



Ministry of Forests



FFT Backlog Impeded and NSR Stands Data Review for the Southern Interior Forest Region

February 15, 2007

These standards apply, in addition to the [General FIA Standards \(FS 1001\)](#), to all impeded and NSR stands data review activities funded under the Forest for Tomorrow (FFT) Program.

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1.0 PREAMBLE

Many openings / Standard Units will be at a point where it is too costly to do any further treatments / management. On non-obligation openings / SUs, the designations NSR, SR and FG are for management purposes, providing a flag on what actions to take. Areas that will have no further actions should be flagged as FG. Other openings / SUs should have the appropriate designation and be scheduled for treatment / activity .

2.0 DISTRICT APPROVAL

- 2.1 The district manager or designate must approve this standard or any district staff amendment (in consultation with FFT Staff) before the recipient can proceed with impeded or NSR stand data reviews.
 - (a) Where a TSA / TFL crosses district boundaries, the district manager or designate of the district in which the opening / SU is located is the approving authority.
 - (b) The district manager may designate a regional representative as the approving authority.
- 2.2 Arrangements must be made with the district ten working days in advance to arrange
 - (a) Office space to review the files or develop protocols for taking the files off site; and
 - (b) The use of any Ministry office equipment.

3.0 INVESTIGATION

- 3.1 Data Source
 - (a) Where the recipient does not have authorization to access and update RESULTS data, the recipient will be required to take the steps as outlined on the RESULTS web page <http://www.for.gov.bc.ca/his/results/accessx.htm>
 - (b) The recipient will review backlog impeded and NSR data posted on the FFT website (<http://www.for.gov.bc.ca/hfp/fft/nsr/impededstands.htm>) and obtain
 - i) any relevant opening / SU information held electronically by RESULTS
 - ii) any relevant information found in hardcopy opening files

- iii) any district established protocol/guidelines for updating openings / SUs, if available;
- iv) any regional established protocol/guidelines, if available;
- v) any provincially established protocol/guidelines, if available;
- vi) the stocking standards for applicable TSA/TFLs;
- vii) Transfer limits for seed lots (if required, see Section 3.2 (d));
- viii) in consultation with the district and FFT staff, develop specific standards to be assigned to SUs
 - (1) Review Policy 2.22 – Backlog Management in the Ministry Policy Manual, 1.0 Preamble, Internal Rate of Return Workbook, and the Backlog Cost Calculator as a starting point to develop these standards.

3.2 Report Detailing

- (a) The recipient will list the openings / SUs into five categories:
 - 1. Openings/SUs that are '*RESULTS* FG' based on free growing stocking standards (held in RESULTS) applicable to Opening/SU or provincially approved default standards (held in RESULTS).
 - 2. Openings/SUs that are '*file* FG' based on free growing stocking standards for that opening/SU
 - 3. Openings/SUs that are 'likely not FG – brush' . Areas that may have brushing or spacing opportunities.
 - 4. Openings/SUs that are 'likely not FG – survey'. Areas where all available information does not provide enough information to determine status and a survey will be scheduled.
 - 5. Openings/SUs that are 'likely FG – non-recent survey'. Areas that will have a 10% field check to determine status (see section 3.3b)
- (b) The recipient will provide two spreadsheets to the District Manager and FFT Regional representative.
 - i. Spreadsheet 1 must contain
 - 1. The opening / SU
 - 2. The category from 3.2 (a)
 - 3. Area
 - 4. Action taken
 - 5. Declaration/ Acknowledgement
 - a. No
 - b. Yes – meets free growing stocking
 - c. Yes – meets Backlog Management Policy 2.22
 - d. Yes – too costly to do further treatments based on ROI
 - ii. Spreadsheet 2 must summarize declaration / Acknowledgment
 - 1. Opening
 - 2. Whole block declared/acknowledged? Yes or No
- (c) The recipient will list the detailed cost for updating information into RESULTS (see 4.0 RESULTS data entry).
- (d) The recipient will determine if the seed lots used on the opening / SU comply with the transfer limits.

- i. Openings / SUs that are planted with seed lots that do not comply with the transfer limits will be documented in RESULTS as not meeting these limits and scheduled for a field check.
- ii. The FFT Regional representative for the TSA under review may exempt the recipient from determining the seed lots used (Section 3.2 (d)).

3.3 Decision guidelines

- (a) Openings/SUs can be acknowledged free growing after completing an extensive review of the available information if:
 - i. There is recent field data within the opening file or within an attachment to RESULTS that shows that free growing stocking standards for the applicable district have been met and the stand is not comprised (from Silviculture label) of greater than 50% pine with an average diameter exceeding 12.5cm.
 - 1. Recent means a reasonable period of time since the data was collected.
 - ii. The survey information existing on file shows that the block specific standards that were assigned to units in accordance to the criteria developed in consultation with the district have been met.
- (b) If there is any doubt that a stand is still free growing based on the time elapsed since the field information was collected then
 - i. the recipient must conduct a 10% field check on these areas to determine the correlation between older field data and current field conditions.
 - 1. if the 10% field check shows that the stands still meet free growing status then this is sufficient rationale to acknowledge the remaining blocks as FG providing the survey information existing on file shows that the block' specific standards that were assigned to units in accordance to the criteria developed in consultation with the district have been met
 - a. Documentation must be placed in RESULTS
 - b. Documentation must be placed on the opening file unless other arrangements have been made with the district office to place on the opening file.
 - 2. if the 10% field check does not show that the stands still meet free growing status then there is not sufficient rationale to acknowledge all older field data. All older field data will need to have a field inspection scheduled.
 - a. Documentation must be placed in RESULTS
 - b. Documentation must be placed on the opening file unless other arrangements have been made with the district office to place on the opening file.

3.3 A 10% field check will be carried out as follows:

This section is currently under development. Please contact FFT staff for direction.

3.4 FG declaration / acknowledgement

(Foresters Act states that the practice of professional forestry means engaging in and reporting on the inventory, classification, ..., silviculture and rehabilitation of forests, forest lands, forest resources and forest ecosystems; therefore, declarations / acknowledgements will need to be made by a RPF)

- (a) If a hard copy of a FG declaration is found on the opening file signed by a registered professional forester (RPF) as defined in the *Foresters Act* (S.B.C. 2003 Ch.19), a non-RPF may make the declaration in RESULTS.
- (b) IF a hard copy of a FG declaration is not found on file then a RPF must declare / acknowledge the opening / SU FG in RESULTS or place a signed hard copy of the declaration / acknowledgement on the opening file allowing a non-RPF to make the declaration / acknowledgement in RESULTS.

- i) If FG is declared / acknowledged, an adequate rationale must be given by an RPF to justify a FG declaration / acknowledgement and attached to RESULTS as a PDF or word document.
 - (1) The rationale will be considered a "professional document" that the RPF has prepared or was prepared under his/her supervision.
 - (a) Given the professional nature of the document, the signing RPF may wish to conduct a field inspection.
 - (2) A hard copy of this rationale must also be placed on the opening file unless other arrangements have been made with the district office to place on the opening file.

4.0 FIELD REVIEW

- 4.1 Before field work is carried out the recipient must
 - (a) be given approval by the third party administrator to carry out this section of the standard (to assure funding availability)
- 4.2 For openings / SUs that are recommended for field review, based on information collected in 3.0 Investigation and recorded in 5.0 RESULTS data entry, the recipient will:
 - (a) Visually inspect the openings / SUs to verify that the information contained with the opening / SUs and/or RESULTS is correct.
 - i) Use of helicopter must be approved in advance of the flight by the third party administrator
 - (b) Complete ground based assessments where required
 - (c) Create a report per opening / SU detailing:
 - i) What is held by RESULTS
 - ii) Outcomes of hardcopy file review
 - iii) Details of field review
 - iv) Recommendations for next step
 - (d) Update RESULTS as necessary and place information on opening file unless other arrangements have been made with the district office to place on the opening file.

5.0 RESULTS DATA ENTRY

- 5.1 For openings / SUs that are categorized as '*RESULTS FG*' (see 3.2 (a) 1), the recipient will make the required milestone declaration / acknowledgement in RESULTS
 - (a) Declarations / acknowledgements can be done directly through RESULTS or using extensible markup language (XML)
 - i) All FG declarations/acknowledgements must follow protocol as stated in 3.4 FG declaration / acknowledgement
 - ii) The date of the survey should be the applicable reference date for the declaration / acknowledgement.
 - (b) The Net Area Reforested (NAR) must be rationalized with the best available information.
 - (1) If the entire opening or a portion of the opening is declared / acknowledged FG then the Net Area Reforested will need to be rationalized against the total area less roads, landings, NP and reserves and other areas that can not be reforested.
- 5.2 For openings / SUs that are categorized as '*file FG*' (see 3.2 (a) 2), the recipient will:

- (a) load the data found in the file into RESULTS directly or use extensible markup language (XML).
 - i) Spatial data in geographic markup language (GML) format is required if a change in inventory is uploaded into RESULTS.
 - ii) No spatial data updates are required where no changes in inventory are uploaded into RESULTS, however maps that are related to the data found in the opening file and entered into RESULTS must be placed into RESULTS as an attachment.
 - (b) make the required milestone declaration / acknowledgement in RESULTS
 - i) All FG declarations/acknowledgements must follow protocol as stated in 3.4 FG declaration / acknowledgement.
 - ii) Place on the opening file documentation of changes and recommendations made to the opening / SU unless other arrangements have been made with the district office to place on the opening file.
 - (c) The Net Area Reforested (NAR) must be rationalized with the best available information.
 - (1) If the entire opening or a portion of the opening is declared / acknowledged FG then the Net Area Reforested will need to be rationalized against the total area less roads, landings, NP and reserves and other areas that can not be reforested.
- 5.3 For openings / SUs that are categorized as '*likely not FG – brush*' (see 3.2 (a) 3), the recipient will:
- (a) Prepare a Microsoft word or PDF document containing pre-field review recommendations for further actions to be taken and attach this to the openings / SUs in RESULTS.
 - i) These recommendations may include a field inspection (see 4.0 Field Review)
 - (b) Schedule next treatment / activity in RESULTS
 - (c) The Net Area Reforested (NAR) must be rationalized with the best available information.
- 5.4 Openings / SUs that are '*likely not FG – Survey*' (see 3.2 (a) 4), the recipient will:
- (a) Prepare a Microsoft word or PDF document containing pre-field review recommendations for further actions to be taken and attach this to the openings / SUs in RESULTS.
 - i) These recommendations may include a field inspection (see 4.0 Field Review)
 - (b) Schedule next treatment / activity in RESULTS
 - (c) The Net Area Reforested (NAR) must be rationalized with the best available information.
- 5.5 Openings / SUs that are '*likely FG – non-recent survey*' (see 3.2 (a) 5), the recipient will:
- (a) complete a 10% field check before making declarations / acknowledgements.
 - i) Where the 10% field check (as described in 3.3) shows that the stands still meet free growing status
 - (1) prepare a Microsoft word or PDF document containing the criteria used to determine FG status (meets free growing stocking, meets Backlog Management Policy 2.22 or is too costly to do further treatments based on ROI) including the results of the 10% field check that shows the correlation between older field data and current field conditions and place this document on the opening file (unless other arrangements have been made with the district office to place on the opening file) and as an attachment to RESULTS.
 - (2) make the required milestone declaration / acknowledgement in RESULTS
 - (a) All FG declarations/acknowledgements must follow protocol as stated in 3.4 FG declaration / acknowledgement.
 - (3) The Net Area Reforested (NAR) must be rationalized with the best available information.
 - (a) If the entire opening or a portion of the opening is declared / acknowledged FG then the Net Area Reforested will need to be rationalized against the Total

area less roads, landings, NP and reserves and other areas that can not be reforested.

- ii) Where the 10% field check (as described in 3.3) does not show that the stands still meet free growing status
 - (1) prepare a Microsoft word or PDF document containing the criteria used to determine FG status including the results of the 10% field check that did not show the correlation between older field data and current field conditions and recommendations for further actions to be taken and attach this to the openings / SUs in RESULTS.

6.0 QUALITY ASSURANCE

- 6.1 All Work must be inspected by a person (the "Inspector") who is:
 - (a) the Registered Professional Forester (RPF), or operates under the direction of the RPF, who will sign and professionally seal reports for the Work;
 - (b) experienced in silviculture record keeping;
 - (c) familiar with Return on Investment (ROI) and cost guidelines;
 - (d) familiar with appropriate Silviculture Treatment Recommendation options; and
 - (e) who did not undertake the review.
- 6.2 The Inspector must inspect the Work in accordance with an approved quality inspection Method in a timely manner to ensure the results of the work conform to the FFT Standards.
- 6.3 Unless otherwise specified by a District Manager, the methodology given in this Article shall form the basis for the approved quality inspection method.
- 6.4 The Inspector must carry out field and office inspections to intensity necessary to confirm the items in sections 3.0 and 4.0 and must make a written record of the inspection. The primary focus of an inspection is to verify that the declarations/acknowledgements are made in accordance to the FFT standard.

Inspection Method

- 6.5 An Inspector must use one or more of the following inspection methods which form part of the approved inspection method and must document the rationale for the choice of methods in the inspection report:
 - (a) an office review;
 - (b) a field reconnaissance;
- 6.6 If an Inspector conducts an office review, the Inspector must review all files and RESULTS data available for the Opening/SU to ensure they meet the requirements of the FFT Standards.
- 6.7 If an Inspector conducts a field reconnaissance, the Inspector must conduct a reconnaissance of a portion of the 10% field check and carry out an overview assessment of the determination.

Satisfactory Work Quality Defined

- 6.8 The Inspector must generally examine each Opening/SU to the extent necessary to determine that the review has been undertaken and reported in accordance with FFT Standards, and specifically may determine a review to be satisfactory when the Opening/SU has been placed in the category (3.2 (a) that meets the decision guidelines (3.3) based on the data source (3.1).

Ministry Quality Assurance Check

- 6.9 The ministry of Forests and Range may conduct an Independent Quality Assurance Check.