

**Forest Service Handbook
National Headquarters (WO)
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Forest Service Handbook 2409.14 – Timber Management Information System Handbook

Chapter 20 - Timber Inventory and Planning

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Responsible Staff:

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Digest: Following is an explanation of the changes throughout the directive by section.

20: Updates references throughout the chapter. Replaces all references to sections 71-78 with references to the Sales Tracking and Reporting System (STARS) User Guide and the Timber Activity Control System (TRACS) Data Dictionary and User Guide. Corrects title of the Timber Activity Control System and its reports.

23: Requires the use of TRACS for maintaining forest land and resource planning data.

23.11 - 23.14: Adds new sections providing timeframes for forest plan timber information updates for each TRACS database.

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21 - Timber Inventory and Planning (ET11)

Timber inventory and planning provides the information needed to develop and prepare the timber resource portion of the forest plan including timber inventory and analysis of data, determination of rotations, development of harvest schedules, and regulation of cut. In this activity include work relating to the timber portions of the forest plan, maintenance of plans and forest management control records, and timber sale schedules. See chapter 30 for related timber sale information.

When reporting timber inventory and planning information, include all activities required by FSH 1309.16, National Activity Structure Handbook, and information described in sections 22-25.

22 - Timber Resource Inventory (ET111)

Use timber inventory to provide a detailed account of the timber resource characteristics and quantity.

22.1 - Extensive Timber Inventory (ET111-1)

In extensive inventory, include the preparation of an inventory plan, sampling design, organizing and training for the inventory project; photo mapping, photo sampling, field sampling, and maintenance of quality control; and inventory data compilation. Also, include establishment and maintenance of the timber inventory records system.

22.2 - Silvicultural Examination (ET111-2)

Use silvicultural examination as the process for gathering detailed in-place field data needed to determine management opportunities and direction for the timber resource within a small subdivision of forest area, such as a stand or a compartment. Gather data needed to allow determination of the current condition of a stand and provide a basis for silvicultural prescriptions. Include in the examination a determination of the tree size, age class, stocking, and species to feature in management. Include entry of information into stand record systems (FSM 2492.2) or data bases.

22.3 - Growth and Yield Permanent Plots (ET111-3)

Use such plots to provide for maintenance and collection of data from permanent plots to enable accurate projections of growth and yield (FSM 2492.2) across the forest. See the Timber Permanent Plot Handbook, FSH 2409.13a.

23 - Timber Resource Planning (ET112)

Implement timber resource planning through the forest land and resource management planning process. Include analysis of compiled inventory data, development of alternative harvest schedules, preparation of plans through the National Environmental Policy Act (NEPA) process, and approval by the Regional Forester. Include annual maintenance and updating of the plan, including land base changes, insect and disease loss, silviculture modifications, and so forth, which result in changes in the harvest schedule, which can be accomplished through procedures established in the plan. Also, include plan revisions, such as scheduled 10-year revisions or major revisions caused by catastrophic losses or other factors. Use the Timber Activity Control System (TRACS) to maintain a record of timber data as shown in FSM 2492.11-.13.

23.1 - Forest Plan Timber Information

Use TRACS to maintain information on the timber aspects of forest plans. (FSM 2492.1) Update TRACS data bases to ensure that information is consistent with approved plans.

23.11 - Land Suitability Classification (TRACS-LSC)

Revise entries into this data base within 60 days of the date the record of decision to implement a forest plan or revision is signed. Update information within 30 days after a major land adjustment is made through a plan amendment.

23.12 - Forest Plan Timber Summary (TRACS-FPTS)

Revise entries into this data base within 60 days of the date the Regional Forester signs a record of decision to implement a forest plan or plan amendment or revision to ensure that information reflects the allowable sale quantity and other data portrayed in the forest plan.

23.13 - Program Sale Statement (TRACS-PSS)

Transfer required components (sec. 24.4) of previous fiscal year's data from Sales Tracking and Reporting System (STARS) into this data base by November 30 each year. Include only sales that have passed Gate 6 (sec. 32.16).

23.14 - Special Unit (TRACS-SU)

Use of this part of TRACS is optional. Entries should be made within 60 days of the date the record of decision to implement a forest plan or revision is signed, if this part is used.

23.2 - Timber Inventory - Post Stratification (ET112-1)

After completion of the forest plan, reorganize the timber data into strata/management areas to enable implementation of the plan. Stratify the timber data used to develop the plan into categories that fit the management areas in the plan.

23.3 - Timber Stand Analysis and Modeling (ET112-2)

After the field data for stands are collected, compiled, and summarized (sec. 23.2), determine a basic stand treatment need for timber production purposes or for enhancement of some other resource purpose consistent with forest plan goals. Identify and record the treatment need using codes, such as silvicultural needs activity codes, shown in the TRACS system. This step provides the basic data, evaluations, analysis and treatment needs from which detailed interdisciplinary prescriptions are prepared. Do not include detailed written prescriptions (sec. 23.4) for the stands.

23.4 - Silvicultural Prescription (ET112-3)

Develop written prescriptions (FSM 2470.03 and 2492.2) which describe the current stand condition and the desired future stand condition. Include silvicultural practices, cutting methods, or other management actions necessary to achieve the desired stand condition. Include time tables of priorities, events, needed inputs and expected outputs, and an identification of the "featured" stand for management and regulation purposes. The compartment prescription is a composite of the prescription made for stands and other resource units. Include a description of the resources, problem areas and management opportunities of the compartment and its relationship to larger management areas. The prescription should contain the management decisions made to improve the condition and output of the selected resources. Include tabulations of resource statistics, action programs by priority, needed inputs, and expected outputs. Include entry of information into stand record systems or data bases.

24 - Required Information

Enter the Forest Service region and Forest Service administrative units as defined in FSH 6609.15, Standards for Data and Data Structures Handbook, for all reports listed in sections 91.4 through 91.43, and as specified in sections 24.1 through 24.4.

24.1 - Land Suitability Class (TRACS-LSC)

(See FSM 2492.11 for specific report information.) Record the following:

1. Timberland Suitability Class (TRACS Data Dictionary and User Guide) (sec. 70.6).

2. Forest Type Group (TRACS Data Dictionary and User Guide).

3. Area Acres (TRACS Data Dictionary and User Guide).

24.2 - Forest Plan Timber Summary (TRACS-FPTS)

Record the following (FSM 2492.12):

1. Timberland Suitability Class (TRACS Data Dictionary and User Guide).

2. Harvest Activity (TRACS Data Dictionary and User Guide and User Guide).

3. Area Acres (TRACS Data Dictionary and User Guide and User Guide).

4. Timber Yield Component (TRACS Data Dictionary and User Guide).

5. Forest Type Group (TRACS Data Dictionary and User Guide).

6. Product (TRACS Data Dictionary and User Guide).

7. Volume MCF (TRACS Data Dictionary and User Guide).

8. Volume MBF (TRACS Data Dictionary and User Guide).

24.3 - Program Sale Statement (TRACS-PSS)

(See FSM 2492.13 for specific report information.) Record the following:

1. Fiscal Year (TRACS Data Dictionary and User Guide).

2. Planned or Accomplished (TRACS Data Dictionary and User Guide).

3. Timberland Suitability Class (TRACS Data Dictionary and User Guide).

4. Fiscal Quarter (TRACS Data Dictionary and User Guide).

5. Harvest Activity (TRACS Data Dictionary and User Guide).

6. Area Acres (TRACS Data Dictionary and User Guide).

7. Timber Yield Component (TRACS Data Dictionary and User Guide).

8. Forest Type Group (TRACS Data Dictionary and User Guide).
9. Product (TRACS Data Dictionary and User Guide).
10. Volume MCF (TRACS Data Dictionary and User Guide).
11. Volume MBF (TRACS Data Dictionary and User Guide).

24.4 - Required Sales Tracking and Reporting System (STARS) Data Elements

The following data elements must be in the Sales Tracking and Reporting System (STARS) to enable an extract of required TRACS-PSS information from STARS (FSM 2493.1 and sec. 33):

1. Sale Subunit (STARS User Guide).
2. Sale Subunit Acres (STARS User Guide).
3. Timberland Suitability Class (TRACS Data Dictionary and User Guide).
4. Harvest Activity (TRACS Data Dictionary and User Guide).
5. Plant Species (FSH 6609.15)
6. Product (STARS User Guide).
7. Unit of Measure (STARS User Guide).
8. Timber Yield Component (TRACS Data Dictionary and User Guide).
9. Timber Quantity (STARS User Guide).

25 - Optional Planning Information

The following components are commonly used as optional planning data elements. Their use is optional, unless required by the region, forest, or district.

1. Management Area (TRACS Data Dictionary and User Guide).
2. Working Group (TRACS Data Dictionary and User Guide).
3. Subunit (FSH 6609.15).
4. Area Identifier (TRACS Data Dictionary and User Guide).

5. Forest Type (TRACS Data Dictionary and User Guide).
6. Site Productivity Class (TRACS Data Dictionary and User Guide).
7. Gross Growth Per Unit Area (TRACS Data Dictionary and User Guide).
8. Mortality Per Acre, Cubic Feet (CF) (TRACS Data Dictionary and User Guide).
9. Ecological Type (FSH 6609.15).
10. Timber Activity Method (TRACS Data Dictionary and User Guide).
11. Timber Yield Component, Non-Interchangeable Component (NIC) (TRACS Data Dictionary and User Guide).