

**KLAMATH-LAKE  
DISTRICT  
2018 ANNUAL  
OPERATIONS PLAN**

# KLAMATH-LAKE DISTRICT

## 2018 ANNUAL OPERATIONS PLAN

### OVERVIEW

This overview describes the planned activities that Oregonians can expect to see on Oregon Department of Forestry (ODF) managed lands located in Klamath County, Oregon. ODF manages approximately 105,800 acres of forest within Klamath County including two state forests. The Sun Pass State Forest (21,500 acres) located adjacent to Crater Lake National Park and the Gilchrist State Forest (72,100 acres) located near the towns of Crescent and Gilchrist. ODF also manages a number of smaller parcels within the county ranging in size from 40 to approximately 4,000 acres. These lands are managed under the Eastern Region Long-Range Forest Management Plan to provide a mixture of economic, environmental, and social benefits to the citizens of Oregon.

The Klamath-Lake Annual Operations Plan (AOP) is divided into five major categories: Integrated Forest Management, Planning Activities, Information Systems, Public Information and Education, Administration, and Appendices. Specific details for items in each of these categories are described using a combination of tables and written narratives. The intent of this overview is to briefly summarize some of the items identified in the five categories so that the reader can more efficiently review the proposed activities in the 2018 AOP.

Over the next two months, ODF will request review and comments on our plan from others, including Klamath County Commissioners, the Forest Trust Land Advisory Committee (representing the counties that deeded land to ODF), Oregon Department of Fish and Wildlife, the US Fish and Wildlife Service, recreationalists, and wildlife advocates, as well as Oregonians in general.

During this time, we want to hear your feedback and suggested revisions. In addition, any *thank you* messages to staff and volunteers are welcomed and appreciated. Thanks in advance for your review and engagement.

#### **A short summary of activities planned for the coming year:**

- Proposing to Harvest 8.2 MMbf on 1,043 acres with an estimated net revenue of \$1,985,619.
- Proposing to Harvest 2,380 Mbf of pulp from 2,838 acres estimated to produce a net revenue of \$64,322
- Improving 13 miles of existing road.
- Planting 17,500 seedlings on 40 acres.
- Conduct operational surveys for Northern Goshawk.
- Continue working with Trout's Unlimited and Crater Lake National Park to restore Bull Trout to the lower reaches of Sun Creek.



# Table of Contents

<b>OVERVIEW .....</b>	<b>2</b>
<b>INTRODUCTION .....</b>	<b>6</b>
<b>INTEGRATED FOREST MANAGEMENT.....</b>	<b>6</b>
<b>Timber Harvest Operations .....</b>	<b>6</b>
Annual Harvest Objectives .....	6
FMP Annual Objective .....	6
2018 AOP .....	6
Volume (MMBF) .....	6
Partial Cut Harvest (acres) .....	6
Regeneration Harvest (acres).....	6
Pulp Harvest (acres).....	6
Overview of Timber Harvest Operations.....	7
Structural Habitat Components.....	11
Summary of Timber Harvest Operations.....	12
<b>Forest Roads Management.....</b>	<b>12</b>
Overview .....	12
Road Construction.....	12
Road Improvement .....	13
Road Access Management .....	13
Road Maintenance.....	13
Management of Rock Source/Supply .....	13
Land Surveying.....	13
<b>Young Stand Management.....</b>	<b>14</b>
Site Preparation.....	14
Seedlings / Nurseries .....	14
Planting .....	14

Vegetation Management.....	14
Tree Protection.....	14
Pre-commercial Thinning.....	14
Pruning.....	14
Invasive Species.....	15
Roadside Spraying.....	15
Stocking Surveys .....	15
<b>Recreation Management .....</b>	<b>15</b>
Overview of Recreation Management .....	15
Facilities (Campgrounds, View Points, Trail Heads, etc.).....	15
Trails .....	15
<b>Other Integrated Forest Management Projects .....</b>	<b>16</b>
Aquatic Habitat Improvement.....	16
Land Exchange .....	16
Firewood Cutting Program.....	16
Non-Timber Forest Products.....	17
<b>Planning.....</b>	<b>17</b>
Stand Level Inventory and Other Vegetation Inventories .....	17
Fish and Wildlife Surveys .....	17
Research and Monitoring .....	17
Other Planning Operations.....	17
<b>Administration .....</b>	<b>18</b>
<b>Unit Organization .....</b>	<b>18</b>
<b>APPENDIXES.....</b>	<b>19</b>

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# KLAMATH-LAKE DISTRICT

## 2018 ANNUAL OPERATIONS PLAN

### INTRODUCTION

This document describes activities planned on the Eastern Region State Forest lands during Fiscal Year 2018 (July 1, 2017 to June 30, 2018). All the eastern region state forest lands are located on the Klamath-Lake District in Klamath County. With the establishment of Gilchrist State Forest, the district manages approximately 105,800 acres of forest land, 98,953 acres of Board of Forestry lands and 6,827 acres of Common School Forest lands. Management of these lands is guided by the Eastern Region Long- Range Forest Management Plan (LRFMP), which was approved in October, 1995.

This Annual Operations Plan (AOP) describes how the Long-Range Plan will be implemented during the 2018 fiscal year. The AOP includes this summary document with sections on commercial forest management operations, roads and engineering, cultural resources surveys, wildlife surveys, etc. It also includes summary tables. Pre-operations reports that describe the individual timber sales being proposed are available upon request. The final plan will contain a public involvement summary that describes the results of the public involvement activities related to this AOP.

Keep in mind as you read the AOP summary, the document describes management activities for contracts which will be prepared during the fiscal year (commercial forest management operations and roads) as well as activities that will occur on the ground during the fiscal year (site prep, tree planting, pre-commercial thinning, fuels reduction).

### INTEGRATED FOREST MANAGEMENT

#### Timber Harvest Operations

Table 1. Annual Operations Plan objectives compared to Annual Harvest Objectives identified in the Eastern Region Long-Range Forest Management Plan. All values are acres, except for Volume.

<b>Annual Harvest Objectives</b>	<b>FMP Annual Objective</b>	<b>2018 AOP</b>
Volume (MMBF)	6.1	8.4
Partial Cut Harvest (acres)	1,036	1,017
Regeneration Harvest (acres)		26
Pulp Harvest (acres)	3,000	2,838

## Overview of Timber Harvest Operations

This plan proposes 3 timber sales all located in the North Block within the Sun Pass State Forest. These sales consist of 1,017 acres of partial cut harvest and 26 acres of clear cut harvest for a combined harvest acreage of 1,043. The Eastern Region Long-Range Forest Management Plan calls for 1,036 acres to be harvested within this fiscal year.

**Manzanita Woman** – This sale is comprised of three areas totaling 330 acres.

**Area 1** – This area is mixed conifer dominated by ponderosa pine on the upper portions turning to a near pure lodgepole pine stand on the lower portions. This area has seen significant bark beetle mortality in recent years primarily in the lodgepole pine but also present in the ponderosa pine. Consequently the entire stand is experiencing low vigor. This will be a single tress selection thinning but due to poor health and vigor in the dominant trees a larger portion will be selected for removal than is normal freeing up growth space for the healthier co-dominant and understory trees to develop. Some vigorous larger trees will be retained in compliance with the Sun Pass large tree policy as well as individuals of high defect being retained for wildlife habitat. Group Selections will be primarily in the lodgepole pine dominated areas with the focus being either to create a cohort of lodgepole pine or to convert portions to ponderosa pine through planting.

Post-harvest the stand will be generally younger but maintaining the structural components of uneven-aged management. Initial planting of the group selections and, if needed, interplanting of understocked areas will occur the spring following harvest. Another harvest in these stands will be planned in about 20 years.

**Area 2** – This will also be a single tree selection thinning, trees across all age classes will be selected for removal as required to maintain stand health and vigor. Group selection cuts will be incorporated into the marking prescription. Groups will be likely be tied into those areas where plantings failed following the previous harvest. Due to the amount of already unstocked ground in this area new planting acres will be greater than normal (10% of the total sale area) it is anticipated that 15-20% of this area will be initial planted following harvest. Highly defective trees will be reserve marked to provide snags and down wood for wildlife habitat.

Past-harvest site prep may be required to remove brush from the areas to be planted. Site prep will most likely be accomplished mechanically, either mastication or plucking of the brush. Planting will be primarily ponderosa pine seedlings with a small component of Douglas-fir and sugar pine. Another harvest will be scheduled in 20-30 years.

**Area 3** – This lodgepole pine stand will be clearcut reserving highly defective individuals for wildlife habitat. Post-harvest the stand will be replanted with lodgepole pine seedlings. A precommercial thin will scheduled in approximately 20 years with another clearcut harvest anticipated in 60-80 years.

**Hoagie** – This 352 acre partial cut harvest intended to reduce stocking levels while retaining the uneven aged characteristics of the stand. Thinning will be primarily from below, removing suppressed understory or codominant individuals, but overstory trees will be cut as needed to

ensure continued stand growth. Group selection cuts will be incorporated into the marking prescription. These 2-5 acre patches will typically be tied into existing stand openings and will provide planting sites to ensure a new cohort. Group selections will be limited to 10% of the total sale area. Highly defective trees will be reserve marked in order to provide snags and down wood for wildlife habitat.

Post-harvest the group selects will be planted with a mixture of ponderosa pine and Douglas-fir seedlings. Interplanting of understocked areas will may occur as needed. The remaining stand will be grown forward with another entry anticipated in approximately 20 years.

**Final Straw** - This 361 harvest is intended to reduce stocking levels while retaining the uneven aged characteristics of the stand. Thinning will be primarily from below, removing suppressed understory or codominant individuals, but overstory trees will be cut as needed to ensure continued stand growth. Group selection cuts will be incorporated into the marking prescription. These 2-5 acre patches will typically be tied into existing stand openings and will provide planting sites to ensure a new cohort. Group selections will be limited to 10% of the total sale area. Highly defective trees will be reserve marked in order to provide snags and down wood for wildlife habitat.

Both stands comprising this timber sale are identified in the Eastern Region Long-Range Forest Management Plan as Forest Connectivity Areas (FCA). The FCAs are a network of stands, approximately 2,000 acres, across Sun Pass designed to allow wildlife a corridor to move across the forest. Long term management objectives in these stands require a larger percentage of larger trees (15 tpa greater than 20" DBH of which 5.5 are greater than 30" DBH) and a higher residual stocking density (basal area of 120-160 sqft/acre). Harvest is expected to maintain the proportion of larger trees, however, stand density is expected to drop below recommended levels post-harvest with the expectation that the large component of understory white fir that is currently established, once released, will rapidly occupy the site restoring the basal area to approximately 120 sqft per acre.

Post-harvest the group selects will be planted with a mixture of ponderosa pine and seedlings. Interplanting of understocked areas will occur as well as needed. The remaining stand will be grown forward with another entry anticipated in approximately 20 years.

## **Gilchrist Activities**

This plan proposes 4 timber sales all located in the Gilchirst State Forest. These sales consist of 2,838 acres of partial cut harvest. Rather than the removal of saw timber these sales are focused on the removal of overstocked, small diameter, sub-merchantable trees which will be typically removed as chips. These projects are supported by the management strategies from the 1995 Eastern Region Long-Range Forest Management Plan and policy direction as stated during the February, 2010 Board of Forestry meeting that approved the initial acquisition of the 43,235 acres of the Gilchrist State Forest:

"It is proposed that the lands acquired shall be designated as approximately 42,535 acres Silviculturally Capable and 700 acres Non-Silviculturally Capable. The Gilchrist tract forestlands will be managed consistent with the approved Eastern Oregon Region Forest

Management Plan, which calls for uneven-aged management to provide a range of forest values. Following a post-acquisition study and planning phase, specific plans for managing the Gilchrist lands will be incorporated into the implementation plan and annual operations plans for the Klamath-Lake District.”

**Broken Spoke** – This 840 acre harvest is intended to increase viability of the stand by reducing stocking levels to maintain proper stand density. The stand is currently overstocked and vulnerable to attack by a range of forest pathogens. Research has shown that fast-growing trees can resist bark beetle attack, some diseases, and mistletoe infection. Therefore, maintaining forest health means keeping individual trees growing well. This will maximize opportunity for future entries and create a stable forest to reliably produce forest products and other forest benefits. Additionally, this will be a resilient stand suitable to the climate and ecology of eastern Oregon ponderosa / mixed conifer stand type.

To accomplish this, thinning will be primarily from below, removing suppressed understory or codominant individuals, but overstory trees will be cut as needed to ensure continued stand growth. The stand will result with a multi aged and vigorously growing 80 sq. ft. / acre basal area where forest health constraints allow. Some areas will be thinned more aggressively to reduce phenotypically poor trees with a low potential for growth. This will create a younger and more vigorously growing stand. Highly defective trees will be reserved in order to provide snags and down wood for wildlife habitat. Snags and wildlife trees will be created / left to achieve a minimum of 4 per acre.

The remaining stand will be grown forward with another entry anticipated in approximately 20 years.

**Dirty Paws** – This 492 acre harvest is intended to increase viability of the stand by reducing stocking levels to maintain proper stand density. The stand is currently overstocked and vulnerable to attack by a range of forest pathogens. Research has shown that fast-growing trees can resist bark beetle attack, some diseases, and mistletoe infection. Therefore, maintaining forest health means keeping individual trees growing well. This will maximize opportunity for future entries and create a stable forest to reliably produce forest products and other forest benefits. Additionally, this will be a resilient stand suitable to the climate and ecology of eastern Oregon Ponderosa / mixed conifer stand types.

To accomplish this, thinning will be primarily from below, removing suppressed understory or codominant individuals, but overstory trees will be cut as needed to ensure continued stand growth. The stand will result with a multi aged and vigorously growing 80 sq. ft. / acre basal area where forest health constraints allow. Some areas will be thinned more aggressively to reduce phenotypically poor trees with a low potential for growth. Additionally, some areas may thinned to a higher residual basal area dependent on the micro site within the stand. The changes in prescription will be dependent on what will achieve the highest future value. Highly defective trees will be reserved in order to provide snags and down wood for wildlife habitat. Snags and wildlife trees will be created / left to achieve a minimum of 4 per acre.

The remaining stand will be grown forward with another entry anticipated in approximately 20 years.

**Horizon** – This 1233 acre harvest is intended to increase viability of the stand by reducing stocking levels to maintain proper stand density. The stand is currently overstocked and vulnerable to attack by a range of forest pathogens. Research has shown that fast-growing trees can resist bark beetle attack, some diseases, and mistletoe infection. Therefore, maintaining forest health means keeping individual trees growing well. This will maximize opportunity for future entries and create a stable forest to reliably produce forest products and other forest benefits. Additionally, this will be a resilient stand suitable to the climate and ecology of eastern Oregon ponderosa / mixed conifer stand types.

To accomplish this, thinning will be primarily from below, removing suppressed understory or codominant individuals, but overstory trees will be cut as needed to ensure continued stand growth. The stand will result with a multi aged and vigorously growing 80 sq. ft. / acre basal area where forest health constraints allow. Some areas will be thinned more aggressively to reduce phenotypically poor trees with a low potential for growth. Additionally, some areas may thinned to a higher residual basal area dependent on the micro site within the stand. The changes in prescription will be dependent on what will achieve the highest future value. Highly defective trees will be reserved in order to provide snags and down wood for wildlife habitat. Snags and wildlife trees will be created / left to achieve a minimum of 4 per acre.

The remaining stand will be grown forward with another entry anticipated in approximately 20 years.

**Powder** – This 274 acre harvest is intended to capitalize on available product that may otherwise deteriorate if left alone. The stand is currently stocked with mature and over-mature Lodgepole Pine and vulnerable to attack by a range of forest pathogens. Research has shown that fast-growing trees can resist bark beetle attack, some diseases, and mistletoe infection. Therefore, maintaining forest health means keeping individual trees growing well.

This will capitalize on an available market and maximize opportunity for future entries. Select mature and overstory trees will be left to create structure and habitat for wildlife as well as allow the residual stand to thrive. All healthy regeneration and advance progeny will be reserved. This intended release will promote a stable forest to reliably produce forest products and other forest benefits.

To accomplish this, thinning will be primarily from above, removing mature or codominant individuals, but understory trees will be cut as needed to ensure appropriate stand stocking levels. The stand will result with a multi aged and vigorously growing 60 sq. ft. / acre basal area where forest health constraints allow. Some areas will be thinned more aggressively to reduce phenotypically poor trees with a low potential for growth. Additionally, some areas may thinned to a higher residual basal area dependent on the micro site within the stand. The changes in prescription will be dependent on what will achieve the highest future value. Highly defective trees will be reserved in order to provide snags and down wood for wildlife habitat. Snags and wildlife trees will be created / left to achieve a minimum of 4 per acre.

The remaining stand will be grown forward with another entry anticipated in approximately 40 years.

Financial summaries for all planned harvest activities can be found on Table A-2, Timber Harvest Operations – Financial Summary.

Table 2.1. Accomplishment of AOP Harvest Acreage Compared to IP Annual Objective (Acres)

<b>Fiscal Year</b>	<b>IP Annual Objective</b>	<b>AOP Planned Acres</b>	<b>AOP Sold Acres</b>	<b>Cumulative Difference from Objective<sup>1</sup></b>
2009	1197	994	1106	-91
2010	1197	1184	1150	-154
2011	1197	1132	1134	-217
2012	1197	1235	1231	-183
2013	1197	1229	1242	-138
2014	1197	1172	1122	-213
2015	1036	1046	1170	-79
2016	1036	1471	1365	250
2017 (Current AOP)	1036	1037	N/A	251
2018 (Draft )	1036	1043	N/A	258

1. FMP Harvest Objective versus Sold Acres

## **Structural Habitat Components**

### **Desired Future Condition for Large Trees in Sun Pass State Forest:**

Stands will be managed to achieve a target of 10 trees per acre 20" DBH and larger, at least two of which are 30" DBH or larger. This is a long-term goal that could take several decades to achieve. Stand management prescriptions in the area described will be designed to guide stands towards the future target, and to create stands of vigorous, fast-growing trees. This type of stand has the best chance of providing the large tree component in the future. Existing large trees (up to the 10 tree standard) are a priority to leave as long as doing so contributes to the long-term forest health goal. Existing large trees that exhibit decadence that is of value to wildlife will also be left at least to the level prescribed in the FMP (0.2 per acre).

Monitoring:

Summer/Fall of 2016 stand level inventory was conducted within Sun Pass. These measurements confirmed we were meeting or growing these stands towards this target.

**Snags/Downed wood:**

In order ensure snags and downed wood components in the harvested areas the following steps will be taken:

- All snags, unless determined to be a safety hazard, will be reserved from cutting.
- Highly defective trees will be reserved from cutting.
- Trees with minor defects will be mechanically high-stumped as appropriate for snag creation.
- Non-merchantable segments of felled trees will bucked out and left on site or returned from the landing and scattered within the harvest unit.

**Summary of Timber Harvest Operations**

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

<b>Management Area</b>	<b>Partial Cut</b>	<b>Clearcut</b>
Sun Pass State Forest	1017	26
Gilchrist State Forest	2838	

Forest Roads Management

**Overview**

All of the road management activities proposed in 2018 will be associated with the proposed timber sales. No new road construction is anticipated and road improvements will be limited to that which is necessary to conduct timber harvest operations. Where feasible, roads that will not be utilized until the next harvest entry, approximately 20 years, will be closed following harvest.

Refer to Summary Table A-3 for the Forest Roads Summary of the 2018 AOP

**Road Construction**

No road construction is anticipated for Fiscal Year 2018.

## **Road Improvement**

All timber sales will require road improvement either to access the sale area or to open interior roads to facilitate logging. This AOP proposes to improve 13 miles of road. Road improvement will consist of opening previously closed roads, removing encroaching brush, and minor reshaping of the roads surface as necessary for travel and drainage.

- Broken Spoke                    1 miles
- Dirty Paws                      1 miles
- Horizon                         5 miles
- Manzanita Woman            1 miles
- Powder                         1 miles
- Hoagie                         2 miles
- Final Straw                    2 miles

## **Road Access Management**

Whenever possible, existing roads are used to access the sale area. Emphasis is placed on closing or vacating roads; whether or not they are constructed for a particular sale. All Fiscal Year 2018 sales will be accessed using ODF owned road systems.

## **Road Maintenance**

Nearly all of the road maintenance is associated with timber sales and is accomplished through timber sale contracts as project work. Road maintenance other than project work is generally limited to emergency repairs such as storm damage repair.

Road maintenance general consists of brushing roads along the haul route as well as spot rocking, reshaping, and maintaining drainage on portions of our main road systems to keep it in good condition for seasonal traffic. During the summer months, road watering is utilized to keep the road surface intact as well as providing good visibility for any traffic using the roads during active hauling.

## **Management of Rock Source/Supply**

There are no established rock sources on state owned property in the district. All needed rock will be purchased from local suppliers. Rocking will be limited to what is necessary for road maintenance associated with timber harvests.

## **Land Surveying**

No land surveys are anticipated for FY 2018.

## Young Stand Management

Due to budget constraints only those activities that are required by the Forest Practices Act, identified in the Eastern Region Long-Range Forest Management Plan, or are essential for establishment of a new stand will be undertaken.

Refer to Summary Table A-4 for the Reforestation and Young Stand Management Summary of the 2018 AOP.

### **Site Preparation**

No site prep is planned other than what is indirectly accomplished through timber harvest activities. Tree planting is planned for the first planting season following harvest operations utilizing the disturbance from the harvest to minimize competition from competing vegetation.

### **Seedlings / Nurseries**

17,500 seedlings have been ordered for outplant in FY 2018 consisting of 11,000 ponderosa pine and 6,500 Douglas-fir. This number is down from the average of 40,000 seedlings per year due to the scheduling of timber harvests.

All seedlings are container stock being grown by PRT.

### **Planting**

Approximately 40 acres will be initial planted in the Toddzilla and PLJ Timber Sales. Seedlings will be planted in the 2-5 acre group selections that were incorporated into the marking prescriptions of these sales. Planting is anticipated to be at a rate of 436 trees per acre.

### **Vegetation Management**

No vegetation management is anticipated for FY 2018.

### **Tree Protection**

No tree protection is anticipated for FY 2018.

### **Pre-commercial Thinning**

Approximately 1,700 acres are in need of pre-commercial thinning but current budget levels will not support these operations. If funds were to become available this work will be planned and carried out.

### **Pruning**

No pruning is planned for FY 2018

## **Invasive Species**

Isolated patches of Klamath weed (*Hypericum perforatum*) have been observed and treated adjacent to Sun Mountain Road in Sun Pass State Forest. These areas will continue to be monitored and treated as necessary by district staff.

## **Roadside Spraying**

None planned in FY 2018.

## **Stocking Surveys**

Stocking survey will be conducted by district staff focusing on seedlings planted in the two previous planting seasons. Older planting sites will be surveyed on a case by case basis as necessary to ensure seedling growth is progressing at an acceptable rate.

## **Recreation Management**

### **Overview of Recreation Management**

The primary recreation strategy in the Eastern Region Long-Range Forest Management Plan is to make District forests available for informal dispersed recreation. During development of the FMP, it was determined that current users value this type of opportunity because surrounding agencies and private landowners are providing a full spectrum of more developed as well as more primitive recreation opportunities.

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

The Klamath Outdoor Science School (KOSS) will continue to develop facilities at the site as funding becomes available. A pavilion, restrooms, and additional Yurts are planned at this time.

The Klamath Trail Alliance will continue to improve and maintain the Spence Mountain Trailhead located off of Highway 140 on Board of Forestry property.

### **Trails**

The KOSS nature trail will continue to be maintained by seasonal staff as well as KOSS volunteers.

In Gilchrist maintenance will continue on the footpath connecting the high school to the bike path.

A new trail will be constructed in the Gilchrist State Forest east of the town of Gilchrist. This trail will start at the parking area south of the football field and end at the top of Crescent Butte. The construction will be performed by Gilchrist High School personnel.

## Other Integrated Forest Management Projects

### **Aquatic Habitat Improvement**

#### **Sun Creek Bull Trout Restoration Project**

The Klamath-Lake District in partnership with Trout Unlimited, Oregon Department of Fish and Wildlife, Crater Lake National Park, and USF&W have implemented a project to expand bull trout distribution downstream from Crater Lake National Park (Park) onto the State Forest portion of Sun Creek. This effort supports a USFW Draft Recovery Plan for Bull Trout in the Klamath Basin. Reestablishing headwater populations and increasing downstream distributions of bull trout have been presented by USFWS and ODFW as the most important recovery actions for bull trout in the Klamath Basin.

The first action completed for this restoration project was installing two temporary barriers that will prevent upstream migration of non-native fish into the bull trout recovery reach, but allow for downstream migration of bull trout. This was completed in the fall of 2010. The barriers can eventually be removed when bull trout have been established throughout Sun Creek and the threat from non-native fish has been mitigated.

Channel construction began Fiscal Year 2016 and will be completed in Fiscal Year 2018. The end result of this project is to divert Sun creek from its Current channel downstream of these barriers and realign it with its historic channel and connect to the head of the Wood River.

This approach (installation of barriers and removal of non-native fish with chemical treatment) was used in the upstream portion of Sun Creek flowing through the Park. The Park project has been declared a success with large increases in bull trout population and distribution within the park. Crater Lake National Park will continue to monitor the Sun Creek barriers and bull trout populations in Sun Pass.

### **Land Exchange**

District personnel will work on developing the Land Acquisition and Exchange Plan as time and workload allow.

### **Firewood Cutting Program**

The Klamath-Lake District will continue to issue personal firewood cutting permits for areas where sufficient amounts of wood are available. The public may call our office to inquire about the availability of wood cutting areas. Permits will be issued only during the months outside of fire season.

A limited number of personal firewood permits will be issued, on a first come-first served basis with a limit of one per individual or household within a 12 month period. At this time, there is no fee for the permit which allows removal of 4 cords of firewood. The Oregon Department of

Forestry does not guarantee the quality of availability of wood when issuing firewood cutting permits.

Designated firewood cutting areas will be marked on the permit map, which excludes active and sold timber sales, recreation sites, and planned operations. Active sales will be posted with “No Firewood Cutting” signs.

### **Non-Timber Forest Products**

Mushroom and cone collection permits are offered on the District.

## **Planning**

### **Stand Level Inventory and Other Vegetation Inventories**

District personnel will work on SLI as time and workload allow. Additional SLI data may be collected through a statewide contract if funds become available.

### **Fish and Wildlife Surveys**

Pre-operational surveys for Northern Goshawks will be conducted prior to auction if suitable habitat is present and surveys are recommended by Salem staff.

Crater Lake National Park staff will monitor Bull Trout migration above the barriers that were installed on Sun Creek.

### **Research and Monitoring**

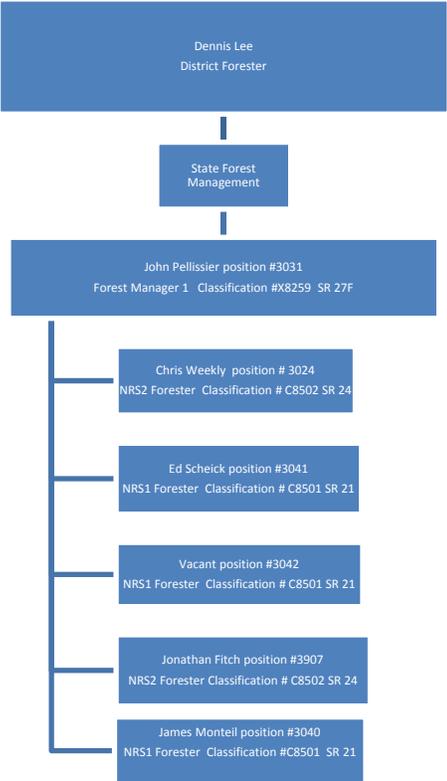
None planned for FY18.

### **Other Planning Operations**

None Planned in FY18

# Administration

## Unit Organization



## APPENDIXES

### A. Summary Tables

- a. Harvest Operations – Financial Summary
- b. Harvest Operations – Forest Resource Summary
- c. Forest Road Management Summary
- d. Reforestation and Young Stand Management Summary
- e. Recreation Management Summary

### B. Map Section

- a. Harvest Operations Vicinity Map
- b. Include other maps that support the AOP

### C. Consultations with Other State Agencies

This appendix summarizes the results of consultations with the Oregon Department of Fish and Wildlife and other agencies, as appropriate. This appendix contains any written comments that we received from state agencies.

### D. Public Involvement

This appendix describes the results of the public involvement process of this AOP and will be added prior to its approval.

### E. Pre-Operations Reports

Pre-Operations Reports are available from the district upon request.



## PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District: Klamath-Lake

Fiscal Year 2018

Date: 11/22/2016

This table lists Forest Resources and other issues addressed within Pre-Operations Report due to their presence within or near harvest operations

Primary Harvest Operations	Unit (Optional)	Forest Health Issues <sup>1</sup>	Invasive Species	LYR/OFS Structures <sup>2</sup>	Landcape Design LYR/OFS <sup>3</sup>	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement <sup>4</sup>	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle (BA Required)	Operating within a MIMMA (BA Required)	Murrelet Timber Sale Screening Process Required (MM Policy 2.27)	T&E Fish Adjacent to Harvest Unit / Haul Route <sup>5</sup>	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues	
Broken Spoke																						
Dirty Paws																						
Horizon																						
Manzanita Woman	1-3	X	X																			
Powder																						
Hoagie																						X
Final Straw							X		X						X							X

<sup>1</sup> A 'x' (in any column) indicates yes the resource or other issue occurs within or near the harvest operation and is addressed by the Pre-Operations Report

<sup>2</sup> A 'x' indicates the harvest operation contains stands that are currently in a Layered or Older Forest Stand Structure

<sup>3</sup> A 'x' indicate that the operation contains areas that have been designated for the development of complex forest stands (LYR/OFS)

<sup>4</sup> The final decision on these projects will occur during sale preparation and inconultation with ODFW.

<sup>5</sup> This table lists harvest operations (units or log haul routes) that are adjacent to streams that are known to contain T&E fish. The Pre-Operation Report identifies whether T&E fish are present in the basin.





## REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Klamath-Lake

Fiscal Year: 2018

Date: 11/22/2016

Projects Conducted by ODF Staff or Contractors	Board of Forestry			Common School Forest Lands			Volume (MBF)	
	Acres Planned	Average Cost*/Acre	BOF Cost	Acres Planned	Average Cost*/Acre	CSL Cost	Total Acres	Total Cost
Seedling / Nursery Costs			\$7,000.00			\$0.00	0	\$7,000.00
Initial Planting	40	\$125.00	\$5,000.00			\$0.00	40	\$5,000.00
Interplanting			\$0.00			\$0.00	0	\$0.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection - Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection - Direct Control			\$0.00			\$0.00	0	\$0.00
Site Prep - Chemical - Aerial			\$0.00			\$0.00	2,167	\$0.00
Site Prep - Chemical - Hand			\$0.00			\$0.00	0	\$0.00
Site Prep - Broadcast Burning			\$0.00			\$0.00	0	\$0.00
Site Prep - Piling Burning			\$0.00			\$0.00	0	\$0.00
Site Prep - Mechanical			\$0.00			\$0.00	0	\$0.00
Release - Chemical - Aerial			\$0.00			\$0.00	0	\$0.00
Release - Chemical - Hand			\$0.00			\$0.00	0	\$0.00
Release - Mechanical - Hand			\$0.00			\$0.00	0	\$0.00
Precommercial Thinning	175	\$300.00	\$52,500.00			\$0.00	175	\$52,500.00
Pruning			\$0.00			\$0.00	0	\$0.00
Invasive Species			\$0.00			\$0.00	0	\$0.00
Road Side Spraying			\$0.00			\$0.00	0	\$0.00
Stocking Surveys			\$0.00			\$0.00	0	\$0.00
Other			\$0.00			\$0.00	0	\$0.00
<b>Totals</b>	<b>215</b>	<b>--</b>	<b>\$64,500.00</b>	<b>0</b>	<b>--</b>	<b>\$0.00</b>	<b>2,382</b>	<b>\$64,500.00</b>

\* Work to be completed by ODF staff; cost are for materials only

Projects Conducted by Inmates	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			\$0.00			\$0.00	0	\$0.00
Interplanting			\$0.00			\$0.00	0	\$0.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection - Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection - Direct Control			\$0.00			\$0.00	0	\$0.00
Site Prep. - Chemical Aerial			\$0.00			\$0.00	0	\$0.00
Site Prep - Chemical - Hand			\$0.00			\$0.00	0	\$0.00
Site Prep - Broadcast Burning			\$0.00			\$0.00	0	\$0.00
Site Prep - Piling Burning			\$0.00			\$0.00	0	\$0.00
Site Prep - Mechanical			\$0.00			\$0.00	0	\$0.00
Release - Chemical - Hand			\$0.00			\$0.00	0	\$0.00
Release - Mechanical - Hand			\$0.00			\$0.00	0	\$0.00
Precommercial Thinning			\$0.00			\$0.00	0	\$0.00
Pruning			\$0.00			\$0.00	0	\$0.00
Invasive Species			\$0.00			\$0.00	0	\$0.00
Other			\$0.00			\$0.00	0	\$0.00
<b>Totals</b>	<b>0</b>	<b>--</b>	<b>\$0.00</b>	<b>0</b>	<b>--</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>

Grant Funded Activities	Board of Forestry			Common School Forest Lands			District		Funding
	Acres Planned	Average Cost*/Acre	Cost	Acres Planned	Average Cost*/Acre	Cost	Total Acres	Total Cost	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	

**RECREATION SITE MANAGEMENT SUMMARY**

District: Klamath-Lake

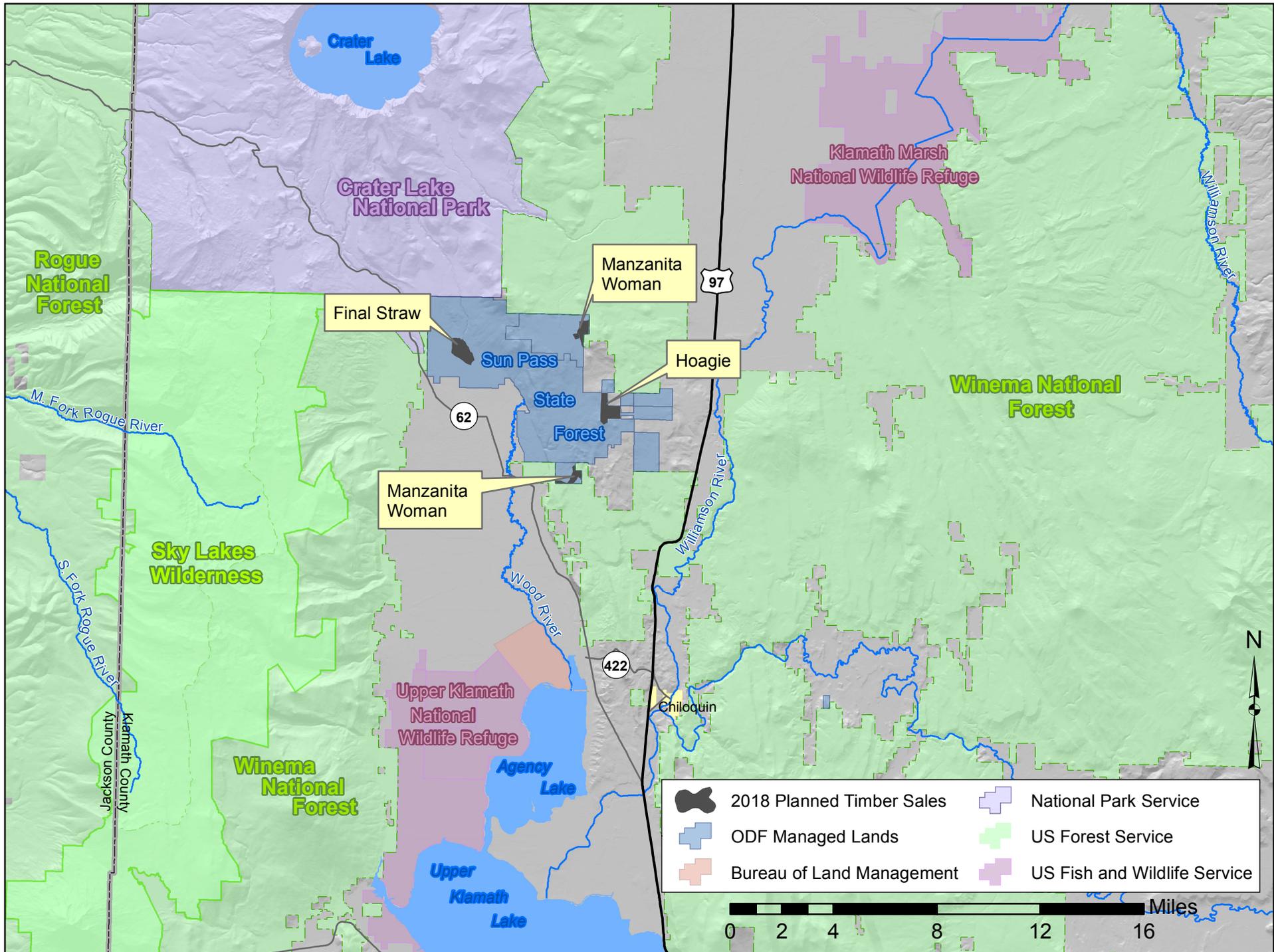
Fiscal Year: 2018

Date : 11/22/2016

Project	Construction Cost (Funding)		Improvement Cost (Funding)		Operations/Maint. (Funding)		Volume (MBF)	Comments
	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)		
<b>Campgrounds</b>								
							\$0	
							\$0	
							\$0	
<b>Designated Dispersed Campsites</b>								
							\$0	
							\$2,167	
							\$0	
<b>Day Use Areas</b>								
							\$0	
							\$0	
							\$0	
<b>Trailheads</b>								
							\$0	
							\$0	
							\$0	
<b>Interpretive Sites</b>								
							\$0	
							\$0	
							\$0	
<b>Other Operations</b>								
							\$0	
							\$0	
							\$0	
							\$0	
							District Total	\$0
							Other Total	\$0
							<b>TOTAL</b>	<b>\$2,167</b>

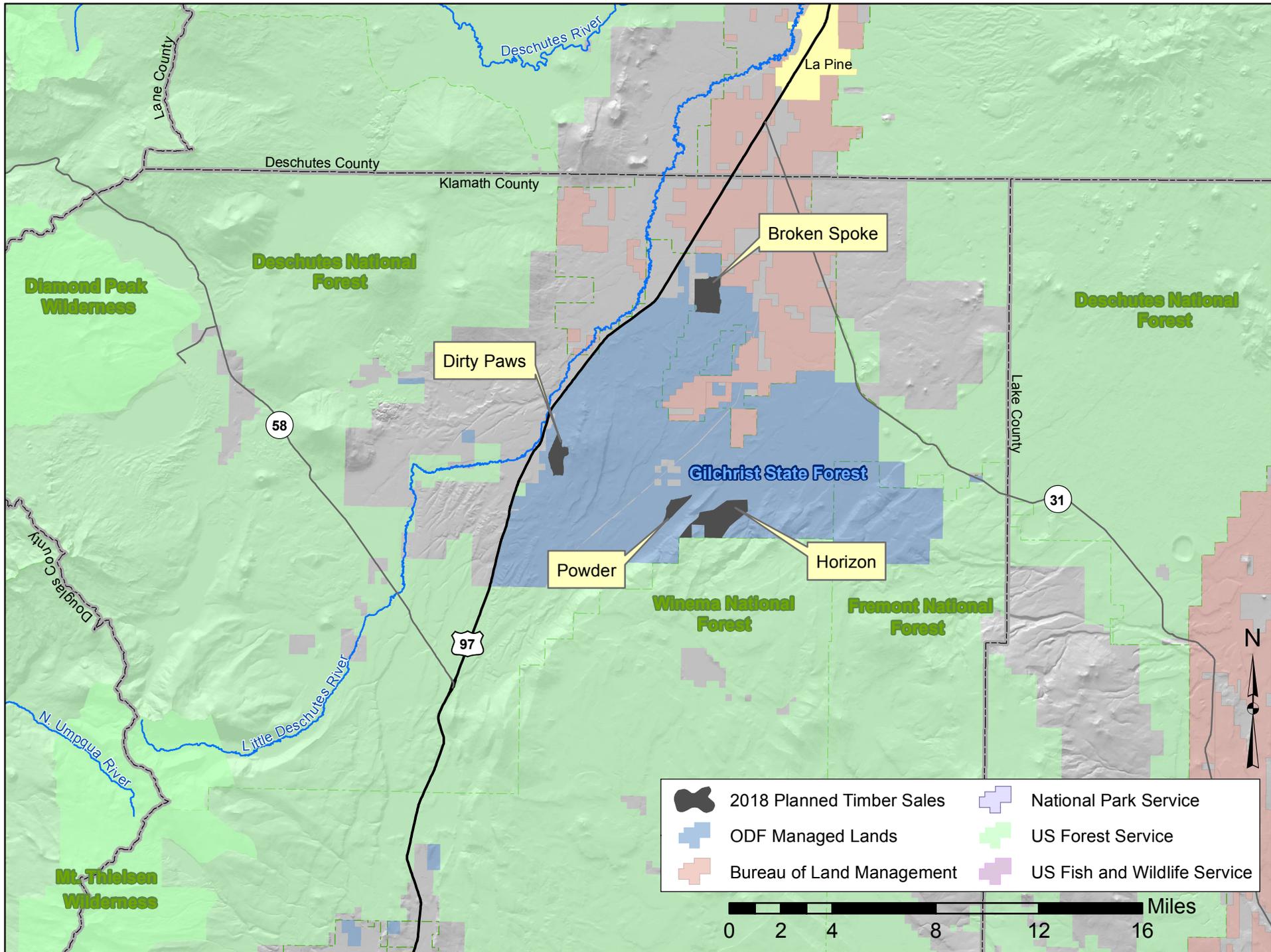


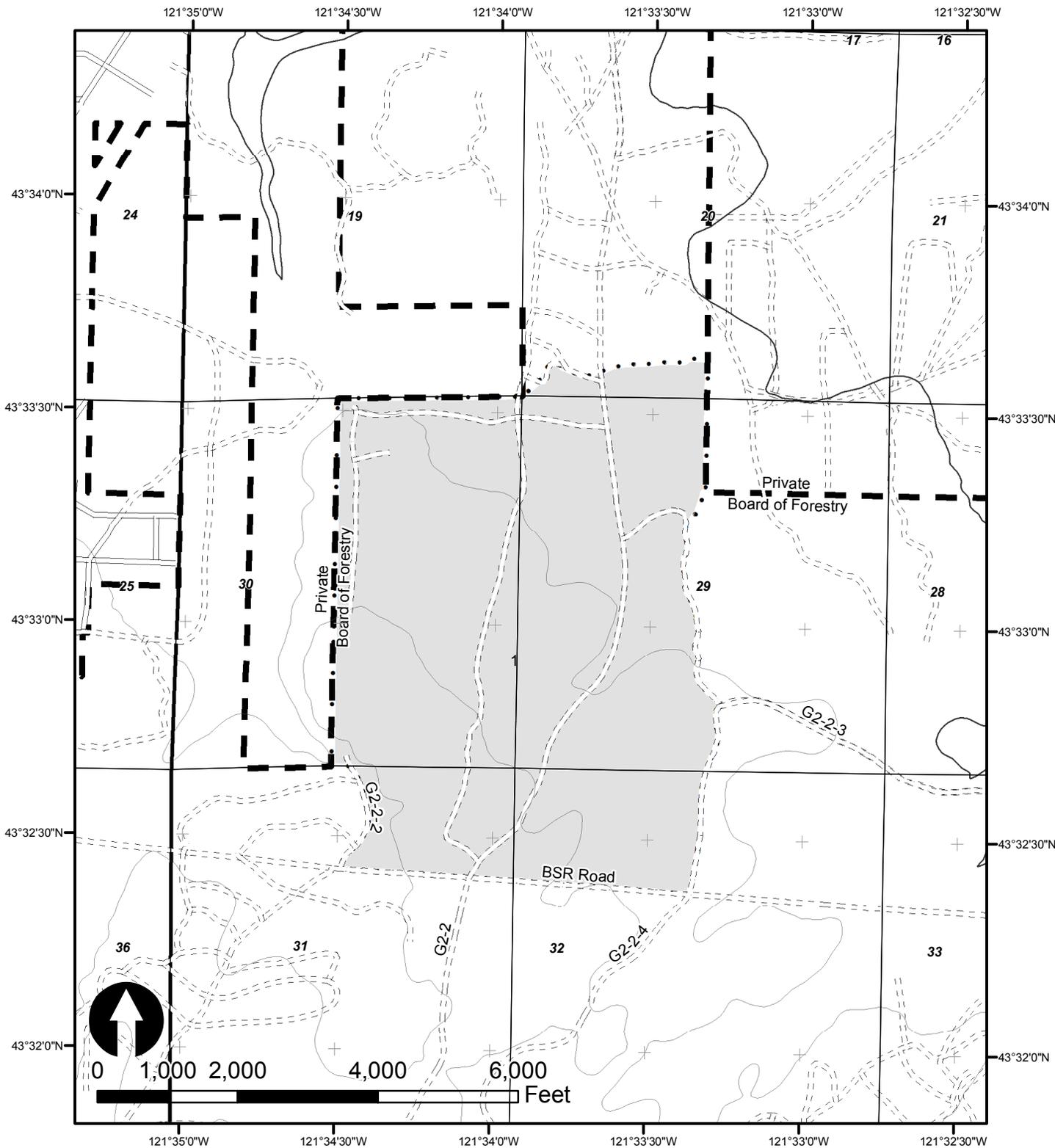




- |   |                           |   |                              |
|---|---------------------------|---|------------------------------|
|  | 2018 Planned Timber Sales |  | National Park Service        |
|  | ODF Managed Lands         |  | US Forest Service            |
|  | Bureau of Land Management |  | US Fish and Wildlife Service |



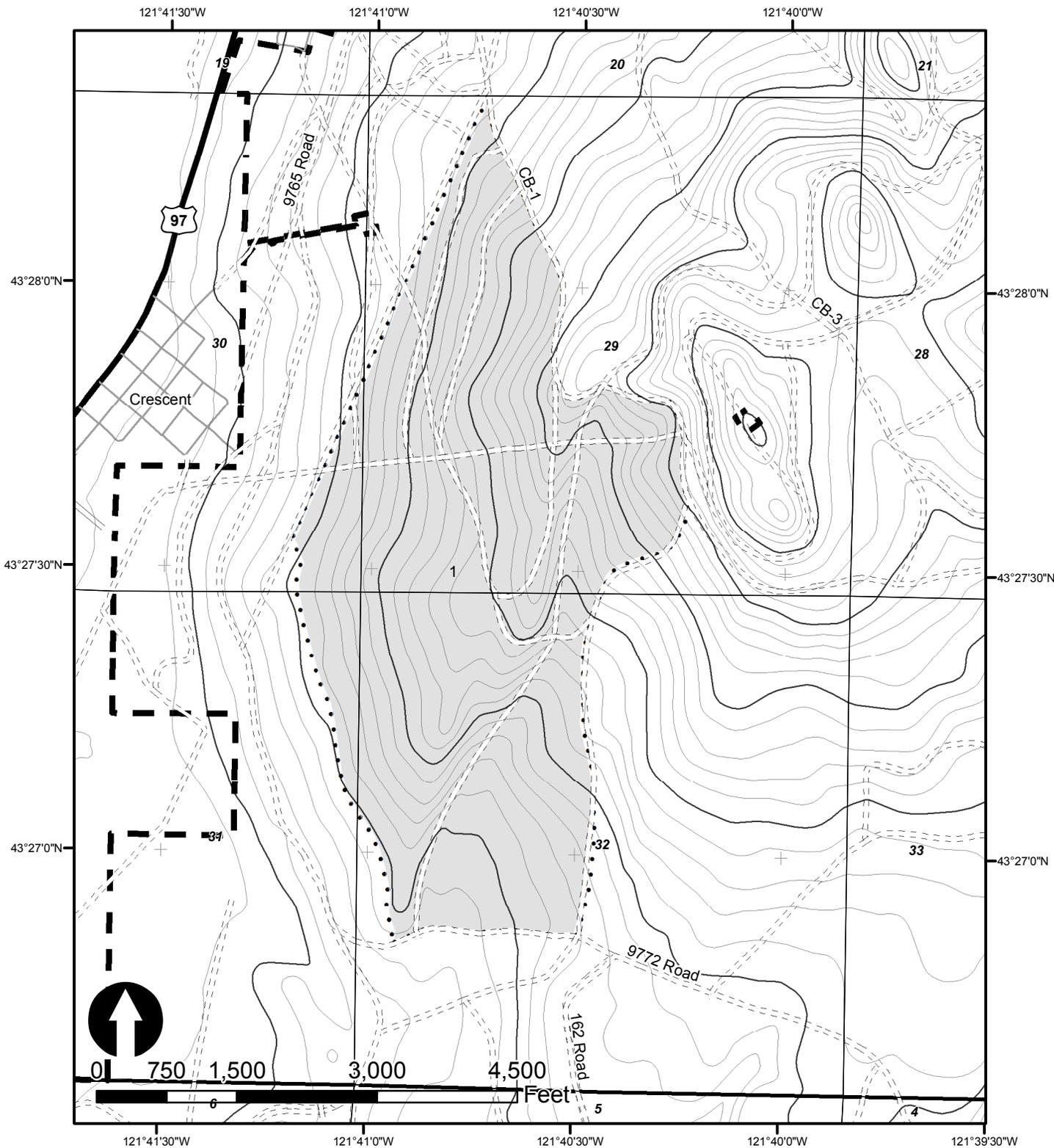




**FY 18**

Klamath-Lake District  
 Broken Spoke Timber Sale  
 Portions of Sections 20, 29, 30, 31,  
 and 32, T23S, R10E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 840 acres

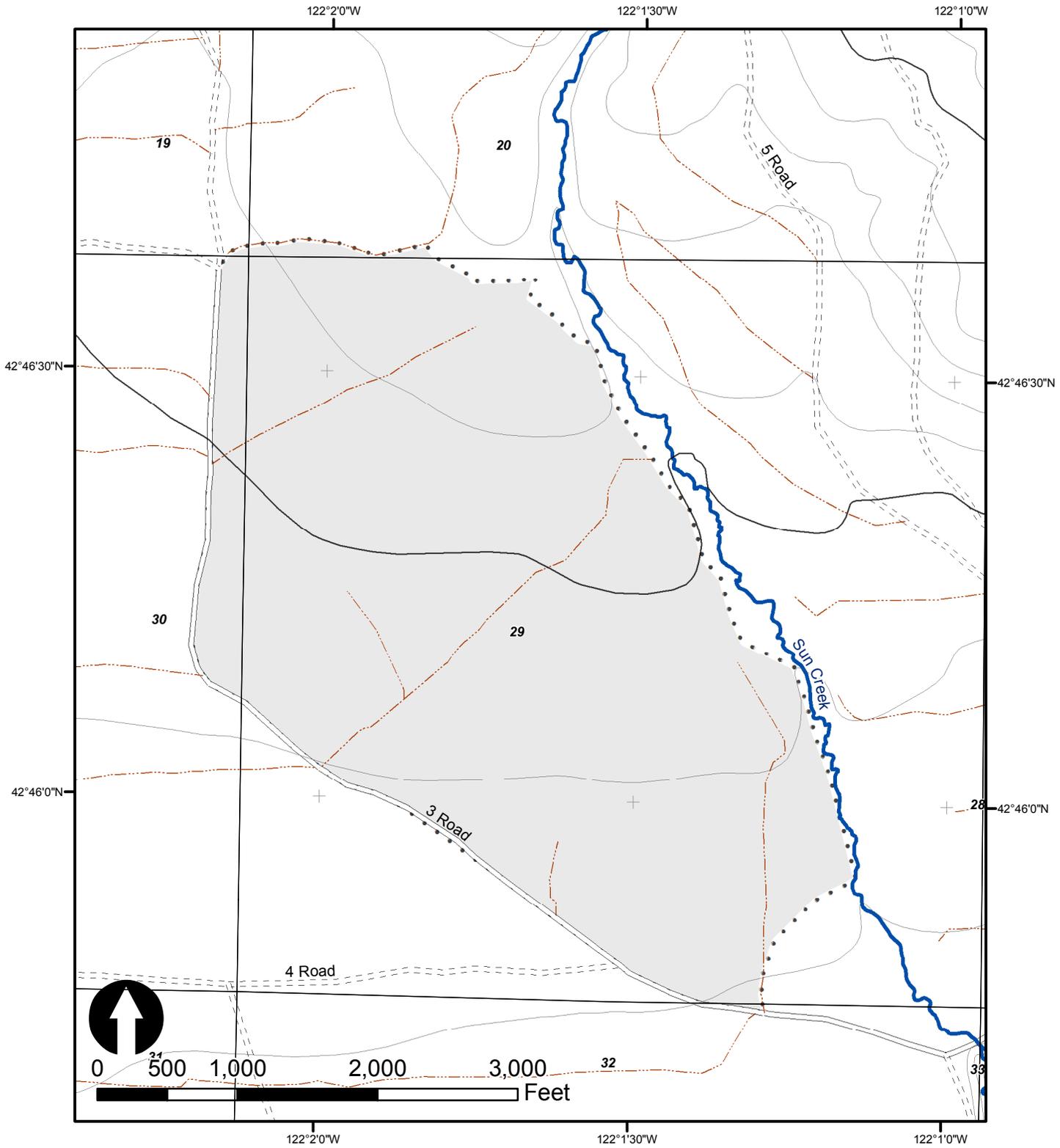




**FY 18**

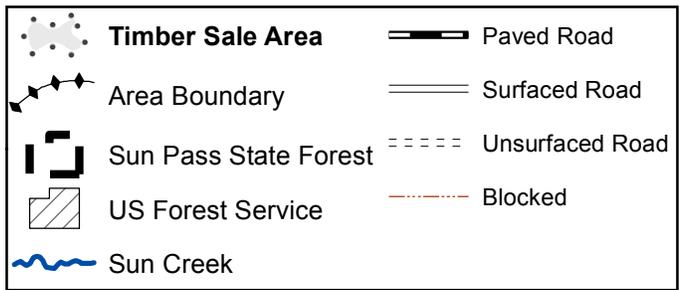
Klamath-Lake District  
 Dirty Paws Timber Sale  
 Portions of Sections 20, 29, 30, 31,  
 and 32, T24S, R9E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 492 acres

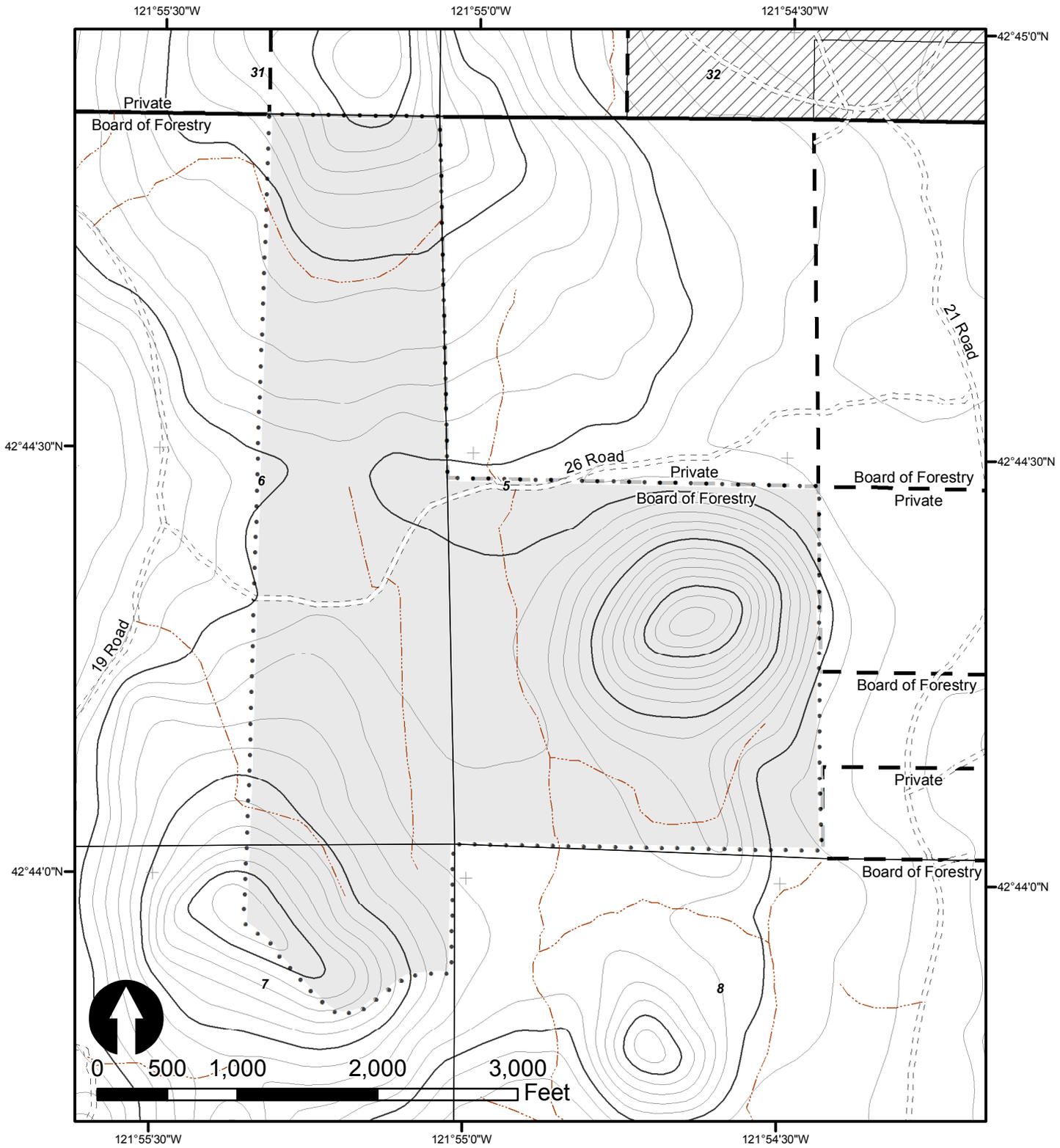




**FY 18**

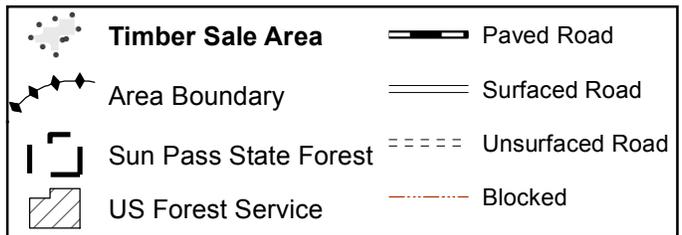
Klamath-Lake District  
 Final Straw Timber Sale  
 Portions of Section 19, 20, 29 and 30,  
 T32S, R7.5E, Willamette Meridain,  
 Klamath County, Oregon  
 Approximately 361 acres

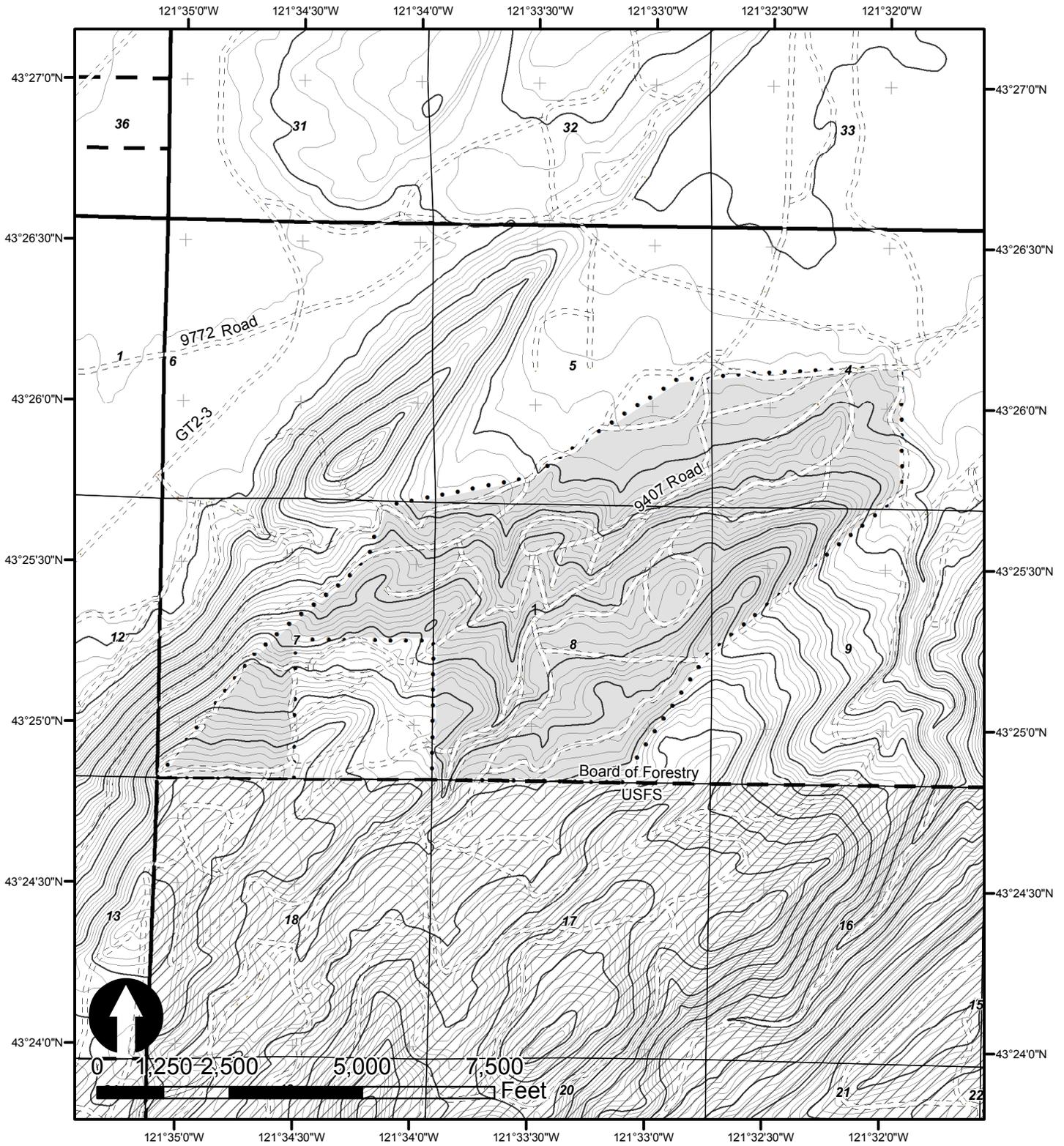




**FY 18**

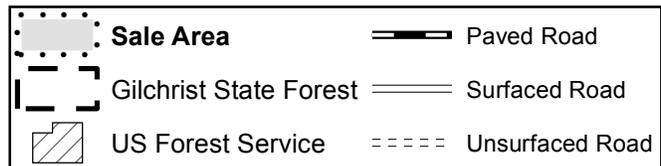
Klamath-Lake District  
 Hoagie Timber Sale  
 Portions of Section 5, 6 and 7, T33S,  
 R7E, Willamette Meridain,  
 Klamath County, Oregon  
 Approximately 352 acres

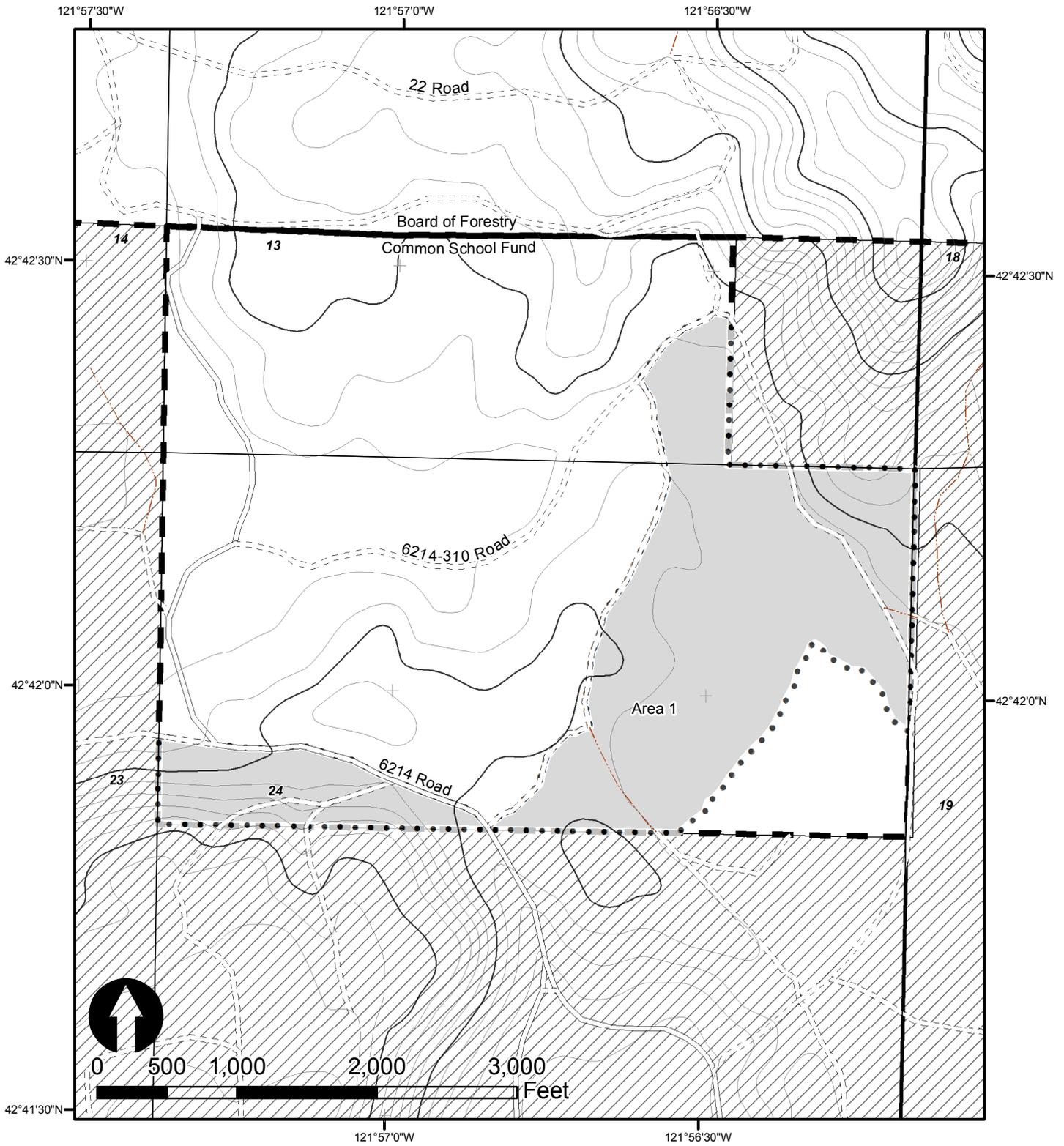




**FY 18**

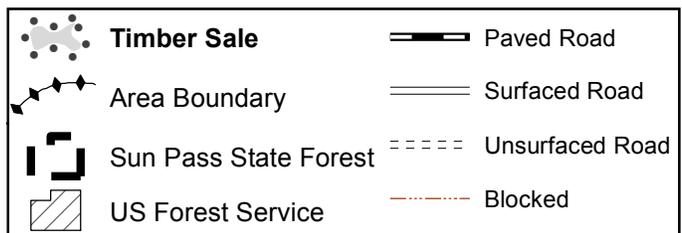
Klamath-Lake District  
 Horizon Timber Sale  
 Portions of Sections 4, 5, 6, 7,  
 8, 9, and 17, T24S, R10E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 1233 acres

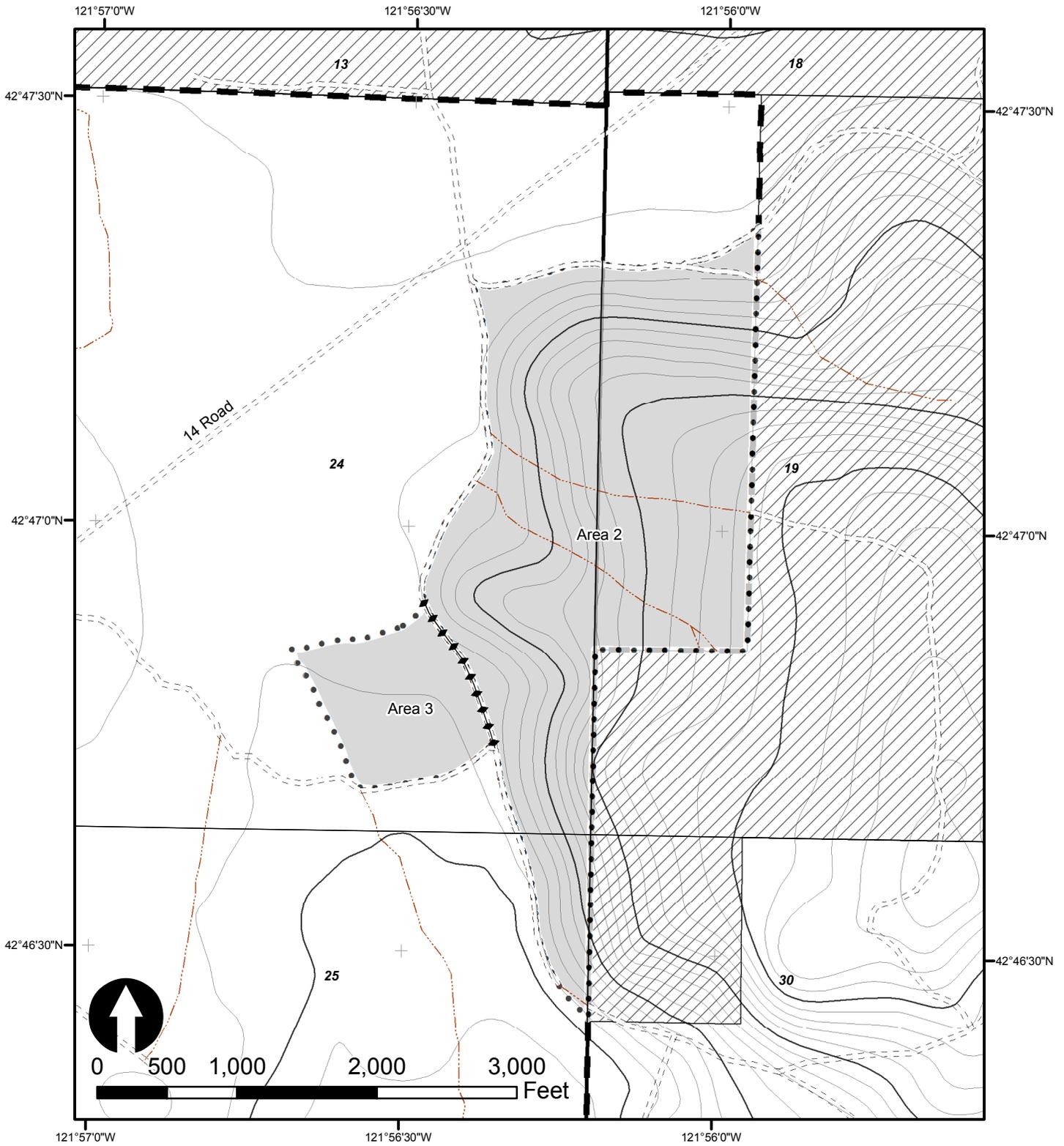




**FY 18**

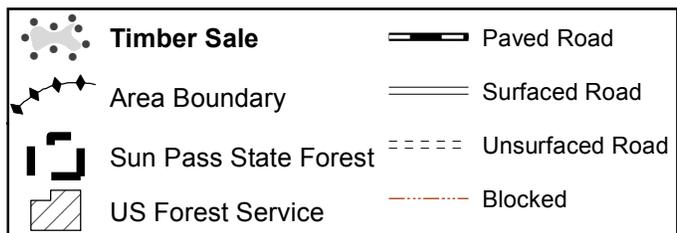
Klamath-Lake District  
 Manzanita Woman Timber Sale  
 Portions of Section 19, T32S, R7E,  
 Portions of Sections 24 and 25,  
 T32S, R7.5E, Portions of Sections  
 13 and 24, T33S, R7.5E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 334 acres

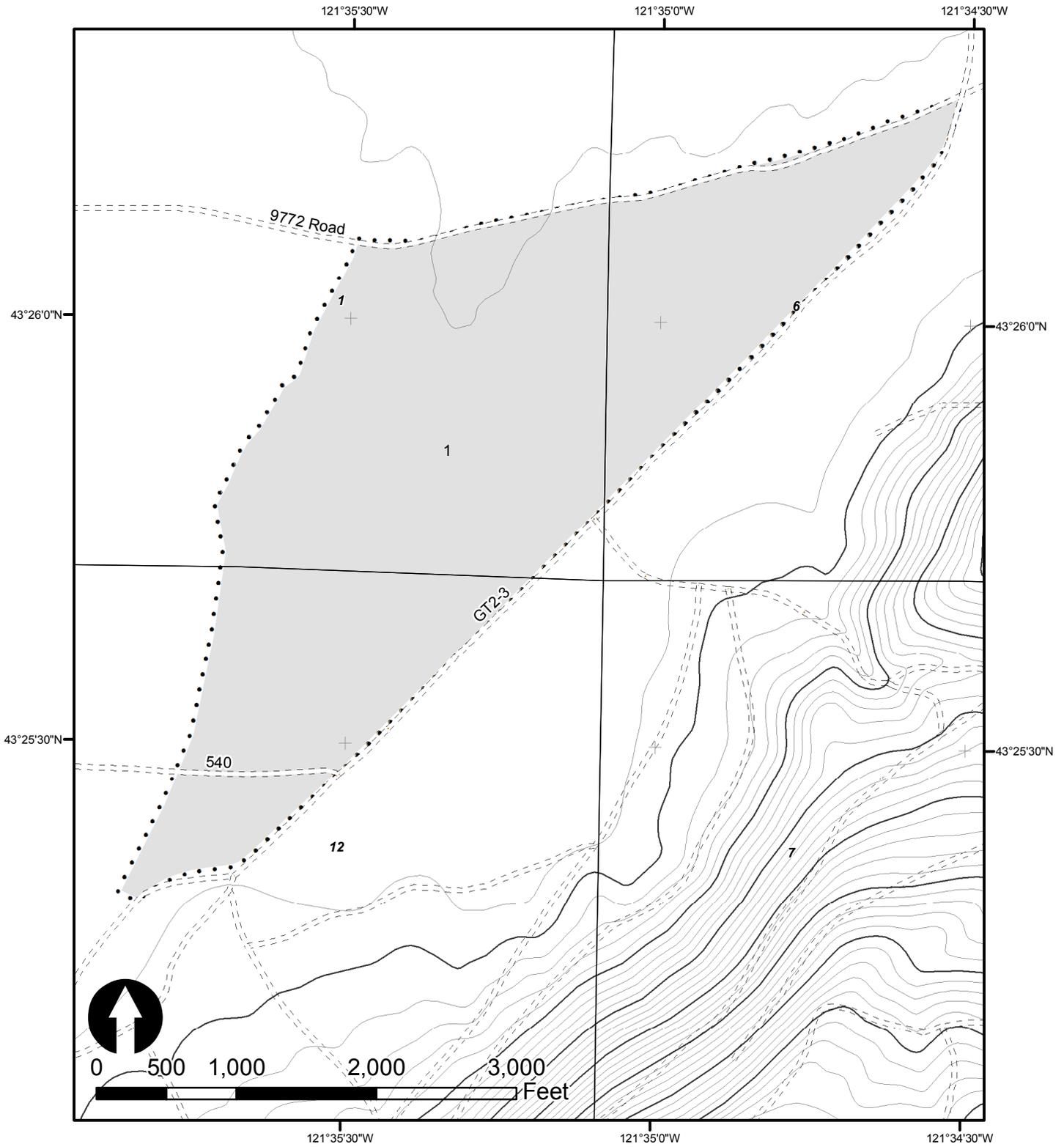




**FY 18**

Klamath-Lake District  
 Manzanita Woman Timber Sale  
 Portions of Section 19, T32S, R7E,  
 Portions of Sections 24 and 25,  
 T32S, R7.5E, Portions of Sections  
 13 and 24, T33S, R7.5E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 334 acres





**FY 18**

Klamath-Lake District  
 Powder Timber Sale  
 Portions of Sections 1 and 12,  
 T25S, R9E, Portions of Section  
 6, T25S, R10E, Willamette  
 Meridain, Klamath County, Oregon  
 Approximately 274 acres



# Appendix C

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## **Consultations with Other State Agencies**

This appendix summarizes the results of consultations with the Oregon Department Of Fish and Wildlife and the Oregon Department of Transportation.

- No written comments from ODFW have been received.
- Archaeologists from the Oregon Department of Transportation (ODOT) have reviewed the proposed timber harvests, road construction and recreation projects to review potential impacts to cultural resources. ODOT identified cultural resources on the Hoagie Timber Sale. All sites had been previously documented in the Cultural Resource Inventory of the Oregon Department of Forestry Eastern Region (2008). All sites will be reviewed on the ground during project layout.

# Appendix D

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## **Public Involvement**

### **PUBLIC COMMENT PROCESS FOR THE FY 2018 ANNUAL OPERATIONS PLAN**

The Oregon Department of Forestry issued a Press Release in March 2017, announcing a formal public comment period for the FY 2018 Annual Operations Plans from March 20 through May 4, 2017.

The purpose of the Public Comment Period is to provide an opportunity for the public to review the AOPs, ask questions, make recommendations and offer comments. As a public agency, ODF strives to operate in the best interest of Oregonians. We provide opportunities for public participation to assist us in securing the greatest permanent value from state forests for all Oregonians.

**The public comment period was held and no comments were received.**

# Appendix E

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## **Pre-Operations Reports**

Pre-Operations reports are available from the district upon request.