

Unit 3 Lesson 5 - Forest Management Plan

Forest management is all about taking care of forests in a way that keeps them healthy and balanced while also meeting the needs of people who use them. Here's an idea of what a forest management plan covers.

1. **Current Conditions:** First, we need to understand the forest. This means studying things like the types of trees, the wildlife that lives there, the soil quality, and how much water is available.
2. **Goals:** Once we understand the forest, we can decide what we want to achieve. Goals might include preserving biodiversity (the variety of life), preventing wildfires, providing clean water, or offering recreational activities like hiking and camping.
3. **Planning:** This is where we make a detailed plan to reach our goals. We might decide to selectively cut down certain trees to create space for new ones to grow, build firebreaks to stop wildfires from spreading, or set up designated areas for camping and picnicking.
4. **Implementation:** With the plan in hand, we put it into action. This could involve activities like planting new trees, removing invasive species that harm the forest, or setting up signs and trails for visitors to follow.
5. **Monitoring:** We don't stop once the plan is in place. We regularly check on the forest to see how it's doing. Are the trees growing well? Is wildlife thriving? Are there any signs of trouble, like disease or pollution?
6. **Adaptation:** Based on what we learn from monitoring, we might need to adjust our plan. Maybe certain areas need more protection, or we discover a new threat that we hadn't considered before.

You will be creating a management plan for the following site:

Site Description

A 28 year-old Douglas-fir plantation that was established following clearcutting by the previous owner. The trees are thick enough to make the forest dark with little sunlight reaching the floor. Without wind getting in moss is the sole groundcover and creeps its way up the lower trunks of the trees. The fall of conifer needles and dead branches from above, added to old chunks of wood left from the prior generation of forest, feed a diverse fungal community that flourish even during the driest times of the year. Sprinkled throughout the Douglas-fir plantation are periodic big leaf maple, most of which sprouted from the stumps of trees cut during the prior harvest. Alder also occurs in small gaps or along former skid trails, and bitter cherry, an early colonizer of any

disturbed site in this area, is still hanging on in the conifer canopy. Small openings in the canopy reveal diverse shrubs that crowd together in the available sunlight – elderberry, salmonberry, vine maple, bald hip rose, Oso berry, and others. These biodiverse gaps wait for the dense conifers to open up and allow them to fill in the space around them.

In dense stands composed of only moderately shade tolerant trees, like Douglas-fir, the live crowns of the individual trees begin receding, due to shade competition, as soon as the canopy closes across the stand. For a stand to remain in an optimal growth phase, at least 50-60 percent of the trees should retain at least 35% – 40% of their live crowns. With an average DBH of 9” and an average stocking density of 328 trees per acres, the density of the stand is in danger of competition causing decreased growth.

The latitude and longitude for the site is 46.798359, -122.924023



1. Forest Values and Goals

Which of the following values are important to you in managing a forest?

- Home/vacation property
- Keeping it natural
- Visually appealing
- Personal connection to the land
- Personal recreation
- Income from timber harvest
- Income from other forest products - (floral greens, beargrass, mushrooms, holiday wreaths)
- Fishing or hunting
- Wildlife viewing
- To pass on to children
- Long term financial support
- Other: _____

What would you like the forest to look like in 20 years?

What are your top three goals for managing this forest?

- 1.
- 2.
- 3.

2. Forest Current Conditions

Based on your goals, what information is most important from the site description?

What is the annual precipitation at the site? _____

What water sources are on or near the site?

What surrounds the property?

What do the site soils tell you?

3. Forest Management Actions

What type of management actions will you take to reach your goals? Think back to the history of WA forests, forest ecology, ethnobotany, wildlife management, tree volume and harvest methods lessons.

What is the outcome you hope to see from each management action?

What will the forest look like after 20 years of your management?