

**VRI Change Management**

**2007 / 2008**

**Issue Summary**

Issue ID
<b>National Forest Inventory</b>
<b>National Forest Inventory 1</b> A number of projects have been collecting small trees on plot sizes other than the standard 2.50m radius plot. More projects seem to be interested in a larger small tree plot, possibly due to the loss of the overstory from MPB. Consider implementing other plot radii for the small tree plot.
<b>National Forest Inventory 2</b> Cards need to be modified to match procedures that have been in place for a number of years. (eg plot disturbance).
<b>NFI 3 This is a carry over from 05/06</b> The NFI QA evaluation of pass / fail should be based on a points system similar to the VRI system.
<b>Ground Sampling</b>
<b>Ground Sampling 1</b> Bark windows were originally intended to obtain some baseline information on bark thickness, and not intended to be collected in perpetuity. There should be enough data available to determine if bark windows are no longer necessary.
<b>Ground Sampling 2</b> Modify procedures so that Aux plots that are replaced are replaced in order.
<b>Ground Sampling 3</b> The VRI - Phase 2 Ground Sampling, Net Volume Adjustment Factoring (NVAF) standards and process, should be changed (updated) to collect Interior Log Grades, as well as Coastal Log Grades for all Interior Management Units in BC.
<b>Ground Sampling 4</b> Make mandatory, in the quality assurance procedures, the requirement for submission of QA reports to the respective MFR inventory representatives concurrently with the completion of the QA reports.
<b>Ground Sampling 5</b> Section 4.8 Pg. 71 - Suitability of Age and Height: Provide additional clarification on tree suitability in regard to suppression as too many intermediates with excessive early suppression are being classified as co-doms.

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**Ground Sampling 6**

Allow the use of 'X' site trees where no suitable site trees are present. Use the procedure where the closest suitable site tree to plot center within 25 m is selected.

**Ground Sampling 7**

Allow for the VRI ground sample cluster to be expanded by an additional 12 plots, 9 count and 3 measure, to be better capture variability in stocking in highly variable polygons found in Interior dry belt and other stand types.

**Ground Sampling 8**

Tally of dead standing in aux plots. We tally these trees because we recognize potential timber value in these trees. Why not only tally sawlog grade or better and exclude tallying the low value dead standing.

**Ground Sampling 9**

Consider deleting the % Class 1 from the CWD measurements. It is very hard to assess and there is such a range of values that the measurement has no reliability.

**Ground Sampling 10**

Submission of QA summary reports - minimum submission requirements needs to be developed. Reports are being submitted with insufficient supporting data.

**GS 11 This is a carry over from 06/07.**

Ground Sampling - Net Volume Adjustment Factor - Planning

1) ground sampling: For interior ground sampling projects please consider the use of the new interior log grades

**GS 12 This is a carry over from 06/07.**

Phase 2 re-measurement protocols need to be developed.

**GS 13 This is a carry over from 06/07.**

Tree distance will become in the future an important ground attribute. Right now, tree distance is only collected at IPC. It should be collected at all points. This is the "critical height sampling" issue.

**GS 14 This is a carry over from 06/07.**

Modify the site tree selection procedures to allow for the selection of dead and live trees in stands with large amounts of MPB mortality. Age and height information should be captured for the new dead tree layer. Site tree criteria for the remaining live tree layer may be modified to meet information needs.

**GS 15 This is a carry over from 06/07.**

Modify site tree selection procedures to allow for an adequate number of site trees to be collected from a ground sample.

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**GS 16 This is a carry over from 06/07.**

Replace the auxiliary plots that are dropped due to being outside the polygon. Replace these plots by establishing new plots within the polygon.

**GS 17 This is a carry over from 05/06.**

Change the log length associated with the VRI ground sample net factor rule for conk.

**Net Volume Adjustment Factor**

**NVAF 1**

Allow for NVAF stratification to be based on tree level characteristics such as the presence or absence of decay or conk and blind conk. Tree level stratification should improve the NVAF correction by reducing stratum variability. Some modification of the VRI compiler would be required to adjust volume at the tree level.

**NVAF 2**

NVAF cross sectional area standards may be too tight when dealing with dried wood. Currently they are 8cm<sup>2</sup> for "regular" circumferences, and 20cm<sup>2</sup> for "irregular" circumferences, or collapsed pieces.

**NVAF 3**

Sample enhancements are now being conducted simultaneously along with the sample establishment, it is possible that none of the enhanced samples will be audited in the random sample selection process.

All NVAF enhanced samples must be grouped into unique QA batches to ensure that a proportional number of NVAF enhanced samples are selected for QA.

**NVAF 4:**

Allow for the collection of non-merchantable wood in NVAF sampling, where non-merchantable wood defined as decay and non-millable sound as determined using provincial scaling procedures.

**NVAF 5**

If units have already had destructive sampling, and are being re NVAF sampled, the phase 2 samples that have already been partially destructively sampled be used again if the trees fall within the matrix.

**NVAF 6 This is a carry over from 06/07**

The interior forest industry is exploring the option of moving towards a Call Grade / Net Factor system. One of the key issues involved is the lack of consistent NVAF data throughout the interior. Support from I/P is further collecting this information or supporting the collection of this data within the planning process will again further support the IP and revenue business.

**Photo Interpretation**

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**Photo Interpretation 1**

VRI Phase 1 deliverable standards need to be updated to reflect Forest Inventory Update requirements for silviculture openings, Free to Grow coding and VRIMS personal geodatabase format for final submissions.

**Photo Interpretation 2**

Making a provision in the current VRI to allow it to address dead or partially dead stands beyond a description of the number of snags per hectare.

**Photo Interpretation 3**

Adopt the use of a QA batch system for the delineation and attribution phase of the photo interpretation process, similar to that of the ground sampling QA process which would generate an Auditor's Mapsheet List. The Auditor's Mapsheet List should include all mapsheets in each project and indicate pass or fail for every batch and the phase of the interpretation process selected to QA.

**PI 4 This is a carry over from 06/07**

Photo Interpretation  
Should there be a minimum number of ground and air calls established for maps.

**PI 5 This is a carry over from 06/07**

We have to investigate the usefulness of interpreting basal area. Can VDYP& do it more consistently than the interpreters? VDYP7 is very sensitive to changes in BA.

**PI 6 This is a carry over from 06/07**

How should we address places like the Cassiar for a new inventory. Due to its size, to carry-out an inventory to conventional VRI standards would be costly and time consuming.(Its not feasible.) For the vast amount of area (non THLB) a VRI standard phase 1 inventory may not be required.

**PI 7 This is a carry over from 05/06**

For stand structure classification, there has been no adequate way to systematically and consistently account for the variety of stand structures. The Cumulative Distribution Approach would rectify this.

**PI 8 This is a carry over from 05/06**

A gap in the classification exists where a polygon may be vegetated with trees but the crown closure is less than 10%.