

**KLAMATH-LAKE
DISTRICT
2015 ANNUAL
OPERATIONS PLAN**

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Klamath - Lake District

2015 ANNUAL OPERATIONS PLAN

INTRODUCTION

This document describes activities planned on the Eastern Region state forest lands during Fiscal Year 2015 (July 1, 2014 to June 30, 2015). 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 76,932 acres of forest land, 70,105 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 2015 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. Reevaluation of stands to be entered in 2015 resulted in slightly less acres being treated than were identified in the Long Range Plan. This additional acreage helps to offset those years that in which more acres than the annual objective were treated. 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).

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the Klamath-Lake District Implementation Plan. All values are acres, except for Volume.

Silvicultural Activity	IP Annual Objective		2015 AOP Objective
	Low	High	
Partial Cut Harvest			1046
Regeneration Harvest			105
Rehabilitation			0
Reforestation (Initial Planting)			780
Pre-commercial Thinning			0
Fertilization			0
Pruning			0

INTEGRATED FOREST MANAGEMENT

OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

This plan proposes three timber harvest operations all located in the North Block within Sun Pass State Forest. Two of the proposed harvests, Drum Stick and Three Way, will be partial cut harvests. The third, Toddzilla, will be a multiple prescription harvest with two partial cut areas and a third area which will be treated as a shelterwood harvest. Combined the three sales will cover 1,154 acres.

Drum Stick will be a single tree selection harvest thinning generally “from below” where understory and subordinate trees will be removed in order to maintain stand health. Dominant overstory trees will also be selected for removal where they are showing signs of deteriorating vigor or are impeding the establishment or growth of a new cohort of trees. Tree selection will favor ponderosa pine but will ensure a healthy component of white fir and sugar pine remain. A portion of the stand, not expected to exceed 10% of total acreage, will be cut in group selections in order to create planting sites. These groups will be between one and five acres in size and will be selected utilizing existing openings and understocked areas within the stand.

This sale is 258 acres and will remove approximately 1,806 thousand board feet worth an estimated \$451,500.

The stands composing the Three Way Timber Sale were acquired by the Department of State Lands as part of the Mount Hood Exchange in 1996 and have not been previously entered by ODF. This will also be a partial cut harvest, thinned from below, using a single tree selection method. Selection will favor for removal suppressed or defective individuals. Most mature white fir and lodgepole pine will be removed due to insect and disease damage in these species. Approximately 10% of the total acreage will be in group selections in order to establish a new cohort of ponderosa pine. These groups will likely take advantage of openings created by the removal of clumps of white fir and lodgepole pine.

Three Way is planned at 304 acres and is estimated to remove 912 thousand board feet with an estimated value of \$228,000.

Areas one and three of the Toddzilla Timber Sale will be partial cut harvests. Area one is a generally younger stand which has become overstocked. It will be treated with a single tree selection removing suppressed and defective individuals. Ponderosa pine and Douglas fir will be the favored leave species but components of sugar pine and white fir will also be maintained. Group selection harvests are not anticipated in this area which will produce an estimated 810 thousand board feet off 81 acres.

Area three is one of the stands designated as a Forest Connectivity Area (FCA). The FCAs are managed at a higher density with a larger component of large diameter trees in order to provide habitat and cover to animals moving across Sun Pass State Forest. This area will be thinned from below again using a single tree selection method. This is primarily a white and

Shasta red fir stand with small components of ponderosa and lodgepole pine. Selection will favor larger healthy fir while removing subordinates and failing overstory trees. Most pine will be reserved in order to maintain stand diversity. If group selection harvests are utilized they will be smaller than two acres. This area is expected to produce 3,224 thousand board feet from 403 acres.

Area two is a decadent stand of fir with little understory remaining alive. Due to the low health and vigor of the stand and the lack of acceptable leave trees this stand will be treated as a shelterwood harvest. Most lodgepole and ponderosa pine will be reserved as well as clumps of healthy fir regeneration but these are few in number and scattered. Most of the overstory fir will be removed leaving only sufficient numbers to ensure the recruitment of a new stand. Shelterwood tree selection will favor Shasta red fir in order to move species composition to favor this over white fir. This prescription should produce 1,260 thousand board feet from 105 acres.

Combined Toddzilla is expected to produce 5,294 thousand board feet worth an estimated \$1,285,700.

Summary of Timber Harvest Operations by Basin

Table 2. Summary of Timber Harvest Operations in each basin. All values are in net acres.

Basin	2015 AOP	
	Partial Cut	Clearcut
North	1046	105

Forest Roads Management

Overview

All of the road management activities are associated with the proposed sales to provide access to/within the sale area. Most of the activity is related to road improvement. Where feasible, we are closing roads that are no longer needed, or will not be utilized until the next sale entry approximately 20 to 30 years from now.

Road Construction

No new road construction is anticipated.

Road Improvement

All timber sales will require improvement to interior roads to facilitate logging. Road improvement will primarily consist of removing encroaching brush, some minor reshaping of the road surface, and reopening previously closed roads.

Road Access Management

Whenever possible, existing roads are utilized to provide access to/within the sale area. Emphasis is placed on closing/vacating roads; whether or not they are constructed for a particular sale.

Road Maintenance

Almost all of the road maintenance is accomplished through timber sale contracts as project work. Most of this involves brushing roads along the haul route as well as spot rocking, reshaping, and maintaining drainage on portions of our main road system to keep it in good condition for seasonal traffic. During the summer months, road watering is utilized to keep the road intact as well as providing good visibility for any traffic using the roads during active hauling.

Land Surveying

No land surveys are anticipated.

Young Stand Management

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

Site Preparation

None

Planting

Approximately 134,500 seedlings will be planted on Board of Forestry Ownership in Sun Pass State Forest and the Bear Valley Tract. Approximately 50,000 seedlings will be planted on Common School Forest Land in the Yainax Butte Tract.

Vegetation Management

None

Tree Protection

None

Pre-commercial Thinning

None

Fertilization

None

Gilchrist Activities

The recently acquired Gilchrist State Forest is comprised of high stocking levels of young Ponderosa pine and Lodgepole pine. This material ranges in size from seedlings to sawlog, with the current appraisal showing 1500 board feet of sawlog material per acre, most of which will be left in the residual stand. The current density levels put the Gilchrist State Forest at a high risk for pest-caused damage. The district has implemented a thinning program that will help reduce stand density to acceptable levels. Diseased and overstocked material from 5.0 inches to 12.0 inches DBH will be removed. Ponderosa pine will be the preferred species to leave. The removed material will be sold as sawlog and pulp volume. It is expected that this project will result in a break-even cash flow. The district will identify the highest priorities on the forest and take advantage of specific market conditions to make this program successful. The ensuing stand will be a Fire, Insect and Disease resistant stand. This project is 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.”

Recreation Management

Overview of Recreation Management

The primary recreation strategy in the LRFMP is to make Klamath-Lake District state forests available for informal dispersed recreation. During development of LRFMP, 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. There is no recreation management activities planned for FY2015.

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.

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 north of the town of Gilchrist. The construction will be performed in partnership with the Gilchrist High School.

Management Activities

ODF is working with the "Klamath Trail Alliance" on a trail head, located off of a scattered Board of Forestry tract. This will entail removing some road side trees and stumps and thinning approximately five acres with a 342 contract.

Land Exchange

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

Gilchrist Acquisition

ODF is in the process of acquiring an additional 25,000 acres of the Gilchrist State Forest from The Conservation Fund. This forest will be managed consistent with the current Eastern Region Long-Range Forest Management Plan until we acquire enough on site information to revise the plan. We will proceed at a reduced level until enough information is obtained that will allow changes.

Other Integrated Forest Management Operations

District Firewood Cutting Program

The Klamath-Lake District will continue to issue personal firewood cutting permits in the coming years for areas where it is available.

The public may call our office to inquire about 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 or 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 timber sales will be posted with “no firewood cutting” signs.

Sun Creek Bull Trout Restoration Project

The Klamath-Lake District in partnership with ODF&W, Crater Lake National Park, and USF&W has 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.

The removal of the non-native fish through a chemical treatment was planned to take place above these barriers during the summer of 2011. This was delayed due to the need to reinforce the lower barrier to the high flow regime following the melting snow pack. The reinforcements were completed during the summer and fall of 2011 and chemical treatment was carried out during the summer of 2012. An additional treatment took place in August of 2013.

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.

Planning (and Information Systems)

Stand Level Inventory and Other Vegetation Inventories

District personnel will work on SLI as time and workload allow.

Fish and Wildlife Surveys

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

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

Watershed Assessments

None

Research and Monitoring

None

Other Planning Operations

None

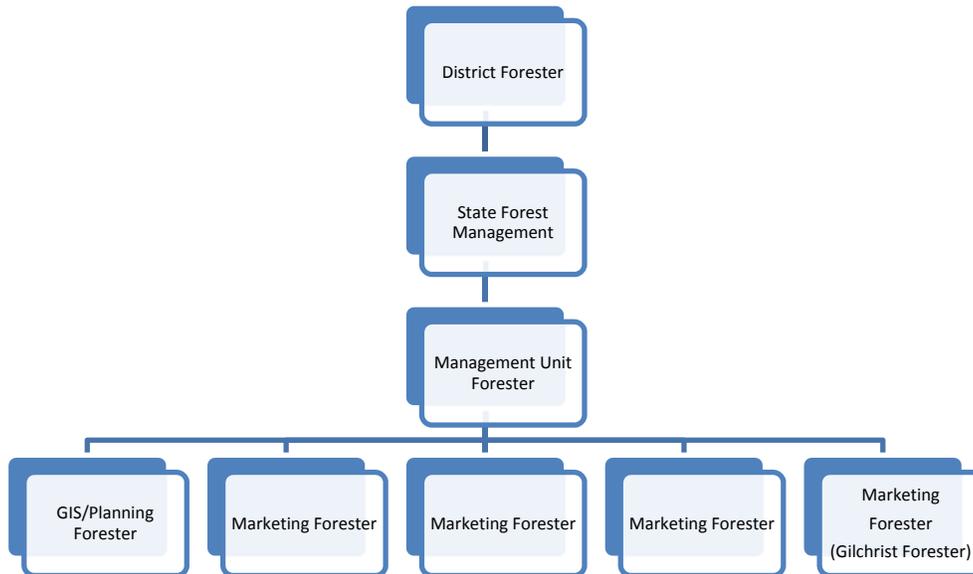
Public Information and Education

The District will conduct public involvement activities related to the Annual Operations Plan. In addition to a general public comment period, the district will continue to work with the Klamath-Lake Forest Health Partnership as a focus group for the AOP process.

The Klamath Outdoor Science School (KOSS) has been operating since 2006. This site is a resident outdoor science school that serves primarily grade school students, in Sun Pass State Forest. This program provides an opportunity to provide youth, teachers, and parents with education about the working forest. ODF renewed the Special Use Permit that allows KOSS to develop a site near Kimball State Park. Over 350 students, teachers, and parent chaperones attended the camps in 2013. The permit requires review and approval of annual development plans. The program will continue to have day and overnight camps.

KOSS is currently in the process of construction of a pavilion and bathhouse. Two concrete pads were pored during the summer of 2013. The organization is still working on securing funds to develop the infrastructure.

Administration



State Forests on the Klamath-Lake District are managed by the Management Unit under the direction of the District Forester. The unit is supervised by the Management Unit Forester. Four Marketing Foresters plan, prepare, and administer timber sales. A GIS/Planning Forester manages the forest geographic information as well as the unit computers.

APPENDIXES

A. Summary Tables

B. Maps

C. Public Involvement

D. Pre-Operations Reports

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Klamath-Lake

Fiscal Year: 2015

Date: 17-Sep-13

Primary Operation	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
	BOF	CSL			Partial Cut	Clear-cut	Con-ifer	Hard-woods	Total	Gross	Projects	Net
Drum Stick	100%	0%	Klamath	4	258		1.8		1.8	\$451,500	\$20,000	\$431,500
Three Way	0%	100%	Klamath	4	304		0.9		0.9	\$228,000	\$15,000	\$213,000
Toddzilla	100%	0%	Klamath	4	484	108	5.3		5.3	\$1,285,700	\$25,000	\$1,260,700
	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
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	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
	0%	0%							0.0			\$0
Total:					1,046	108	8	0	8	1,965,200	60,000	1,905,200

Alternate Operations

(Operation Name)												

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

District: Klamath-Lake

Fiscal Year 2015

Date: 10/28/2015

Current Structure	
	Total
REG	
CSC	
UDS	
LYR	
OFS	
Total	0

Post Harvest Structure				
REG	CSC	UDS	LYR	OFS
0	0	0	0	0

Desired Future Condition		
GEN	LYR	OFS
0	0	0

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Klamath-Lake

Fiscal Year: 2015

Date: 10/28/2013

ODF Funded Activities 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	400	\$190.00	\$76,000.00			\$0.00	400	\$76,000.00
Interplanting			\$0.00	330	\$200.00	\$66,000.00	330	\$66,000.00
Underplanting	100	\$200.00	\$20,000.00			\$0.00	100	\$20,000.00
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 -Slash Burning			\$0.00			\$0.00	0	\$0.00
Site Prep -Mechanical			\$0.00			\$0.00	0	\$0.00
Fertilization			\$0.00			\$0.00	0	\$0.00
Noxious weeds			\$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			\$0.00			\$0.00	0	\$0.00
Pruning			\$0.00			\$0.00	0	\$0.00
Other			\$0.00			\$0.00	0	\$0.00
Totals	500	--	\$96,000.00	330	--	\$66,000.00	830	\$162,000.00

*Planting costs include all costs including seedlings

Grant Funded Activities Management Activity	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 MANAGEMENT SUMMARY

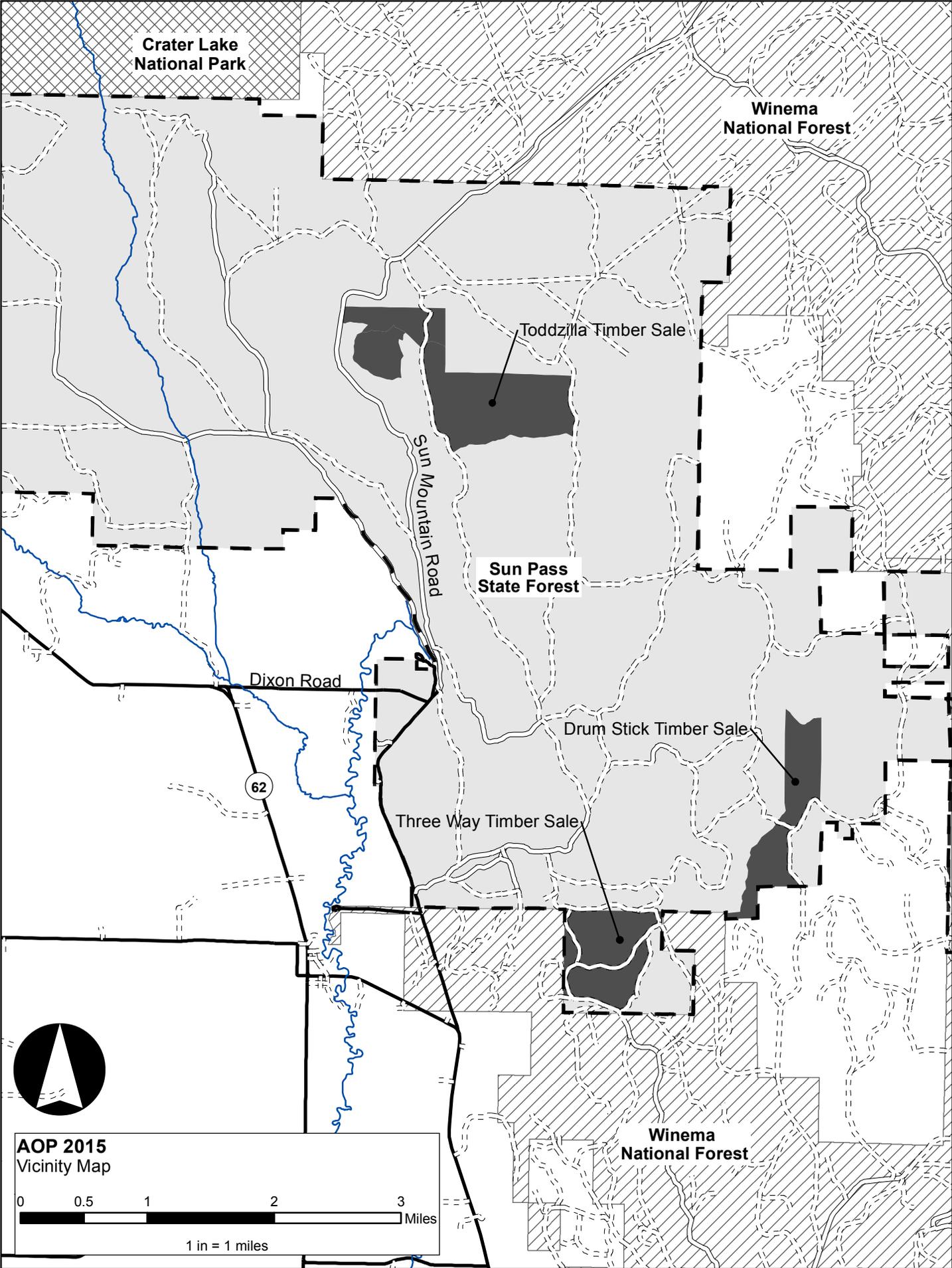
District: Klamath-Lake

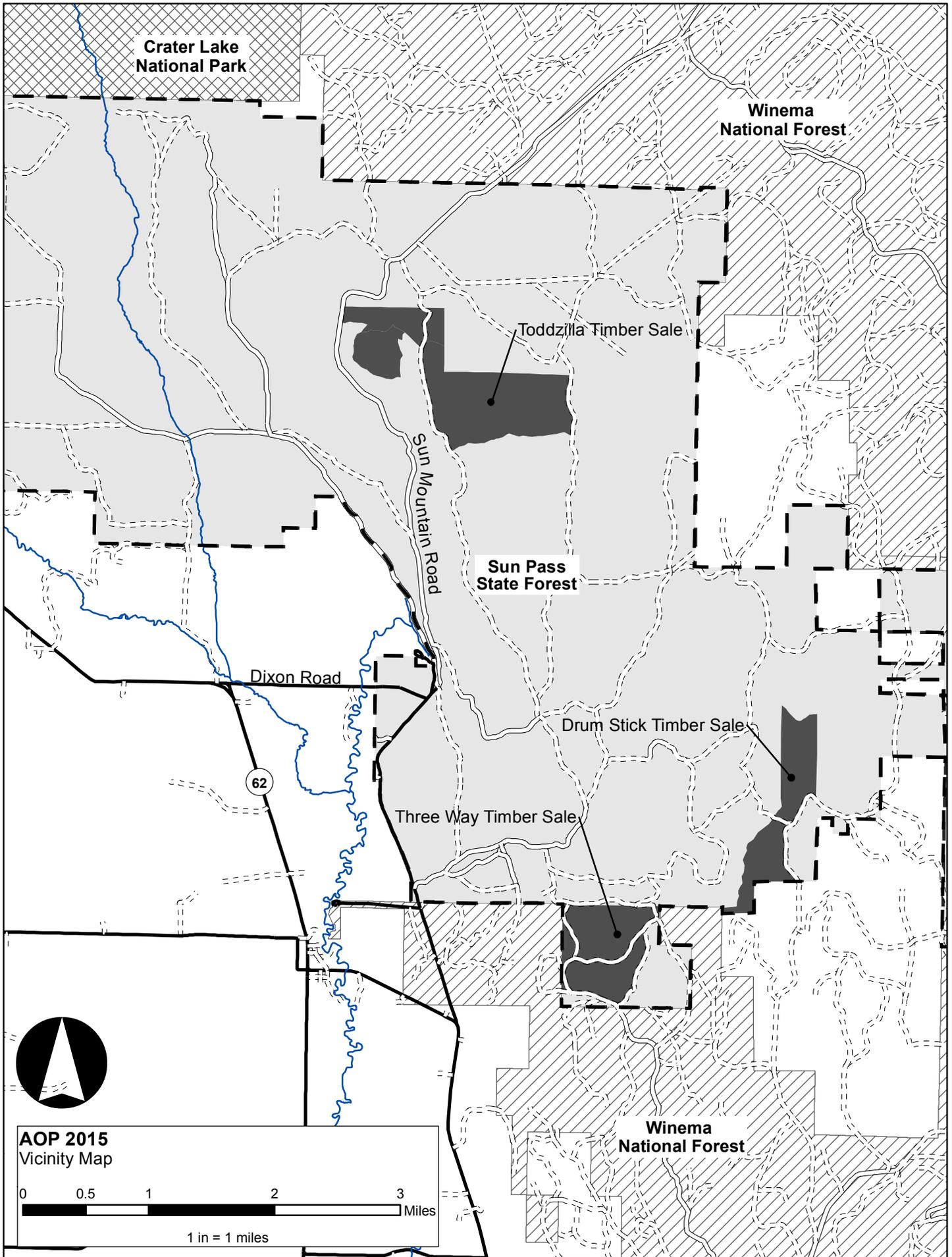
Fiscal Year: 2015

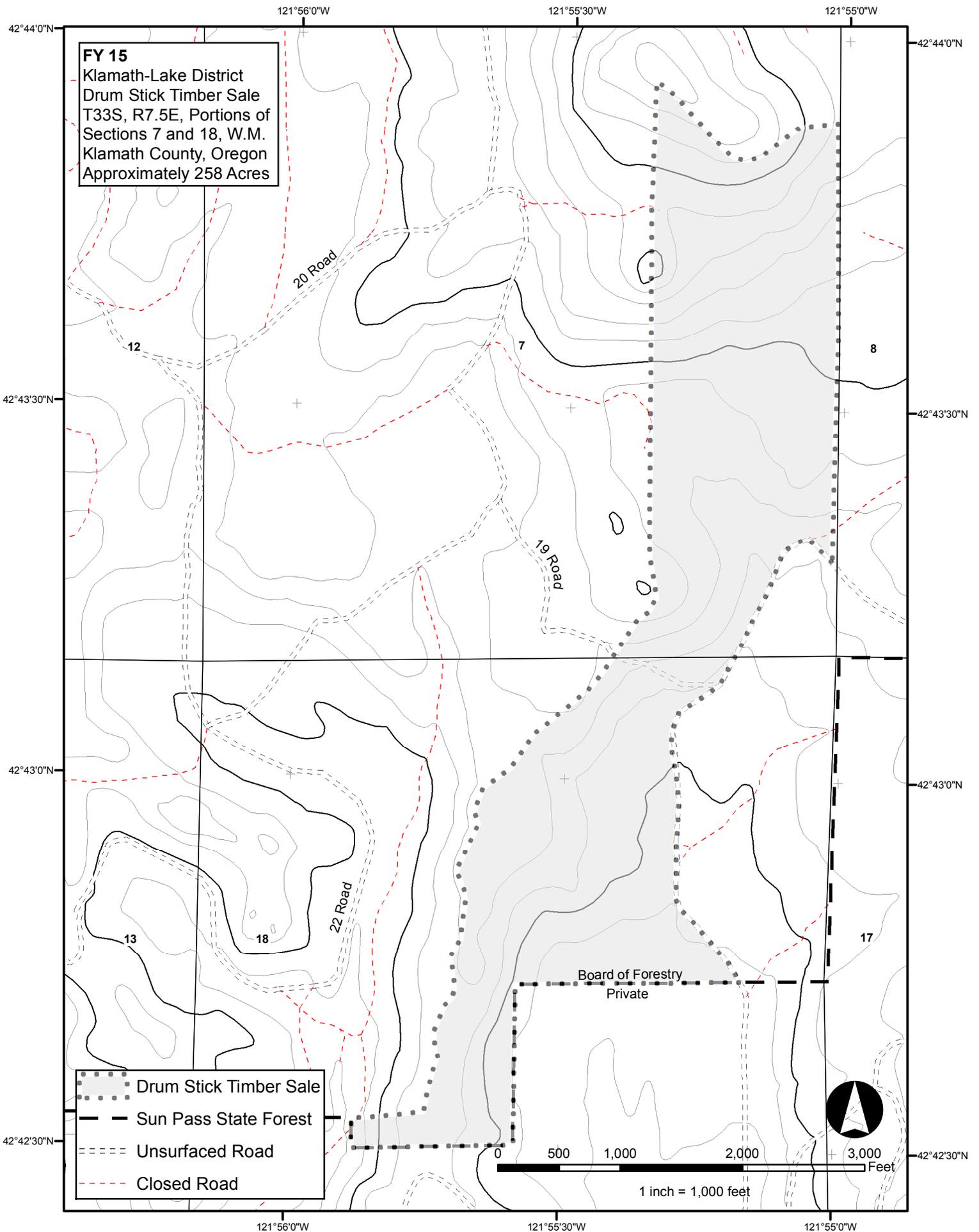
Date: 10/28/2013

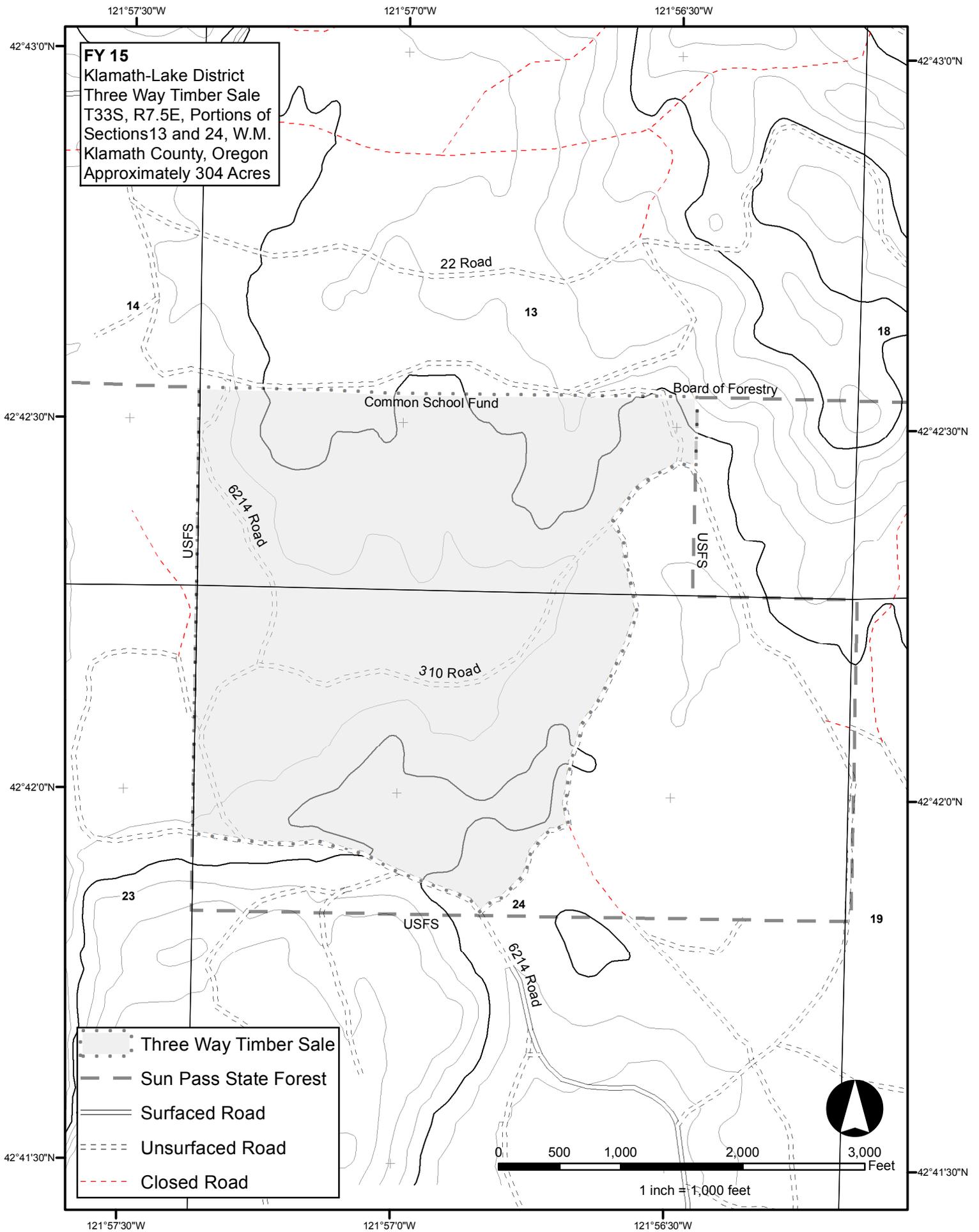
Operation	Unit of Measure	Current	Construction Projects	Construction Cost (Funding)		Improvement Projects	Improvement Cost (Funding)		Total Cost	Comments
				ODF	Other		ODF	Other		
Facilities										
Campsites	Sites								\$0	
Day Use Areas									\$0	
Trailheads									\$0	
Interpretive Sites									\$0	
(Other)	Sites								\$0	
Trails										
Non-Motorized	Miles								\$0	
Motorized	Miles								\$0	

Total: \$0







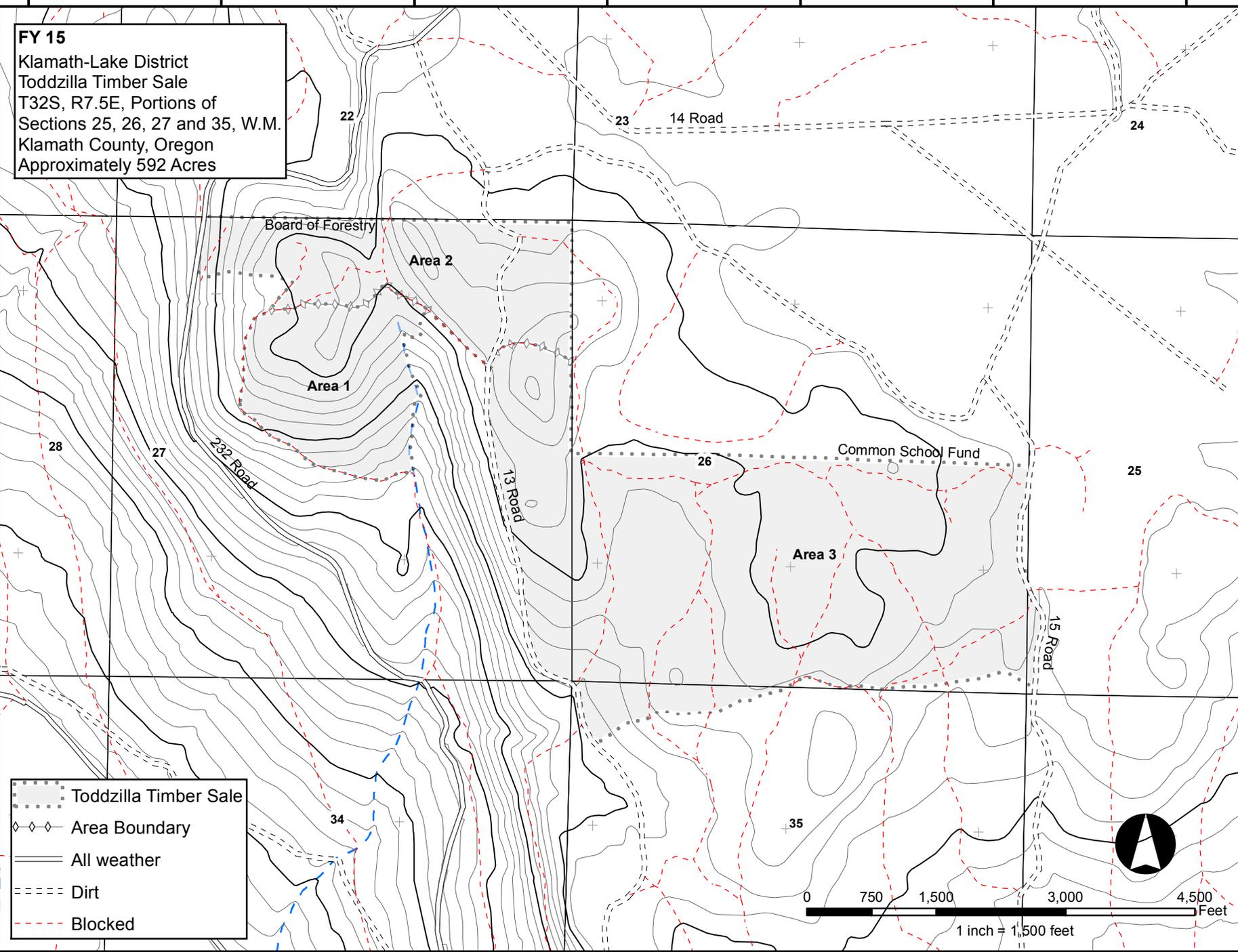


122°0'0"W 121°59'30"W 121°59'0"W 121°58'30"W 121°58'0"W 121°57'30"W 121°57'0"W

42°47'0"N
42°46'30"N
42°46'0"N
42°45'30"N

42°47'0"N
42°46'30"N
42°46'0"N
42°45'30"N

FY 15
Klamath-Lake District
Toddzilla Timber Sale
T32S, R7.5E, Portions of
Sections 25, 26, 27 and 35, W.M.
Klamath County, Oregon
Approximately 592 Acres



Board of Forestry

Area 2

Area 1

Common School Fund

Area 3

-  Toddzilla Timber Sale
-  Area Boundary
-  All weather
-  Dirt
-  Blocked



1 inch = 1,500 feet



122°0'0"W 121°59'30"W 121°59'0"W 121°58'30"W 121°58'0"W 121°57'30"W 121°57'0"W

APPENDIX C PUBLIC INVOLEMENT

No public comment was received in regard to the Klamath-Lake District Fiscal Year 15 AOP.