

Oregon Forest Stewardship Planning Guidelines

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Introduction

Why a forest management plan? Oregon forest landowners are currently faced with the need to have a written management plan for an increasing number reasons, including cost-share programs, land use actions, carbon credit trading, and certification. In addition, management plans are a key tool for passing along property history and plans to the next landowner. From a landowner point of view, a single plan format is an important feature to easing the job of creating and updating the plan. These guidelines represent a multi-organizational effort to create a uniform plan format for Oregon forest owners seeking certification by the Oregon Tree Farm System or cost-share assistance through the Forest Stewardship Program administered by the Oregon Department of Forestry in partnership with the U. S. Department of Agriculture, Forest Service, State and Private Forestry Cooperative Programs. These guidelines and the associated plan template are an evolving work. Expect future versions which will continue to pull various plan requirements into a common form.

This management plan guide is a joint effort of Oregon State University's Forest Extension program, Oregon Department of Forestry, Oregon Tree Farm System and Oregon Forest Resource Institute. The guidelines and template were fully endorsed by the Oregon Tree Farm Board of Directors in November 2010 and by Oregon's State Forest Stewardship Coordinating Committee in January 2011. The guidelines are designed to serve landowners and others developing forest management plans to achieve a well-managed forest consistent with their personal ownership objectives.

Management plans may vary in length and complexity, but in all cases a plan should reflect management goals and objectives, current and desired conditions, and include a schedule of actions to achieve desired conditions.

Table 1 summarizes the required forest management plan elements that both meet: 1) National Forest Stewardship Forest Management Planning Standards as developed by the National Association of State Foresters (NASF) and the U.S. Department of Agriculture, Forest Service, State and Private Forestry's *Forest Stewardship Program*; and 2) *American Forest Foundation (AFF) 2010- 2015 Standards of Sustainability for Forest Certification* for the American Tree Farm System as implemented by the Oregon Tree Farm System.

Table 1: Required forest management planning elements.

<u>Plan Element:</u>	Forest Stewardship Plan / Oregon Tree Farm Plan
A. Cover Page	X
B. Plan Introduction	X
C. Landowner Goals and Objectives	X
D. Property Map/Woodland Description	X
E. Forest Vegetation/Timber Resource	X
F. Integrated Pest Management	X
G. Wildlife/Fish Habitat	X
H. Soils	X
I. Roads and Access	X
J. Water Resources	X
K. Forest Health	X
L. Invasive Species	X
M. Protection from Wildfire	X
N. Agro-forestry/Range	X
O. High Conservation Value Forest ¹ and Rare Species	X
P. Special Sites - Archeological, Cultural and Historic	X
Special Sites – Biological, Geological and Ecological	X
Q. Recreation	X
R. Aesthetic/Scenic Resources	X
S. Threatened and Endangered Species	X
T. Regulatory Compliance	X
U. Sources of Assistance	X
V. Tax and Business Management	X
W. Action Plan – Management Recommendations	X
X. Signature Page ^{2,3}	X
Y. NRCS ⁴ Plan Approval	X

1. High Conservation Value Forest: forests of outstanding and critical importance due to their environmental, social, biodiversity or landscape values. Oregon White Oak woodlands in the Willamette Valley are an example.

2. Plans written and /or approved by ODF must use “ODF Forestry Assistance Stewardship Plan Signature Page”.

3. Tree Farm Inspectors approve management plans as part of their field inspections.

4. U. S. Department of Agriculture, Natural Resources Conservation Service.

I. Principles of a Well-Managed Forest

A word about sustainable forest management: While landowners and foresters have long worked to sustainably manage their forests, their understanding of sustainability has evolved with our knowledge that continues to increase over time. There are no exact definitions of a well-managed forest, but there are sets of questions on issues or concerns that when appropriately addressed lead to a healthy sustainable forest.

Landowners' property goals and objectives play an important role in shaping the answers to these questions which address the economic, ecological and social components of a managed forest. The questions come from a number of international forums on forest sustainability, e.g., the World Summit on Sustainable Development, the United Nations Forum on Forests Proposals for Action, the Montreal Process Criteria and Indicators of Sustainable Forests, and the International Forest Industry Roundtable. Common to all these efforts is the premise that forests are a community of interacting plants, animals, soil, water, air, and people within a major landscape. The following set of standards and principles are taken from these efforts and can help when defining the goals and objectives, and in developing an action plan for future forest management activities.

Any system or program professing to result in a well-managed forest when implemented, should address the premise of the following principles in its requirements for planning, implementation and assessment:

1. Contribute to the Conservation of Biological Diversity of the Forest and the Landscape in which it resides
2. Maintain or Improve Productive Capacity
3. Maintain the Health and Vigor of the Forest and its Landscape/Watershed
4. Protect Soil and Water Resources
5. Consider Carbon Cycles
6. Consider Socio-Economic Benefits and Impacts
7. Comply with Laws and Legally Adopted Rules and Implement Applicable Guidelines in States Not Using the Regulatory Approach

Following this management plan process will allow a landowner to participate in Oregon Department of Forestry's Forest Stewardship Program, be certified under the American Tree Farm System, and take an important step toward participating in the U. S. Department of Agriculture Natural Resource Conservation Service's financial assistance programs. Individual programs require that a qualified representative review and certify that the management plan adequately addresses their planning standards.

II. Stewardship Plan Elements

This section identifies the parts or elements of a forest management plan and the kinds of information to be included in each. The current version of the template includes all elements necessary to meet the requirements of both Forest Stewardship and American Tree Farm System plans. The amount of information and the level of detail included under each element will vary by landowner but each element (A-Y) must be addressed somewhere in the plan.

A. Cover Page

The following items should be included on a cover page:

- Plan Development Date (usually the date the plan is approved)
- Period Covered by the Plan (usually 5 to 10 years as specified by landowner)
- Landowner name
- Landowner address
- Landowner phone
- Landowner e-mail
- Tract name or number
- Total tract acreage
- Total forested acreage
- Tract legal description
- Latitude and longitude (to a recorded survey monument on the property)
- Land use classification
- Watershed tract is located in
- Fire protection district
- Property tax classification (tax lot numbers)
- Tree farm number (if applicable)
- Tree farm certification date (if applicable)
- Seed zone
- Plan writer name
- Plan writer address
- Plan writer phone number
- Plan writer e-mail

B. Plan Introduction

Explain the plan's purpose and how it relates to the landowner and his/her values. The landowner is identified as the decision maker and the plan is identified as suggested courses of management. The management plan should be active, adaptive, and embody the landowner's current objectives, remain appropriate for the land involved, and reflect the current state of knowledge about forestry and natural resource management. Plan detail should reflect the forest and habitat complexity of the property in terms of both current and desired forest conditions as well as the management intensity planned for the property so as to meet landowner goals and objectives. This section should address the history of the property both before and after the present owner bought it.

C. Landowner Goals and Objectives

Goals and objectives are the foundation of a landowner's management plan. Management plans must clearly state landowner's objectives, describe what the landowner wants their forests to look like (i.e., desired forest condition), include management activities aimed at reaching landowner goals and objectives for how their forest should look in the future. For any given forest, a variety of management strategies and actions can promote a healthy, sustainable forest. The goals and objectives help define the detail to which various plan elements are discussed and drive the development of a prioritized list of future activities.

Goals are broad statements of desired conditions for the forest property, while objectives are specific and measurable actions that move the forest toward the landowners' goals. Goals and objectives are a part of an iterative process. As landowners learn more about their forests and its capabilities and limitations, their personal situations or forest markets change, or their forests are impacted by natural disasters, the goals and objectives often need to be modified or changed.

Most family forest landowners have an array of reasons for owning forestland. Describe what the landowner(s) want to achieve on the property. Include both goals and objectives. For example, if a landowner intends to make a profit from their operations, indicating profit as one of the objectives can help establish active management status for tax purposes.

D. Property Map/Woodland Description

Give landowner information, legal description, tax lot, boundary map, assessor's plat, property corners, adjacent property owners, and tax status. Include a map or maps of a scale appropriate for the property that show legend; property boundary; vegetation cover types; soil types; topography; access (including existing and proposed roads and culverts); water features such as streams/ponds; and other resource sites. In addition to the required maps, aerial photos of the property showing boundaries and other information can be very informative.

E. Forest Vegetation / Timber Resource

Describe the existing and desired forest types, including those in riparian areas. Include a forest type map for the property. Give the following details for each forest type: acreage, species mix, density, site index, size class, age, elevation, slope, and aspect. Site information can be in relative terms, if site index or site class information is not available. For uneven- or all-age stands, give age or age-class range.

Give forest inventory data including a range of detail appropriate for management opportunities. Owners' proprietary information such as volumes, grades and other detailed inventory information may be best listed in an appendix that can be separated from the plan if the plan is shared. Harvesting plans may also be separate from Stewardship Plans. List significant historical events for the stand such as date of origin, if planted or natural, past timber/product sales, timber stand improvements, reforestation, vegetation management, and loss events such as fire, insects and diseases.

List management opportunities for each vegetation type. Include tax-designations of forested lands, as applicable.

F. Integrated Pest Management

Describe strategy for controlling destructive insect, disease and/or weeds to achieve tolerable levels of pests that will forward landowners' goals and objectives. The control strategy should combine in a complementary effort of chemical pesticides, mechanical cutting, and biological or cultural management. Pest can include invasive species and other organisms which threaten the forest.

G. Wildlife / Fish Habitat

Describe different species and habitat components present on the property and desired in the future, along with, special protection measures, and improvement activities needed to meet landowners' objectives. Include protected resource sites covered under the Forest Practices Rules (bird sites, threatened and endangered species, wetlands, etc.). Presence and abundance of snags and downed woody debris should be assessed for wildlife, but should also be noted for Forest Health considerations.

H. Soils

Use information from published soil surveys and other sources if available to identify major soil types, topographic and geological features and characteristics such as site index, slope stability, and soils limitations. Recommend tree species and other vegetation types based on soil types and landowner objectives. Identify erosion, drainage, and other problems through an inventory process. A good source for soil data is on the web at: <http://websoilsurvey.nrcs.usda.gov/app/>

I. Roads and Access

Make general road and culvert assessment recommendations for improving, developing, and maintaining road systems to ensure good water quality and fish habitat and to meet landowner objectives. Considerations to be taken into account include road locations, stream crossings, potential for sediment delivery, culvert size and condition, fish passage, and surface and road stability. Discuss skid trail design and access and identify any problems related to water quality and soil productivity. Identify road easements.

Identify road needs such as relocations, needed rebuilding, or resurfacing. Also identify any maintenance needs like rebuilding water bars, installing rolling dips, culvert cleaning, ditching etc. All recommendations should meet or exceed Oregon Forest Practices Rules requirements. Be sure that any road construction and maintenance coordinates with any planned timber/product harvests.

J. Water Resources

- Identify key water resources and the watershed context for the property. For example, list the named stream that drains the property and the next larger stream. Indicate FPA stream classifications.
- Identify streams, wetlands, ponds, and other special riparian considerations and their protection needs, consistent with landowner objectives.
- Identify water rights for both the property and registered domestic downstream water use as described in the Forest Practices Rules. Identify easements for water rights.
- Ponds and pump chances should be identified for fire protection. Assess and evaluate ponds for leaking and dike failure problems.
- If ponds are planned or work is needed, landowner should check with the Natural Resources Conservation Service (NRCS), or the Oregon Water Resources Department (WRD).
- Riparian areas and wetlands may be included here or treated as a separate section of the plan that addresses vegetation, inventory, needs, and opportunities for management/restoration.
- Identify opportunities for coordinated management with neighboring landowners.

K. Forest Health

Identify any insect, disease, animal damage, wind-throw and wildfire problems and associated management strategies to resolve problems, consistent with the landowner's objectives. Note pest management concerns and fuel levels on forest type maps (Section D).

L. Invasive Species

Identify any invasive plant or animal species problems present and associated management strategies to resolve problems, consistent with the landowner's objectives. Note invasive species concerns on forest type maps (Section D).

M. Protection from Wildfire

Provide a fire management plan that includes roads, turning radius, addressing, pump chance, water supply, fuel reduction, tree thinning, tree pruning, and creation of defensible space around structures. Note the fire protection district of property for structures and forestland. The Oregon Department of Forestry does **not** provide structural fire protection. Prescribed fire, if desired and/or used, must conform with state and local laws and regulations. The fire protection agency defending your forest can provide what is needed.

The following plan elements can be discussed by topic for the entire property or by forest vegetative type. This management plan template has them discussed by vegetative type/management unit.

N. Agro-forestry/Range

Identify resources and opportunities consistent with landowner's objectives. Include projected costs and revenues where applicable.

O. High Conservation Value Forests and Rare Species

High Conservation Value forests are defined as forests of outstanding and critical importance due to their environmental, social, biodiversity or landscape values". Many high conservation value forests in the United States that are globally, nationally or regionally significant have been identified and protected by federal or state government, or have been acquired or put under conservation easement by a land trust or similar environmental non-profit organization. There is no single central clearinghouse of information on high conservation value forests. Oregon White Oak in the Willamette Valley, important to both several wildlife and plant species, is an example of an Oregon high conservation value forest.

Due to the small scale and generally low-intensity of family forest operations, informal assessments of High Conservation Value Forests can be accomplished through consulting with experts or review of available information. Landowner objectives can also be used to identify forested areas on their property that are of outstanding or critical importance to them and as such be identified as a landowner High Conservation Value Forest. For those areas identified as High Conservation Value forests, the management plan should identify a management strategy for maintaining and enhancing these high conservation value forests.

Forest owners are also encouraged to make a good-faith effort to find out if there are known occurrences of a rare species on their property. Rare species may not

be listed on state or federal Threatened and Endangered species lists but may be considered by the landowner to be a rare occurrence on their own property even if regionally abundant. This often happens because the landowner's property is out of the main range for a given species or past management practices have extirpated the species from the local area. The management plan should identify actions and measure for maintaining and protecting rare species and their habitats.

NatureServe has an on-line database that can be searched at the county level for rare species [<http://www.natureserve.org/explorer/servlet/NatureServe>].

P. Special Sites – Archeological, Cultural, Historical, Geological, Biological, or Ecological.

Many landowners are very interested in preserving family, community and settlement history and associated resources such as cemeteries, homesteads, trails and other significant sites. List any measures needed to protect known archaeological or cultural resources to meet existing laws and landowner objectives. Cemeteries and gravesites should be protected as mandated by state and federal law. Human bones should be brought to the sheriff's attention. Cabins or buildings (>50 years old) should be identified and landowners are encouraged to consider these for preservation. State Historic Preservation Officer (SHPO) should be notified and asked to evaluate such properties. The SHPO will provide confidential consultation at no cost to the landowner.

Biological special sites include wildlife rookeries, fish spawning grounds, vernal ponds and shelters of hibernating animals. Many of these are required to be protected or subject to seasonal restrictions under the Oregon Forest Practices Act. Check with local ODF for protected resource sites and attendant obligations under the Oregon Forest Practices Act. Special ecological sites include relic old-growth, springs, glades, savannas, fens and bogs that could be identified as high conservation value forests. Special geological sites include terminal moraines, cliffs, and caves.

Any special site identified in the management plan must include provisions for its protection, especially during forest management activities.

Q. Recreation

If recreation is one of the landowner's objectives, identify resources and describe and plan for opportunities. Trails should be identified and assessed and design resources should be noted. Fire safety must be addressed in recreation planning. Include anticipated costs and revenues where appropriate.

R. Aesthetic / Scenic Resources

Describe opportunities to meet landowner objectives. Note any scenic highways and scenic rivers on or abutting properties. Identify opportunities for scenic

management and ways to improve aesthetics of forest practices. Forest owners can access a Forest Aesthetics Guide at <http://www.aces.edu/forestry/aesthetics/>.

S. Threatened and Endangered Species

Habitat on many landowners' property may be important for threatened and endangered (T&E) species. Identify known T&E species and describe management and protection measures. List activities to maintain or improve T&E species habitat that are consistent with the landowner's objectives. Landowner may want to include plant as well as animal species.

Forest management planning provides the opportunity for owners to make a good-faith effort to find out if there are known occurrences of a threatened or endangered species on their property. Terrestrial and non-migratory to sea fish threatened or endangered species lists are maintained by the US Fish & Wildlife Service in accordance with the federal Endangered Species Act. Nationally listed threatened or endangered freshwater fish that migrate to sea are listed by National Oceanic Atmospheric Administration's National Marine Fisheries Service (NMFS) The Oregon Department of Fish and Wildlife maintains Oregon's state endangered species list. Forest owners should consult directly with these agencies regarding regulatory requirements for species protection should there be known occurrences on the property. List sources (resource professionals, data bases, etc) used to determine if T&E species are known to exist on the property.

A comprehensive listing and status of either federally or state listed (or both) in Oregon can be found on the Oregon Department of Fish and Wildlife website at: http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp.

T. Regulatory Compliance

The plan and all management recommendations must meet or exceed the Oregon Forest Practices Rules as administered by the Oregon Department of Forestry, as well as other applicable local, state and federal laws and regulations. Most forest operations require filing of Notifications of Operations and a 15-day waiting period. Some operations require filing of a written plan (OAR 629-605). Landowner should obtain a current copy of the Oregon Forest Practice Rules.

U. Sources of Assistance

Describe available financial, technical, and educational assistance including investigating opportunities to market ecosystem services such as carbon sequestration, fish and wildlife habitat and water quality. List agencies and individuals that provide assistance to family landowners, including names, addresses, phone, and e-mails. Identify assistance needed to accomplish objectives.

V. Tax and Business Management

This section includes a series of statements related to tax and business management that should be included in plans. Include a statement that good record keeping can help landowners manage their assets, increase their revenues, and minimize their tax liability. Techniques and forms for recording may be helpful.

- Property tax – Identify existing property tax classification. Where appropriate, include information on the Forestland Program (and Small Tract Option [STF]) and what should be considered in deferring annual property taxes via the option.
- Income tax – Include a statement that timber harvest and other revenue generating activities generally produce a federal and state income tax liability. Tax credits are available for some management activities.
<http://www.timbertax.org>
- Estate tax – Include a statement that good estate planning can help to lessen tax liability when passing land to heirs and that landowners should seek good planning and tax advice.

W. Action Plan – Management Recommendations

Describe resource situations, desired tree species and forest conditions, and management opportunities by management unit (forest type-island or stand), including timber harvest and fiber production. These may include short-term and long-term recommendations.

Where applicable, address:

- Specific priorities for taking action
- Approximate time when the action is expected to occur (especially for practices to occur with the next 5 years).
- If applicable, more than one option for achieving a recommendation
- How recommendations meet landowner goals and objectives
- Financial aspects
- Tax implications/questions
- Estate planning/passage implications
- Timber harvest plans
- Assistance/new skills needed to accomplish the job and associated costs
- Dates or conditions that trigger the need to complete a recommendation.

A management activity schedule should be used to summarize the timing and priority of management recommendations. The Period Covered by the Plan on the cover page can be defined by the period beginning with the Plan Development Date through the date of the last scheduled recommended management action or other end date as specified by the landowner; but usually no more than 10 years.

X. Signature Page

The following elements should be included on a signature page:

- Date of plan
- Landowner name and signature
- Plan writer name, signature, and address and phone number

Plans written and/or approved by ODF must use the “ODF Forestry Assistance Stewardship Plan Signature Page”. Tree Farm Inspectors review and approve management plans for certification when inspecting properties.

Y. NRCS Conservation Plan Approval

Completing this forest management plan is the first step in completing an approved Conservation Activity Plan (CAP) – Forest Management (also known as a Forest Management Activity Plan) through the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). An approved CAP improves your priority in accessing voluntary technical and financial assistance available through NRCS and local Soil and Water Conservation District programs.

III Further Resources for Forest Stewardship Planning

- Management Planning for Woodland Owners: Why and How*, EC 1125, by M. Bondi and C. Landgren (Oregon State University Extension Service, Corvallis, 1983).
- Management Planning for Woodland Owners: An Example*, EC 1126, by C. Landgren and M. Bondi (Oregon State University Extension Service, Corvallis, 1983).
- Management Planning For Your Small Woodland: An Introduction*, Video Tape #1017, by M. Bondi and J. Hino (Oregon State University Forestry Media Center, Corvallis, 1996).
- Putting Together a Watershed Management Plan: A Guide for Watershed Partnerships* (Conservation Technology Information Center, West Lafayette, IN, 1997).
- Watershed Stewardship: A Learning Guide*, EM 8714, edited by D. Godwin, F. Conway and M. Cloughesy (OSU Extension Service, Corvallis, 1998).
- A Stewardship Handbook for Family Forest Ownerships*, National Association of State Foresters, 2005, 444 North Capitol Street NW, Suite 540, Washington DC, 20001, nasf@stateforesters.org

Web sites:

- American Tree Farm System Woodland Owner Resources –
www.treefarmssystem.org
- Federal and State Listed Threatened and Endangered Species
http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp.
- Forest Aesthetics Guide
<http://www.aces.edu/forestry/aesthetics/>
- National Timber Tax Website
<http://www.timbertax.org>
- NatureServe
<http://www.natureserve.org/explorer/servlet/NatureServe>
- Oregon Biodiversity Information Center –
<http://orbic.pdx.edu/>
- Oregon Conservation Strategy –
<http://www.dfw.state.or.us/conservationstrategy/>
- Oregon Department of Agriculture Plant Division: Noxious Weed Control –
<http://www.oregon.gov/ODA/PLANT/WEEDS/>
- Oregon Invasive Species Council – 100 Most Dangerous Invaders –
http://www.oregon.gov/OISC/most_dangerous.shtml
- Web soil survey data and mapping –
<http://websoilsurvey.nrcs.usda.gov/app/>