The reference year is the year that the forest cover data was collected in the format YYYY. This would typically be the year the associated silviculture survey was performed. |
| Re-entry Year | No | The estimated year of the next harvest entry into the stratum. |
| Stocking Status | Yes | The current stocking status for the forest cover polygon. Must be a valid stocking status code as per the stocking status code table. For layered NSR stands; all layers must be NSR regardless of age class. E.g. IMM(ature), NSR (Not Satisfactorily Restocked), MAT(ure). |
| Stocking Type | Yes | The current stocking type for the forest cover polygon. Must be a valid stocking type code as per the stocking type code table. Must be used in a correct combination with the stocking status. E.g. NAT(ural), ART(ificial). |
| Reserve Type | Conditional | Reserves consist of individual trees or patches of trees (within the cut block) that have been retained for habitat, scenic, biodiversity, cultural or other reasons. Reserves would include trees retained in riparian reserve and management zones, wildlife trees or wildlife trees patches or other trees that are being excluded from harvesting. If no reserve trees have been retained, use the code "No Reserve". Trees that have not been specifically excluded from future harvesting in seed tree, shelterwood or selection silvicultural systems are not reserves. If reserve trees have been retained, describe if reserve trees have been left in groups, uniformly scattered over the cut block or as a variable mixture of groups and individual trees. Must be a valid reserve type code as per the reserve type code table. Required if stratum is a reserve, otherwise not required. |
| Reserve Objective | Conditional | The primary purpose/objective of the reserve. Must be an acceptable reserve objective code as per the reserve objective code table. Must be used in an acceptable combination with the Reserve Type. Required when a Reserve Type is supplied, otherwise it is not included. |

| Field | Required | Details |
|--|-------------|---|
| Standards Unit ID (i.e. which SU is the polygon in?) | Yes | For compliance purposes, forest cover polygons must lie within a standard unit. In the submission document the SU in which the forest cover polygon relies must be identified. Required where the forest cover polygon lies within a SU. |
| Site Index | Yes | The current site index of the forest cover polygon. |
| Site Index Source | Yes | The source of the current site index. Must be a valid site index source code as per the site index source code table. |
| Tree Cover Pattern | No | The dispersion of trees over the forest cover polygon. Must be a valid tree cover pattern code as per the tree cover pattern code table. |
| Layer | Yes | This field identifies the layer being reported. For even aged stands values are I - Inventory, and S - Silviculture. For uneven aged stands values are 1, 2, 3, and 4 for inventory layers, and 1S, 2S, 3S, and 4S for silviculture layers. |
| Crown Closure | Conditional | The percentage of ground area covered by the vertically projected tree crown areas. Required only for inventory layers. |
| Total Stems | Conditional | The total number of stems in a given layer. This field is required for all inventory layers, but not for silviculture layers. |
| Well Spaced (with m value) | Yes | The number of well spaced stems per hectare in a given layer calculated using the m-value. This field is required for silviculture layers. |
| Total Well Spaced | No | The number of well spaced stems per hectare in a given layer calculated disregarding the m-value. This field is optional for silviculture layers. |
| Free Growing | Conditional | The number of free growing stems per hectare in a given layer. This field is required where free growing stems exist. |
| Residual Basal Area | Conditional | Refers to the cumulative cross-sectional area of trees as measured at breast height. For inventory labels this field refers to all total stems greater than or equal to 12.5cm DBH. For silviculture labels this field refers to the basal area for all well-spaced preferred and acceptable stems greater than or equal to 12.5cm DBH. |
| Tree Species | Yes | The tree species present in the stratum. Tree species are required when stocking status is IMM or RES, or NSR (for layered stands). Must be a valid tree species code as per the tree species code table. Up to 10 species may be included. |
| Species Percent | Yes | The percent of the total number of trees within the layer which the species comprises. Note that the sum of all species percentages must equal 100 for each layer that tree species are present. |
| Average Age | Conditional | The average age of the tree species in years. Age must be submitted for the primary and secondary (if present) species. Required when FC polygon has a stocking status of IMM, otherwise it is optional. |
| Average Height | Conditional | The average height of the tree species in meters. Height must be submitted for the primary and secondary (if present) species. Required when FC polygon has a stocking status of IMM, otherwise it is optional. |
| Damage Agent | No | A code used to identify the insect, disease, or abiotic factor that contributing to forest health concerns. |
| Incidence Percent | No | The percentage of the number of stems impacted by the identified damage agent. |

| Field | Required | Details |
|----------------|----------|---|
| Incidence Area | No | The area impacted by the identified damage agent. Required if damage agent is identified and no incidence percent supplied, otherwise it is optional. |

Forest Cover Submission Spatial Details

A representation of the forest cover polygon boundaries is a required component of the forest cover submission. The forest cover polygon boundaries are typically synonymous with the survey stratum boundaries.

Milestone Submission (aka Milestone Declaration)

The Milestone Declaration Submission is used by Licensees to affirm that they have met or exceeded a reforestation obligation and the Licensee can be relieved of the liability associated with that obligation.

Critical notes:

- Milestones declarations are optional under FRPA Section 107 and WPPR Section 84; however Licensees who do not declare the achievement of milestones will continue to hold the liability for the reforestation obligation. Therefore milestone declarations are highly recommended.
- The prescribed period in which MoFR may dispute the achievement of the milestone is 15 months from the date of the milestone submission to RESULTS.
- Milestone declarations must be supported by Forest Cover submissions demonstrating the achievement of said milestone.
- Milestone declarations fall under the practice of professional forestry. As such they must be submitted to RESULTS by a RPF, or if submitted by a non-RPF there must be a signed and sealed declaration on file at the Licensee's location.
- Milestone declarations can be directly entered in RESULTS or submitted using an XML/GML document.

Milestone Declaration Submission Attribute Details

Table 7: Detailed field requirement information for the Milestone Submission (aka Milestone Declaration Information).

| Field | Required | Details |
|-----------|---------------------|--|
| SU | Yes | The standard unit within the opening upon which the milestone declaration is being made. |
| Date | Yes | The date upon which the milestone was achieved in the format YYYY-MM-DD. |
| Milestone | Only FG is required | The type of milestone being declared. There are three types: Post Harvest, Regen Delay, and Free Growing. Note that only the FG milestone declaration is required for woodlots. The remaining milestone declarations are optional. |
| Comment | No | A comment can be included with the milestone declaration. |

Milestone Submission Spatial Details

There is no spatial data associated with any of these components.