



**Ministry of Forests, Lands, Natural
Resource Operations and Rural
Development**

**RESULTS INFORMATION SUBMISSION
SPECIFICATIONS**

Form and Manner of Reporting
(Government Funded Silviculture Activities)

Edition 6

December 2019

Foreword

This document is the 6th edition of the *RESULTS Information Submission Specifications for Government Funded Silviculture Activities (RISS-gf)*. This document was developed in response to questions received by Resource Practices Branch and the Application Service Desk staff on how to process submissions for government funded silviculture activities.

This document contains information submission specifications: that is, specifications pertaining to what is required in each electronic submission or submission entry field. For more details on business requirements and ‘how to’, users can access specific topic related training modules on the [RESULTS](#) website.

Acknowledgments

This edition has been revised by Karen Stout, F.I.T. and Caroline Wood, R.P.F. with assistance from the following individuals:

Dan Turner, R.P.F.
Lee-ann Puhallo, R.P.F.
Scott Akerley
Carolyn Stevens, R.F.T.
Timothy O’Rourke, R.P.F.
Robert Hember, P.Ag.
Melani Plett, R.P.F.
Garrett McLaughlin, F.I.T.

TABLE OF CONTENTS

FOREWORD.....I

ACKNOWLEDGMENTSI

1. PURPOSE..... 1

2. REPORTING TIMELINES..... 1

3. APPLICATION..... 1

4. INTRODUCTION..... 2

5. ACCESS AND SUPPORT 3

5.1. AUTHORIZATION TO BC GOVERNMENT SYSTEMS 3

5.1.1. *RESULTS Access* 3

5.2. SUPPORT 3

6. GENERAL DATA SPECIFICATIONS 4

6.1. OPENING CATEGORIES AND FUNDING SOURCES 4

6.2. RECORD MANAGEMENT 6

6.2.1. *Approval* 6

6.2.2. *Projects*..... 6

6.2.3. *Inter-Agency Number*..... 6

6.3. RESULTS DATA AND MAPPING STANDARDS..... 7

6.4. REPORTING TO NEW OPENING OR AN EXISTING FG OPENING 7

6.4.1. *Existing FG Opening* 7

6.4.2. *New Opening (non-tenured and tenure)*..... 7

7. OPENING DEFINITION SUBMISSION..... 9

7.1. OPENING DEFINITION DATA REQUIREMENTS 9

7.2. CHANGES TO OPENING DEFINITIONS 9

8. STOCKING STANDARDS SUBMISSION 9

8.1. STOCKING STANDARDS DATA REQUIREMENTS10

8.2. MODIFICATIONS TO STANDARDS UNITS12

9. DISTURBANCE AND SILVICULTURE ACTIVITIES SUBMISSION..... 12

9.1. DISTURBANCE DATA REQUIREMENTS12

9.2. SURVEYS (PLANNED OR COMPLETED) DATA REQUIREMENTS.....13

9.3. PLANNED TREATMENTS DATA REQUIREMENTS14

9.4. COMPLETED TREATMENTS DATA REQUIREMENTS15

10. FOREST COVER AND MAP SUBMISSION 17

10.1. POLYGON COMPONENT DATA REQUIREMENTS17

10.2. EVEN-AGED STANDS DATA REQUIREMENTS17

10.3. MULTI-LAYER STANDS DATA REQUIREMENTS19

11. DECLARATION SUBMISSION 19

12. BROADCAST TREATMENTS OF LARGE AREAS 20

12.1. AERIAL FERTILIZATION20

12.2. REPORTING BY EXISTING VERSUS ‘SHELL’ OPENINGS.....21

12.3. FERTILIZATION ACTIVITY DATA REQUIREMENTS23

12.4. SUPPORTING DOCUMENTATION FOR AERIAL FERTILIZATION PROJECTS25

13.	JUVENILE SPACING	26
13.1.	REPORTING BY ‘SHELL’ OPENINGS	27
13.2.	JUVENILE SPACING ACTIVITY DATA REQUIREMENTS	27
14.	PRUNING	30
15.	FOREST HEALTH SURVEYS.....	31
15.1	FOREST HEALTH SURVEYS, NO PLOTS ESTABLISHED (AERIAL, LINE, WALKTHROUGH, PHOTO INTERPRETATION).....	31
15.2	FOREST HEALTH SURVEYS WITH PLOTS ESTABLISHED	32
16.	STAND MONITORING SURVEYS.....	34
17.	FOREST ENHANCEMENT SOCIETY OF BRITISH COLUMBIA.....	35
18.	FOREST CARBON INITIATIVE	37
19.	FRPA S. 107 DECLARATION OR S. 108 APPLICATION	39
19.1.	RESULTS UPDATES PRIOR TO S. 108 APPLICATION	39
19.2.	S. 108 APPLICATION.....	39
19.3.	FRPA S. 108 PROCESSING (POST APPROVAL).....	40
19.3.1.	<i>Relief of Obligation for Partial or Complete Opening</i>	<i>40</i>
19.3.2.	<i>Funding for Obligations</i>	<i>40</i>
20.	GAR OPENINGS.....	42
20.1.	NO HARVEST ZONES	42
20.2.	MITIGATION OPENINGS EXTERNAL TO GAR AREAS.....	42
20.2.1.	<i>Damaged GAR Mitigation Openings</i>	<i>43</i>
21.	SMALL SCALE SALVAGE.....	43
22.	DATA DISCREPANCIES.....	44
23.	QUALITY ASSURANCE MONITORING	44

LIST OF TABLES

Table 1.	Opening Category Codes	4
Table 2.	Funding Source Codes	6
Table 3.	Minimum Stocking Standard Data Requirements for Site Plan Openings using SSIDs	11
Table 4.	Minimum Stocking Standard Data Requirements for Silviculture Prescription Openings (no SSIDs)	11
Table 5.	Disturbance Activity Data Requirements	13
Table 6.	Survey Activity Data Requirements	13
Table 7.	Planned Treatment Data Requirements	14
Table 8.	Completed Activity Data Requirements	15
Table 9.	Completed Planting Activity: Data Requirements.....	16
Table 10.	Forest Cover Data Requirements: Even-Aged and Multi-Layer Stands. Polygon Component.....	17
Table 11.	Forest Cover Data Requirements: Even-Aged Stands Except Reserves. Inventory Component.	18

Table 12. Forest Cover Data Requirements: Even-Aged Stands Except Reserves. Silviculture Component.....	18
Table 13. Forest Cover.....	19
Table 14. Declaration Data Requirements.....	20
Table 15. Broadcast Fertilization of Extensive Areas Data Requirements.....	23
Table 16. Juvenile Spacing Data Requirements.....	27
Table 17. Pruning Data Requirements: Not Previously Fertilized or Spaced.....	30
Table 18. All Pruning Activities Data Requirements.....	30
Table 19. Forest Health Surveys Data Requirements: No Plots Established.....	31
Table 20. Forest Health Surveys Data Requirement: Ground Plots.....	33
Table 21. Stand Monitoring Surveys Data Requirements.....	34
Table 22. FES Project Types.....	35
Table 23. FES Data Requirements.....	36
Table 24. FCI Data Requirements.....	38

LIST OF FIGURES

Figure 1. Fertilization Treatment Overlapping Existing Openings.....	22
Figure 2. Juvenile Spacing Treatment Workflow.....	26
Figure 3. FRPA S. 108 Processing Workflow.....	41

1. Purpose

This guide summarizes requirements for preparing and submitting information pertaining to Ministry of Forests, Lands, Natural Resource Operations & Rural Development (MFLNRORD) Government Funded Programs, Forest Carbon Initiative (FCI) and Forest Enhancement Society of British Columbia (FESBC) funded silviculture activities (treatments and surveys) to RESULTS (*Reporting Silviculture Updates and Land Status Tracking System*).

General user and formatting submission specifications, including field definitions, are summarized in the *RESULTS Information Submission Specifications - Licensee Submissions (RISS-Is)* document.

- Information on how to use RESULTS is found on the [RESULTS website](#).
- Access to RESULTS is governed by the RESULTS Access Policy (expand the relevant section under Application Access on the above website); and,
- [RESULTS training material](#) and documentation, including pre-recorded sessions are also available.

2. Reporting Timelines

All government funded activities must be submitted to RESULTS on or before **March 31st**. Completed FESBC funded activities must be reported to RESULTS before payments will be made to the proponent.

Despite the March 31st deadline for government funded activities, all completed planting activities for FFT must be reported into RESULTS by **November 30th**.

3. Application

This guide provides direction to individuals who submit silviculture data to RESULTS as part of a government funded program: 1) in accordance with the *Forest Planning and Practices Regulation (FPPR)*, sections 86, 87, and 88; and/or 2) in accordance with MFLNRORD contractual agreements or 3) in accordance with Forest Enhancement Society of BC (FESBC) contractual agreements.

Such programs include (but are not limited to):

1. Forests for Tomorrow (FFT) including pre-2006 small scale salvage openings;
2. Forest Enhancement Society of British Columbia including other funding partners;
3. Forest Carbon Initiative;
4. Forest Stand Management Fund (FSMF) using funds from the Forest Stand Management Levy:
 - a. *MFLNRORD-managed non-replaceable forest licences (NRFL)*;
 - b. *Community salvage under community forest agreements*;
 - c. *MFLNRORD-managed Small Scale Salvage (SSS)*;
 - d. *Forestry Licences to Cut (FLTC) with free growing obligations*.
5. Forest & Range Practices Act (FRPA) s. 108 Applications.

Sections 6 to 11 of this document provide information on general RESULTS submissions including opening definition, stocking standards, denudation, planned and completed activities and forest cover.

Sections 12 to 21 include program specific information for the following activities:

- Section 12. Broadcast treatments of large areas
- Section 13. Juvenile spacing
- Section 14. Pruning
- Section 15. Forest health surveys
- Section 16. Stand monitoring surveys
- Section 17. FESBC
- Section 18. Forest Carbon Initiative
- Section 19. FRPA S. 108
- Section 20. GAR openings, and
- Section 21. Small Scale Salvage

Sections 22 and 23 cover data discrepancies and quality assurance.

4. Introduction

RESULTS tracks silviculture information on the landbase by managing submissions of opening definitions, disturbances, silviculture activities, forest cover and obligation declarations as required by FRPA, FPPR and the Woodlot Licence Planning and Practices Regulation.

RESULTS also tracks the following:

- Government funded activities on managed natural disturbance stands;
- Government funded activities on any free growing stands with previous licensee silviculture obligations;
- Government funded activities where the licensee is insolvent;
- Government funded activities on GAR mitigation openings;
- FESBC funded projects with an on-the-ground component;
- FCI funded projects; and,
- Government funded fertilization activities.

RESULTS stores the following information:

- Opening definitions;
- Standards units and associated stocking standards;
- Disturbance (e.g. harvest, natural disturbance, etc.) and silviculture activities;
- Forest cover and land status summary;
- Milestone declarations (regeneration and free growing);
- Standard unit modification history;
- Rendered spatial data such as opening, standard units, disturbance activities, silviculture activities and forest cover;
- Comments relevant to the history of the opening;
- Attachments: ‘mandatory’ information pertinent to the management of the openings.

The information supplied to RESULTS is used to:

1. Calculate statistics that support the provincial allowable annual cut allocations as part of the provincial timber supply review.
2. Report on performance of key outcome indicators in the MFLNRORD *Annual Service Plan Report*.
3. Supply statistics for the *BC State of the Environment* report.
4. Update the provincial forest inventory.
5. Calculate statistics for cost recovery under the Low Carbon Economy Leadership Fund.
6. Provide spatial data for publication and use in the GeoBC/Data BC Catalogue.
7. Provide supporting documentation for the government carbon strategy.
8. Provide supporting documentation for completed work.
9. Monitor submitters for compliance with reporting requirements; and,
10. Plan and track accomplishments for government and FESBC funded programs.

5. Access and Support

5.1. Authorization to BC Government Systems

RESULTS and ESF systems are accessed by authorized users with either BCeID or IDIR accounts. To be granted access to the RESULTS application, a user must complete two steps:

1. Register for a BCeID or IDIR account; and,
2. Apply for access to RESULTS (through the RESULTS Online Access Request Service).

BCeID and IDIR Accounts

BCeID – an online service for private sector clients to securely access any BCeID participating British Columbia (BC) government website. Register for a [BCeID](#) account for submissions relating to FFT, FESBC, FCI or FSMF programs. BCeID accounts are issued for most RESULTS submissions associated with government funded projects.

IDIR – accounts are only issued to third party program administrators.

5.1.1. RESULTS Access

BCeID or IDIR account holders may apply for RESULTS access. Access is granted via [RESULTS Online Access Request](#).

Applicants are granted access to RESULTS after completion of RESULTS training and/or by demonstrating competency through online testing. **Access is granted for 2 years as per current user access policy.** On or before expiry date, the authorized user must re-apply to renew access. Training modules and descriptions are available at [Results Training and Resources](#)

5.2. Support

1. Reference materials are available on the [RESULTS Business and Policy Documentation](#).

2. RESULTS support is available via the Business service desk
NRSenquiries@gov.bc.ca
3. [Results Technical Documentation](#)

6. General Data Specifications

General user and formatting submission specifications are found in the [RESULTS Information Submission Specifications - Licensee Submissions](#). This document specifies additional content requirements and MFLNRORD policy applied to submissions related to government funded programs, FESBC and FCI funded activities.

6.1. Opening Categories and Funding Sources

Opening category codes (Table 1) in RESULTS classify program areas. They are based on combined descriptors of legislative silviculture obligation, disturbance origin and silviculture responsibility. *Funding Source* codes (Table 2) classify funding allocation and may overlap some program areas. Activities funded by different funding sources may occur on the same openings.

Table 1. Opening Category Codes

Code	Description	Details
CONT	Non-tenured agreements under FESBC and FCI ; use NDFS if the activities are a result of a natural disturbance. *FCI and FESBC are also tracked by funding source codes FCE, FCM, or FES.	This would include planting, stand conversion, habitat enhancement, stand rehabilitation or operational fuel treatments.
EXCLU	Openings excluded from Crown Managed forests.	Openings within newly created parks or other protected areas, or openings on crown land that have been transferred to private ownership. *‘EXCLU’ openings should have their opening status set to retired ‘RET’ so that they are not tallied in RESULTS reports. As a best practice, tenured license to cut openings such as gravel pits and rights-of-way (without FG obligations).
FFTFLTC	FFT – Forestry License to Cut.	BCTS FLTC, district administered, restricted to the FFT program.
FFTITSL	FFT – Innovative Timber Sale License. The opening category will not change for FCI funded reforestation.	BCTS initiative, BCTS administered, restricted to the FFT program. The FFTITSL may have an overlapping NREQ opening to report the pre-harvest FFT survey activities,
FTFSM	Forest Tenure – Forest Stand Management Forest Practices Code Act (FPC) s.71, S.30 FRPA.	Pertains to Non Replaceable Forest Licenses (NRFL) only , where the free growing obligations have been transferred to the government under the FPC Act s. 71, Non-Replaceable licenses under s.30 of FRPA.

Government Funded Silviculture Activities – Version 6.0

Code	Description	Details
FTLEVY	Blocks with silviculture obligations under FPPR s.46, for which a silviculture levy (Forest Stand Levy) under the Forest Stand Management Fund Regulation has been collected.	Pertains to Small Scale Salvage FLTCs not NRFLs.
FTNOLVY	Post April 1/09 blocks (1-5 ha for SSS openings) with silviculture obligations for which no silviculture levy has been collected	Pertains to Small Scale Salvage FLTCs not NRFLs.
FTMSL	Forest Tenure – Ministry Silviculture Liability	Instances where a licensee has become insolvent, the opening is not free growing, and the Ministry is now managing the silviculture liabilities.
NDAML	Natural Disturbance – Area-based Major Licensee	Non-tenured post-87, fire, wind, severe drought, insect or disease attack in major licensee area-based tenures (excluding community forests).
NDCF	Natural Disturbance – Community Forest	Non-tenured post-87, fire, wind, severe drought, insect or disease attack in community forest tenures.
NDFS	Natural Disturbance – Forest Service	Non-tenured post-87, fire, wind, severe drought, insect or disease attack in areas with no overlapping silviculture obligations. Includes under-planted stands (no overstorey removal).
NDVML	Natural Disturbance - volume-based Major Licensee	Non-tenured post-87, fire, wind, severe drought, insect or disease attack in major licensee volume-based tenures.
NDWL	Natural Disturbance - WL License	Non-tenured post-87, fire, wind, severe drought, insect or disease attack in woodlot tenures.
NREQ	Areas not under tenure where site plans or stand management prescriptions are not required.	Government or FESBC and FCI funded activities such as fertilization and juvenile spacing. FFT openings used to report pre-harvest FFT survey activities. These NREQ openings will have overlapping FFTITSL openings where BCTS has completed overstorey removal.
SPEX	Areas under tenure that are exempt from site plan requirements.	No reforestation or free growing obligations exist. SSS without free growing obligations.

Table 2. Funding Source Codes

Code	Description	Details
FCE	FCI under FESBC funding	Forest Carbon activities carried out with funding from FESBC.
FCM	FCI under Ministry funding	Forest Carbon activities carried out with MFLNRORD funding (government funding).
FES	FESBC funded projects.	Activities funded by FESBC and carried out by various proponents. This does not include FCI projects or activities where FESBC has paid a silviculture levy to a district.
FRP	FRPA Application for Relief	Activities funded under FRPA s. 108 account until the stand is brought to the same condition it was prior to the damaging event.
FTL	FFT - Licensee delivered or delivery by proponent through third party administrator.	Activities funded by the FFT program that were carried out by licensees or proponents directly administered through third party administrator.
FTM	FFT - MFLNRORD Administered	Activities funded by the FFT program that were carried out by branch, regions or districts internally or with direct Ministry contracts to FFT proponents.
GFS	Forest Stand Management Fund	

6.2. Record Management

6.2.1. Approval

Some government or FESBC funded program submissions (e.g. amendments, stocking standards) may require Resource District Manager approval. The submitter should notify either the RESULTS Coordinator(s) of the applicable district(s) and/or the MFLNRORD Project Administrators after submitting items that require district approval, to ensure these documents are assessed and approved in a timely fashion.

6.2.2. Projects

The RESULTS Projects module allows MFLNRORD Project Administrators (IDIR account users exclusively) to track cost and administrative details associated with silviculture projects, prepare contract requirements, and monitor field implementation. Project Administrators and specific standards agreements will specify whether use of the Projects module is mandatory for a given project. Access to RESULTS project administration is requested as a separate role.

6.2.3. Inter-Agency Number

The inter-agency field in RESULTS is designed to reconcile project completion with assigned project funding in FIRS or FESIMS. Submitters must use the project numbers generated by either of those systems for all FFT and FESBC funded activities. For government funded activities completed under the district or BCTS administration, we recommend creating a number that will help the organization with their own tracking e.g. contract number or it may be any other system the district/BCTS is using. The inter-agency field may contain alpha-numerical characters up to a maximum of 10 characters. To avoid duplication, please **DO NOT** use a 7-digit number as it may conflict with the FIRS generated numbers. **Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.**

6.3. RESULTS Data and Mapping Standards

Data and mapping standards are described in [RISS-Is](#) and [RESULTS technical specifications](#).

Professionals and non-professional staff who collect and prepare data for RESULTS submissions are expected to be familiar with data requirements and required precision and accuracy.

6.4. Reporting to New Opening or an Existing FG Opening

When RESULTS submissions are initiated, submitters must determine whether they submit to an existing opening (Section 6.4.1) or create a new opening (Section 6.4.2).

FESBC and FCI funded projects (FES, FCE or FCM funding source code) will be reported to new openings except where they occur on existing FFTITSL openings. Fertilization activities may be reported to a shell opening or to existing opening(s) where the treatment area is contained within those opening(s) and forest cover will not be updated.

When new openings are created, planned activities from previous programs in underlying openings must be deleted.

6.4.1. Existing FG Opening

If the completed treatment(s) and/or disturbance(s) is entirely contained within the bounds (on the ground) of an existing free growing opening that was never under post-87 silviculture obligations (e.g. opening categories that may be updated include P87, NDFS, SPEX and NREQ), and the new activity(ies) will cover most of an existing opening, the activity(ies) may be reported to the existing opening. Where new activities cover only a portion of an existing opening, it is preferable to create a new shell opening to avoid resubmitting existing forest cover for the untreated area (see Section 10). Opening spatial submission and/or update is mandatory on existing openings.

Please note that No UPDATES are to be carried out on existing free growing tenured openings or FG standard units within active openings. Tenured openings include the following opening categories: FTML, FTWL, FTCF, FTSBF, FTLEVY, FTNOLVY, FTFSM or FTMSL. Exception applies to fertilization treatments (FE) that are contained within the opening and where forest cover updates will not be carried out.

This is critical to maintaining current forest cover on areas where silviculture obligations existed.

6.4.2. New Opening (non-tenured and tenure)

New openings are created as non-tenured shells or as tenured openings.

6.4.2.1. Non-Tenured Openings (Shell Openings)

Shell openings may be created for:

- Activities on FG tenured openings or FG standards units (see box above);
- Completed treatment(s) and/or disturbance(s) that span several openings;
- Treatments on unmanaged stands where the area is not under any form of tenure;
- Juvenile spacing activities (Section 13);
- Fertilization activities, including FCI projects (Section 12.2);
- FCI activities except those that occur on FFTITSL openings; and,
- All other FESBC activities.

Where new activities cover only a portion of an existing opening, it is preferable to create a new shell opening to avoid resubmitting existing forest cover for the untreated area.

Please note, with the exception of fertilization treatment openings, when a managed shell opening entirely overlaps one or more existing free growing opening(s), the free growing opening(s) must be retired (Section 7.2).

6.4.2.2. Tenured Openings

When a new tenure is created to complete harvesting activities, a new opening is created and subsequent activities are reported to that opening.

- **Forestry License to Cut (FLTC)**

For all activities conducted on FLTCs under the FFT program, the opening category code FFTFLTC must be used. FFT surveys and other activities conducted over an area prior to the establishment of an FLTC are reported via non-tenured openings (shell openings).

- **Innovative Timber Sale License (ITSL)**

For reporting activities under ITSL that have a shared responsibility between BCTS and FFT:

1. FFT surveys and other activities conducted over an area **prior to the establishment of an ITSL** are reported via non-tenured openings (shell openings using opening category NREQ);
2. BCTS initiates the ITSL and disturbance harvesting occurs;
3. BCTS tracks the opening and disturbance in the Land Resource Manager as if they hold the silviculture liabilities;
4. BCTS creates a new RESULTS opening using ‘**FFTITSL**’ **opening category** and supplies the opening definition, the standards units and associated stocking standards, the disturbance activity and denuded forest cover;
5. Subsequent silviculture activities and updates (surveys, planting, forest cover updates, milestones, etc.) are reported to the FFTITSL opening created by BCTS (Step 4 above). FFTITSL is a viewable category and as such, the records will be available for other submitters to manage and update.

- **FESBC-funded harvesting (CONT)**

For reporting harvesting under a tenured opening that is part of an approved FES project, see Section 17. Forest Enhancement Society of British Columbia, Table 23, Habitat Enhancement, Hazard Risk Reduction: tenured opening.

7. Opening Definition Submission

An opening must exist in RESULTS before other attributes or spatial data can be submitted.

Opening spatial submission and/or update is mandatory on all existing and new openings where forest cover is submitted.

7.1. Opening Definition Data Requirements

Please refer to [RISS-Is](#).

Where shell openings are created to report activities on area-based tenures (i.e. TFLs, Community Forests, First Nations Woodland Licenses, and Woodlots), the following procedures must be followed when the opening is created:

1. Include the License (Forest File ID - no cutting permits or blocks)
2. Submit all fields in the Pre-Harvest Stand Label (Previous Stand Type, Species1, Age Class, Height Class, Stocking Class, Site Index and Site Index Source).

7.2. Changes to Opening Definitions

Occasionally, opening definitions may require updates because of changes to the landscape, new or better information or because of administrative changes (e.g. tenure information). RESULTS accommodates three kinds of changes to openings definitions:

1. **Spatial and Attribute Area Update:** to revise spatial boundaries and attributes of affected openings.
2. **Retire:** to permanently disable the opening from receiving further updates (the records associated with these openings are not deleted). History associated with the opening is archived. MFLNRORD staff with Approval authorisation may retire openings. **Where a managed shell opening (except fertilization) entirely overlaps one or more existing free growing openings, the free growing opening(s) must be retired.**
3. **Delete:** to completely delete an opening record from RESULTS. History associated with the opening is permanently removed and is not archived. Candidate records for deletion are usually openings that were submitted in error. Deletions are completed with the assistance of NRS Application Service Desk staff.

8. Stocking Standards Submission

Stocking standards and Biogeoclimatic Ecosystem Classification (BEC) information are required for openings under MFLNRORD responsibility. While these areas have no legal obligations, the objective is to manage them like obligated areas under FRPA. This allows the government to satisfy key performance indicators in the MFLNRORD service plan. Stocking

standards are assigned to establish the regeneration and free growing milestones that enable the MFLNRORD to monitor reforestation progress.

Standard Units (SUs) are created through Opening Definition submissions where surveys or reforestation activities will occur within an opening. Where SUs are created only for submitting regeneration and/or free growing declarations, assign the SUs and associated stocking standards or stocking Standard IDs (SSIDs) based on the stocking and free growing survey parameters that were used to make the assessments.

Stocking standards are assigned to SUs as follow:

1. PREFERRED METHOD – Provincial Default Standards in accordance with the [*Reference Guide for Forest Development Plan \(FDP\) Stocking Standards*](#) or the [*Fire Management Stocking Standards Guidance Document*](#). Data requirements in Table 3 apply.
 - ✓ From FDP Stocking Standard document: the appropriate SSID that matches the desired stocking standards may be used for most government or FESBC funded projects where the stocking standard is primarily based on BEC.
 - ✓ From the Fire Management document: SSIDs are in RESULTS under Admin/Standards, Admin, Org. Unit HFP and the appropriate zone, subzone, variant and site series.
2. UNIQUE CIRCUMSTANCES – District-Approved Default or other MFLNRORD-Approved Standards
 - ✓ *Individual standards* may be loaded into RESULTS for given SUs in accordance with existing Higher Level Plans, Silviculture Strategies, Forest Management Plans, recent backlog prescriptions, or FESBC projects such as wildfire hazard reduction or ecological restoration, in consultation with, and under the direction of, district silviculture staff and the MFLNRORD contract administrator (see [*FFT Stocking Standards Policy*](#)). This may be desirable for stands with management objectives that are not reflected in the Provincial default standards in the [*Reference Guide for Forest Development Plan Stocking Standards*](#). In this case, the stocking standards are sent to the RESULTS Inbox for District approval. Data requirements in Table 4 apply. Stocking standards for government-funded projects are not developed through the Forest Stewardship Plan Tracking System.
3. Silviculture Prescription – outstanding Forest Practices Code openings- NO SSIDs
 - ✓ The appropriate stocking standards based on ecology are manually assigned at the SU level. All elements of the stockings standards are manually entered. Any changes requiring updates to the stocking standards must be submitted via a major amendment requiring approval.

8.1. Stocking Standards Data Requirements

Depending on the option chosen to assign stocking standards, Table 3 and Table 4 list mandatory information required for stocking standard submissions. **SU Spatial is mandatory and can only be submitted via ESF.**

Note that for Natural Disturbance (ND*), NREQ, P87 and SPEX opening categories, RG and FG milestone dates are calculated from the approval date of the opening, not the DN start date. Offset years may need to be adjusted so that the milestone dates are appropriate for each SU.

Table 3. Minimum Stocking Standard Data Requirements for Site Plan Openings using SSIDs

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission.
SU	A unique alphanumeric identifier.
Net Area to be Reforested (NAR)	Area in hectares must be > 0.
BEC fields	BEC zone, subzone, and site series.
SSID	Unique number in the <i>Reference Guide to Forest Development Plan Stocking Standards</i> , specific to ecosystems within each region, to which a specific set of stocking standards has been assigned. When entered, all related stocking standards are automatically generated for the defined SU in RESULTS.
Spatial (Map) for areas that will receive treatment	SU boundaries must be provided in spatial submission (via ESF).

Table 4. Minimum Stocking Standard Data Requirements for Silviculture Prescription Openings (no SSIDs)

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission.
SU	A unique alphanumeric identifier.
Net Area to be Reforested (NAR)	Area in hectares must be > 0.
Regen Offset	The end of the period, following the commencement date, by which a stand being established on the NAR must conform to regeneration stocking standards. In RESULTS, this is an offset field called 'Regen'.
FG Offsets	The end of the period, following the commencement date, by which a stand being established on the NAR must conform to free growing stocking standards. In RESULTS, the offsets fields are referred to as 'Early' and 'Late'.
Preferred Species/Minimum Heights	Preferred species and the minimum heights that must be attained by the preferred species in meters.
Acceptable Species/Minimum Heights	Acceptable species and the minimum heights that must be attained by the acceptable species in meters.
Target Stocking	Target number of trees per hectare of preferred and acceptable species.
Minimum Preferred and Acceptable Stocking	Minimum number of trees per hectare of preferred and acceptable species.
Minimum Preferred Stocking	Minimum number of trees per hectare of preferred species.
Max Conifers (stems/ha)	Maximum allowable stand density of total countable conifers, above which openings must be spaced down to a specified density of well-spaced preferred and/or acceptable stems/ha, to achieve free growing status.

Field	Details
Post Spacing (Min/Max)	Minimum and maximum density of well-spaced preferred and/or acceptable stems/ha to which the stand must be spaced to achieve free growing status.
Minimum Inter-tree Distance	Minimum allowable horizontal distance between trees in meters.
% Height Above Brush	Required minimum height of the tree above competing vegetation in a 1-meter radius, expressed as a percentage.
Comment	Required where applicable to expand or justify stocking requirements. Select a standards comment type code, then type applicable comment related to stocking standards.
Spatial	SU boundaries must be provided in spatial submission (via ESF).

8.2. Modifications to Standards Units

Modifications to SUs and associated stocking standards are submitted into RESULTS via ESF if spatial updates are required. If there are no changes to the spatial data, the updates may be submitted online.

Changes to site plan openings, which do not require approval, may be made through a site plan amendment.

Changes to **silviculture prescription openings** that do not require approval (NAR adjustment because of better available information) may be made via a minor amendment. Any other updates required to stocking standards must be submitted via a silviculture prescription amendment and will require approval. **The correction functionality is only used to update erroneous information that is not consistent with the latest approved version of the prescription or submitted in error.**

9. Disturbance and Silviculture Activities Submission

Data requirements are described for four activities: disturbance, surveys, planned treatments, and completed treatments. Data for planned reforestation activities (treatments and surveys) under government funded programs must be entered in RESULTS to secure adequate project funding for treatments and surveys scheduled for the next fiscal year (beginning April 1).

If RESULTS contains a record for a planned activity (survey or treatment) for which the activity has been completed, then the existing record should be updated with the completed activity information; i.e., update the previously entered planned activity with the relevant completed activity information details. Creating new completed activity records while leaving previously planned activity records unchanged causes errors in budgeting and planning processes.

9.1. Disturbance Data Requirements

Fields in Table 5 are required with disturbance submissions. Data fields not listed in the table are optional. Disturbance reporting must be accompanied by forest cover updates that include both spatial and attributes information. Disturbance activities may be reported online in RESULTS or through the ESF. Note, when reporting a new natural disturbance activity to an

existing P87 opening, please update the opening category to NDFS. Refer to Section 13.2 for denudation reporting for juvenile spacing shell openings, Section 17.2 for FESBC funded activities and Section 18 for FCI projects.

Table 5. Disturbance Activity Data Requirements

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission
Disturbance Code	As appropriate: B (burned, wildfire) E (stand enhancement) F (flood) I (slide) L (logged) P (pest – e.g. beetle) R (rehabilitation) S (salvage) W (wind damage)
Disturbance Start Date	YYYY-MM-DD
Disturbance Completion Date	YYYY-MM-DD
Disturbance Area	In hectares
Silvicultural System	Required for projects that involve harvest activity. e.g. CLEAR, CCRES, SELEC
Silvicultural Variant	Conditionally required for IMCUT, SEEDT, SELEC, SHELT.
Silvicultural Cut Phase	Required for projects (e.g. salvage) that involve harvest activity. e.g. REMOV, SALV

9.2. Surveys (Planned or Completed) Data Requirements

Fields in Table 6 are required with planned or completed survey submissions. Data fields not listed on the table are optional. Enter survey submissions online in RESULTS or through the ESF. **Forest cover updates with both spatial and attribute data must accompany completed survey activities.** Additional reporting standards for Forest Health Surveys, Stand Development Monitoring surveys, FCI and FESBC surveys are found in Sections 15 to 18.

Table 6. Survey Activity Data Requirements

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission.
Base	SU
Technique	RE (Reconnaissance) RG (Regen/Stocking) RA (Regen Performance Assessment) FG (Free Growing) FG-FILE (Impeded Stands Data Review) Or other appropriate code relevant to program requirement.

Field	Details
Method	PLOT RECCE WALK FILE Or other appropriate code relevant to program requirement
Activity Status Indicator (in RESULTS)	Set to 'Planned' or 'Complete' as appropriate. <i>Some ESF submission software has an Actual Date Indicator instead of an Activity Status indicator. In the case of a 'yes' or 'no' indicator.</i> <ul style="list-style-type: none"> • Set to 'no' if the survey is planned. • Set to 'yes' if the survey has been completed.
Activity Date (Planned or Completion Date)	YYYY-MM-DD. Date of the planned or completed survey. For ESF submission software that does not have an 'Activity Status' indicator: <ul style="list-style-type: none"> • If <i>Actual Date Indicator</i> is set to 'no' this the planned commencement date for the survey. • If <i>Actual Date Indicator</i> is set to 'yes', this is the date on which the survey was completed.
Funding Source	Enter applicable funding source code (Table 2).
Net Area Treated	Areas surveyed, in hectares
Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter-agency No.	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Attachments	Where an IRR workbook or a Return on Investment (ROI) analysis is completed, the workbook or analysis must be attached to the opening in RESULTS. All activities conducted for LBIS/FFT/FESBC/FCI delivery such as prescriptions, maps, plots locations and monitoring data is to be attached as a deliverable under contractual requirement.

9.3. Planned Treatments Data Requirements

Fields in Table 7 are required with planned treatment submissions, all other data fields are optional. Submit planned treatment submissions online in RESULTS or through the ESF (aerial fertilization and juvenile spacing activities are transmitted through ESF because spatial activity maps are required).

Table 7. Planned Treatment Data Requirements

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission.
Activity Base	Select appropriate codes for the planned activity(ies). At a minimum, include Activity Base.
Activity Technique	
Method	
Activity Status Indicator (RESULTS)	Set status to 'Planned'. <i>(Note: Some ESF submission software has an 'Actual Date Indicator' instead of an Activity Status indicator. In this case, for planned data, set Actual Date Indicator to 'no'.)</i>
Planned Date	YYYY-MM-DD (planned commencement date of activity)

Field	Details
Funding Source	Select appropriate funding source code (Table 2).
Treated amount	Planned number of hectares proposed for treatment.
Planned Cost	Total estimated planned cost (\$). Use current local costs or estimates provided by funding program.
Spatial	Optional as specified by program area

9.4. Completed Treatments Data Requirements

Fields in Table 8 are required with completed treatment submissions. Data fields not listed in the table are optional. Transmit completed treatment submissions online in RESULTS or through the ESF. **Forest cover submissions with spatial information accompany completed treatment submissions.** Accompanying forest cover submissions are transmitted through the ESF.

A complete listing of RESULTS Activity Codes and code combinations can be assessed in RESULTS by clicking on “Search” in the upper left corner of the screen and then click on “Code Table Search” and select “Activity Code Search”. Planting activity codes are provided in Table 9.

***Note: in order to avoid creating orphan records, when reporting previously planned activities, please ensure the planned records and associated attributes are updated to complete.**

Table 8. Completed Activity Data Requirements

Field	Details
Mapsheet&Opening No, Opening ID, Timber Mark/Cut Block; Licence/CP/Cut Block	Must use one of the mandatory keys used for RESULTS ESF Submission
Base Technique	For complete list of valid codes and associated descriptions please refer to the code tables in the RESULTS online technical specifications .
Activity Status Indicator (RESULTS)	Set status to ‘Complete’. <i>(Note: Some ESF submission software has an ‘Actual Date Indicator’ instead of an Activity Status indicator. In this case, for activity completion data, set Actual Date Indicator to ‘yes’.)</i>
Activity Completion Date	YYYY-MM-DD (date of activity completion)
Funding Source	Select appropriate funding source code (Table 2).
Treatment Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Net Area Treated	Area treated, in hectares
Inter-agency No.	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.

Government Funded Silviculture Activities – Version 6.0

Field	Details
Spatial	Activity spatial is mandatory for FE, JS, and PL activities completed under all funding sources. It is not required for other activities, unless otherwise specified by the program area. Forest cover updates both attribute and spatial, are mandatory with other completed field-based activities except for Danger Tree Assessment and Felling.

Table 9. Completed Planting Activity: Data Requirements

Field	Details
Base	PL
Technique	CG (Chemical Ground) FP (Fill Planting) PL (Planting) RO (Roadside) RP (Re-Planting) RR (Road Rehab) SE (Seedling Protection) SL (Slide)
Method	BAGS (Gro-max Bags) BRMAT (Brush Mats) BROOT (Bareroot) CAGES (Cage Style Protectors) COPPR (Copper Treated Plugs) CONE (Cone Style Protectors) CTAIN (Container) FENCE (Fence Style Protectors) MAINT (Maintenance) MXPLT (Mixed Stock) REPEL (Repelling Style Protector) RBROO (Resistant Bareroot) RCOOP (Resistant Copper Treat) RCTAI (Resistant Container) SINCO (Sinocast) STAKE (Staking) TRANS (transplanted Stock) VEXAR (Vexar Tubing) VOLCOL (Vole Collar) WHIPS (Whips)
Species	See RESULTS species code list
Number Planted	
Number Beyond Transfer Limit	
Lot	Seedlot must exist in the Seed Planning and Registry (SPAR) database and must match the species.
Request ID	Mandatory for all Government Funded programs. *Note: that the Request ID can only be supplied in RESULTS online as field is not part of the ESF schema. When entering the Request Key online, the Species and Lot fields are automatically populated
Spatial	Activity spatial is mandatory for all PL activities completed under all funding sources.

10. Forest Cover and Map Submission

Forest cover updates are required with all government, FCI or FESBC funded programs where a treatment and/or activity results in a change in forest cover attributes. The only exception is if the understory is modified but the overstory as reported in the most recent inventory is unchanged (e.g. wildfire hazard abatement activities).

All forest cover updates must be submitted via ESF and must include both GML and XML data files (spatial and attributes) for the entire opening.

When reporting new activities on an existing opening where forest cover updates are mandatory, forest cover must be reported for the entire opening even if the treatment or survey only covers a portion of the opening. All untreated polygons must be updated as forest cover updates are a complete delete and replace.

10.1. Polygon Component Data Requirements

Polygon component fields in Table 10 are required with forest cover submissions. For reserve polygons where the forest cover has not changed since the last inventory, only the attributes and spatial shown in Table 10 are submitted.

Table 10. Forest Cover Data Requirements: Even-Aged and Multi-Layer Stands. Polygon Component.

Field	Details
SU label	Required only for IMM, MAT or NSR polygons that are located within an SU.
Polygon ID	
Gross Area	Area of the polygon.
Reference year	Year of survey.
Reserve Type	Group (G), Dispersed (D). Required if reserves (long-term or short-term) exist within the polygon.
Reserve Objective	BIO (Biodiversity), WTR (Wildlife Tree Retention), CHR (Cultural Heritage Resource), TIM (Timber Management), VIS (Visual), etc. For complete list of valid codes and associated descriptions please refer to the code tables in the RESULTS technical specification .
Site Index	
Site Index Source	Select appropriate code.
Stocking status	Select appropriate code.
Stocking type	Select appropriate code.
Spatial location of each forest cover polygon (GML)	Load through ESF.
Non-mapped area	Conditional - Include areas(ha) that should be taken out of the productive forest area (NAR) but are too small to map (< 0.1ha) but should be accounted for as well as roads and landings if they are not mapped. Consists of four components: ID, area, stocking status and stocking type.

10.2. Even-aged Stands Data Requirements

Inventory component data is required for all even-aged stands except reserves (Table 11). Silviculture component data (Table 12) is required for even-aged stands when differences exist between inventory and silviculture forest cover. Even-aged inventory and silviculture component data may be combined into the inventory component if no significant differences

exist between species composition in the silviculture (crop trees) and inventory (all trees) components; that is, if the stand inventory consists almost entirely of preferred and acceptable crop trees.

Table 11. Forest Cover Data Requirements: Even-Aged Stands Except Reserves. Inventory Component.

Field	Details
Layer Component	Component = I. Inventory component.
Crown Closure	Crown closure of all the commercial tree species: estimated to the nearest 10%. Required when tree species are entered.
Basal Area	Average cross-sectional area (m ² per hectare) of all tree stems > 12.5 cm diameter at breast height. <ul style="list-style-type: none"> • Required if BA is part of stocking requirements. • Required for commercial thinning or intermediate cuts where BA is used to assess post-harvest stocking requirements. • Required where the BA of dispersed stems is >5 m² per hectare • Not required for even-aged stands, except if prescribed as an even-aged partial or intermediate cut.
Total Stems/ha	Refers to all stems/ha: both crop and non-crop trees.
Species	
Species %	Refers to species composition of total stems/ha – crop and non-crop. Must total 100% for all species.
Average Species Age	<ul style="list-style-type: none"> • Stocking surveys: average age of the leading species dominant and co-dominant trees; • Free growing surveys: average age of the leading species dominant and co-dominant trees and the average age of the second species dominant and co-dominant trees.
Average Species Height	<ul style="list-style-type: none"> • Stocking surveys: average height of the leading species dominant and co-dominant trees; • Free growing surveys: average height of the leading species dominant and co-dominant trees and the average height of the second species dominant and co-dominant trees.
Damage Agent	Required where stand has been damaged.
% Incidence of Damage Agent	Required if damage agent present.
Area Affected by Damage Agent	Required if damage agent present.

Table 12. Forest Cover Data Requirements: Even-Aged Stands Except Reserves. Silviculture Component.

Field	Details
Layer Component	Component = S. Silviculture component.
Total Well Spaced Stems/ha	
Well Spaced Stems/ha	
Free Growing Stems/ha	
Species	
Species %	Must total 100% for all species.
Average Species Age	<ul style="list-style-type: none"> • Stocking surveys: for the leading species, the average age of all preferred and acceptable well-spaced sample trees;

Field	Details
Average Species Height	<ul style="list-style-type: none"> Free growing surveys: for the leading species, the average age of all preferred and acceptable free growing sample trees. Stocking surveys: for the leading species, the average height of all preferred and acceptable well-spaced sample trees; Free growing surveys: for the leading species, the average height of all preferred and acceptable free growing sample trees.
Damage Agent	Required where stand has been damaged.
% Incidence of Damage Agent	Required if damage agent present.
Area Affected by Damage Agent	Required if damage agent present.

10.3. Multi-layer Stands Data Requirements

These specifications apply to forest stands that have more than one layer. Four layers are recognized (Table 13): mature, pole, sapling and regeneration. Please refer to Table 11 and Table 12 above for multi-layer stands data requirement.

Table 13. Forest Cover

Layer	Description	Details
1	Mature Layer – uneven-aged	Uneven-aged stand with trees ≥ 12.5 cm dbh – based on all commercial trees.
2	Pole Layer – uneven-aged	Uneven-aged stand with trees 7.5 cm to 12.49 cm dbh – based on all commercial trees.
3	Sapling Layer – uneven-aged	Uneven-aged stand with trees 1.3 m in height to 7.49 cm dbh – based on all commercial trees.
4	Regeneration Layer – uneven-aged	Uneven-aged stand with trees < 1.3 m in height – based on all commercial trees.

Inventory component data is mandatory for multi-layer stands. When reporting uneven-aged inventory and silviculture component, data may be combined into the inventory component report if no significant differences exist between species composition in the silviculture (crop trees) and inventory (all trees) components; that is, if the stand inventory consists almost entirely of preferred and acceptable crop trees.

For reserves, follow procedures for [Submitting Forest Cover to RESULTS for Openings with Treed Retention](#).

General information on multi-layer stands is in the [RISS-Is](#), the [Silvicultural Systems Handbook for British Columbia](#) and the [Stocking in Partial Cut Stands](#) website.

11. Declaration Submission

Declarations for openings subject to government funded treatments or surveys are the same as for licence holders. Follow procedures for submitting declarations according to the [RISS-Is](#).

If an area is declared stocked or free growing but does not meet the stocking standards in the given SSID because of Return on Investment (ROI) criteria or a decision that further

treatment will not be done, a comment is added to the declaration stating that no further treatments are planned because of the ROI decision process.

Fields in Table 14 are required with declaration submissions. Declaration fields not listed in the table are optional. Forest cover and spatial submissions must accompany declaration submissions. Submit completed declarations online in RESULTS or through the ESF. Forest cover updates are submitted through the ESF. Attachments of supporting documentation are submitted online in RESULTS.

Table 14. Declaration Data Requirements

Field	Details
SU	Standards Unit ID to which the declaration relates.
Declaration type	Enter appropriate code: RG=regeneration FG=free growing
Declared date	YYYY-MM-DD (not necessarily the same as submission date)
Comment	Include the name of the Registered Professional Forester who supervised the professional field assessments that support the declaration. Add comments as necessary to explain the declaration or to satisfy contractual requirements.

12. Broadcast Treatments of Large Areas

In some projects, broadcast treatments are applied over large areas (e.g. fertilization application for timber value improvement, aerial spraying for forest health management regimes). Existing openings, forest cover, or stocking standards may be absent in some of these cases. While each case must be addressed individually, an example is provided for how RESULTS may be used to report the information.

12.1. Aerial Fertilization

The provincial government funds extensive fertilization of stands with good growth potential, to supplement anticipated timber supply shortfalls in some timber supply areas. FESBC and FCI may also fund fertilization to increase growth rates and sequester atmospheric carbon at an improved rate. These treatments are mapped and tracked to monitor the investments.

The new opening submission must have sufficient information (as outlined in Section 12.3) to describe the fertilization event, and to determine impacts on higher level plans, silviculture, forest cover, and local issues.

All aspects of a fertilization program, from initial pre-treatment project area assessments, to the treatment record, and post-treatment monitoring, are submitted to RESULTS. Broadcast fertilization submissions include opening definition, initial assessment including ROI analysis, if completed for the area, immediate and future planned treatments, completed treatments, post-treatment monitoring, supporting documentation, and related maps.

A report of the pre-treatment fertilization assessment area and map provides initial assessment of potential fertilization treatment opportunities and minimizes the risk of duplication. This report contains the *entire* assessed area (the areas both eligible and non-eligible for

fertilization). Individual prescription areas are not reported here because the planned or completed activities are entered separately with spatial.

During the assessment of potential fertilization areas, any candidate fertilization treatment areas that cannot be treated due to constraints in time, resources or finances in the current year are identified. This preserves the investments made in reviewing these areas and allows for easy identification and efficient deployment of fertilization when funding and resources become available. For candidate sites within an assessed area that are predicted to meet specific criteria within a given number of years (up to 3 years) and have a stand management prescription or treatment plan, an estimated planned date is submitted for the fertilization treatment. A planned re-survey is submitted for areas that will not qualify for fertilization for more than three years.

Fertilization treatment monitoring installations may be established and then re-measured five years after treatment. An installation comprises both treated and control plots. The control area is commonly identified at the pre-treatment planning stage and should be identified as a unique Activity Treatment Unit (ATU) (e.g. ‘no’ treatment) for monitoring purposes. If not identified on the map as a separate ATU, then the attached supporting documentation must clearly identify where the treated area is in relation to the untreated area. Control areas must be identifiable spatially during encumbrance checks. Designating them as ‘non-treated’ ATU will ensure that they are easily identified.

The area comprising the control ATU is included as part of the opening gross area with the opening definition submission. This allows the control area to be identified by silviculture planners so they can avoid scheduling activities in the area during the post-treatment monitoring period. Post-treatment monitoring survey data (both treated area and control area) is submitted through an activity submission, along with spatial GML showing the location of the treatment and control ATUs.

Spatial data, in GML format embedded within the XML document, is submitted for all fertilization activities.

Assessed fertilization areas, future planned fertilization areas, and other required documents (e.g. prescriptions, survey documentation and treatment prescriptions, ROI calculations, foliar assessments, monitoring plot data.) must be submitted as attachments to the opening (Section 12.4). Historically, this information has only been available at a District recipient’s office and is not readily available to other RESULTS users.

12.2. Reporting by Existing versus ‘Shell’ Openings

A fertilization treatment may overlap existing openings (**Figure 1**). Two reporting options may be considered: 1) Report to individual existing openings; or, 2) Create a ‘shell’ opening that overlaps existing openings.

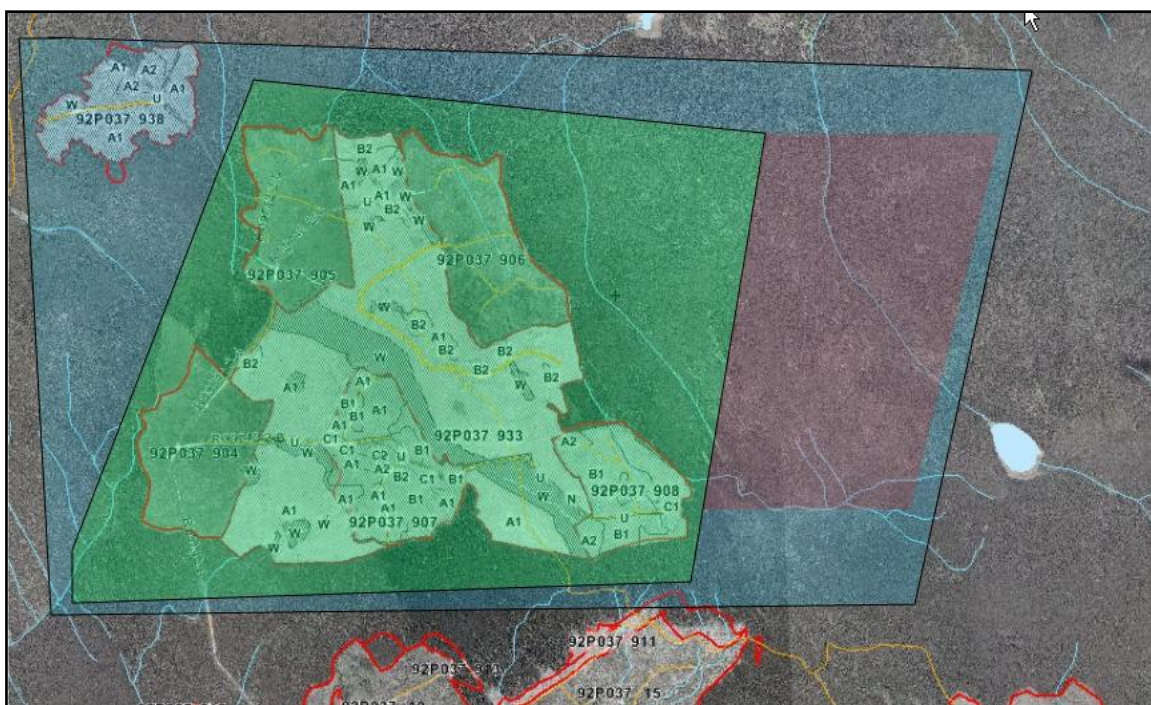


Figure 1. Fertilization Treatment Overlapping Existing Openings

Option 1: Existing Individual Openings

Reporting by individual openings allows specific treatments to be tracked within each opening so that full historical context is retained within the individual opening records. Increased work is required to split the areas (attribute and spatial) to conform to each of the opening boundaries. A shell opening is created to report any adjacent, remaining project area outside of the existing opening(s), including control areas.

Option 2: New ‘Shell’ Openings

Reporting by a ‘shell’ opening allows for complete coverage of the entire assessed, treated, control, and planned area in one record. This method may simplify reporting because only fertilization related work, activity information and maps are submitted, and RESULTS allows for submission of multi-part polygons. A shell opening should fit within a resolution unit such as by drainage or landscape unit so that the areas can be reviewed using existing MFLNRORD map viewing tools (e.g. Mapview or iMap). A shell opening must not be in more than one TSA. **Please note that when reporting fertilization activities using a shell opening, the opening gross area supplied is always 0.1 ha and opening spatial must NOT be submitted.**

When reporting the completion of a planned treatment activity, the update must be carried out in the existing opening in which the activity was planned. For data integrity purposes, it is important not to create another new shell opening as it results in orphan planned records and unnecessary overlap and overestimation of future treatment areas.

12.3. Fertilization Activity Data Requirements

Fields in Table 15 are required with fertilization treatment activity submissions to RESULTS. Additional information may be required by some districts.

Table 15. Broadcast Fertilization of Extensive Areas Data Requirements

Field	Details
<i>Opening Definition (shell openings only)</i>	New Opening will create Opening ID that will be used as the key for reporting online by ESF.
Mapsheet Number	Optional – Most districts are on auto-generate
Opening ID	Automatically generated by RESULTS upon submission.
Opening Category	NREQ (Areas where SP/SMP not required)
Opening Gross Area	Opening gross area must be set to 0.1 ha to be used for fertilization activities and do NOT supply opening spatial .
Approval Date	Fertilization application date or date of pre-treatment assessment (YYYY-MM-DD)
Opening Status	IDIR Users: Set to 'FG' BCeID Users: Set to 'APP' and contact district RESULTS Coordinator with request to reset Opening Status to 'FG'.
TSB (Timber Supply Block)	Select as appropriate to assist with reporting.
<i>Survey Activity (pre-treatment)</i>	<i>Fertilizer Pre-treatment Assessment with map</i>
Base	SU (Survey)
Technique	FE (Fertilization)
Method	PHOTO (Air Photo Interpretation) PLOT (Plots) WALK (Walkthrough) HELI (Helicopter)
Objective	FE (Fertilization)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total surveyed area reviewed for fertilization treatment.
Actual Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Supply GML exterior outline of assessed area.
Comments or Attachments	Attach details regarding survey assessments as required by the program such as: GPS, any treatment prescriptions or foliar analysis reports, etc.
<i>Planned Treatment Activity</i>	<i>Immediate or Future Planned Fertilizer Treatment (enter fertilization treatment if treatment is expected to be done within three years and a stand management prescription exists). If stands are suitable for fertilization but treatment will occur after three years, then indicate a follow-up survey for fertilization. Re-treatments do not need to be planned for as these areas will be based on areas previously treated.</i>
Base	FE (Fertilization)
Technique	CA (Chemical Air) or CG (Chemical Ground)
Method	FIXED (Fixed Wing) or HELI (Helicopter) for aerial; BPACK (Backpack Application), GRANU (granular application) or VMSGH (Vehicle Mount Sprayer (Gun and Hose) for ground.

Government Funded Silviculture Activities – Version 6.0

Field	Details
Objective	FE (Fertilization)
Funding Source	Select appropriate funding source code (Table 2).
Planned Date	YYYY-MM-DD
Planned Area	Total planned eligible fertilization treatable area(s).
Planned Cost	Total estimated planned cost (\$). Use current local costs or estimates provided by funding program.
Inter-agency No	Not applicable for planned activities.
Activity Spatial (GML)	Supply GML exterior location(s) for planned eligible fertilization treatment area.
Comments or Attachments	Attach details regarding future fertilization stands including differences noted in species composition from current inventory leading species, stand management prescription, and GPS of treatment area.
Completed Treatment Activity	Completed Aerial Fertilizer Treatment
Base	FE (Fertilization)
Technique	CA (chemical Air)
Method	FIXED (Fixed Wing) or HELI (Helicopter)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total fertilization coverage area in hectares.
Treatment Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter Agency No	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	GML exterior outline of coverage required. Internal swath linework not required.
Comments or Attachments	Attach treatment prescription including details regarding type/concentration of fertilizer applied, GPS, monitoring plot data etc.
Completed Treatment Activity	Completed Ground-based Fertilizer Treatment (excluding at-time-of-planting fertilizers)
Base	FE (Fertilization)
Technique	CG (Chemical Ground)
Method	BPACK (Backpack Application) GRANU (Granular Application) VMSGH (Vehicle Mount Sprayer (Gun and Hose)
Objective	FE (Fertilization)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total fertilization coverage area in hectares.
Treatment Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Supply GML exterior outline of ground fertilized area.
Comments or Attachments	Can attach details regarding type/concentration of fertilizer applied, GPS, etc.

Field	Details
Survey Activity (post-treatment)	Fertilizer Post-treatment Assessment with map (separate ATUs designated for treated and control areas)
Base	SU (Survey) or AU (Audit) – as appropriate
Technique	FE (Fertilization)
Method	PLOT (Presently, only plot monitoring is funded by the Ministry) <i>PHOTO (Air Photo Interpretation)</i> <i>WALK (Walkthrough)</i> <i>HELI (Helicopter)</i>
Objective	FE (Fertilization)
Funding Source	Enter applicable funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total surveyed area monitored for fertilization treatment (control areas and plots)
Treatment Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (FFT or FCI) (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT, FCI or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Supply GML exterior outline of surveyed area (areas within which plots are located, including control areas). Separate ATU for control and treated areas.
Comments or Attachments	Attach details regarding survey assessments, survey data, detailed plot locations, GPS etc.
Standards Unit	
n/a	Not required. 'NREQ' opening category removes requirement for SU information.
Forest Cover	
n/a	Not required. Spatial ATU maps provide for identification of these areas.

12.4. Supporting Documentation for Aerial Fertilization Projects

RESULTS attachment option allows submitters to attach project documentation associated with the treatment, pre-treatment assessment activity reports, or post-treatment monitoring assessment report, and foliar analysis.

- Foliar analysis: Report attached to either a new shell opening or an existing opening depending on how broadly the samples were collected. The attached file name and description field would include the word 'foliar' to allow for easy identification.
- Monitoring Plots: Monitoring Plot data is submitted to RESULTS in Excel format with both the current FIRS, FCI or FESBC project plan number (for re-measurements) as well as the original FIRS or FESBC project number listed. The data table is to be attached to the original opening where the monitoring plots were established as a new activity using coding of (Base: SX; Technique: FE; Method: TSP). Do not modify any of the historic data for the opening. If the original opening cannot be found, but the plot location is within the current year's shell opening area of treatment then the monitoring plot may be attached to the current year's treatment as long it is referenced to the previous treatment, clearly marked as a re-measurement, and there is clear map of plot locations.

13. Juvenile Spacing

The provincial government funds stand tending activities to optimize fibre and timber supply on stands that have been declared free growing or have no licensee obligation. All aspects of a juvenile spacing program, from initial pre-treatment project area assessments, to the treatment records, and post-treatment monitoring, are submitted to RESULTS. Submissions include required information listed in Table 16. All opening submissions for juvenile spacing activities must have sufficient information to describe the treatment event and to determine impacts on higher level plans, silviculture, forest cover/land status, land use decisions and other local issues that may be impacted by those activities. Figure 2 shows the workflow associated with juvenile spacing activities.

Under this activity some previous spacing treatments may also be assessed through a [Post Incremental Treatment Assessment \(PITA\) standard](#). This survey is an operational assessment, performed a minimum of 10 years after an incremental treatment completion (primarily spacing or spacing and pruning). It is designed to collect stand attributes and growth and performance data, to determine if the treatment prescription has been achieved or is on track to achieving the stated objectives or not. See Survey Activity Post Treatment assessment process in Table 16.

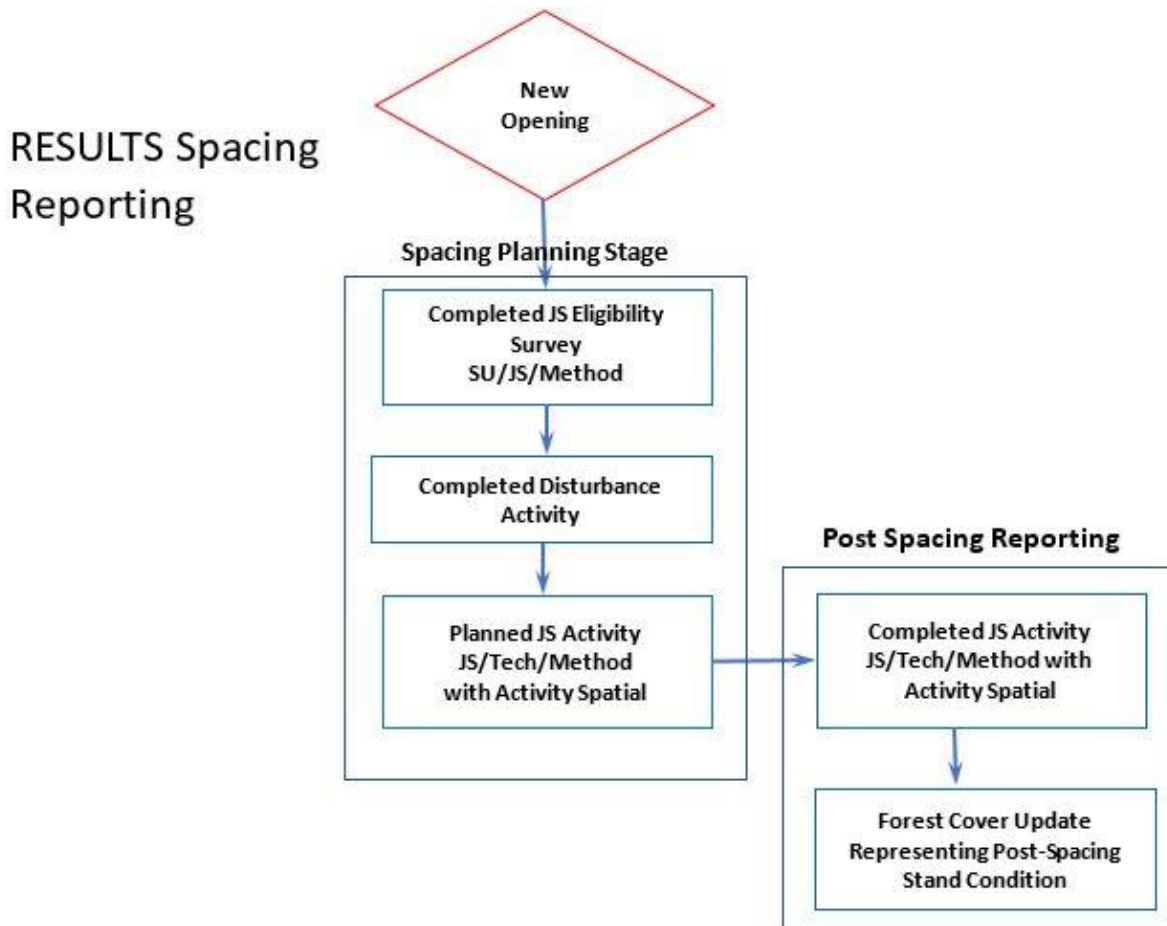


Figure 2. Juvenile Spacing Treatment Workflow

13.1. Reporting by ‘Shell’ Openings

Juvenile spacing activities are reported as ‘shell’ openings on free growing (non-obligation) areas. Using shell openings allow for reporting of an entire surveyed, planned and treated area in one single opening. **Please note that when using a shell opening for juvenile spacing, opening spatial is mandatory.**

Licensees who are carrying out juvenile spacing on tenured openings may report the activity to their existing openings to maintain the full history of the opening. In that case, skip the Opening Definition and Disturbance activity in Table 16 below.

All ‘shell’ openings must be initiated via RESULTS online to generate an opening ID. At a minimum, the opening category, opening gross area and the approval date must be supplied for the opening to be saved successfully. The opening ID is later used as a ‘key’ for future ESF submissions. Once the online portion is completed, you must submit an opening definition via ESF to supply the opening spatial. The opening definition data requirements are provided in Table 16. All subsequent submissions must be done via ESF as activity spatial and/or forest cover updates are mandatory for juvenile spacing activities. The data requirements for all other activities are also provided in Table 16.

13.2. Juvenile Spacing Activity Data Requirements

Fields in Table 16 are required with juvenile spacing treatment activity submissions to RESULTS. Sections 10.2 and 10.3 outline data requirements for forest cover submissions for both even-aged and multi-layer stands.

Table 16. Juvenile Spacing Data Requirements

Field	Details
<i>Opening Definition (shell openings only)</i>	New Opening initiated online will generate an Opening ID that will be used as the key for ESF reporting.
Mapsheet Number	
Opening ID	Automatically generated by RESULTS upon submission.
Opening Category	NREQ (Areas where SP/SMP not required)
Opening Gross Area	Must equal treatment area
Approval Date	Approval Date = date of initial spacing eligibility survey (YYYY-MM-DD)
Opening Status	IDIR Users: Set to ‘FG’ BCeID Users: Set to ‘APP’ and contact district RESULTS Coordinator with request to reset Opening Status to ‘FG’.
TSB (Timber Supply Block)	Select as appropriate to assist with reporting.
Spatial	Spatial data representing treatment area
<i>Disturbance Activity</i>	Mandatory to allow Forest Cover updates
Silviculture System	Leave Blank
Silviculture Variant	Leave Blank
Silviculture Cut Phase	Leave Blank
Disturbance Code	E (Stand Enhancement)
Disturbance Start Date	Set to date of eligibility survey
Disturbance End Date	YYYY-MM-DD
Disturbance Area	Always use 0.1 ha

Government Funded Silviculture Activities – Version 6.0

Field	Details
Eligibility Survey Activity (pre-treatment)	Juvenile Spacing Eligibility Survey
Base	SU (Survey)
Technique	JS (Juvenile Spacing)
Method	PHOTO (Air Photo Interpretation) PLOT (Plots) WALK (Walkthrough) HELI (Helicopter)
Objective	JS (Juvenile Spacing)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total surveyed area reviewed for juvenile spacing treatment
Treatment Cost	Actual cost of completed treatment
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Mandatory - Supply GML exterior outline of surveyed area.
Comments or Attachments	Attach details regarding survey assessment for both areas suitable for spacing and areas not suitable for treatment, GPS coordinates, stand management prescription or treatment plan, etc. Attachment file size limit is 1 MB.
Forest Cover	
Conditional	Forest Cover updates are required for all ground surveys unless (a) no treatment is recommended or (b) there is a current (within the last 5 years) FG survey forest cover inventory label in RESULTS that still best describes the stand attributes. See Pre-stand Tending Survey and Prescription Development Standard Section 3.10 .
Planned Treatment Activity	Immediate or Future Planned Juvenile Spacing Treatment or additional treatment as identified in the stand management prescription (e.g. pruning). If stands are suitable for Juvenile Spacing but treatment will occur after more than three years, then indicate a follow-up survey for spacing.
Base	JS (Juvenile Spacing)
Technique	MA (Manual)
Method	MANCT (Manual Cutting) POWER (Power Saw)
Objective	JS (Juvenile Spacing)
Funding Source	Select appropriate funding source code (Table 2).
Planned Date	YYYY-MM-DD
Planned Area	Total planned eligible juvenile spacing treatable area(s)
Planned Cost	Total estimated planned cost (\$). Use current local costs or estimates provided by funding program.
Inter-agency No	Not required for planned activities
Activity Spatial (GML)	Mandatory - Supply GML exterior location(s) planned eligible juvenile spacing treatment or additional treatment area.
Comments or Attachments	Attach details regarding future juvenile spacing stands including, differences noted in species composition from current inventory leading species, GPS coordinates, and stand management prescription or treatment plan. Attachment file size limit is 1 MB

Government Funded Silviculture Activities – Version 6.0

Field	Details
Forest Cover	
Optional	Only if complete forest cover data is collected.
Completed Treatment Activity	
	Completed Juvenile Spacing Treatment
Base	JS (Juvenile Spacing)
Technique	MA (Manual)
Method	MANCT (Manual Cutting) POWER (Power Saw, Brush Saw)
Objective	JS (Juvenile Spacing)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total spaced area in hectares
Treatment Cost	Actual cost of completed treatment
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (Section. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Supply GML exterior outline of treated area.
Comments or Attachments	Must attach treatment prescription as well as any other details required by the treatment standard. Attachment file size limit is 1 Megabyte.
Forest Cover	
Mandatory	This must include the entire opening including untreated areas where a licensee is reporting to an existing opening.
Survey Activity (post-treatment)	
	Juvenile Spacing Post-treatment Assessment with map
Base	SU (Survey) or AU (Audit) – as appropriate
Technique	JS (Juvenile Spacing)
Method	PHOTO (Air Photo Interpretation) PLOT (Plots) WALK (Walkthrough) HELI (Helicopter)
Objective	JS (Juvenile Spacing)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total surveyed area monitored for juvenile spacing treatment (control areas and plots)
Actual Cost	Required for FTM or FTL funding source
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (Section 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Supply GML exterior outline of assessment area (areas within which plots are located, including control areas). Separate ATU for control and treated areas.
Comments or Attachments	Attach details regarding survey assessments, survey data, detailed plot locations, GPS, etc. Attachment file size limit is 1 MB
Standards Unit	
n/a	Not required

Field	Details
Forest Cover	
Mandatory	

14. Pruning

Pruning activities on stands that have not been fertilized or spaced are reported to shell openings as outlined in Table 17 and Table 18. Pruning activities on stands that were previously fertilized or spaced are added to existing shell openings using the data requirements shown in Table 18. Forest cover submissions are not required for pruning activities.

Licenses who are carrying out pruning activities on tenured openings may report the activity to their existing openings to maintain the full history of the opening. In that case, use the data requirements in Table 18. All Pruning Activities Data Requirements to report the activity.

Table 17. Pruning Data Requirements: Not Previously Fertilized or Spaced

Field	Details
Opening Definition (shell openings only)	New Opening initiated online will generate an Opening ID that can be used as the key for ESF reporting.
Opening ID	Automatically generated by RESULTS upon submission.
Opening Category	NREQ (Areas where SP/SMP not required)
Opening Gross Area	0.1 ha
Approval Date	Date of pruning activity (YYYY-MM-DD)
Spatial	Not required. Do not submit opening spatial.
Opening Status	IDIR Users: Set to 'FG' BCeID Users: Request that the district RESULTS coordinator reset the opening status to 'FG'

Table 18. All Pruning Activities Data Requirements

Field	Details
Stocking Standards	Not required
Disturbance Activity	Not required
Completed Activity	
Base	PR (Pruning)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total area treated
Actual Cost	Actual cost of completed treatment
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Mandatory - Supply GML exterior outline of pruned area.
Forest Cover	Not required. Do not submit forest cover.

15. Forest Health Surveys

Forest health reconnaissance surveys often cover large areas from which potential candidate areas are identified for more detailed ground surveys where plots are established. It is important to record both levels of surveys in RESULTS as both a record of work accomplished and as a spatial record of the areas surveyed. Please note that the reporting standards between the two levels of forest health surveys are different. Where aerial surveys recommend no treatment, the survey activity is not reported to RESULTS.

Ground surveys that are planned from the original reconnaissance but are not completed within a fiscal year should be kept in the reconnaissance opening. A shell opening for the ground survey is created when the survey is completed and the planned activity is deleted from the reconnaissance opening.

15.1 Forest Health Surveys, no plots established (aerial, line, walkthrough, photo interpretation)

Reporting requirements for reconnaissance surveys or forest health monitoring surveys with no plots established are shown in Table 19. Spatial for survey activities must be submitted through the ESF. It is important that aerial surveys be reported by landscape unit or TSA to provide broad activity spatial for each project. Openings should not cover multiple TSAs.

Table 19. Forest Health Surveys Data Requirements: No Plots Established

Field	Details
Opening Definition (shell openings only)	New Opening initiated online will generate an Opening ID that can be used as the key for ESF reporting
Opening ID	Automatically generated by RESULTS upon submission
Opening Category	NREQ (Areas where SP/SMP not required)
Opening Gross Area	0.1 ha
Approval Date	Date of survey (YYYY-MM-DD)
Spatial	Not required. Do not submit opening spatial.
Opening Status	Where a forest health survey is done on a FG stand, after the new opening is created: IDIR Users: Set opening status to 'FG' BCeID Users: Request that the district RESULTS coordinator reset the opening status to 'FG'.
Stocking Standards	Not required
Disturbance Activity	Not required
Completed Survey	Forest Health Survey (no ground plots established)
Base	SU (Survey)
Technique	RE (reconnaissance) FH (forest health)
Method	FIXED HELI LINE PHOTO WALK
Objective	FH MON

Government Funded Silviculture Activities – Version 6.0

	Or other appropriate codes relevant to the work conducted.
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total area surveyed, in hectares
Actual Cost	Actual cost is mandatory for FCE, FCM, FTL or FTM funding source
Inter-agency No	FFT project number listed in FIRS or Ministry generated number (Sec. 6.2.3) or FESBC project plan number listed in FESIMS. Required for completed projects under an FFT or FESBC project. Inter-agency numbers beginning with FC, WR, HB, RB, or FR are reserved for FESBC contracts.
Activity Spatial (GML)	Mandatory - Supply GML exterior outline of surveyed area. This may be a multi-part polygon and may be for the entire area surveyed under a contract within a district.
Attachments	Attachments relevant to the project. For aerial surveys, do <u>not</u> include any photos or maps with orthophotos. Provide an overview PDF map that clearly identifies each stratum in the opening. Zip summaries together if required to limit the number of attachments and name them so they may be easily referenced to the overview map.
Forest Cover	Do not submit forest cover.
Planned Surveys	<p>Surveys planned for subsequent fiscal years. It is recommended that planned treatments be reported individually allowing a link with the attached reports. These will be deleted as the surveys are completed and reported to new openings.</p> <p>If the boundaries for the reconnaissance survey (no plots) and a subsequent ground survey (with plots) are the same, submit an activity for each survey but use the opening definition data requirements in Section 7.1 for the shell opening.</p>
Licensee Activity ID	Use the file name from the corresponding attachment.
Base	SU
Technique	FH RG Other appropriate techniques relevant to the survey.
Method	PLOT MULTI
Activity Status Indicator	Set status to 'Planned'. <i>(Note: Some ESF submission software has an 'Actual Date Indicator' instead of an Activity Status indicator. In this case, for planned data, set Actual Date Indicator to 'no'.)</i>
Planned Date	YYYY-MM-DD
Funding Source Code	Select appropriate funding source code (Table 2).
Net area treated	Planned survey area, ha

15.2 Forest Health Surveys with plots established

Forest health surveys where plots were established are also reported to shell openings. New openings should be logical geographic units within a single TSA that will be treated on a similar schedule. New forest cover must be provided for the entire opening. Polygons that are free growing and/or untreated will have a unique standards unit so that a FG milestone may be declared.

If the boundaries for the reconnaissance survey (Section 15.1) and a subsequent ground survey are the same, submit an activity for each survey but use the opening definition data requirements below for the shell opening.

If the only future treatment is fertilization and associated surveys, report to the standards in Section 12.1.

If any treatments beyond surveys are planned or completed on these openings, the opening category must be updated (NDFS, FFTITSL, FFTFLTC etc.) and the opening managed to the appropriate RISS-gf standards.

Table 20. Forest Health Surveys Data Requirement: Ground Plots

Field	Details
<i>Opening Definition</i>	Create a new shell opening and report using Section 7 to Section 11 with the changes below.
Opening Category	NREQ (Areas where SP/SMP not required). Update as required if ground treatments such as harvest, site preparation, or planting are planned or completed
Opening Gross Area	Equals area surveyed
Approval Date	Date of survey (YYYY-MM-DD)
Spatial	Submit opening spatial for the entire area surveyed
<i>Standards Unit(s) Using SSIDs</i>	If the opening includes any free growing or untreatable areas, make them a separate SU so that a milestone declaration may be made
Early Free Growing Date	In SUs for FG or untreatable areas, use the Correction button to remove the early free growing date, if that field is populated, so that a milestone declaration can be made.
<i>Standards Unit(s) No SSIDs</i>	If the opening includes any free growing or untreatable areas, make them a separate SU so that a milestone declaration may be made
Early Free Growing	In SUs for FG or untreatable areas that will be declared FG immediately, leave this field blank so that a milestone declaration can be made.
<i>Disturbance</i>	
Disturbance Start Date	YYYY-MM-DD. Estimated commencement date of forest health issue.
Disturbance Completion Date	YYYY-MM-DD
Disturbance Area	Area surveyed
Disturbance Code	P (Pest)
<i>Planned Activities</i>	If a planned forest health survey was scheduled in an overlapped tenured opening, delete that activity to avoid scheduling overlapping activities.
<i>Completed Survey</i>	
Base	SU
Technique	FH RG Other appropriate techniques relevant to the survey.
<i>Forest Cover</i>	Mandatory Forest cover updates for the entire opening must be submitted through ESF. Forest cover and map submission standards are provided in Section 10.

Field	Details
Milestone	If no further work is recommended or if the survey shows the SU area to be free growing, add a free growing milestone declaration.
Remove Early Free Growing Date	See comments in the Standards Unit section above.
Comment	If the area is not free growing and no further work is recommended, add a comment: ‘Based on the FFT survey results (or ROI calculations), no future work is planned.’ For all declarations, include the name of the Registered Professional Forester who supervised the professional field assessments or the no-treatment decision.

16. Stand Monitoring Surveys

This process creates new RESULTS openings with opening spatial for Stand Development Monitoring (SDM) or other monitoring surveys except monitoring of carbon openings which will be reported in the relevant opening. The new opening only covers the polygons surveyed and includes a DN activity and a survey activity with spatial. To allow a comparison of previous forest cover to new forest cover for the polygon, the forest cover from the relevant polygon(s) from the original opening with spatial and the SDM survey forest cover with spatial are both reported. The polygon(s) are linked back to the original opening by Licensee Opening ID and by adding ‘S’ to the mapsheet opening number in the new opening (only where 4 digits are available).

Table 21. Stand Monitoring Surveys Data Requirements

Field	Details
Opening Definition (shell openings only)	Create a new shell opening and report using Section 7 to Section 11 with the changes below.
Mapsheet Number	Use original mapsheet opening number and add ‘S’ suffix (e.g. 103F087-20S)
Licensee Opening ID	Use the original Opening ID for cross-reference with ‘SDM’ prefix (e.g. SDM_ - 62750000)
Opening Category	NREQ (Areas where SP/SMP not required)
Opening Gross Area	Must equal treatment area
Approval Date	Approval Date = date of survey (YYYY-MM-DD)
Opening Status	IDIR Users: Set to ‘FG’ BCeID Users: Set to ‘APP’ and contact district RESULTS Coordinator with request to reset Opening Status to ‘FG’.
Spatial	Spatial data representing surveyed area
Standards Unit	
n/a	Not required
Disturbance Activity	Mandatory to Forest Cover updates
Silviculture System	CCRES
Silviculture Variant	Leave Blank
Silviculture Cut Phase	REMOV
Disturbance Code	L (Logged)
Disturbance Start Date	Set to date of survey (YYYY-MM-DD)
Disturbance End Date	Set to date of survey (YYYY-MM-DD)
Disturbance Area	Always use 0.1 ha

Field	Details
SDM Survey Activity	Stand Development Monitoring Survey
Base	SU (Survey)
Technique	FH (Forest Health)
Method	SDM (Stand Development Monitoring)
Objective	MON (Monitoring)
Funding Source	Select appropriate funding source code (Table 2).
Completion Date	YYYY-MM-DD
Area Treated	Total area surveyed
Activity Spatial (GML)	Mandatory - Supply GML exterior outline of surveyed area.
Forest Cover	
Mandatory	Mandatory Forest Cover updates: Two forest cover submissions are required: the first submission for the current forest cover for the polygon(s) (from the most recent forest cover in the original RESULTS opening) and the second from the current SDM survey. Note – these submissions must be done on different days due to nightly replication.

17. Forest Enhancement Society of British Columbia

Many different types of projects may be funded by FESBC or their funding partners but only projects that produce a land-based plan (e.g. a wildfire risk reduction plan) and/or complete activities on the ground will require RESULTS reporting. The project types below identify broad categories and over time, these may change, or new project types may be added. Five main groups have been identified: forest carbon, habitat enhancement, stand rehabilitation, fibre recovery and wildfire risk reduction.

Table 22. FES Project Types

Forest Carbon	Fertilization
	Planting
	Stand conversion
	Fibre recovery
Habitat Enhancement	Habitat Restoration
	Ecosystem Restoration
Stand Rehabilitation	Stand conversion
Wildfire Risk Reduction	Community Wildfire Protection
	Operational Fuel Treatments
Fibre Recovery	

Forest carbon projects will sequester carbon or avoid carbon emissions to meet the government carbon strategy.

FESBC has also partnered with two other groups to fund specific project types:

- Wildfire risk reduction projects that support communities to mitigate risk from wildfire in the wildland urban interface will be jointly funded with and administered by the Union of BC Municipalities Strategic Wildfire Prevention Initiative.
- Projects that enhance forested habitat for wildlife populations will be jointly funded with and administered by the Habitat Conservation Trust Foundation.

This section provides a standard reporting framework from which outcomes may be identified and reviewed.

Opening Category Codes are provided in Table 1, Section 6.1.

New openings must be created online to acquire an Opening ID for subsequent ESF submissions. The activities may be managed in one opening or multiple openings. The expectation is that the same opening will be managed over the reforestation obligation to monitor progress and achievement of milestones. All forest cover submissions to the openings must be for the entire opening (Section 10).

Table 23. FES Data Requirements

Field	Details
Carbon - Fertilization	Report using Section 12.
Funding Source Code	FCE (Forest Carbon activities funded by FESBC)
Inter-agency No.	Recipient administered projects: FESIMS project plan number BCTS administered projects: BCTFC followed by the last 4 digits of the FESIMS project plan number (e.g. BCTFC0362) MFLNRORD administered projects: GOVFC followed by the last 4 digits of the FESIMS project plan number (e.g. GOVFC0352)
Carbon – Stand Conversion and/or Planting	If activities cover an existing FFTITSL opening, report activities to that opening and do not change the opening category. In all other cases, create a new shell opening and report using Section 7 to Section 11 with the changes below. Reconnaissance surveys (with activity spatial) are reported to RESULTS even if no treatment is recommended. Report reconnaissance surveys with no treatment recommendations to an existing FG opening if possible, but DO NOT CHANGE THE EXISTING FG FOREST COVER,
Opening Category	Section 6.4.2.1. and Table 1
Approval Date	Earliest of date of recent disturbance, survey, site preparation or planting
Denudation	If using an existing FFTITSL opening, add DN B activity (wildfire). For new openings, use: <ul style="list-style-type: none"> • DN E for no previous disturbance or where DN is already reported in an underlying opening; area is 0.1 ha. • DN B (wildfire), DN P (pest), DN R (Rehabilitation), area is the project area for any new disturbance.
Planned activities	Only add planned activities for areas where ‘FCE’ funded seedlings are already sown. Include all required activities to FG.
Funding Source Code	FCE (Forest Carbon Activities funded by FESBC)
Inter-agency No.	Recipient administered projects: FESIMS project plan number BCTS administered projects: BCTFC followed by the last 4 digits of the FESIMS project plan number (e.g. BCTFC0362) MFLNRORD administered projects: GOVFC followed by the last 4 digits of the FESIMS project plan number (e.g. GOVFC0352)
Activity Spatial	Must be provided for all planting activities completed under FCI and FESBC.
Forest Cover	If using an existing opening, report forest cover for the <u>entire</u> opening.
Attachments	As required under the program standards.
Habitat Enhancement, Hazard Risk Reduction, Stand Rehabilitations: non-tenured	Create a new shell opening and report using Section 6.4.2.1., Table 1, Section 7, Section 9 and Section 10 with the changes below.
Approval Date	Date of treatment or approval date of plan.

Government Funded Silviculture Activities – Version 6.0

Field	Details
Opening spatial Standards	Do not provide opening spatial. Fire Management Stocking Standards (In RESULTS under Admin/Standards, Admin, Org. Unit HFP and the appropriate zone, subzone, variant and site series.)
Activities	Include an activity for land-based plans (use base code LB) completed as part of the FESBC project.
Activity Objective	HAZ (Fire Hazard Abatement); WHM (Wildlife Habitat Management); ER (Ecosystem Restoration); RH (Rehabilitation); RHM (Range Habitat Management).
Funding Source Code	FES (Forest Enhancement Society)
Inter-agency No.	Use FESIMS project plan number
Activity Spatial	Must be provided for the area covered in any land-based plan.
Denudation	Not mandatory. DN E with area 0.1 ha only if forest cover is required.
Forest cover	Only required if the forest cover has changed from the existing inventory. e.g. Removal or spacing of the understory where the mature canopy was not modified does not require a forest cover submission.
Attachments	A summary of any land-based plans including the location of the complete plan and a PDF map showing proposed treatments. All other attachments as required by the program.
Habitat Enhancement, Hazard Risk Reduction: tenured opening	Report using RISS-licensee standards.
Opening category	To match tenure.
Standards	Fire Management Stocking Standards. (In RESULTS under Admin/Standards, Admin, Org. Unit HFP and the appropriate zone, subzone, variant and site series.)
Licensee Opening ID	FES_FESIMS project plan number e.g. FES_HB1234567. As there is no inter-agency number for a denudation activity, the Licensee Opening ID on the Opening Inquiry page is the only way to identify these openings as FESBC funded.
Planned activities	Entered by the entity that holds the reforestation responsibility.
Funding Source Code	FES

18. Forest Carbon Initiative

Forest Carbon Initiative projects including fertilization and surveys, site preparation, planting and associated stand monitoring will be reported to RESULTS. Apart from reforestation on existing FFTITSL openings or fertilization on existing RESULTS openings, new shell openings will be created for these activities. This section provides a standard reporting framework from which outcomes may be identified and reviewed.

Opening Category Codes are provided in Table 1, Section 6.1. Funding source codes are in Table 2 and are used to track the primary delivery agent or agency.

New openings must be created online to acquire an Opening ID for subsequent ESF submissions. The activities may be managed in one opening or multiple openings. The expectation is that the same opening will be managed over the reforestation obligation to monitor progress and achievement of milestones. All forest cover submissions to the openings must be for the entire opening.

Table 24. FCI Data Requirements

Field	Details
Carbon - Fertilization	Report using Section 12.
Funding Source Code	FCE (Forest Carbon Activities funded by FESBC) FCM (FCI activities funded by MFLNRORD)
Inter-agency No.	BCTS administered projects funded by FESBC: BCTFC followed by the last 4 digits of the FESIMS project plan number (e.g. BCTFC0362) MFLNRORD administered projects funded by FESBC: GOVFC followed by the last 4 digits of the FESIMS project plan number (e.g. GOVFC0352) MFLNRORD administered projects funded by MFLNRORD use the Ministry generated number (i.e. contract number) Recipient administered projects: FESIMS project plan number if funded by FESBC.
Carbon – Stand Conversion and/or Planting	If activities cover an existing FFTITSL opening, report activities to that opening and do not change the opening category. In all other cases, create a new shell opening and report using Section 7 to Section 11 with the changes below. Reconnaissance surveys are reported to RESULTS (with activity spatial) even if no treatment is recommended. Report reconnaissance surveys with no treatment recommendations to an existing FG opening if possible, but DO NOT CHANGE THE EXISTING FG FOREST COVER,
Opening Category	Section 6.4.2.1. and Table 1
Approval Date	Earliest of date of recent disturbance, survey, site preparation or planting
Denudation	If using an existing FFTITSL opening, add DN B activity (wildfire). For new openings, use: <ul style="list-style-type: none"> • DN E for no previous disturbance or where DN is already reported in an underlying opening; area is 0.1 ha. • DN B (wildfire), DN P (pest), DN R (Rehabilitation), area is the project area for any new disturbance.
Planned activities	Only add planned activities for areas where ‘FCE’ funded seedlings are already sown. Include activities to FG.
Funding Source Code	FCE (Forest Carbon Activities funded by FESBC) FCM (FCI activities funded by MFLNRORD – Forest for Tomorrow or direct MFLNRORD funding)
Inter-agency No.	BCTS administered projects funded by FESBC: BCTFC followed by the last 4 digits of the FESIMS project plan number (e.g. BCTFC0362) MFLNRORD administered projects funded by FESBC: GOVFC followed by the last 4 digits of the FESIMS project plan number (e.g. GOVFC0352) MFLNRORD administered projects funded by MFLNRORD use the Ministry generated number (i.e. contract number)Recipient administered projects: FESIMS project plan number if funded by FESBC.
Activity Spatial	Must be provided for all planting activities completed under FCI and FESBC.
Forest cover	Report forest cover for the entire opening. Use ‘Details’ on the forest cover to get the existing forest cover for the unburned areas.
Attachments	As required under the program standards.

19. FRPA S. 107 Declaration or S. 108 Application

If a tenured opening with outstanding silviculture obligations has been damaged by an event such as a fire, landslide, or flood and meets the requirements of FRPA s. 108 and FPPR s. 96, FRPA s. 108 may provide funding or relief of obligation.

However, as outlined in [FRPA General Bulletin Number 26](#), if an obligation holder believes that they met the free growing obligation on all or part of an opening prior to a damaging event, they may submit a FG declaration under FRPA s. 107. The date of the FG declaration must be prior to the date of the damaging event and the milestone declaration must include a comment that it is being declared under FRPA s. 107. A FG forest cover submission must accompany the declaration.

19.1. RESULTS Updates Prior to S. 108 Application

A s. 108 application must not include SUs that have previously been declared FG as all licensee obligations have already been met on these areas. However, the post-fire disturbance submission includes all burned areas within the opening. The forest cover submission includes all wildlife tree reserves associated with the opening but excludes any previously FG SUs. This exclusion allows other government-funded programs to create new openings overlapping the FG SUs and avoids overwriting these polygons in inventory updates.

Before submitting a FRPA s. 108 application:

- Submit a disturbance activity for the disturbance event.
- Submit a post-disturbance forest cover submission. If two forest cover submissions are required (one to update the pre-damage forest cover and one for the disturbance), to maintain both in RESULTS, they cannot be submitted on the same calendar day.
- For SUs within a s. 108 request for funding, amend the standards to extend the RG and LFG dates if necessary. Regen delay and early and late FG dates will still be calculated from the start date of the original disturbance in the opening.

19.2. S. 108 Application

If both relief of obligations and request for funding are applied for on the same opening, separate applications are required.

If the s. 108 application is for relief of obligations, check the ‘Relief from Obligations’ box. Relief of obligations under s. 108 only applies to areas that (a) have not achieved FG, (b) are not a s. 107 application (Section 18) or (c) are no longer practicable to reforest to the condition prior to the new disturbance.

For both requests for relief of obligations or for funding, the following information must be provided.

1. Disturbance Section: RESULTS references disturbance history associated with the opening. *(To qualify for s. 108, the disturbance event must have occurred after*

December 17, 2002). Once the disturbance event is selected, the information is auto-filled.

2. Forest Cover Observation Dates Section: *Forest Cover Observation Dates* describe the forest condition prior to the event and the most recent forest cover after the damaging event demonstrating the current forest condition leading to the FRPA s. 108 request. Hyperlinks are available to view the detailed forest cover associated with each event. From the dropdown menu, pick the appropriate forest cover submissions for the ‘Before Event Date’ and the ‘After Event Date’.
3. Planned Activity Regime: Planned activities are not submitted for applications requesting relief of obligations. Where funding is requested, the request is comprised of the activities required to re-establish the stand condition that existed immediately prior to the catastrophic event. Funding source code FRP is used for all planned activities.
4. Attachments: If available, attach any documents that justify the s. 108 application or provide a rationale for the relief or funding requested.
5. Eligibility and Authorization: Check the applicable eligibility box(s) and confirm authorization to complete the s. 108 request. Save and submit the application, this will send the application to the district RESULTS Inbox. Contact the district RESULTS Coordinator (or designated district contact if known) to let him/her know that a FRPA s. 108 application is awaiting processing in the district RESULTS Inbox.

19.3. FRPA S. 108 Processing (Post Approval)

19.3.1. Relief of Obligation for Partial or Complete Opening

Relief of obligation may be approved where there are outstanding free growing obligations on one or more standard units. The standard unit that is granted relief of obligation is declared free growing by the licensee and the following comment is included with the milestone declaration: ‘**Relief of obligation under s. 108 granted**’.

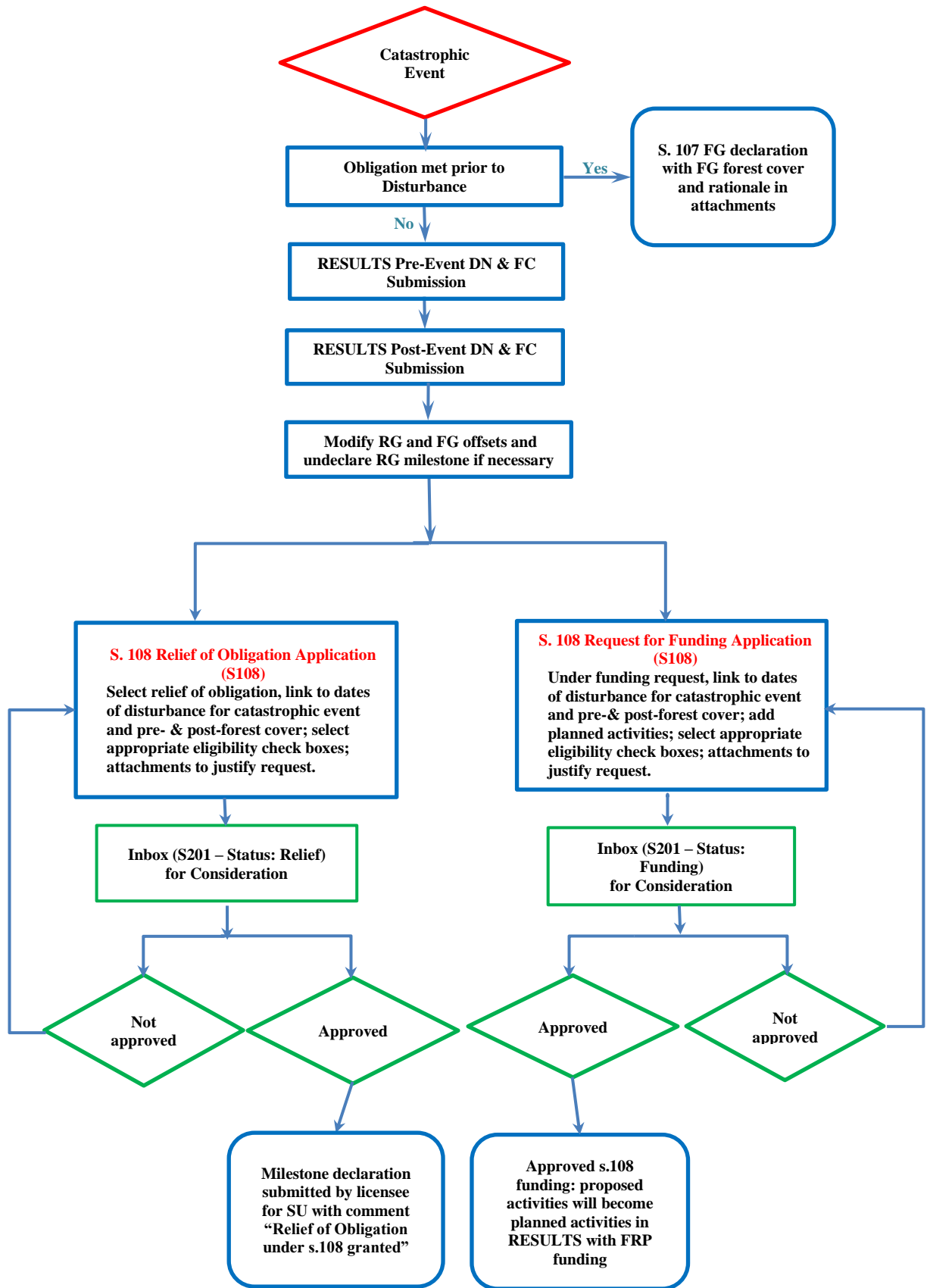
Do not change the opening category and do not report any government funded silviculture activities to this opening except those funded under s. 108.

19.3.2. Funding for Obligations

Once funding has been approved, the planned activities are automatically moved into the Activities tab in RESULTS. Timing of forest cover submissions follow Section 5.7.1. in the [RISS-ls](#).

1. As activities are completed, the planned activities must be updated or removed if the treatment plan is modified. All funded activities must use funding source code FRP.
2. RG declarations accompanied by forest cover submissions are completed to meet RG milestone obligations covered by s. 108 funding.

Figure 3. FRPA S. 108 Processing Workflow



20. GAR Openings

Prior to any RESULTS updates for GAR openings, the affected licensees will submit a master list of the openings, and the value that is to be relieved (if applicable) to the district for review and approval by the Resource District Manager.

20.1. No Harvest Zones

Each licensee with GAR openings in no harvest zones will change the opening category to EXCLU (excluded from the THLB).

The district will review each of these openings to confirm that it is on the master list provided by the licensee. The district confirms that the area being relieved is consistent with the relief of obligations provided by the Resource District Manager under Section 91(1) of the Forest Planning and Practices Regulation. The District will update the opening status to RET in lieu of ‘approval’ to show that the district staff has checked that the above requirements have been met.

20.2. Mitigation Openings External to GAR areas

This section is specific to openings where the MFLNORD has exempted the licensee from all outstanding silviculture obligations under Section 91 (1)(a)(i) and (iii) of the FPPR.

MFLNORD has taken on the silviculture obligations to mitigate the costs of unamortized roads and harvest authorities that will not be exercised to maintain critical wildlife habitat or other values.

1. Letters by licensee listing each block exempted from all outstanding silviculture obligations will identify GAR mitigation cut blocks.
2. **All blocks identified are expected to be in RESULTS.** Upon harvest completion, licensees are required to report the disturbance with updated denuded forest cover. This includes the licensee providing opening definition reporting with standard units and associated stocking standards, disturbance activity and forest cover with both spatial and attribute data. Forest cover updates for any new harvested or regenerated areas are to include the current stocking status and stocking information with full labels and any reserves or mature timber within the block.
3. Licensees will identify and update all outstanding planned activities required to achieve free growing.
4. Licensees must notify the district when their updates are complete as the district will not receive a system-generated notification.
5. The district will review each opening submitted to RESULTS to confirm it is on the letter provided to the licensee granting relief of obligations. The district confirms that the area of the opening and the associated liabilities being relieved are consistent with the relief of obligations provided under Section 91.
6. The district will update the opening category to ‘NREQ’ in RESULTS and add a comment in lieu of ‘approval’ functionality to indicate that all requirements as stated above are met. This opening category indicates that the silviculture obligation is now held by the district.

7. All subsequent activities by the district will be reported to the licensee opening but will follow Sections 9 to 11 of this document and will use the Funding Source Code applicable to the program funding the activities.
8. Reporting for licensee-managed GAR mitigation openings will be consistent with [RISS-ls](#) but will also use the Funding Source Code applicable to the program funding the activities.

20.2.1. Damaged GAR Mitigation Openings

If the district or licensee believes that the free growing obligation had been met on all or part of a GAR mitigation opening prior to the damaging event, they may submit a FG declaration under FRPA s. 107. The date of the FG declaration must be prior to the date of the damaging event and the milestone declaration must include a comment that it is being declared under FRPA s. 107.

If a GAR mitigation opening is damaged or destroyed by fire, pests or other damaging event before reaching FG, the district or licensee managing the opening has the following choices:

1. If no further work will be done, amend the standards unit(s) to accept the remaining stocking and complete a FG declaration. Include a description of the damage and the rationale for no further activities in the milestone comment;
2. Continue to manage the opening to FG. Add a DN activity relevant to the damage incurred.

Any post-FG activities on 1 or 2 above will be reported to new openings to maintain the history of the GAR Mitigation openings.

21. Small Scale Salvage

MFLNRORD policy requires the SSS program to report information in accordance with this guide and the [RISS-ls](#). The current publication applies to silviculture operations that are subject to Forest Stand Management Fund or funds collected from the Forest Stand Management Levy such as:

- a. MFLNRORD-managed non-replaceable forest licences;
- b. Community salvage under community forest agreements;
- c. MFLNRORD-managed Small Scale Salvage;
- d. FLTC with and without free growing obligations.

To track forest inventory updates and free growing obligations, all areas harvested under the SSS program that have legal free growing obligations must be entered into RESULTS. SSS blocks without legal free growing obligations are entered into RESULTS at the discretion of the District. Salvage permits for rights-of-way including roads, hydro lines, fireguards or pipelines that have no silviculture obligations do not need to be reported to RESULTS.

Data must be submitted for disturbance, surveys, planned and completed treatments and forest cover updates as outlined in Sections 9 to 11. For details on submissions and data requirements, please refer to this guide and the [RISS-ls](#).

22. Data Discrepancies

When data inconsistencies are found, forest professionals should contact the custodians of the data (e.g. licensees and/or district office for licensee-responsibility openings; district office for government-responsibility openings) to report their findings, so that the custodians may check and correct the data if required.

23. Quality Assurance Monitoring

Submissions made to RESULTS under government funded programs are subject to data quality assurance monitoring. All submissions must be consistent with this guide and all submitters are responsible for any required updates identified by the quality assurance process.