

**Directive No.** 97-12                      **Date** September 23, 1997

**Subject**                      **Verification of Disposition Holder Forest Inventories**

To ensure that forest inventories meet or exceed provincial inventory standards.

**Purpose**

**Policy**

Accurate inventory information is one of the most important tools for resource management planning. Data is collected under certain criteria to ensure not only its accuracy, but also its compatibility with existing data in the Alberta Environmental Protection (AEP) database. The **Alberta Vegetation Inventory (AVI)** is the standard which all forest inventories in Alberta must meet. AVI data consists of two parts - digital map data (including base map data) and tree measurement (or plot) data. Regional volume tables are subsequently developed from this data.

Inventories are completed by the forest industry, Department staff, and other resource stakeholders, including members of the petroleum and mining industries. Resource Data Division (RDD) will administer Forest inventory projects undertaken by the Department. AVI map data is verified for accuracy by AEP staff and ultimately incorporated into the AEP database once a Data Sharing Agreement (DSA) is in place.

Forest Management Agreement holders are required, under their agreement (usually Section 15) to collect the data necessary for **Detailed Forest Management Plan (DFMP)** development. All FMA holders have agreed to use AVI specifications as the standard for their forest inventories.

**Procedure**

**Inventory Plan**

Prior to commencing a forest inventory, the disposition holders must submit, as a component of their DFMP (or, in the case of non-timber operators, as part of their operating plan), a plan for inventory activities. A description of the requirements for forest management plans can be found in the "Interim Forest Management Planning Manual - Guidelines to Plan Development." This component will include inventory objectives and methodologies to be used. The DFMP is submitted to the appropriate Regional headquarters or District personnel as designated by the Regional Director for review, comment and approval. Data resulting from inventory activities that commence prior to approval may not be accepted for use. The disposition holder is responsible for all costs associated with the inventory as well as for the accuracy of all data collected.

**Initial Review**

A new inventory usually begins with the disposition holder arranging for the mapping of one township. A review of this data will be co-ordinated by the Region or District (as delegated by the Regional Director) and will include the staff of the disposition holder, appropriate District and Regional staff and RDD before the remainder of the inventory proceeds. Other stakeholders may be

included at the discretion of the Regional Director. This review provides an opportunity for those involved in the inventory, including Land & Forest Service staff, to review the application of the AVI mapping standard and audit procedures to be used. Technical approval, when appropriate, will be provided by RDD and Forest Management Division (FMD), while final approval for the inventory component of the DFMP will be the responsibility of the Regional Director. Once agreement on any outstanding issues has been reached the inventory will proceed, audited both by the disposition holder and staff from the Department of Environmental Protection.

### **Inventory Audit**

Audits of forest inventories are arranged and co-ordinated by RDD. Beginning with the first test township, mapping activities are audited by RDD staff until those involved are satisfied that the data collected is complete and accurate. District staff will be informed of upcoming audits and invited to attend.

Auditing involves checking a sample of the work to confirm acceptable:

1. quality and coverage of the aerial photography;
2. conformance of the interpretation to the AVI standard, including ground truthing;
3. transfer of the interpreted information to the base map;
4. digitization and coding; and
5. addition of geoadminstration data, including the Alberta Township grid.

Forest Management Division will, as part of this audit process, review the inventory to ensure volume sampling is adequate.

Resource Data Division will prepare a report outlining the audit results for each completed AVI and forward the report to FMD. If the inventory meets the required standards, a letter is written to the disposition holder, the appropriate Region and District by FMD confirming that the inventory was done to acceptable standards. If the inventory does not meet acceptable standards the disposition holder is responsible for rectifying discrepancies.

### **Use of AVI Data**

Until AVI coverage has been completed and the data has passed the audit, Phase 3 data will continue to be the official inventory for the operating area. Timber supply modelling and the issuance of dispositions will be based on the inventory in force at the time the activity occurs. Unapproved and unaudited AVI maps may be used for **Annual Operating Plan (AOP)** development if the Regional Director feels that they represent an appropriate enhancement of the Phase 3 Forest Inventory for the area.

### **Update Standards**

Current update standards can be found in the AVI Standards Manual. The inventory database is usually updated annually to recognize depletions caused by fire, insect & disease damage, and cutblocks. Landbase changes, such as seismic or powerlines will be updated every five years. AVI inventories may also be updated as more information becomes available or specifications change. Changes will be determined through consultation with stakeholders

and other government agencies.

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**Definitions**

**Forest Management Agreement (FMA)** - a renewable 20 year agreement between the government and a company that grants the company the rights and obligations to manage, grow, and harvest timber on a specific area on a sustained yield basis.

**Alberta Vegetation Inventory (AVI)** - a system for describing the quantity and quality of vegetation present. It involves the stratification and mapping of the vegetation to create digital data according to the AVI Standards Manual and associated volume tables.

**Detailed Forest Management Plan (DFMP)** - a plan that describes the methods, approved by the Minister, that an FMA holder will follow in managing an area.

**Annual Operating Plan (AOP)** - a plan prepared and submitted annually by timber operators describing how, where and when to develop roads and harvest timber. It describes the integration of operations with other resource users, the mitigation of the impacts of logging, the reclamation of disturbed sites and the reforestation of harvested sites.

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**Authorities**

- AVI Standards Manual in effect at the time of inventory.
- Applicable Forest Management Agreements
- Any Data Sharing Agreement in place for individual operators

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**Cross- Reference**

- **Interim Forest Management Planning Manual**
- Directive 97-18 "Release of Timber Information"

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**Approved**

