

TABLE OF CONTENTS

| | |
|---|-----------|
| INTRODUCTION | 3 |
| INTEGRATED FOREST MANAGEMENT OPERATIONS | 5 |
| Timber Harvest Operations..... | 5 |
| Overview of Timber Harvest Operations..... | 5 |
| Riparian Management..... | 6 |
| Best Management Practices | 7 |
| Threatened and Endangered Species | 7 |
| Summary of Operations by Basin | 8 |
| Forest Roads Management..... | 11 |
| Overview | 11 |
| Road Construction..... | 13 |
| Road Improvement..... | 13 |
| Road Access Management..... | 13 |
| Road Maintenance | 14 |
| Land Surveying..... | 14 |
| Young Stand Management..... | 14 |
| Rehabilitation | 15 |
| Site Preparation | 15 |
| Planting | 16 |
| Vegetation Management | 16 |
| Tree Protection | 16 |
| Precommercial Thinning (density management)..... | 17 |
| Fertilization..... | 17 |
| Pruning..... | 17 |
| Recreation Management | 17 |
| Recreation Program Overview | 17 |
| Facilities (Campgrounds, View Points, Trail Heads, etc.)..... | 20 |
| Forest Land Management Classification | 25 |
| Land Exchange..... | 25 |
| Other Integrated Forest Management Operations..... | 26 |
| Firewood | 26 |

| | |
|--|-----------|
| PLANNING (AND) INFORMATION SYSTEMS | 26 |
| Stand Level Inventory and Other Vegetation Inventories | 26 |
| Fish and Wildlife Surveys | 26 |
| Watershed Assessments | 27 |
| Research and Monitoring | 27 |
| Noxious Weeds | 28 |
| Other Planning Operations | 28 |
| PUBLIC INFORMATION AND EDUCATION | 28 |
| Forest Education and Interpretation..... | 28 |
| <i>Program Overview.....</i> | 28 |
| ADMINISTRATION | 29 |
| APPENDICES..... | 30 |
| A. Summary Tables | 30 |
| B. Pre-Operations Reports | 30 |
| C. Public Involvement | 30 |
| D. Additional Maps | 30 |

NORTH CASCADE DISTRICT

2010 ANNUAL OPERATIONS PLAN

INTRODUCTION

This operations plan describes the activities planned for the Santiam State Forest during the 2010 fiscal year. The 2010 fiscal year runs from July 1, 2009 to June 30, 2010. This plan summarizes the activities and projects that will take place in FY 2010 to achieve the goals, strategies and objectives of the Northwest Oregon State Forest Management Plan, North Cascade District Implementation Plan and the Santiam State Forest Recreation Management Plan as well as state and federal statutes and regulations, policies and voluntary measures. Under the current economic conditions, funding for some projects in this planning may be limited.

The 2010 Annual Operations Plan is broken into sections that discuss commercial forest management operations, roads and engineering, young stand management, recreation, land exchange, planning, public information and education, and administration. Summary Tables, Pre-Operations Reports, Maps and a Public Involvement appendix will be included in the final document.

A portion of this plan describes timber harvests and associated project work which will be designed and prepared for contract during FY 2010. The actual harvesting and associated project work described in these plans will not occur until after these timber sale contracts are auctioned and sold. The duration of a timber sale contract is generally two to three years.

The young stand management, recreation management, road management, planning and information activities described within this plan are estimated objectives that will be met within FY 2010. The levels of these activities are based on current information and data. These management activity levels may be adjusted as new information becomes available during the fiscal year. For instance, initial tree planting levels are dependent upon the harvesting of individual timber sale units being completed on a certain timeline. If those harvest units are completed in a time frame different than estimated, the initial tree planting levels would be adjusted accordingly.

Acreage objectives in this plan are described in terms of gross or net. Gross acres refer to the total area within the boundaries of an operational unit. Gross acreage minus the acres in roads, stream buffers, green tree retention areas and other areas that will not be harvested equals net acreage. Net acres are used when determining harvest volumes.

Harvest Levels:

The District is planning 13.8 MMBF of timber harvest in this Annual Operations Plan (Table A-1). Due to limitations associated with T&E restrictions/reductions (no approved Habitat Conservation Plan) and the difficulties of finding thinning acres to meet the volume targets, the 2003 approved IP partial cut harvest range was modified from 800 - 1,200 acres per year to 510 – 900 acres per year. The range for clearcut acreage objectives was modified from the 2003 approved IP range of 180 - 270 acres to 230 – 320 acres per year. The combined range for regeneration and partial cut acreage objectives was modified from the 2003 approved IP range of 980 -1,470 acres per year to 740 -1,220 acres per year. In FY 2010, 524 acres are planned to be thinned and 284 acres are planned for regeneration harvest.

The District has included 3 Alternate Operations in this Annual Operations Plan. These alternate operations may be used to replace regular sales that cannot be completed as planned.

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the 2003 Cascade District Implementation Plan (Table A-1) as modified in 2009. All values are acres.

| Silvicultural Activity | IP Annual Objective | | 2010 AOP Objective |
|----------------------------------|---------------------|------|--------------------|
| | Low | High | |
| Conifer Partial Cut | 510 | 900 | 524 |
| Regeneration Cut | 230 | 320 | 284 |
| Hardwood Partial Cut | 0 | 0 | 0 |
| Hardwood Regeneration Cut | 0 | 0 | 0 |
| Rehabilitation | 0 | 0 | 0 |
| Reforestation (Initial Planting) | 115 | 345 | 160 |
| Precommercial Thinning | 150 | 250 | 0 |
| Fertilization | 1000 | 1400 | 0 |
| Pruning | 0 | 50 | 0 |

INTEGRATED FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

Definitions for proposed harvest types can be found on the “State Forest Annual Operations Planning” web page (http://www.oregon.gov/ODF/STATE_FORESTS/docs/management/aop/Harvest_Type_definitions.pdf)

Summary tables and detailed pre-operation reports for the harvest operations are attached to this document.

The partial harvests and regeneration harvests proposed in this operations plan comprise less than 2% of the total acres within the Santiam State Forest.

Approximately 65% of the planned harvest acres are in partial cuts, while the remaining 35% are in regeneration harvests. The regeneration harvests will help maintain a sustainable flow of timber and revenue to local markets, economies, and governments, and help achieve open habitats on the landscape. The partial cuts are intended to reduce the density of the overstory trees and to maintain or further encourage the understory growth within these stands. Partial cutting will also allow the residual trees within a stand to increase their diameter growth and enhance stand volume production and value. These proposed partial cuts will allow the stands to move along the trajectory towards their desired future condition.

Most regeneration harvests are planned within stands that are not on a trajectory for a complex stand structure. Stand structure in these units begins to develop later when the units reach 10-15 years of age or pre-commercial thinning age. At the time of pre-commercial thinning, the DFC for the unit is re-evaluated since some young stands change dramatically within the first 15 years. The primary management objective for these stands is to enhance stand volume production and value while maintaining or developing structural components important to habitat diversity. All regeneration harvests will be reforested with a mixture of Douglas-fir and western redcedar or for higher elevation ground, a mixture of Douglas-fir and noble fir seedlings.

The guidelines for managing structural habitat components listed under Landscape Management Strategy 3 in the *NWO State Forests Management Plan* (pg. 4-52) will be followed for the FY 2010 Annual Operations Plan. In proposed commercial forest management operations, existing down wood, snags, and remnant old growth trees or

patches of old growth will be retained. The landscape management goal is to have an average of two snags per acre retained across the landscape. Residual live trees retained in conjunction with regeneration harvests will serve as a source of future snags and down wood as well as provide legacy trees for the new stand being regenerated. Retained trees will include a component of hardwood trees when available. The snags and down wood left in all operations also support future forest needs. The snags provide habitat for cavity-using species and provide a future source of down wood. The down wood provides habitat for wildlife species and enables other key functions such as nutrient cycling.

Additional information on the proposed operations can be found in Tables 1, A-1, and A-2 located in Appendix A and in the individual pre-operations reports located in Appendix B.

Table 2. Stand Structure Development – This table summarizes how the Timber Harvest Operations in this AOP will contribute to achieving the district’s desired future condition. All values are in acres.

| Stand Structure | REG | CSC | UDS | LYR | OFS | GEN¹ |
|---------------------------------|------------|------------|------------|------------|------------|------------------------|
| Current | 0 | 193 | 615 | 0 | 0 | |
| Post Harvest² | 284 | 0 | 524 | 0 | 0 | |
| Desired Future | | | | 251 | 148 | 409 |

1. General (GEN) is not a stand structure, but identifies those stands that are not targeted for Layered or Older Forest Structure in the district landscape design. These stands may develop into any of the five stand structures.

2. The Post Harvest stand structure is an estimate of how the stands will develop in five to ten years after the operations are completed.

Riparian Management

Management activities within riparian areas of streams will focus on achieving properly functioning aquatic and riparian habitat conditions over time. Riparian Management Areas (RMAs) will be established immediately adjacent to streams for the purpose of protecting aquatic and riparian resources and maintaining the functions and ecological processes of the streams. The Management Standards for Aquatic and Riparian Areas found in the *NWO State Forests Management Plan* (pg. J-1 – J-16) will be followed within these RMAs.

In addition to the requirements of the *NWO State Forests Management Plan*, the following measures will be employed to minimize impacts to the streams caused by harvesting activities:

1. No ground based equipment will be allowed within the stream buffers.
2. No timber will be felled within the buffer except to facilitate cable yarding.
3. Timber above the buffer will be felled away from or parallel to the stream.
4. Timber will be yarded away from the stream, where possible.

5. If it is necessary to yard logs across the stream, logs will be fully suspended above the buffer vegetation.
6. Skylines over buffer areas will be pulled prior to rigging the next yarding road.
7. Erosion control measures will be used on areas of soils exposed during road construction or improvement.
8. Road ditches will be disconnected from streams
9. Road maintenance will be required during log hauling.
10. Other requirements designed to minimize impacts to streams may include seasonal restrictions for road construction and log hauling.

Best Management Practices

The District follows the *Oregon Forest Practices Act* statutes and rules for soil and water protection. These rules define the best management practices for protecting soil, air and water quality when conducting timber harvests, prescribed burning or road construction activities. The District uses the professional expertise of foresters and forest engineers to evaluate proposed activities. The District also uses geotechnical expertise in planning and carrying out management activities, especially when steep slopes and other high landslide hazard locations require this.

Threatened and Endangered Species

All management activities will avoid take of Northern Spotted Owls by applying the strategies outlined in ODF's Northern Spotted Owl Operational Policies and Procedures (2008). These measures remain the best available information for avoiding take. The guidelines call for surveys of suitable habitat, protection of core areas, and maintaining suitable habitat within owl circles. Portions of Areas I and II of the Boulder Creek sale are located within a Northern Spotted Owl site. A biological assessment of this site will be prepared by ODF staff biologists. The assessment will be reviewed by both the Oregon Department of Fish and Wildlife and the US Department of Fish and Wildlife. The assessment and comments from both agencies will be reviewed by the District Forester, Area Director and Program Director who collaborate on how to apply conservation measures for the planned operations.

Summary of Operations by Basin

Table 3. Summary of Timber Harvest Operations in each basin. All values are in acres.

| Basin | 2010 AOP | | Cumulative Operations ¹ (FY 02—10) | |
|-------------|-------------|----------|--|----------|
| | Partial Cut | Clearcut | Partial Cut | Clearcut |
| Butte Creek | 0 | 123 | 971 | 505 |
| Cedar Creek | 0 | 0 | 1133 | 142 |
| Crabtree | 0 | 0 | 9 | 351 |
| Green | 0 | 0 | 637 | 3 |
| Mad Creek | 0 | 0 | 1383 | 263 |
| Rock Creek | 222 | 0 | 2500 | 330 |
| Scattered | 302 | 161 | 962 | 569 |

1. The Cumulative Operations include all Timber Harvest Operations, prepared and proposed, under the current implementation plan period (July 1, 2001 through June 30, 2011). Operations or units that were proposed, but have been subsequently dropped, are not included in the total.

The following is a short description of operations proposed within the seven management basins within the District. A more detailed description of each operation can be found in the attached Pre-Operations Reports.

Butte Creek Basin

There is one proposed operation within this basin.

Party Butte: this is a two area modified clearcut. Area I is a Closed Single Canopy stand and Area II is currently classified as Understory. After harvest both areas will become Regeneration stands. The objective of the operation is to harvest underproductive stands and establish intensively managed new stands while maintaining or developing the structural components important to habitat diversity. The sale area will be reforested with a mixture of Douglas-fir and western red cedar seedlings.

Cedar Creek Basin

There is one alternate operation proposed in this basin.

Cedar Creek (alternate): this is a two area moderate partial cut. Area I is currently classified as Understory. The proposed thinning will remove a portion of the midstory trees to stimulate both the remaining trees and the understory vegetation. The overall objective is to move this stand to the Desired Future Condition of Layered. Area II is currently classified as Closed Single Canopy. The primary objective in the Area II operation is to enhance stand volume production and value.

Crabtree Basin

There are no planned harvest operations within this basin for FY 2010.

Green Basin

There are no planned harvest operations within this basin for FY 2010.

Mad Creek Basin

There are no planned harvest operations within this basin for FY 2010.

Rock Creek Basin

One operation to partially cut a total of 222 acres is planned within this basin.

Tom Rock 400: there are two areas within this operation. The proposed moderate partial cuts will move 66 acres along the pathway to Older Forest Structure. Area I is 40 years old and Area II averages 32 years of age. Both areas will receive an initial commercial thin to enhance future growth.

Scattered Basin

There are four proposed operations and two alternate operations located within this basin.

Boulder Creek: the stands within the proposed operation areas are currently classified as Understory and average 60 years of age. Area I will be moved toward a Layered structure with a moderate, first entry commercial thinning designed to create openings that will encourage understory growth. Areas II and III are heavily infested with dwarf mistletoe and also suffering from bear and snow damage. These stands are planned for a regeneration harvest. The harvest objective is to establish healthy new stands while maintaining or developing structural components important to habitat diversity.

Special Concerns: Sixty-seven acres of Area I and ten acres of Area II are located within a Northern Spotted Owl site. In 2007 a Preliminary Biological Assessment was completed by an ODF biologist. At that time the proposed operation was within the home range of two owls. In 2008 one of the owl sites became historic. The Biological Assessment will be updated to take into consideration the historic status of one of the owl sites and the addition of one small clearcut within the home range of the active owl site.

Evans Mountain: the stands within the proposed operation area are around 70 years of age and are classified as Understory. The lack of prior thinnings has resulted in a

slowing of growth over the last 20 years. The trees in this area most likely would not respond to thinning due in part to severely reduced crowns. The harvest objective is to establish healthy new stands and enhance volume production and value.

Special Concerns: The county road that travels through the operation is the access road to the USFS Opal Creek Recreation Area. In addition, a portion of the southeast corner of the sale area is within the Santiam State Scenic Waterway. Clumps of green trees will be placed in locations that will help break up the visual impacts of this modified clearcut. Also, the riparian area buffers on the streams will lessen the open appearance of the clearcut.

Shellburg Southeast: this is an eighty-five year old Douglas-fir stand with smaller amounts of bigleaf maple, grand fir, and western hemlock. The stand is currently classified as Understory. The proposed heavy partial cut will move the stand to the desired future condition of Older Forest Structure by removing the smaller, damaged, and unproductive conifer while preserving the larger conifer and bigleaf maple.

Special Concerns: Parts of the operation are within the Shellburg Falls Recreation Area, popular location for hikers, cyclists, campers and horse back riders. The entire operation is within Focused Stewardship for Visual because of visibility from the Shellburg Road, a high use road accessing the recreational area. Various methods will be used to limit impacts to recreational and scenic resources and to ensure public safety. Signs will be posted at trailheads, staging areas, and at the campground. Logging equipment will not be allowed on Shellburg or SB 200 roads. After the operation any part of the August Mountain Trail damaged from harvest activities will be rehabilitated.

The Other Half: this is a 70 year old Douglas-fir stand currently classified as Understory. The primary management objectives for this stand are enhancing stand volume production and value. The proposed modified clearcut will establish an intensively managed new stand of planted Douglas-fir and western redcedar.

Silver Creek (alternate): this is another 70 year old Understory stand currently stocked with Douglas-fir and minor amounts of western hemlock and red alder. A modified clearcut is proposed for this stand. The sale area will be reforested with a mixture of Douglas-fir and western red cedar seedlings.

Polly Power (alternate): the operation is located in a low volume 50 to 80 year old Douglas-fir stand with dense vine maple openings. The area is proposed for a modified clearcut that will remove the poorly stocked, underproductive trees and establish an intensively managed new stand of planted Douglas-fir and western redcedar.

Special Concerns: The streams within the sale area have very defined “gorge” areas and buffers will be posted on the slope-break to minimize damage to the

stream channels. The buffer width will vary but will be no less than 25 feet horizontal distance from the channel. A Bonneville Power Administration (BPA) powerline right of way is immediately adjacent to the proposed north timber sale boundary. The BPA will be notified of our proposed activity and their guidelines for logging activities on or near BPA rights-of-way will be followed.

Forest Roads Management

Overview

The primary transportation focus is to protect and secure access for forest management activities. This involves constructing new roads where needed and maintaining or upgrading existing roads. Other resource management and other users are also considered in the transportation planning. The transportation system provides access for timber removal, recreation, fire control and removal of other forest products as well as other uses. The District transportation system is managed to provide efficient and effective access that facilitates obtaining the greatest permanent value from the forest for the people of Oregon.

An important component of the transportation activities planned in FY 2010 will be to maintain and improve current access to a condition that minimizes resource impacts to water quality and meets ODF's access needs. A high priority and special concern for road improvement is to protect or improve water quality. Over the last 15 years much effort and success has been made in removing barriers to fish passage and providing drainage improvements that minimize impacts to water quality. There are only minor stream crossing improvements left to complete for short reaches of fish streams that will further enhance fish usage on the Santiam State Forest. The activities below will move the district in that direction as well as meet transportation goals. The District Implementation Plan defines our goals for surfacing. Because the Oregon economy is in such poor shape and funds are very limited; only road work that must be completed for timber sale access will be the targeted for this AOP period. Mainline roads and collector roads are in good condition and will only receive maintenance such as spot rock and vegetation control. Roads with crushed rock make it possible to create and maintain a road surface shape that will drain well and allow for efficient travel. This has largely been completed on this district where it makes sense economically and for the projected use. Good surface drainage is critical to minimizing sedimentation from roads and for protecting the subgrade to allow winter hauling where appropriate. Along with good surface drainage, once the water is off the road and into a ditch it needs to be directed in a way to minimize impacts to water quality. Cross drainage will be reviewed on essential haul routes, tributary roads and will be upgraded where necessary, including disconnecting the ditches from live streams. The guidelines found in the ODF Roads Manual are followed to decide where additional culverts will be installed. Stream crossings will be analyzed on haul routes and the connecting spur roads to make sure they meet 50-year flow event minimums. Roadside brushing will be conducted to control

encroaching vegetation on sale haul routes as necessary for safety. Minor amounts of roadside spraying will be completed by District employees as time and funds are available.

Several new roads will be constructed to provide access for commercial forest management operations planned within the 2010 fiscal year. All new road construction for this Annual Operations Plan falls into the spur road category and will be evaluated during sale prep for closure or being vacated after the sale is completed. Spur roads needed for future management activities but not for immediate use may be put in a restricted status by partially vacating or simply closing the road. This will help to reduce the maintenance cost as well as water quality impacts from those roads. All new road construction will be designed, reviewed and administered by foresters with forest engineering experience. Roads will be rocked if winter use is anticipated, typically during cable logging operations. Roads within some of the predominately ground harvestable operations will be restricted to summer use only and those roads will generally not be surfaced. There are exceptions when it may be desirable to rock roads for reforestation access that must occur in the winter.

Projects are achievable with the proposed sales for this plan and stay within current guidelines for project expenses.

Additional information regarding roads and engineering can be found in Table A-3 located in Appendix A.

Table 4. Summary of Road Management Activities. All values are in miles.

| | Mainline (High Use) | | Collector (Medium Use) | | Spur (Low Use) | |
|---|------------------------|-----------------|---------------------------|-----------------|-------------------|-----------------|
| | AOP | IP ¹ | AOP | IP ¹ | AOP | IP ¹ |
| Road Construction | 0 | 0 - 0.4 | 0 | 0.2 - 0.3 | 5.87 | 4 - 5.2 |
| Road Improvement | 0 | 1.6 - 15 | 0.3 | 4.9 - 6.1 | 3.54 | 2.4 -3.6 |
| Road Closure/Vacation | 0 | 0 - 0.5 | 0 | 0 - 0.5 | 6.37 | 4.6 -5.8 |
| Road Maintenance – District² | 0 | | 50 | | 0 | |
| Road Maintenance - Active Operations³ | 0 | n/a | 15.68 | n/a | 3.46 | |

1. These are annual estimates derived from Table 6 Potential Road Activities FY 2002-2011 of the 2003 District Implementation Plan. The values here were derived by dividing the values in the Potential Road Activities table by 10.

2. The road maintenance estimates include only the work to be completed during Fiscal Year 2009 by the district road crew or service contract. Estimates of road maintenance were not made in the Implementation Plan.

3. This is a broad estimate of the road maintenance that may be accomplished during the fiscal year, through active commercial operations. However, the exact amount can not be predicted at this time.

Road Construction

All of the road construction described for the planned commercial forest management operations described within this Annual Operations Plan will be designed as spur roads. These will be short roads, generally less than ½ mile in length and will be built to standards to minimize the road footprint. Road subgrade widths will be 14 to 16 feet wide and either ditched or out-sloped. Since many of the proposed operations are partial harvests, there will be a need to use most of the roads again for future management activities. Some of the roads built will be closed (not vacated) when the operation has been completed. Closed roads will be put in a condition that will require minimal or no maintenance until needed again. This may involve grass seeding and the installation of water bars, tank traps or other road barriers to keep vehicles off the road. Spur roads into completed clear-cut operations will be closed when it is determined that the road is no longer needed for approximately 15 years or more. Stream crossing structures will be removed to eliminate the possibility of a stream restriction or maintenance problem. In some cases the access in clear cuts will not be vacated to assist with the reforestation effort. The net effect of road building and road vacating will be a loss of .5 miles of spur road on the District.

Road Improvement

The road improvement in this plan will consist of minor culvert replacements/additions spot rocking and road brushing as needed on mainlines and collector spurs. Because of reduced funding during this economic down turn, only road improvement necessary for timber sale access will be targeted. Future sale plans will again focus improvements over the entire district road system as the economy improves.

Road Access Management

Access to the Santiam State Forest generally is not restricted. Roads that are not needed for future forest management or for extended periods of time (more than 15 years) are candidates for some form of closure to take the road out of active use. Roads that pose a high risk of damage to water quality are candidates for closure. Closing and vacating roads reduces the District's maintenance cost and helps to minimize impacts to the environment from roads. Not only do these roads cause a maintenance liability; some of these roads become opportunities or locations for dumping of trash. Many of the short spurs constructed for timber sale use will be reviewed for closure. Before any road is scheduled for closure a "Road Proposed for Vacating" sheet is routed to all known interested management sections within the District to make sure roads are not closed that are needed.

Road Maintenance

The road maintenance for roads being used for timber sale access becomes the responsibility of the timber sale purchaser once sale activity has begun. Timber sale purchasers during this operating plan will maintain approximately 20 miles of road. Road grading, ditch cleaning, culvert inlet and outlet cleaning and spreading patch rock as needed during timber haul will all be done by purchasers.

The District roads not under timber sale contracts are maintained by the District using a grader, loader, lowboy and a dump truck. Road grading over much of the District is covered once during the year with some roads graded more. Small rock projects will also take place to reinforce weak subgrades or cover road surfaces producing sediment. The District road crew also responds to emergencies such as unplugging culverts, removing small slides, clearing slough from ditch lines and blocking roads when necessary. A backhoe or excavator will be rented for approximately a month to clean out culvert catch basins as well as working on any miscellaneous projects that come up.

Land Surveying

There are 4.25 miles of property line on 4 timber sales that will be surveyed, posted and blazed by District personnel.

Young Stand Management

Young stand management operations occur in forest stands prior to the first commercial thinning and after a commercial thinning. These operations tend not to produce revenue, but are essential in establishing a healthy forest. The objectives of young stand management are to achieve the goals for reforestation, stand structure development, and future revenue generation. The current fiscal year budget does not allocate the necessary funding to implement stand management prescriptions to move stands toward the desired future conditions for each stand.

The reforestation and young stand management table outlines the costs needed to perform management activities on young stands. These young stands are not associated with the sales described in the pre-operations reports found in Appendix B.

Several smaller and short-term reforestation projects are well suited to using inmate crews from Mill Creek or South Fork. South Fork is a correctional facility that is a cooperative effort between the Department of Corrections and ODF. These reforestation projects tend to be one-day projects such as planting a few acres or pruning small acres of white pine to protect them from blister rust. The Mill Creek crew will be used to help with the completion of the projects this year. Prior planning is needed to schedule any

inmate crew for these projects; although some emergency situations can be accommodated.

The planned operations necessary to meet landscape and stand structure targets include: site preparation, planting, vegetation management, tree protection, pre-commercial thinning and fertilization. Site preparation, tree planting, tree protection, and some limited vegetation management are the only operations planned during strained economic times. The following is a brief summary of each individual activity. Additional information on young stand management can be found in Tables 1 and A-4.

Rehabilitation

No rehabilitation projects are planned for fiscal year 2010.

Site Preparation

Site preparation is an important tool used in establishing a stand. Site preparation can affect seedling establishment and survival. Site preparation will help with reforestation efforts to move a stand into a Regeneration (REG) classification. Prescribed fire (burning of logging slash), mechanical (piling of slash) and use of herbicides are just a few tools used in site preparation. The goal of burning or piling logging slash is to eliminate or manipulate logging debris in order to create plantable areas. Herbicide site preparation is used to manage undesirable vegetation that would compete with newly planted seedlings. Planting spot development is used when burning is not a preferred method due to shallow soils or flat slopes. The use of a slash buster reduces the size of the slash and creates open areas for planting. The slash is not removed from the site and quickly decomposes on site. All site preparation activities contribute to moving a stand towards its desired future condition.

Basins:

Butte Creek: Possible 75 acres broadcast burn and 75 acres of chemical site prep.

Crabtree: None

Cedar Creek: None

Mad Creek: None

Rock Creek: 85 acres of slash burning; and 85 acres of chemical site prep.

Scattered: None

Special Concerns: To protect air quality, all burning will be done in accordance with the Oregon Smoke Management Plan. The Smoke Management Plan is designed to reduce emissions from prescribed burning in western Oregon and to minimize smoke intrusions into designated population areas.

When using herbicides on State Forests for site preparation needs, EPA approved herbicide product labels and the Forest Practices Act will be strictly adhered to.

Mechanical site preparation will also be monitored during use to ensure that the Forest Practices Act requirements are met.

Planting

Reforestation is the establishment of seedlings following regeneration harvests, patch cuts, root disease removal, severe blow down events, and, in certain cases, partial harvests. Planting helps meet the goals of reforestation through planting a variety of tree species in stands. The mixing of tree species helps achieve the desired future conditions within each management basin. The various activities of initial planting, interplanting, and underplanting provide different outcomes to achieve these future conditions.

Initial planting establishes the seedlings to begin a regeneration stand. The species of seedlings planted and the density at which they are planted will influence future management activities within the stand.

Interplanting is used when initial reforestation has been less successful than desired. Planting additional trees within an area will continue the stand along its desired management path.

Underplanting involves planting seedlings beneath a canopy of taller trees. Most species used in underplanting are shade tolerant and are used to help achieve a desirable understory needed for Layered or Older Forest Structure stands. This activity can likewise introduce a desired native species into a stand to increase stand diversity.

Basins:

Butte Creek: Initial Plant 75 acres.

Crabtree: None

Cedar Creek: None

Mad Creek: None

Rock Creek: Initial Plant 85 acres;

Scattered: None

Vegetation Management

Some herbicide release may need to be done in planted units. The effectiveness of the site-prep spray is typically unknown until the following spring.

Basins: Various at 50 acres.

Tree Protection

No tree protection projects are planned for fiscal year 2010.

Pre-commercial Thinning (density management)

No pre-commercial thinning projects are planned for fiscal year 2010.

Fertilization

No fertilization projects are planned for fiscal year 2010.

Pruning

No pruning projects are planned for fiscal year 2010.

Noxious Weeds:

The priority for the noxious weed activity will be areas that can easily be treated and controlled. The treatment for this year will be to stop the spread of a noxious weed found beneath a recently thinned stand of timber.

Recreation Management

Recreation Program Overview

Management Plan

The Recreation Program on the Santiam State Forest is managed with the guidance of the Recreation Management Plan approved in September 2000, North Cascade District Implementation Plan approved in March 2003 and the approved 2001 Northwest Oregon State Forest Management Plan. This section of the FY 2010 AOP is designed to provide information about the types of recreation opportunities and activities that are currently in demand on the Santiam State Forest, the current developments and opportunities available on the forest, and the planned projects for the FY 2010 AOP period. Activities planned for FY 2010 will allow the district to make further progress towards completion of ongoing projects. The projects also address safety, sanitation and maintenance goals. Funding for the planned projects will be identified in the 2010 fiscal budget. The District will also find and apply for state and federal grants that will compliment the program. Given the current economic conditions, funding in the 2010 fiscal budget will be limited.

Public and Multi-agency Involvement

The Santiam State Forest Citizen Advisory Committee provides assistance with a wide range of recreation and education topics. The Committee convenes one to three times a year to review accomplishments and provide recommendations related to current and

future management strategies. In addition the Citizen Advisory Committee assists the district with volunteer recruitment.

The District is a member of the Mid-Willamette and Cascade Recreation Coordination Group. This group is an inter-governmental committee focused on coordination and communication among county, state and federal recreation providers in and around the Santiam Canyon. Members meet each year to address recreation needs, opportunities and development for the betterment of recreation services in the area.

Volunteer Contributions

Volunteers are expected to contribute labor and expertise to the recreation program. Volunteers partner with ODF to construct and maintain infrastructure and rehabilitate and maintain natural resources. Several clubs donate services to the District. These include the Oregon Equestrian Trail club (OET), Back Country Horsemen club, Chemeketans Hiking club, Crooked Finger Riders Association, and two mountain bike clubs, Merry Cranksters and Mountain Street Dirt Crew (MSDC). Oregon Equestrian Trails, Mountain Street Dirt Crew and Crooked Finger Riders Association all have adopt-a-trail programs with the Santiam State Forest. Youth groups also contribute extensively to the volunteer program. Each year many students from local schools and children enrolled in programs like Boy Scouts and 4H donate hundreds of service hours.

Inmate Work Crews

The recreation staff may utilize 10-person inmate crews from the Oregon Department of Forestry South Fork Inmate Camp and also Mill Creek Inmate Work crews. These inmate crews will be used for facility and trail maintenance, improvements, and construction projects. The crews are within 30 minutes to 1 ½ hour travel time from most recreation sites. The crews have the expertise and ability to perform the kind of specialized work projects that need to be completed.

Opportunities and Facilities

The primary recreational activities on the Santiam State Forest include hiking, equestrian use, biking, camping, hunting, fishing and sight seeing. The Crooked Finger Road area is a popular site for local ATV users. A variety of organizations occasionally request to use an area of the forest for 2 to 3 days for special events. In the past these have included re-enactments of Civil War and World War II battles, mountain bike races, youth leadership camps, bow hunting skill competition and back-country road motorcycle events.

The recreational facilities and opportunities on the Santiam State Forest consist of four developed car campgrounds, one primitive hike in only campground, dispersed camping areas, one developed specialized campground for Equestrian enthusiasts and two unique vistas and natural attractions. Combined, there are currently 28 camp sites on the Forest. There are about 28 miles of non-motorized trails associated with the developed sites. The attractions or special places on the Santiam State Forest are located at or near developed sites. These include three waterfalls, Shellburg Falls and Upper and Lower

Butte Falls, two lakes, Rhody and Butte, commonly called the High Lakes, as well as Rocky Top and the Natural Rock Arch.

Motorized vehicles, including ATVs and dirt bikes, are allowed to ride maintained gravel roads on the Santiam State Forest. There is one location where Class I and Class III vehicles are allowed off-road on designated trails. This is the Crooked Finger ATV Riding Area. The State Forest land adjacent to the Crooked Finger Road area east of Scott Mills has been used by local off-road motorists for a number of years. The District recently assisted in establishing the Crooked Finger Rider's Association. CFRA assists the district with providing safe, sustainable ATV and dirt bike riding opportunities in the Crooked Finger Road area. The recreation staff plans to continue to work with this organization to develop and manage a 6 mile system of OHV trails.

Trends

Visitation to the Santiam State Forest has continued to increase each year. This is due to an increase in demand, increased capacity and promotion of recreation opportunities at the forest. As new developments have opened up and word of mouth spread, recreation staff has worked diligently to operate and maintain existing facilities as well as implement new projects to improve visitor enjoyment, safety and sanitation. In fiscal year 2010 funding for recreation has been substantially reduced. Limited staff resources will be directed away from new development and towards maintenance and operation of existing facilities. The fiscal year 2010 recreation resources will focus on safety, sanitation, visitor assistance, and volunteer opportunities. Recreation staff are continually seeking partnerships and contracts for trail and facility stewardship. As these opportunities are found, ODF will once again be able to increase their focus on new development that is outlined in the Recreation Management Plan.

It should also be noted that there is significant use in the Santiam State Forest outside of the designated recreation areas. This includes, dispersed camping, hunting, site seeing, rock climbing, exploration and other activities such as mushroom gathering. Recreation staff is responsible for litter cleanup, monitoring vandalism, monitoring illegal motorized off-road use and providing visitor assistance on nearly 47,000 acres of the Santiam State Forest.

The two most visited areas are the Butte Creek Falls Recreation Area and the Shellburg Falls Recreation Area. These sites are well-known regionally. Butte Creek Falls is used primarily for day-use. The nearby campground receives moderate use during the summer. Use at Shellburg Falls is increasing because of the hiking trail connecting to Silver Falls State Park, as well as the publicity about Shellburg Falls and the exposure the site receives through the Forest Education and Interpretation Programs. The third most visited location is the Santiam Horse Camp area. The Santiam Horse Camp and surrounding Monument Peak Trail System was opened officially in June of 2006. Trail and day-use has increased significantly over the past year. The dispersed camp sites at Rock Creek were often at capacity during summer months.

Law Enforcement and Visitor Assistance

All of the developed sites and other frequently used areas have been patrolled by one to two certified Law Enforcement Officers that were hired through an agreement with the Oregon State Police. These retired State Troopers have promoted public awareness of rules and regulations and have assisted with providing a safe recreational experience for recreationists. They have investigated crimes and violations on the Santiam State Forest and cited individuals to court when the responsible party was identified. An ongoing effort of the officers was to identify and contact individuals that illegally dump debris and garbage. When responsible parties were identified they were usually cited to Justice Court and required to clean-up the trash. Since the District began using these officers there has been a significant improvement in compliance with the regulations in effect. Due to budget reductions the number of officers and the frequency of the patrols will be reduced in fiscal year 2010.

Over the past several years the Recreation Coordinator, temporary employees and the Recreation Summer Intern have regularly patrolled all the developed and dispersed sites throughout the year. The primary objectives of these patrols has been to provide information and assistance to the public, interpret forest management and resources, monitor and document use, inspect trails and facilities and enforce regulations. In fiscal year 2010 reduced staffing will limit this patrolling.

Facilities (Campgrounds, View Points, Trail Heads, etc.)

Butte Creek Falls Recreation Area

Overview

Located near Scott's Mills, Oregon this area is the most heavily visited site at the Santiam State Forest. The Butte Creek Falls Trail and day-use area offer access to two impressive waterfalls and large swimming pools surrounded by a 200 year old Douglas-fir and Western Hemlock stand. There are also two miles of hiking trail and a three site campground within the recreation area. In addition the Butte Creek Falls Trail is becoming a popular education/interpretive site with local school and youth groups. It is also a tour site for a variety of groups who participate in programs at the Santiam State Forest. Use has increased significantly at this location over the past six years. In 2001 observed use estimated 20-40 visitors per weekend at the Butte Creek Falls Trail. In 2008 150-200 visitors were observed per weekend.

Trails

Two miles of hiking trail are within the Butte Creek Falls Recreation Area. These heavily visited trails offer recreationists a pleasant hike through the forest, connect to the Butte Creek Campground, and lead to the picturesque upper and lower Butte Creek Falls. There will be no new trail projects. District efforts will focus on completion of fiscal year 2009 projects and maintenance.

Day-use Area

In 2001 a single vault toilet was placed at the Butte Creek Falls Trailhead and a small four site parking area was cleared of brush and garbage. It was surfaced with crushed rock and provided for the parking and sanitation needs at that time. The current facilities do not provide for present and future use. In fiscal year 2009 this project was approved but unfunded. This project will be completed some time in the future when funding becomes available. The parking lot will be expanded and designed with entrance and exit points that can be gated during the winter months to deter vandalism. A picnic area will be developed to accommodate groups and the single vault toilet will be relocated to the Crooked Finger ATV Area. A double vault toilet will be installed at the Butte Creek Falls Trailhead. This is important to provide for sanitation needs and for the privacy/safety of the visiting public. The increase in number of school groups, youth groups and large family groups require a female and male designated restroom stall.

Butte Creek Campground

Nestled among towering Douglas-fir the Butte Creek Campground is a popular location. Currently there are three camp sites, a vault toilet, designated fire rings and picnic tables. Major issues at this campground are a lack of camp sites, impacts from vandalism and lack of monitoring due to the long travel times for ODF staff. As funds become available the District will develop plans for a future improvement project at Butte Creek Campground.

Butte Lakes

Overview

The Butte Lakes are a series of three picturesque high elevation lakes located south of Scott's Mills. These lakes are accessible by hiking, mountain biking and horseback. Vehicle access is prohibited. This creates a very secluded, peaceful setting for visitors. The most popular recreation activities at this location are hiking and primitive camping. There will be no new development at this location. District efforts will focus on safety, sanitation, maintenance, and resource protection.

Crooked Finger ATV Area

Overview

Near Scott's Mills, Oregon the Crooked Finger ATV Area is comprised of a designated ATV staging area and currently 3 miles of motorized trail. In the past a number of motorized vehicles have damaged natural and recreational resources through improper off-road use. Historically off-road trails often go up steep slopes, dead end, enter wet areas or cause damage within designated recreation areas. The intent of the Crooked Finger ATV Area is to provide a safe, designated system of well designed trails that will give local users, especially families, a place to ride off-road without damaging resources or conflicting with other forms of use.

Trails

The North Cascade District has partnered with the Crooked Finger Riders Association, a group of local ATV enthusiasts, and developed an adopt-a-trail agreement. Together ODF and CFRA design, construct, and steward these trails. In addition club members educate others about sustainable ATV use in this area. The long term success of the trails depends on the club's efforts and the cooperation of local ATV riders in the area. The desired future condition is for six miles of trail in this area. CFRA members with guidance from ODF staff will continue to develop new trails and maintain existing trails as they work towards this goal. The Crooked Finger Riders Association will construct 2-3 miles of trail during fiscal year 2010.

Shellburg Falls Recreation Area

Overview

The Shellburg Falls Recreation Area offers a variety of nonmotorized recreational activities in a secluded forest setting. Within the Shellburg Falls Recreation Area there are 4.5 miles of trail, a campground with seven sites, two trailhead parking areas, an interpretive shelter and picnic area. The Shellburg Falls Recreation Area is a popular interpretive and educational destination for schools and the general public. In the past each year hundreds of students have participated in forest education field programs and stewardship projects at Shellburg Falls. The funding for forest education programs is not a part of the fiscal year 2010 budget.

North Cascade District's goal at Shellburg Falls is to maintain a secluded, rustic setting while offering a quality camping and trail use experience and enhancing the educational potential of this site.

Trails

The emphasis of trail development at Shellburg Falls is to offer a system of nonmotorized loop trails. These trails include hiking only and nonmotorized multiuse trails. These loops are of varying lengths and difficulty to offer visitors to Shellburg Falls a variety of trail options. Short trails that are easy in difficulty are designed for interpretive/educational programs and the casual trail user. Longer more difficult trails are designed for trail users who wish a more challenging experience. Timber sales north and south of the campground will periodically close trails during the next biennium. During the timber sales the District will focus on ensuring visitor safety in the Shellburg Recreation Area and protecting recreation resources. Once the timber sales are complete the trails will be repaired and reopened.

Shellburg Falls Campground

Use at the Shellburg Falls Campground has continued to increase since 2001. There are currently seven sites at the campground which are regularly filled on summer weekends. A host site has been designed and constructed at the campground. It has been proven that campground hosts improve safety conditions, enhance visitor opportunities, reduce

vandalism and reduce patrol time for recreation staff. The host site will play a key role in the long term operation of the Shellburg Falls and other campgrounds.

Shellburg Area Free Ride Mountain Biking Trails

Free ride mountain biking is a relatively new yet fast growing recreational activity. This activity is comprised of down hill mountain bike trails with technical trail features such as bridges and jumps. The North Cascade District has established a partnership with the Mountain Street Dirt Crew free ride mountain biking club to establish free ride trails near the Shellburg Falls Recreation Area. The District and MSDC have established an adopt-a-trail agreement to design and construct free ride mountain bike trails. The District approves and monitors trail development while MSDC is responsible for on the ground trail design, construction and maintenance. Currently an estimated 2 miles of trail have been established. These trails have a variety of trail features and difficulties and are designed for experienced free ride mountain bikers.

Santiam Horse Camp

Overview

The Santiam Horse Camp is a 10 site picturesque equestrian camp and day-use area near Gates, Oregon. In addition there are two walk-in campsites for overflow or car camping. Amenities include drinking water, picnic shelter, corrals, manure bins, restrooms, and trailer parking both in camp and in the day-use area. Opened in June of 2006 use of the camp continues to increase. Recreation employees have spoken to many visitors and all have been impressed with and appreciative of the camp. During the upcoming year North Cascade will be focusing on maintenance and sanitation of the campground and trail system in this area. When funds become available an ADA horse mounting ramp will be constructed in the day-use parking area near horse camp. As the word gets out to more equestrian riders about the campground use will increase.

Monument Peak Trail System

Overview

Located south of the city of Gates the Monument Peak Trail System officially opened to the public in 2006. The Santiam Horse Camp is the hub of this nonmotorized multiuse trail system. Currently the primary user groups are horse back riders and hikers. The North Cascade District and many volunteers have worked over the past three years to complete the short range trail development goals. In this short time the trails have already become popular with many local people and visitors from outside the Santiam Canyon.

Future goals are to develop a lengthy perimeter trail and two shorter trail loops within the perimeter trail. In addition the trail system will connect to the Rock Creek Campground. Progress has been made on much of the trail work.

When funds become available the Rock Creek connection trail and segments of the perimeter trail will be constructed. There are approximately three miles of trail to be constructed. Staff will also continue working with the Santiam State Forest Citizen Advisory Committee to set long range goals for the trail system.

Rocky Top/Natural Arch

Overview

The Rocky Top/Natural Arch Recreation Area is a high elevation site in the foothills of the Cascade Mountains. This scenic area is composed of two hiking trails and day-use areas offering breathtaking views of the Cascade Mountain Range. Rocky Top at 5000 feet is the high elevation within the Cascade foothills. Natural Rock Arch is an impressive forty foot tall rock arch made accessible by a rugged hiking trail. Though there are no designated camping areas, there is dispersed camping within the area. Future plans call for extending trails within this area. No new development will take place during fiscal year 2010. Current trails and day-use areas will be maintained and monitored.

Abiqua Falls

Abiqua Falls is an impressive waterfall located on Mount Angel Abbey ownership. This waterfall is both unique as a waterfall and a geological formation. This waterfall would be a valuable addition to public ownership.

Maintenance Program

Overview

As the level of recreational use increases a strong maintenance and custodial program is a necessity. The maintenance program must focus on both preventive maintenance and repairing existing damage as it arises. A good preventive maintenance program will reduce costs in the long term, while keeping facilities and trails in good repair will reduce acts of vandalism or misuse. An adequate custodial program is crucial in keeping facilities, trails and roads clean and attractive to ensure visitor health and promote responsible use of recreation sites.

In fiscal year 2008 a Personal Service Contract was developed and awarded in the Butte Creek, Crooked Finger and High Lakes areas to perform year round maintenance and visitor assistance. Due to budget limitations this contract will not be continued in fiscal year 2010.

The district will utilize a South Fork inmate crew, Mill Creek inmate crew, ODF staff and volunteer organizations to maintain recreation areas, trails, campgrounds and related facilities.

Vehicle Access: Proper maintenance of roads accessing recreation sites is important. ODF works to ensure that roads are safe and accessible for visitors. One issue the North Cascade Districts faces is that some access roads to popular recreation sites travel through other agency and private land ownerships. It is important for ODF to work with these land owners to ensure safe public access to recreation sites. Having safe, maintained roads will ensure that the public visits the recreation sites. An increase in public use throughout the forest has helped to reduce vandalism and dumping. Visitors monitor each other and in many instances this has reduced natural resource degradation. Road access is a key factor in this success.

Forest Land Management Classification

As required under OAR 629-035-0050, and for the purpose of implementing the FMP's forest resource management strategies, all forest lands have been classified within the planning area using the Forest Land Management Classifications (FLMCS). The FLMCS describes the types of management that a District will apply to particular areas of the land base, the appropriate range of management activities for these areas, and the forest resource or resources the classifications are intended to address. State Forest Lands are grouped into three classifications: General Stewardship, Focused Stewardship, or Special Stewardship. Descriptions and methods of the classifications are found in the Forest Management Plan beginning on page 2-56.

Focused and Special Stewardship classifications are further classified into subclasses based upon the existence of forest resources that require some level of supplemental planning and/or modified management practices to help achieve identified goals. Several subclasses may be assigned to a parcel of land. Where this occurs, the resource requiring the highest level of protection will determine the management approach. A complete list and specific definitions of the subclasses can be found in OAR 629-035-0055.

Total acreage for each classification and subclass can be found in the District IP on pages 5 and 6.

The acreage and boundary lines shown on FLMCS maps are approximate. The information will be updated through watershed assessments, planning for site-specific management activities or site-specific field visits conducted over time. Management activities will be conducted based upon exact areas and locations as determined on the site and will depend upon the conditions that exist on the site.

Land Exchange

The District developed a land acquisition and exchange plan that was reviewed by the Board of Forestry and approved by the State Forester in January 2009. The purpose of this acquisition and exchange plan is to identify parcels of forestland and other property

that could either be acquired or exchanged for the Board of Forestry or, in the case of CSF land, recommended to the Oregon Department of State Lands (OSDL), by the North Cascade District to improve the management and administrative effectiveness and efficiency for ODF and adjacent landowners. Due to the economic conditions, no land exchange activities are planned in fiscal year 2010.

Other Integrated Forest Management Operations

Firewood

The North Cascade District has a firewood program that is tied to the completion of timber sales. Timber sale contracts require any non-merchantable wood or cull material that has been yarded to the landing and is suitable for firewood to be placed in a pile. This wood is then made available to the public by issuing a permit for two cords of firewood. There is a great demand by the public for firewood. Some years there is an abundant supply of firewood. Other years there is very little firewood available, dependant on the timber sales that have been completed.

Offering firewood permits to the public involves the timber sale administrator, clerical staff, and management. The time spent on each timber sale area opened up for firewood is approximately eight hours a week by the sale administrator, sixteen hours a week by the clerical staff, and four hours a week by managers. Law enforcement also spends time checking permits out in the firewood areas. In a typical year, the firewood season lasts for approximately three months. Areas with limited public access are set aside for commercial firewood cutting or special interest groups such as church organizations or community assistance groups. Overall, the firewood program on the Santiam State Forest is highly visible and provides an important face-to-face interaction with the public.

PLANNING (AND) INFORMATION SYSTEMS

Stand Level Inventory and Other Vegetation Inventories

Some stands within the District may be inventoried during the FY 2010 using the Stand Level Inventory (SLI) procedures. This information is well suited to structure based management planning and decision making. Due to budget constraints, contractors will not be hired to complete inventory work in FY2010. District staff, as time allows, may inventory some stands.

Fish and Wildlife Surveys

Almost all of the streams located within operations proposed in the FY 2010 Annual Operations Plan have been surveyed to determine beneficial use (i.e. fish bearing or not).

The only exceptions to this will follow the Oregon Forest Practices *Water Protection Rules (2007)* to determine beneficial use on these streams.

Surveys for the Northern Spotted Owl (*Strix occidentalis*) will be conducted by a contractor during the 2009 field season. The information gathered from these surveys is used during planning activities to determine how to proceed with forest activities without adversely affecting the owls and their habitat. Surveys will be specifically done on a portion of commercial management operations identified for the fiscal year 2009, and all commercial management operations identified for the fiscal years 2010 and 2011 as well as known owl sites.

Table 5. Summary of status of T&E surveys.

| Operation | Species (NSO/MM) | Status |
|---------------------|------------------|---|
| Boulder Creek | NSO | Surveyed in 2005, 2006, 2007, 2008. Will be surveyed again in 2009. |
| Evans Mountain | NSO | Surveyed in 2006, 2007, 2008. Will be surveyed again in 2009. |
| Party Butte | NSO | Surveyed in 2008. Will be surveyed again in 2009. |
| Shellburg Southeast | NSO | Surveyed in 2007, 2008. Will be surveyed again in 2009. |
| The Other Half | NSO | Surveyed in 2007, 2008. Will be surveyed again in 2009. |
| Tom Rock 400 | NSO | Surveyed in 2008. Will be surveyed again in 2009. |
| Cedar Creek (alt) | NSO | Surveyed in 2007, 2008. Will be surveyed again in 2009. |
| Silver Creek (alt) | NSO | Surveyed in 2007, 2008. Will be surveyed again in 2009. |
| Polly Power (alt) | NSO | Surveyed in 2007, 2008. Will be surveyed again in 2009. |

Watershed Assessments

The Northwest Oregon FMP provides that watershed analyses shall be performed on all priority watersheds “within the ten-year period following plan adoption”. No watershed assessments for the Santiam State Forest are planned to begin in fiscal year 2010.

Research and Monitoring

OSU is continuing a study on Swiss Needle Cast. The study is looking into growth trends following thinning in stands with varying levels of Swiss Needle Cast damage, the interactive effect of Swiss Needle Cast with the intensity of thinning and the interaction between thinning, Swiss Needle Cast and the seed source for the stand involved. Four of the study and control plots are located on the Santiam State Forest. The study is scheduled to last until 2011.

The State Forests have been actively monitoring past timber sales to check compliance with the Forest Management Plan, the Implementation Plan, and the North Cascade District’s AOP’s. The monitoring began in 2007 and several past sales have been surveyed. The North Cascade District has used the information as needed to obtain the

proper desired future condition for each stand. The monitoring program will be on a reduced schedule until funds are available.

Noxious Weeds

Noxious weeds are a growing concern on State Lands. Small quantities of noxious weeds such as tansy ragwort, scotch broom, and a variety of thistles are present around the District. The Santiam State Forest has an active treatment project designed to remove or control several know locations of noxious weeds. District staff will continue to monitor and treat these areas as needed. In addition, the District will remain involved with local weed boards and noxious weed committees.

Other Planning Operations

Planning will begin in the spring of 2009 for the fiscal year 2011 Annual Operations Plan. These plans will be completed in the spring of 2010. The annual operations plan will provide specific details on the harvest operations that will be set up and auctioned in the 2011 fiscal year. The plan will also provide an overview of the roads and engineering projects, non-commercial forest management operations, recreation management, planning, public information and education and administrative activities that will take place during fiscal year 2011. This plan is developed according to guidance and standards found in the *NWO State Forests Management Plan, Cascade District Implementation Plans, Santiam State Forest Recreation Plan* and the *Oregon Forest Practices Act*.

PUBLIC INFORMATION AND EDUCATION

This Annual Operations Plan will undergo a public review. Following that review, a public involvement summary will be added as an Appendix to this document.

The District often receives requests for job shadowing opportunities. Job shadowing usually involves a high school student or occasionally a college student who is interested in natural resources. The District arranges for these students to spend a work day with a Santiam State Forester, Stewardship Forester, Road Specialist or other job position they may be interested in. The initial contact is made by the student, so it is impossible to pin down when this activity will occur. The District has also conducted school to work tours in cooperation with the Human Resources section of ODF. Additional tours may possibly occur on the Santiam State Forest during the 2010 fiscal year.

Forest Education and Interpretation

Program Overview

Due to economic conditions the District will not be able to provide educational programs as in past years.

ADMINISTRATION

Due to budget reductions 3 permanent positions (Planning Forester, Recreation Specialist, and Sale Layout Forester) and 2 summer intern positions (Forest Management and Forest Recreation) have been eliminated. There now are a total of 6 permanent positions, 1 co-op position, and 1 grant position that comprise the State Forest Team at the Santiam Unit. In addition, the District Forester and Assistant District Forester provide key leadership and support to the program. The organization is structured as follows:

- Management Unit Forester, FUS2
 - Operations Forester, NRS2
 - Reforestation Forester, NRS2
 - Forester, NRS1
 - Technician, FMT (shared with Protection)
 - Road Specialist, NRS1
 - Recreation/Education Assistant, FMT (limited duration)
 - Equipment Operator, HMS 2
 - Road Maintenance Assistant, Laborer 2

The organization has integrated into one functional unit supervised by the Management Unit Forester. Responsibilities of the Forest Management Unit include forest-level Planning, Stand Level Inventory, Commercial and Noncommercial Forest Management Operations, Young Stand Management, Roads, and Recreation. The unit produces the AOP, timber sale contracts, reforestation and young growth management contracts, conducts stand level inventories, and administers the special forest products and firewood programs. Transportation plans, road maintenance plans and schedules, and other engineering related plans are completed. The Recreation program produces the plans and contracts needed to develop campgrounds, trails, and associated facilities. The Recreation program personnel coordinate most of the Public information and education done on the District.

The young stand management program is highly cyclical in workload due to the nature of projects such as tree planting, fertilization, and vegetation management. During young growth management operations, additional resources are always needed to cover logistical concerns.

APPENDICES

A. Summary Tables

B. Pre-Operations Reports

C. Public Involvement

D. Additional Maps

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: North Cascade

Fiscal Year: 2010

Date: 02/04/2009

| Operation | Payment Type | Fund % | | County | Sale Quarter | Net Acres | | Volume (MMBF) | | | Value | | |
|---------------------|--------------|--------|-----|-----------|--------------|-------------|-----------|---------------|------------|-------|-----------|----------|-----------|
| | | BOF | CSL | | | Partial Cut | Clear-cut | Conifer | Hard-woods | Total | Gross | Projects | Net |
| Boulder Creek | Recovery | 100% | 0% | Marion | 1 | 214 | 37 | 3.1 | 0.1 | 3.2 | \$702,000 | \$29,000 | \$673,000 |
| Evans Mtn. | Recovery | 100% | 0% | Marion | 1 | | 64 | 1.4 | 0.1 | 1.5 | \$328,000 | \$10,500 | \$317,500 |
| Party Butte | Recovery | 100% | 0% | Clackamas | 4 | | 123 | 3.0 | | 3.0 | \$840,000 | \$15,000 | \$825,000 |
| Shellburg Southeast | Recovery | 100% | 0% | Marion | 2 | 88 | | 1.5 | | 1.5 | \$390,000 | \$19,240 | \$370,760 |
| The Other Half | Recovery | 100% | 0% | Marion | 2 | | 60 | 2.1 | | 2.1 | \$529,000 | \$17,000 | \$512,000 |
| Tom Rock 400 | Recovery | 100% | 0% | Linn | 3 | 222 | | 2.5 | | 2.5 | \$500,000 | \$25,000 | \$475,000 |

| | | | | | | | | |
|---------------|------------|------------|-------------|------------|-------------|------------------|----------------|------------------|
| Total: | 524 | 284 | 13.6 | 0.2 | 13.8 | 3,289,000 | 115,740 | 3,173,260 |
|---------------|------------|------------|-------------|------------|-------------|------------------|----------------|------------------|

Alternate Operations

| | | | | | | | | | | | | | |
|--------------|----------|------|----|--------|--|-----|----|-----|--|--|--|--|--|
| Cedar Creek | Recovery | 100% | 0% | Marion | | 115 | | 2 | | | | | |
| Polly Power | Recovery | 100% | 0% | Marion | | | 65 | 1.3 | | | | | |
| Silver Creek | Recovery | 100% | 0% | Marion | | | 86 | 2.5 | | | | | |

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

District: _____ Fiscal Year **2010** Date: **01/08/2009**

| Operation | Area | Net Acres | | | Stand Structure Development Pathway | | | Structural Components | | | Comments |
|--------------------------|------|-----------|-------------|-------|-------------------------------------|--------------|---------|-----------------------|-------------|-------|----------|
| | | Clearcut | Partial Cut | Total | Current | Post-Harvest | Desired | Down Wood | Green Trees | Snags | |
| BUTTE CREEK BASIN | | | | | | | | | | | |
| Party Butte | I | 31 | | 31 | CSC | REG | GEN | | | | |
| | II | 92 | | 92 | UDS | REG | GEN | | | | |
| ROCK CREEK BASIN | | | | | | | | | | | |
| Tom Rock 400 | I | | 162 | 162 | CSC | UDS | GEN | | | | |
| | II | | 60 | 60 | UDS | UDS | OFS | | | | |
| SCATTERED BASIN | | | | | | | | | | | |
| Boulder Creek | I | | 214 | 214 | UDS | UDS | LYR | | | | |
| | II | 23 | | 23 | UDS | REG | LYR | | | | |
| | III | 14 | | 14 | UDS | REG | LYR | | | | |
| Evans Mountain | | 64 | | 64 | UDS | REG | GEN | | | | |
| Shellburg Southeast | | | 88 | 88 | UDS | UDS | OFS | | | | |
| The Other Half | | 60 | | 60 | UDS | REG | GEN | | | | |

| | | | |
|---------------------|------------|------------|------------|
| Total | 284 | 524 | 808 |
| Annual Range | 180-270 | 470-900 | 735-1170 |

Alternate Operations

| | | | | | | | | | | | |
|--------------|--|--|-----|----|--|--|--|--|--|--|--|
| Cedar Creek | | | 115 | | | | | | | | |
| Silver Creek | | | | 86 | | | | | | | |
| Polly Power | | | | 65 | | | | | | | |

Reforestation and Young Stand Management Report

District: North Cascade

Fiscal Year: 2010

Date: 1/12/2009

| Management Activity | Board of Forestry | | | Common School Forest Lands | | | District | |
|--------------------------------|-------------------|--------------------|--------------------|----------------------------|--------------------|---------------|-------------|--------------------|
| | Acres Planned | Average Cost*/Acre | BOF Cost | Acres Planned | Average Cost*/Acre | CSL Cost | Total Acres | Total Cost |
| Initial Planting | 160 | \$261.00 | \$41,760.00 | 0 | | \$0.00 | 160 | \$41,760.00 |
| Interplanting | 0 | \$80.00 | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Underplanting | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Tree Protection-Barriers | 0 | \$60.00 | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Tree Protection-Direct Control | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Site Prep-Chemical- Aerial | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Site Prep-Chemical- Hand | 160 | \$100.00 | \$16,000.00 | 0 | | \$0.00 | 160 | \$16,000.00 |
| Site Prep -Slash Burning | 160 | \$100.00 | \$16,000.00 | 0 | | \$0.00 | 160 | \$16,000.00 |
| Site Prep -Mechanical | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Fertilization | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Noxious weeds | 20 | \$30.00 | \$600.00 | 0 | | \$0.00 | 20 | \$600.00 |
| Release-Chemical- Aerial | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Release,-Chemical-Hand | 50 | \$130.00 | \$6,500.00 | 0 | | \$0.00 | 50 | \$6,500.00 |
| Release-Mechanical-Hand | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Precommercial Thinning | 0 | \$90.00 | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Pruning | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Other | 0 | | \$0.00 | 0 | | \$0.00 | 0 | \$0.00 |
| Totals | 550 | -- | \$80,860.00 | 0 | -- | \$0.00 | 550 | \$80,860.00 |

*Planting costs include all costs including seedlings

*Some proposed activities may drop out due to budget reductions.

| Proposed units | Net Acres | Slash treat | Chem use? | Plant Ac | T trees | tubes? |
|------------------------------------|-----------|------------------------------------|-----------|-------------|--------------|--------|
| South Rock RR | 85 | pile burn landings, planting spots | yes | df-85 | 32,300 | 0 |
| Taylor Butte | 75 | pile burn landings, planting spots | yes | df-65 nf-10 | 24,700 3,800 | 0 |
| PCT and Release on units as needed | | | | | | |

RECREATION MANAGEMENT SUMMARY

District:

Fiscal Year:

2010

Date: 1/7/2009

| Operation | Unit of Measure | Current | Construction Projects | Construction Cost (Funding) | | Improvement Projects | Improvement Cost (Funding) | | Total Cost | Comments |
|--------------------|-----------------|---------|-----------------------|-----------------------------|-------|----------------------|----------------------------|-------|------------|------------|
| | | | | ODF | Other | | ODF | Other | | |
| Facilities | | | | | | | | | | |
| Campsites | Sites | 28 | 6 | 19000 | | | | | \$19,000 | |
| Day Use Areas | | 3 | | | | 1 | 46000 | | \$46,000 | |
| Trailheads | | 9 | | | | | | | \$0 | |
| Interpretive Sites | | 3 | | | | | | | \$0 | |
| (Other) | Sites | | | | | | | | \$0 | |
| Trails | | | | | | | | | | |
| Non-Motorized | Miles | 24.0 | 3.0 | 20475.0 | | | | | \$20,475 | |
| Motorized | Miles | 3.0 | 2.0 | | | | | | \$0 | volunteers |

Total: \$85,475

Note: This table reflects project work only. It does not reflect the total recreation/education budget for AOP 2010, which includes maintenance, supplies and other operating expenses.