POSTING NOTICE: Supplements are numbered consecutively by Handbook number and calendar year. Post by document name. Remove entire document and replace with this supplement. Retain this transmittal as the first page of this document. The last supplement to this Handbook was Supplement 2409.17-94-2 to 2409.17,8.5-8.6.

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Superseded</th>
<th>New (Number of Pages)</th>
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<tr>
<td>2409.17,8.0</td>
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<td>11</td>
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<td></td>
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<td>2409.17,8.1,Ex.08</td>
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Digest:

8.1 - Revises and updates entire chapter to include direction for Regions 1, 2, 3 and 4. Future supplements to this chapter will be issued concurrently to all four regions enabling silviculture programs to be managed consistently throughout the entire area.

/s/ John M. Hughes, for

HAL SALWASSER
Regional Forester
CHAPTER 8 - SILVICULTURAL EXAMINATIONS, PRESCRIPTIONS, AND EVALUATIONS

The direction included in this chapter has been developed through the coordinated effort of Regions 1, 2, 3, and 4. This coordination was initiated by the leadership of each region under the concept of shared services. All four regions must concur on future changes to this direction.

8.1 - Silvicultural Examinations. (Direction applies to silviculture prescription process also). The role of silvicultural prescriptions is to translate land management objectives into silviculturally sound treatments that can be implemented as part of the forest vegetation management program.

1. Purposes of a Silvicultural Prescription. A prescription serves three purposes:

   a. To develop treatment alternatives that are technically correct and ecologically sound.

   b. To clearly show how the proposed and alternative treatments will develop a stand that can meet land management objectives.

   c. To provide the necessary direction for implementation of the preferred treatment.

2. Land Management Objective. The land management objective and related guidance provides the basic direction for development and implementation of a silvicultural prescription. Develop the prescription to benefit all allocated resources and to provide an acceptable level of protection from windthrow, fire, insects, and disease.

3. The Prescription Area. Write Prescriptions for all cultural treatments on forest stands. Forest stands include stands where conifers and/or hardwoods are in sufficient quantity to be a primary site influence.

The area defined by a forest stand may be adjusted for differences in: (1) physical site factors, and (2) land management objectives.

In most cases, differences in vegetation, timber, site factors, and management guidance between stands dictate that separate prescriptions be made for each stand. When these differences are not significant enough to change the prescription from one forest stand to another, stands may be combined for prescription writing purposes.

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4. **Documentation.** The prescription must be a written statement that can be used and preserved as a single and complete document.

Each step of the prescription process requires documentation to meet the direction of FSH 2409.17 and to adequately fulfill the three purposes of a prescription. Ensure documentation is factual and brief. The prescription document is a technical report written for people working in the general field of forestry. It may require interpretation when used by the public and other professions.

5. **Storage and Retention.** Store written silvicultural prescriptions in the stand/LOCATION-SITE folder component of the Timber Stand Management Record System (TSMRS) or the Rocky Mountain Resource Inventory System (RMRIS) as applicable to the various Regions. (Regions 2-4 now use Location for compartment and Site for stand.)

6. **Responsibility.** A Certified Silviculturist who has met the four Region standards for experience, education, and examination should prepare or supervise preparation of prescriptions (FSH 2409.17). A Certified Silviculturist must review all prescriptions, and silviculture prescriptions shall be approved by a line officer with the signing of the decision document. Date each prescription and show the name of the author. If the author is not certified, record the reviewer's name and date of review also.

7. **Broadscale Assessment.** Base the prescription on the characterization, assessment, and synthesis of ecological, social, and economic attributes for the host landscape. The scale used for the landscape assessment should be effective for addressing the majority of questions at the forest planning level. Include the use of hierarchies in the landscape assessment to address questions at larger and smaller scales. Define a desirable range of conditions for ecological, social, and economic considerations to illustrate where ecosystems can be sustained in the long term. Express the range of conditions in measurable terms to facilitate comparison with desired conditions specified in the Forest Plan.

8. **Prescription Process.** A sequence of five steps is followed to complete the prescription process. Each step serves a specific function and supports the next step in the process. The steps are: Stand Examination, Diagnosis, Detailed Prescription, Implementation, and Monitoring and Evaluation.

   a. **Stand Examination.** The stand examination step may have been completed some time before the diagnosis and prescription is prepared.

   (1) Begin this step by identifying the stand which will be the subject of the prescription. If the stand is new, delineate it on the index map of the TSMRS or RMRIS and the compartment/location, subcompartment (if used), stand number/site, and area in acres must be submitted to the automated portion of the data base.
(2) Before the stand is examined, the silviculturist should review the land management objective and the broadscale analysis, to ensure that data are obtained for all pertinent stand attributes.

(3) Make an office search for data about the site before going to the field so that missing information can be gathered with the stand examination.

(4) Regional stand examination procedures provide the information needed to diagnose treatment needs and prepare detailed prescriptions. The kinds and amounts of data gathered and their reliability will depend upon the resources to be managed and intensity of management to be applied. Obtain enough information to adequately describe the current condition of the stand or nonstocked area in relation to the objectives.
The following exhibit identifies information required as part of the silvicultural diagnosis and prescription document.

8.1 - Exhibit 01

DOCUMENTATION STANDARDS FOR THE STAND EXAMINATION STEP

(1) Stand Identification. Minimum requirements: compartment, subcompartment (if used), stand number, (or location and site) and area.

(2) Land Management Objective. Minimum requirement: The land management direction from the Forest Plan for the area covered by the prescription must be stated. Lengthy management direction should be summarized and its source referenced, including direction resulting from landscape level analysis.

(3) Site Data. Although information about the site is recorded elsewhere, it is an integral part of the technical justification for the treatment and will, therefore, be documented as part of the prescription.

Minimum requirements:

(a) slope
(b) aspect
(c) elevation
(d) soil description
(e) habitat type
(f) relative productivity
(g) ecological unit
(h) hydrology: (as directly related to stand/site)
(i) limiting factors specific to the site: For the above factors, describe if a combination of site conditions exist that may make it difficult for the site to regenerate within 5 years if a regeneration harvest were to occur. Some considerations are: high, or very low micro site temperatures, very poorly drained soil, a high amount of exposed surface rock, flood potential, soil erosion or compaction potential, and so forth. Are mitigation measures necessary?

(4) Stand Data: This information shall be documented in the Diagnosis Step.
b. **Diagnosis.** The diagnosis of treatment needs is the most important element of the prescription process. The diagnosis step begins during the National Forest Management Act (NFMA) analysis, prior to the analysis of the proposed action during the NEPA process, using the broadscale analysis to help direct which stands should be considered for treatment in the proposed action. The diagnosis provides the NEPA ID team and the line officer with a basis to build alternatives considered in the NEPA process. The diagnosis must show that alternative treatments will result in a stand that, over time, will best contribute to achieving resource objectives for the area. Treatment alternatives are those cultural practices that will contribute to the desired condition of the landscape.

A stand description compares the existing condition to a defined DESIRED STAND CONDITIONS (DSC), and identifies treatments that will effect the indicated change. This can be an iterative process as there may be a need to define alternative desired conditions or treatments to respond to NEPA issues during scoping and alternative development in the NEPA process (see exhibit 06). Use the following steps for all silvicultural prescriptions.

**Step 1.** Each site has an inherent potential for stand development. Climate, slope, aspect, elevation, soil properties, and fire regime, all combine to control the character of forest vegetation that can occur on the site. Biological factors like competition, insects, and disease influence successional patterns over time. Based upon knowledge of earth science, forest and landscape ecology and biometrics, the silviculturist will describe the sequence of forest conditions (DSC) throughout the life of the stand (normally a rotation period) that are necessary for achieving resource objectives. The silviculturist must frequently involve other disciplines in this determination. In some cases very similar sites may have options for more than one DSC pathway to be followed depending on landscape level composition and structure desired condition objectives. Develop the DSC(s) with an understanding of how current, and historic disturbance patterns influenced stand development, and represent a portion of the landscape composition and structure appropriate to the site being considered. The silviculturist must describe how desired stand conditions will benefit resources at the stand and landscape level.

**Step 2.** The silviculturist should compare the existing stand conditions to the DSC. Base the comparison on those stand attributes that are important to the resource objectives described by the Forest Plan for the site and the ecosystem. The comparison of the existing stand to the DSC must follow a sequence whose logic meets the legal requirements to consider a full range of alternatives. (1) The comparison should first consider if the existing stand is similar enough to the DSC to defer treatment. In making this comparison the silviculturist should base judgment upon acceptable limits for the desired stand conditions. For example, the optimum stand density for a young sawtimber stand may be 110 ft$^2$/ac, but acceptable limits may range from 80 to 130 ft$^2$/ac. An optimum species composition for a given resource objective may be 70 percent seral species in the
overstory, but a minimum of 50 percent would be acceptable. Determine acceptable limits before comparison to the existing stand and base on resource management requirements and an understanding of the historic range of variation of composition and structure in the ecosystem.

(2) The comparison should next determine if the existing stand can be modified by intermediate cutting, planting, burning, or other appropriate measures to restore composition, structure and ecosystem function, and to better meet resource objectives. Describe such cultural treatments in enough detail to allow a reasonable basis for choice from a final list of alternatives. Modifications must be operationally feasible and ecologically sound. Defer economic considerations to a later step in the prescription process.

(3) If the existing stand does not compare favorably with the defined desired stand conditions and cannot reasonably be modified to do so, the silviculturist must next consider alternatives to replace the existing stand.

The regeneration cutting method must adhere to requirements of the Forest Plan. Cutting methods must be related to the resource management requirements and objectives for the site and the larger ecosystem associated with the site, as well as existing stand conditions.

(4) If the existing stand cannot be modified to achieve the target conditions and cannot be replaced because of reasons external to the stand, the silviculturist should consider the opportunity to stabilize or improve the existing condition. Alternatives may include sanitation or salvage cuttings that will help to hold the stand until a regeneration cutting can be carried out. Intermediate cuttings must leave the stand in a condition that is favorable for the allocated resources regardless of opportunities to capture imminent mortality. The diagnosis should derive alternatives that are related to stand conditions that will exist following the proposed harvest.

(5) Finally, the silviculturist may consider deferring treatment because conditions external to the stand do not permit any treatment at the time of diagnosis. In this situation treatment is deferred not because the existing stand meets resource requirements, but because a treatment of any kind is not possible. An example of this situation may be a stand in an area at the hydrologic limits.

Step 3. Summarize a reasonable range of alternatives from the foregoing comparison of the existing stand to the desired stand condition. A reasonable range of alternatives should usually include consideration of both even age and uneven age systems. All alternatives should be attainable with current practice and technology. The silviculturist must describe how the treatment alternatives will produce a stand that is like the desired stand condition.
When alternative treatments have been identified, specify actions that will carry the stand through the next regeneration period. This must be done to assure that the direction set by the treatment need is reasonable, and to develop information for an economic comparison of alternatives completed during the NEPA process.
Estimate Volume yields for the sequence of management actions identified for each alternative. Assignments of values for costs to be incurred and volumes produced will provide the basis for an economic analysis completed for the project in the NEPA document.

The silviculturist should recommend a tentatively preferred alternative with a brief explanation for the selection.

8.1 - Exhibit 02

DOCUMENTATION STANDARDS FOR THE DIAGNOSIS STEP

Stand data is the basis for making a diagnosis that will result in a viable treatment. The prescription document should not be used to summarize general data about the forest stand. The TSMRS or RMRIS (FSM 2490) serves that function. Stand data cited in the prescription should be directed specifically at determining the ability of the subject stand to satisfy management direction. Stand data should be grouped by attributes to allow an efficient comparison between the existing stand and the alternative desired stand conditions. The most useful stand attributes are:

- **Structure** - age and size class distributions, relationship of crown canopy levels.
- **Composition** - species distribution by stand structure.
- **Density** - trees per acre, basal area per acre, or stand density index.
- **Condition** - status of insects, disease, and successional stage.
- **Growth** - volume or height.
- **Fuels** - size, arrangement, loading.
- **Arrangement** - location of the stand related to surrounding area, stands, drainages, and so forth.
Minimum requirements:

(1) Description of the existing stand by important stand attributes.

(2) Description of desired stand conditions with a narrative documenting how each DSC will benefit resources.

(3) Comparison of the existing stand with each identified DSC.

(4) Conclusion of a treatment need for each alternative with a description of how the treatment will achieve the desired stand conditions.

(5) Sequence of steps and their timing to carry each alternative through the next regeneration period.

Suggested format: Description of present and DSC can be brief statements or entries in a tabular summary. Comparison of the present stand to each DSC and conclusion of treatment need can be a short narrative included in a matrix format. Sequence of management steps can be a simple listing in a tabular format (see examples in exhibits 07 and 08).

Economic Analysis

Minimum requirement: Costs and benefits, must be displayed to allow for an economic analysis to be completed for the entire project.

Suggested format: Tabular format summarizing the costs and benefits for all alternatives identified in the diagnosis.

Preferred Alternative

The silviculturist should indicate a tentatively preferred treatment and the reasons for its selection.

c. Detailed Prescription. Do not undertake this step until a decision notice or record of decision has been issued by the responsible forest officer. The detailed prescription is prepared only for the selected alternative. It will direct the next sequence of entries in the stand, but should not be written for a long time period such as the entire rotation.
8.1 - Exhibit 03

DOCUMENTATION STANDARDS FOR THE DETAILED PRESCRIPTION STEP

Correct implementation of a prescription depends upon a clear set of instructions. These instructions are provided by documentation of the detailed prescription. To ensure accurate communication between the author of the prescription and the persons responsible for layout and supervision of a project, documentation must be concise and yet contain necessary detail.

Documentation of the detailed prescription will provide the information required for entry of planned activities into the stand record system.

Minimum requirements: The detailed prescription shall list the sequence of actions required to carry out the treatment. The timing of each action shall be noted. Specifications for each action shall be stated in enough detail to insure that implementation can meet the intent of the prescription.

Required format: Detailed Silvicultural Prescription Summary similar to exhibits 07 and 08.

d. Implementation. This step bridges the gap between the conceptual prescription and a project. If the prescription process has been followed carefully, there are likely to be few changes as the project is accomplished. However, some changes are unavoidable and they must be accounted for in the implementation step. If changes will alter the treatment need or develop a stand that is significantly different from the stand objective described in the diagnosis step, the responsible Certified Silviculturist should consider reentering the prescription process at the point of change and developing an amended prescription. Whenever a prescription is amended, the silviculturist, in consultation with others if necessary, must consider whether or not an amendment to the environmental analysis or impact study is also needed.

Successful implementation of silvicultural prescriptions may require:

(1) Paper layout and review of the project to check its workability in relation to other resources, transportation, and logging systems.

(2) Written marking guides.

(3) Training tree markers.

(4) Participation in selection of contract clauses.
(5) On-site monitoring and consultation with contract administrators and crew supervisors.

8.1 - Exhibit 04

DOCUMENTATION STANDARDS FOR THE IMPLEMENTATION STEP

The documentation involved with implementation of a prescription depends upon a host of forms, records, and reports that are already covered by Manual direction (for example: KV plan, Timber Sale Report, Contracts, and so forth). A record of prescription changes made during the course of implementation should be kept by the responsible silviculturist.

Minimum requirements: Note changes to the detailed prescription form retained in the stand folder. Each notation must be initialed and dated.

e. Monitoring and Evaluation. The responsible silviculturist must evaluate every implemented prescription to determine if the treatment was achieved according to specifications. Evaluation can be made of any step or combination of steps in the prescription process.

8.1 - Exhibit 05

DOCUMENTATION STANDARDS FOR THE MONITORING AND EVALUATION STEP

A record of evaluations shall be retained as a permanent part of the stand folder.

Minimum requirements: All evaluations must be written, signed, and dated.

9. Coordination with Environmental Assessment. Direction on how the silvicultural diagnosis and prescriptions fit into NEPA documents can be found in "Our Approach to Effects Analysis-Desk Reference" (a Region One Publication) under the chapter of clearcutting and vegetative treatments, and as shown in exhibit 06.
### 8.1 - Exhibit 06

<table>
<thead>
<tr>
<th>NFMA/NEPA PROCESS</th>
<th>SEQUENCE</th>
<th>SILVICULTURAL PRESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Land Management Plan</td>
<td>1</td>
<td>FP Management Prescriptions And Yield Tables Developed (Includes Strategy For Forest Regulation), Forest Wide DESIRED FUTURE CONDITION (DFC) Identified.</td>
</tr>
<tr>
<td>Landscape Characterization Assessment and Synthesis</td>
<td>2</td>
<td>Define A Range Of Conditions For Sustainability Of The Ecological, Social And Economic Attributes For The Sustainability Of The Ecosystems. (INCLUDES COMPOSITION AND STRUCTURE)</td>
</tr>
<tr>
<td>Proposed Actions Identified (Includes Amendments to Forest Plan if Appropriate as a Feedback Loop to 1)</td>
<td>3*</td>
<td>Diagnosis Completed For Stands In Proposed Actions, Includes Identifying DESIRED STAND CONDITIONS (DSC) Within The Range Of Sustainability or Term, While Consistent With Forest Plan Goals In 1 Above Applies For Both Project and Forest Plan Amendment Actions.</td>
</tr>
<tr>
<td>Development of EA, EIS, or CE</td>
<td>4</td>
<td>Alternative DSC and/or Treatments Identified For Stands Included In The Project To Address NEPA Issues, If Not Covered In 3 Above.</td>
</tr>
<tr>
<td>Alternatives Developed</td>
<td>5</td>
<td>Final Silvicultural Prescription Prepared.</td>
</tr>
<tr>
<td>Decision Approved</td>
<td>6</td>
<td>Implementation.</td>
</tr>
<tr>
<td>Implementation</td>
<td>8</td>
<td>Monitoring And Evaluation (Includes How Well DSC Is Developing And If It Is Achieving Goals in 1&amp;2 above).</td>
</tr>
</tbody>
</table>
* Point at which Silviculture Diagnosis and Prescription process begins.
8.1 - Exhibit 07

EXAMPLE DIAGNOSIS AND PRESCRIPTION FROM REGION 2

DIAGNOSIS AND PRESCRIPTION PROCESS

**Diagnosis.** The diagnosis can be accomplished by addressing two questions on the basis of stand data. These questions are:

1. How can the existing stand be treated to develop a desired stand condition that will best satisfy Forest Plan and management direction?

2. If the existing stand cannot be treated to meet Forest Plan and management objectives, how and when can it be harvested and replaced with a more desirable stand that will achieve a desired stand condition?

To answer these questions, the silviculturist must be able to visualize and describe one or more desired stand conditions that can meet the requirements of the land management goals for the stand. Frequently the silviculturist must refer to written guidance from other disciplines or must discuss alternative stand descriptions with other resource specialists to develop desired stand conditions and subsequent treatment(s) that can satisfy multiple resources.

The description of desired stand conditions must guide the silviculturist in prescribing future stand development.

Comparison of the existing stand with future stand objectives, or desired conditions will provide the basis for identifying stand treatment needs (alternatives). Site data should be grouped by attributes to allow an efficient comparison between the existing stand and the desired conditions to meet management objectives.

Stand diagnosis documents must include a comparison of existing stand attributes and future stand attributes for each considered alternative. Diagnosis documents should be attached to stand description documents which are retained in the District stand records.

Example of how this information may be summarized follows.
8.1 - Exhibit 07--Continued

EXAMPLE 1

STAND SUMMARY PAGE TYPE 5

<table>
<thead>
<tr>
<th>DATA BASE NAME</th>
<th>LOCATION</th>
<th>SITE</th>
<th>UPDT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1301</td>
<td>110115</td>
<td>9</td>
<td>1</td>
</tr>
</tbody>
</table>

*****RIS CARD TYPE 5 DATA*****

TREE SURVEY TYPE: 3
TREE SURVEY DATE: 8208
FOREST TYPE: DF
STAND SIZE CLASS: 9
PCT NONSTOCK: 0
ORIGIN DATE: 1827
DBH: 15
HT: 65
BA: 220
TOTAL TREES: 374
LARGE TREES: 174
SEROTINY: 0
DAMAGE: 79 (SWP& CRK)
MISTLETOE: 0 (ABSENT)
BEETLE RATING: 0

*****LIVE TREE STOCKING*****

<table>
<thead>
<tr>
<th>BASAL AREA X DBH</th>
<th>BASAL AREA X SPECIES GROUP(1&quot;)+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>FIR</td>
</tr>
<tr>
<td>5-8</td>
<td>20</td>
</tr>
<tr>
<td>9-15</td>
<td>0</td>
</tr>
<tr>
<td>16-99</td>
<td>0</td>
</tr>
</tbody>
</table>

TREES(1+): 174
BAA: 220
QMD: 15.2
SDI: 340
AGE: 160
MAI: 31
PAI: -17
YIELD: 71
SCRIB(7+): 22,992
CUBIC(7+): 5,064

*****WRITE IN CURRENT CONDITION DATA*****

HABITAT TYPE: DF/Ninebark
GROWTH COMMENT: Negative net growth due to mortality in DF.
CONDITION: Spruce Budworm in DF causing mortality.
ARRANGEMENT: Adjoins nonstocked and Ponderosa stands.
FUELLOADING: Moderate-Increasing due to mortality.

*****WRITE IN DESIRED STAND CONDITION DATA *****

DESIRED STAND CONDITION A

HABITAT TYPE: DF/Ninebark
GROWTH COMMENT: Positive net growth
STRUCTURE: Mixed conifer-DF,ES,&
CONDITION: Spruce Budworm endemic
Example 1--Continued

COMPOSITION: 20 BA of Fir, 20 BA of SP, 80 BA of DF.

ARRANGEMENT: Adjoins nonstocked and Ponderosa stands.

DENSITY: BA of 120 max to reach an open grown condition over rotation.

FUEL LOADING: Low/Moderate to maintain low risk of stand replacing fire.

DESIRED STAND CONDITION B

HABITAT TYPE: DF/Ninebark.

GROWTH COMMENT: Positive net growth.

STRUCTURE: Mixed conifer-DF, ES, & AF, Two aged/story.

CONDITION: Spruce Budworm endemic w/risk of mortality.

COMPOSITION: 20 BA of Fir, 60 BA of SP, 140 BA of DF.

ARRANGEMENT: Adjoins nonstocked and Ponderosa stands.

DENSITY: BA of 220 max to reach multi-story, dense stand over rotation to meet cover needs for interior nesting species.

FUEL LOADING: Moderate to maintain down logs at level needed for feeding sites and ground cover habitat.

ALTERNATIVES

A. Regenerate w/ shelterwood system to achieve condition B.
B. Sanitation and/or salvage cut to achieve condition A.
C. Defer treatment and examine for shelterwood prep cut in 10 years to achieve portion of condition B now with option to follow A or B in yr 10 and beyond.

DETAILED PRESCRIPTION  A detailed prescription should not be prepared until an alternative has been selected as best meeting the management objectives (Environmental Assessment). The detailed prescription is prepared to describe management activities through the next regeneration of the stand. Documentation of the detailed prescription will provide the information required for implementation of planned activities in the stand.

A report writer has been developed that automatically summarizes physical and vegetative data from the R2RIS system to aid in the stand prescription writing process. To generate this report from your R2RIS data base:

Enter your Data Base
@ADD S2K.RDSSITREPT/RWT-PRESCR
GENERATE ALL WH C800 EQ "Locsite": or
Example 2

Example 2 shows completed prescription and implementation schedule with the beginning physical and vegetative data being developed by the report writer from stand data in R2RIS data base.

STAND PRESCRIPTION SUMMARY

DATE: 11/30/94

PROJECT NAME: SWAT CREEK
FOR/DIS: 1302
LOCATION: 101405
SITE: 13

PHYSICAL AND VEGETATIVE DATA

| FOREST TYPE: | PP | AREA ACRES: | 29 | STAND SIZE CLASS: | 8-POLE |
| STAGE II SUR DATE: | 8105 | STAGE II SUR TYPE: | 4 | DATE OF ORIGIN: | 1908 |
| VISUAL QUAL. OBJ: | | TMBR COMPONENT: | 500 | SOIL MAP UNIT: | |
| SLOPE PERCENT: | 30 | ASPECT: | SE | ELEV. MIDPOINT: | 8000 |
| SITE INDEX: | | SITE SPECIES: | | TBR PRODUCTIVITY: | 52 |
| BASAL AREA: | 196 | TOTAL TREES: | | LARGE TREES: | 469 |
| DBH: | 8 | HEIGHT: | 52 | |
| GROSS CUBIC GROW: | 54 | CUBIC MORTALITY: | 19 | CUBIC SOUND DEAD: | 94 |
| NET GROWTH (PAI): | 35 | MAI: | 45 | |
| BF SW: | 5990 | | | |
| CUBIC SAW SW: | 1828 | CUBIC POLE SW: | 1512 | CUBIC SW: | 3340 |
| CUBIC SAW HW: | | CUBIC POLE HW: | | CUBIC HW: | |
| % SEROTINITY: | | MISTLETOE (DMR): | 7 | BEETLE RATING: | (UNKNOWN) |
| PLANT ASSOCIATION: | | | | |
| DEATH/DAMAGE: | 79 | TREES FORKED ABOVE MERCH | | |
| STAND STRUCTURE & DISTRIBUTION: | | WINDTHROW HAZARD: | | |

STAND DESCRIPTION AND HISTORY: (Supplement the above data with information on site condition, stand inclusions, regeneration, stand stress, unique features of stand, species mix &/or other appropriate information.)

MANAGEMENT GOALS, OBJECTIVES & DESIGN CRITERIA (FROM LMP, EA, ETC):
MGMT AREA: 07E-EMPHASIZE WOODFIBER PRODUCTION-SAWLOGS FROM LMP-SUITABLE FOR TIMBER PRODUCTION-REASON FOR TREATMENT

TREATMENT ALTERNATIVES & SELECTED ALTERNATIVE:
A. SEE STAND DIAGNOSIS
B. OTHER:

HOW TREATMENT WILL MEET FOREST PLAN AND MANAGEMENT OBJECTIVES
8.1 - Exhibit 07--Continued

Example 2--Continued

DESIRED STAND CONDITION (DESIRE(FUTURE CONDITION): If this is 2 or 3 entries out, explain how the first entry will serve to accomplish the final objective. Include year when objective will be met, number of trees/acre, and other appropriate facts that will describe the final management stand.
### 8.1 - Exhibit 07--Continued

Example 2--Continued

**IMPLEMENTATION OF SELECTED PRESCRIPTION (TIME & DESCRIPTION OF WORK)**

11/30/87

FOR/DIS: 1302  LOCATION: 101405  SITE: 13

**BASE FISCAL YEAR:**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ACTIVITY CODE</th>
<th>TIMING YEAR</th>
<th>FUND CODE</th>
<th>DESCRIPTION-INCLUDE MARKING GUIDES, MONITORING, ETC. THRU ENTIRE ROTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Thinning</td>
<td>4220</td>
<td>(1988)</td>
<td></td>
<td>Mark leave trees with blue paint. Leave 90 square feet per acre of basal area by removing trees in subordinate crown classes (suppressed intermediates, etc). Favor ponderosa pine leave trees; discriminate against Doug-fir with active budworm infestation and either species with serious disease or form defect. Stems/A. Before Cut: ___; After: ___ BA Before Cut: ___; After: ___ DBH Before Cut: ___; After: ___ Average Leave-Tree Spacing: ____ FT.</td>
</tr>
<tr>
<td>Site Evaluation</td>
<td>4345</td>
<td>(1992)</td>
<td></td>
<td>Complete a walk-thru stand exam. to determine if treatment specifications were met. Decide whether enough residual poletimber was damaged during logging to prescribe follow-up treatment.</td>
</tr>
<tr>
<td>Shelterwood - Seed Cut</td>
<td>4131</td>
<td>(2018)</td>
<td></td>
<td>Describe sequence of treatments, including slash treatment &amp; site preparation needed to accomplish the total job (Also special contract clauses.)</td>
</tr>
<tr>
<td>Site Evaluation</td>
<td>4347</td>
<td>(2022)</td>
<td></td>
<td>Complete a walk-thru stand exam. etc.</td>
</tr>
<tr>
<td>Shelterwood Removal Cut</td>
<td>- 4141</td>
<td>45</td>
<td></td>
<td>Describe sequence of treatments, including slash treatment and site preparation needed to accomplish the total job. (Also special contract clauses.)</td>
</tr>
<tr>
<td>Certify New Stand</td>
<td>4381 (2038)</td>
<td>50</td>
<td>Number of trees needed, species, spacing of trees and height.</td>
<td></td>
</tr>
</tbody>
</table>
8.1 - Exhibit 08

8.1 - EXHIBIT 08 IS A SEPARATE DOCUMENT.