

Pre-Operations Report

Operation Name: Taylor Creek
County: Marion
Management Basin: Butte Creek

Table 1. Operation Areas, Types and Acres

Area	Harvest Type	Gross Acres	Net Acres
1	MC	115	99

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The operation is located within a temperate climate area. Typically the fall and winter seasons are wet. This area receives approximately 70 to 90 inches of rainfall per year. The operation is located within the *Tsuga heterophylla* Zone (Natural Vegetation of Oregon and Washington, Franklin & Dyrness, 1973). The soils are predominantly of the Pechuck series with smaller amounts of Nasty soils. Pechuck soils are deep, well-drained, moderately fine-textured colluvial soil that developed from Miocene age andesite. In general, they are gravelly loams to gravelly clay loams with varying amounts of rock from 10 percent in the A horizon to 80 percent in the C Horizon. They lie over Andesite bedrock which is at a depth generally greater than 50 inches and occur on moderate to precipitous slopes at elevations between 1500 to 3200 feet where annual precipitation ranges from 70 to 95 inches. Nasty soils are similar in origin but have larger amounts of gravel and generally occur on steep slopes and ridge noses. The elevation of this site ranges from 1900 to 2500 feet and the aspect is generally northwest. The topography is variable with slopes ranging from 15% to 50%.

II. CURRENT STAND CONDITION:

The proposed harvest area is comprised of three stands that are currently classified as Closed Single Canopy (CSC) or Understory (UDS). The overstory consists of 73 year old Douglas-fir and western hemlock that average approximately 14"-16" DBH. Stocking of these two species is approximately 160 trees per acre. The overstory also includes smaller amounts of red alder, big leaf maple, and western red cedar. Vine maple, Oregon grape, devil's club, red huckleberry, sword fern, and oxalis are all in the understory. Numerous understory trees have seeded in and have grown at a suppressed rate for the past 22 years and resulted in an understory component of hemlock trees 10 feet tall, 1 inch diameter and 22 years old. The majority of the harvest area was fertilized about 6 years ago. Stand 12259 is scheduled to be inventoried in 2008 to determine current snag and down wood amounts.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Acres ²
1	MC	12257	DF, WH	72	14	219	199	59	14
		12258	DF, WH	73	15	214	185	62	20
		12259	DF, WH	74	16	222	169	61	81
	Target³				24	52	16	10	115

¹The source of stand inventory information is SLI from 2003.

²The acres are based on GIS and include roads, streams buffers, reserve areas, etc.

³The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED FUTURE CONDITION/VISION:

The DFC for the Timber Sale Area is a mature fully stocked closed single canopy stand of mixed conifer species consisting primarily of Douglas-fir with lesser amounts of western red cedar. Large remnant green trees and snags from previous rotations will persist in retention areas and along streams.

Table 3. Stand Structure Information

Area	Stand ID	Current ¹	Post Harvest ²	Desired Future	Acres
1	12257	UDS	REG	CSC	14
	12258	UDS	REG	CSC	20
	12259	UDS	REG	CSC	81

¹ Stand structure for stands 12257 and 12258 determined from SLI 2003. Stand structure for 12259 determined from field reconnaissance.

²The stand is expected to develop into this condition in the five to ten years after this operation is completed.

IV. PROPOSED MANAGEMENT PRESCRIPTION:

The objective of the operation is to harvest mature, over-stocked natural stands, establish an intensively managed new stand, and, as needed, develop structural components important to habitat diversity.

- The process begins with a regeneration harvest of the existing stand utilizing a Modified Clearcut.
- Recruit 14 green trees per acre, by employing the following:
 - Leave green trees along stream RMAs
 - Establish a nine acre Green Tree Retention Area in the steep northern portion of the operational area.
 - Reserve all old-growth trees.
- Retain all existing snags and down wood.
- After field inventory has determined existing snags and down wood totals, create additional snags and down wood to meet the following standards:
 - 2 hard snags at least 15 inches in diameter per acre

- At least 600 cubic feet of hard conifer logs per acre including an average of 2 logs per acre greater than 24 inches in diameter
- Pile and burn the logging slash and debris on the tractor skid areas.
- Slash brush species and understory hemlock.
- Whole tree yard cable yarding areas.
- Develop planting spots by hand on the cable areas.
- Replant with a mix of Douglas-fir, noble fir and western red cedar seedlings.

As the stand initiated with this operation grows, it is expected that the overstory crowns will close in and a closed single canopy condition (CSC) will develop. In the years to come, this stand will receive a series of thinnings designed to maximize volume and value, and promote stand health and vigor. It is expected that the stand structure will shift between CSC and UDS as the cutting cycles are implemented over time. Structural development to something more complex is not anticipated. This balance between CSC and UDS will persist over time until the stand is harvested.

V. ESTIMATED TIMBER AND REVENUE OUTPUTS:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:			

	Conifer	Hardwood	Total
Net Volume (MBF)	2,300	100	
Stumpage Value (\$/MBF)	\$350	\$400	
Estimated Gross Value	\$805,000	\$40,000	\$845,000
		Project Costs:	8,700
		Estimated Net Value:	\$836,300

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Access to this sale will be via Sawtell Road, Butte Creek Mainline, BC500 and BC510. These are currently all weather roads. Approximately 1.63 miles of existing surfaced road will be improved, which includes culvert replacement on the BC513 and BC514. One existing landing on the BC514 will receive a lift of rock. This work will bring all roads up to standards in the Forest Roads Manual. One landing will be constructed, on an unnamed spur off the BC510, to facilitate cable yarding. A road easement will need to be obtained from Longview Timberlands LLC for hauling from the newly constructed landing.

All haul roads will have high quality crushed rock or pit run surfacing. Following harvest, roads and skid trails within the sale area will be evaluated for closure.

Project work and their estimated costs are \$8,700.

This sale is 90% cable yarding and 10% ground yarding.

Table 5. Transportation Management Summary (Miles)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				
Improve			1.63	
Maintain	3.5	1.9	1.63	
Close/Block				
Vacate				

VII. AQUATIC RESOURCES AND WATER QUALITY:

A large fish bearing stream, Butte Creek, flows along the northwest boundary of the proposed sale area. Taylor Creek, a medium fish bearing stream flows along a portion of the western boundary. A non fish bearing portion of this stream also flows through the southern portion of the proposed sale area. A third small, non-fish bearing tributary of Butte Creek flows through the north east portion of the sale area. The riparian vegetation for these streams includes red alder, Thimbleberry, salmonberry, oxalis, and sword fern. Riparian management area buffers 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. Timber sale boundaries will be posted no closer than 100 feet horizontal distance from the Butte Creek and Taylor Creek channels where they are adjacent to the proposed sale area. A 50 foot buffer will be posted on either side of Taylor Creek where it flows through the sale area. A 25 foot buffer will be posted on either side of the small type N stream in the northeast portion of the sale area.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

While the sale is not located within any Northern Spotted Owl circles, the sale area was determined to be suitable habitat for this species. Surveys were completed to protocol in the 2007 survey year with no responses. An additional year of surveys will be completed in 2008.

There are no listed species in any of the streams in or near the proposed sale area. The sale area was checked against the Oregon Natural Heritage Program database of known listed plant locations. It was also checked against district knowledge for any listed plant location. No listed plant records were identified within the sale area.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

This assessment is based on analysis of USGS 1:24,000 topographic maps.

There are isolated high landslide hazard locations in the sale. The sale drains into Taylor Creek and Butte Creek. The risk of landslides delivering directly from the sale to Taylor Creek and Butte Creek is low to moderate. The sale appears to be located on a large, deep-seated landslide landform.

The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

X. RECREATION RESOURCES:

The Butte Creek Falls Recreation Area is 500 feet to the west of the timber sale boundary. The High Lakes Recreation Area is several miles up the Butte Creek 500 Road. While there are no developed recreation trails inside the sale boundaries public use in this area is high. In the sale boundary the most common uses are dispersed activities such as hunting, site seeing and primitive camping. Where the haul route and recreation access roads merge informational and caution signs will be posted. It will be important for both the operators and visiting public to use caution on roadways. Illegal motorized off-road use and garbage dumping in this area is high. Once the timber sale is complete access roads into the unit will be blocked to deter garbage dumping and reduce soil erosion from off-road impacts.

XI. CULTURAL RESOURCES:

The District cultural resource inventory and pre-operation reconnaissance revealed no visible cultural resource features or artifacts. If discovery of an artifact is made, the cultural resource will be protected and field personnel will consult with the Cultural Resource Specialist in Salem.

XII. SCENIC RESOURCES:

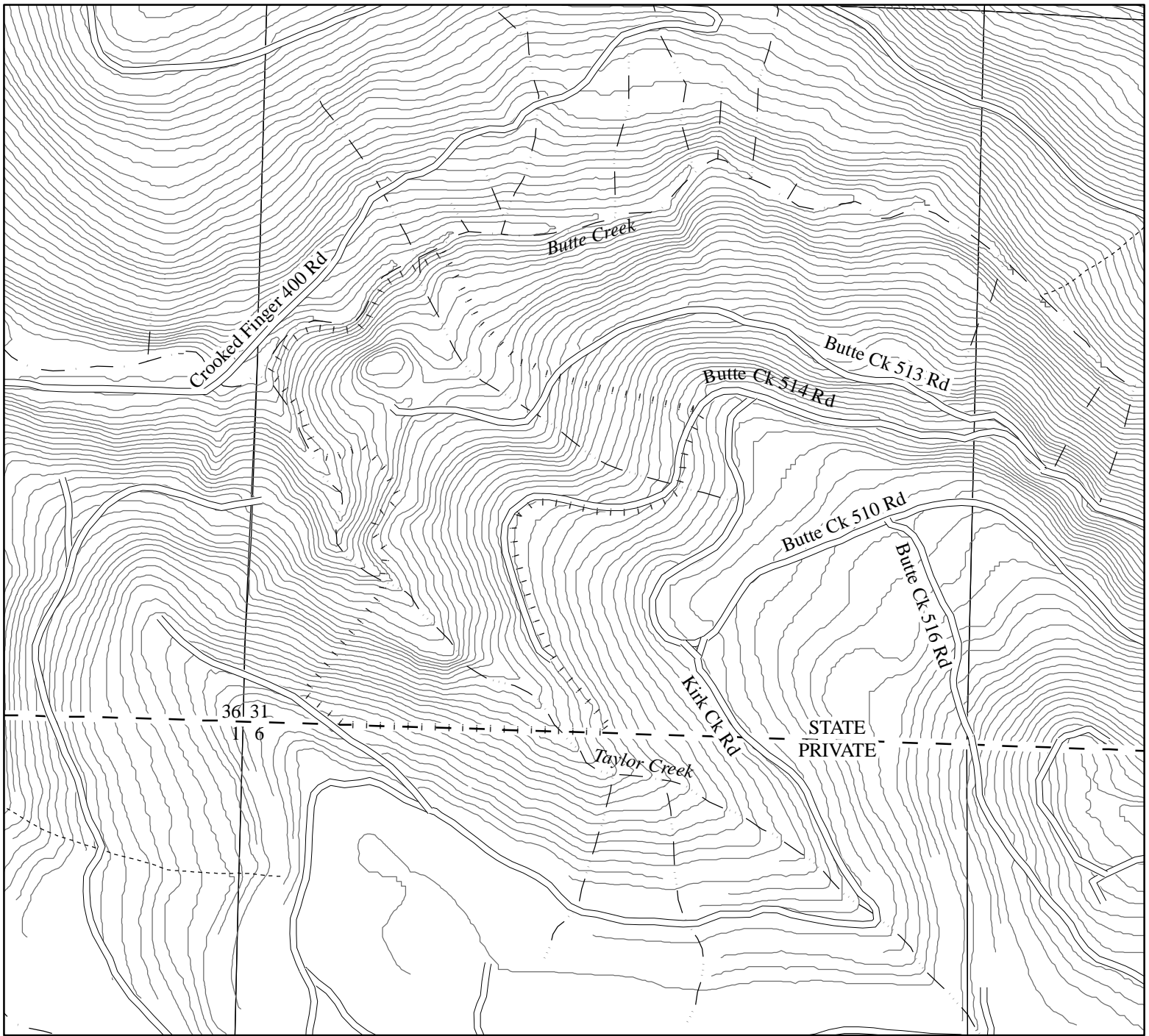
There are no scenic considerations associated with this operation

XIII. OTHER RESOURCE CONSIDERATIONS:

There are no other resource considerations associated with this operation.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Of the 115 gross acres in the operational area, 66 are classified as General, 33 are classified as Focused and 16 classified as Special. All are within the Aquatic and Riparian Habitat subclass.



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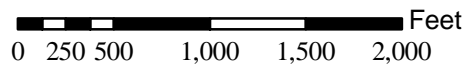
- Sale Boundaries
- == Surfaced Road
- == Unsurfaced Road
- New Road Construction
- Type F Stream
- Type N Stream
- Unknown Stream
- - - State Forest Property Boundary
- 40 Foot Contours
- Common School Land

TAYLOR CREEK
 FY 09 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT A : TOPOGRAPHY
 PORTIONS OF SECTION 31
 T7S, R3E, W.M.
 MARION COUNTY, OR

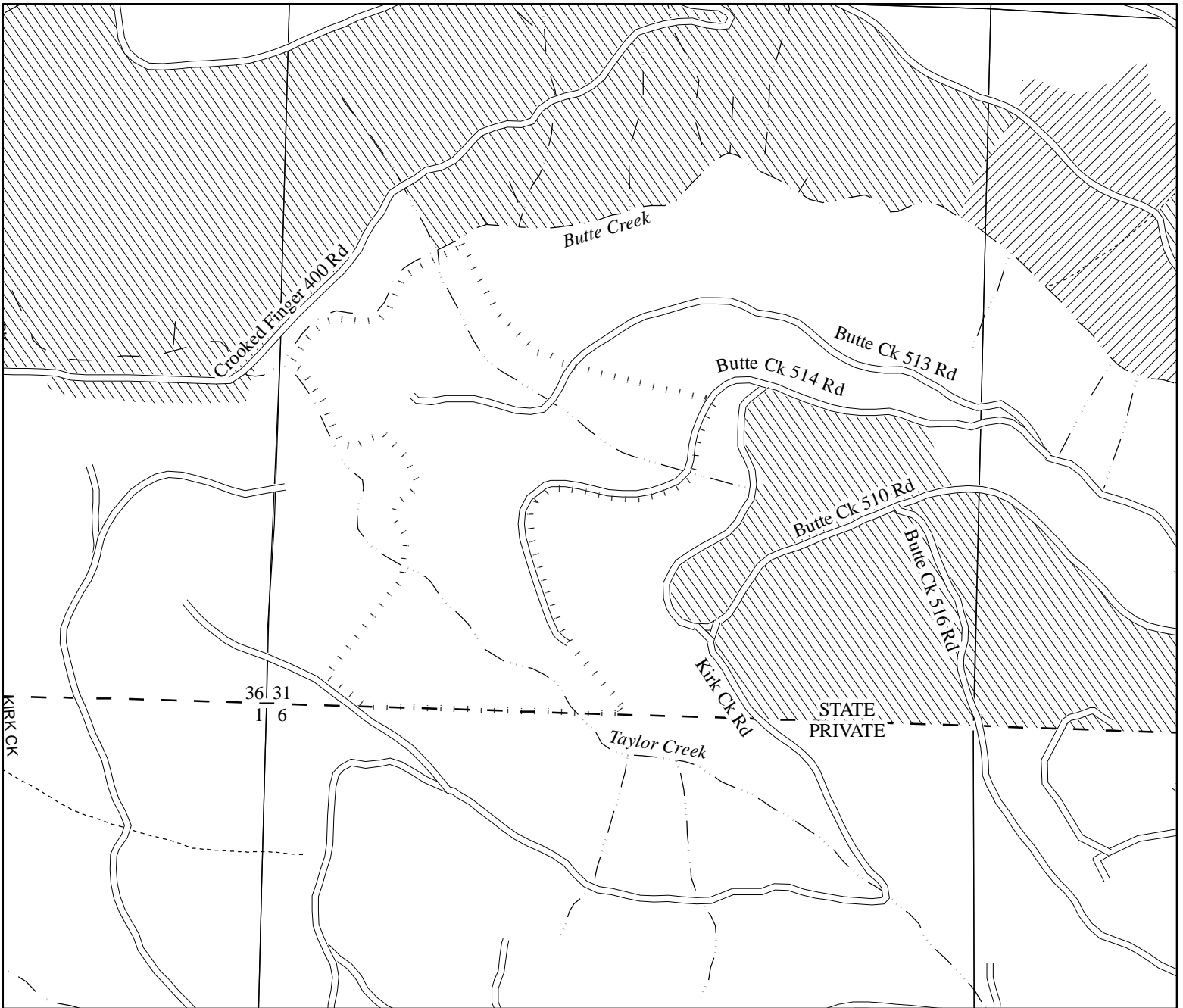
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APPROXIMATE NET ACRES: 99 (MC)

Scale
 1:12,000
 1 inch = 1000 feet



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TAYLOR CREEK

FY 09 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT B : DESIRED FUTURE CONDITION

PORTIONS OF SECTION 31
 T7S, R3E, W.M.
 MARION COUNTY, OR

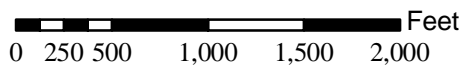
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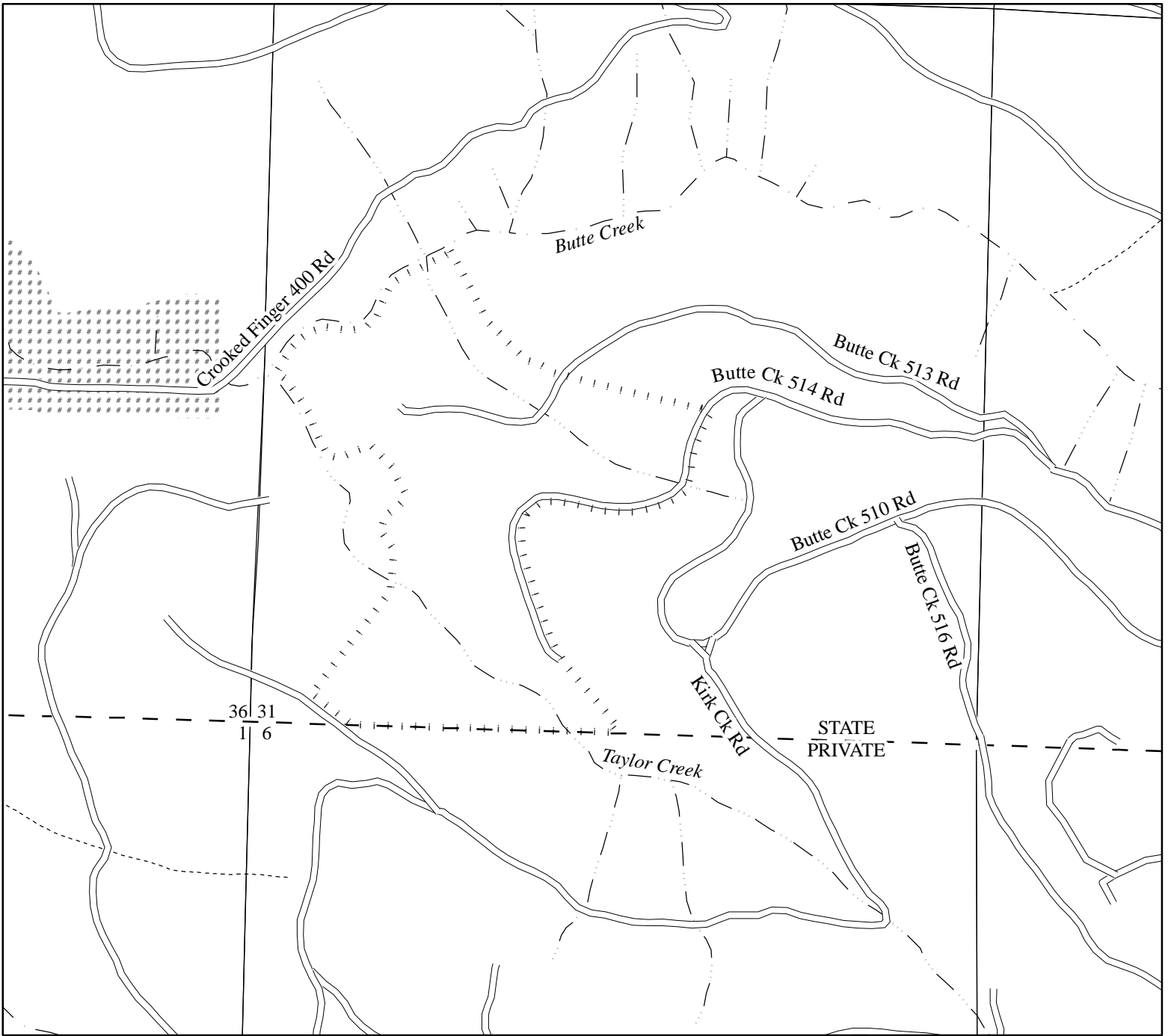
- ▤▤▤▤ Sale Boundaries
- ==== Surfaced Road
- Unsurfaced Road
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- Type F Stream
- Type N Stream
- Unknown Stream
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- - - State Forest Property Boundary
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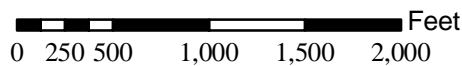
- Sale Boundaries
- ==== Surfaced Road
- - - - Unsurfaced Road
- • — New Road Construction
- Type F Stream
- Type N Stream
- - - - Unknown Stream
- #### Recreation Area
- · - State Forest Property Boundary
- Common School Land

TAYLOR CREEK
 FY 09 AOP
 NORTH CASCADE DISTRICT
 ATTACHMENT C : KEY RESOURCES
 PORTIONS OF SECTION 31
 T7S, R3E, W.M.
 MARION COUNTY, OR

3

APPROXIMATE NET ACRES: 99 (MC)

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