

Final Finding of No Significant Impact (FONSI)

For the
ThunderKat Timber Sale

November, 2015

Environmental Assessment (EA) Number DOI-BLM-OR-S040-2014-0002-EA

National NEPA Register #: DOI-BLM-ORWA-S040-2014-0002-EA

Project Name: ThunderKat Timber Management Project

United States Department of the Interior
Bureau of Land Management, Oregon State Office
Salem District, Cascades Resource Area

Willamette Meridian,
T. 10 S., R. 2 E., Section 5

Middle Thomas Creek 6th Field Watershed
Linn County Oregon

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BLM



As the Nation’s principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/AE-16/002+1632

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FINAL FINDING OF NO SIGNIFICANT IMPACT

THUNDERKAT TIMBER SALE

1. INTRODUCTION

The Bureau of Land Management (BLM) has conducted an environmental analysis for a proposal to regeneration harvest 58 acres of 93 year old forest stands and an alternative to commercially thin 58 acres of 93 year old forest stands. The project is located on BLM lands in T. 10 S., R. 02 E., section 5; W.M. in Linn County, Oregon and spans two seventh field watersheds: approximately 48 acres in Bear Creek and 10 acres in Criminal Creek (EA section 7.0). The ThunderKat Environmental Assessment (EA) (# DOI-BLM-OR-S040-2014-0002-EA) documents the environmental analysis of the proposed timber management alternatives.

The analysis in this EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). The EA evaluates two “action” alternatives, the Proposed Action and Alternative A. A No Action alternative is also evaluated. The Resource Area Interdisciplinary Team (IDT) has designed the proposed harvest activities to conform to the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents, which direct and provide the legal framework for management of the BLM lands within the Salem District (EA section 1.6).

2. FINDING OF NO SIGNIFICANT IMPACT

The Finding of No Significant Impact (FONSI) is defined in 40 CFR 1508.13 as a document briefly presenting the reasons why an action will not have a significant effect on the human environment which includes the natural and physical environment and the relationship of people with that environment.

If the agency “finds” that the action has “no significant impact”, the agency is not required to prepare an Environmental Impact Statement (EIS) for the project. 40 CFR 1508.27 defines the factors to consider in determining whether a project is anticipated to “significantly” impact the human environment. The following FONSI documents the BLM’s evaluation of the potential impacts of the ThunderKat Timber Management Project.

Based up my review of the ThunderKat EA and supporting documents, I have determined that neither action alternative (Proposed Action; Alternative A) are a major federal action and would not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, supplemental or additional information to the analysis in the RMP/FEIS in the form of an environmental impact statement (EIS) is not needed. This finding is based on the following discussion:

CONTEXT [40 CFR 1508.27(a)] refers to the suitable scale for analysis. Potential effects resulting from the implementation of either action alternatives (Proposed Action; Alternative A), have been analyzed within the context of the project area boundaries, and the following watersheds: Thomas Creek, Middle Thomas Creek. The project area would affect less than 0.5 percent of the Thomas Creek Watershed and 2 percent of the Middle Thomas Creek Watershed.

INTENSITY [40 CFR 1508.27(b)] refers to severity of impact. The following ten sections refer to the specific conditions/concerns addressed in §1508.27 and document the BLM’s consideration of the intensity (severity) of the impacts as assessed in the ThunderKat EA.

PROJECT DESIGN (EA section 2.5): An interdisciplinary team of resource specialists (IDT) developed the proposed treatments described in EA section 2.3.1 (Proposed Action, including the project design features

described in section 2.5; Table 2-6) and EA section 2.3.2 (Alternative A, including project design features described in section 2.5; Table 2-6) to conform to the RMP Management Direction and be within the effects analyzed in the RMP/FEIS. Refer to EA section 2.4; Table 2-5, for a comparison of the action alternatives (Proposed Action; Alternative A).

VEGETATION AND FOREST STAND CHARACTERISTICS (EA section 3.1): Effects to these resources would not have significant impacts because:

- The stands proposed for the action alternatives are not presently functioning as late-successional old growth habitat.
- Existing snags, remnant older trees and coarse woody debris (CWD) would be retained to the greatest extent possible. The snags that are felled for operational or safety purposes would be reserved on site as CWD.
- There would be no identifiable effects on the T/E species or habitat within the project area because there are no known populations or habitat in the project area.
- There would be no identifiable adverse impacts to suitable Special Status Species (SSS) or Survey & Manage Species (SMS) because there are no known populations in the project area.
- Noxious Weeds – Increases in the number of invasive/non-native plants are expected to be short lived because all areas with ground disturbing activities will be re-vegetated with native species (EA section 2.3.1; Table 2-6 Project Design Features (Numbers 52, 53)); and native species would naturally re-vegetate the disturbed areas and shade out invasive species. (EA section 3.1.2.1).

HYDROLOGY; FISHERIES AND AQUATIC HABITAT (EA section 3.2; 3.3): Effects to this resource are not significant because:

- No timber harvests will occur within riparian areas and/or stream protection zones.
- Timber haul and road maintenance project design features (PDFs) (EA Table 2-6) would prevent sedimentation delivery to streams in quantities that would exceed Oregon Department of Environmental Quality (DEQ) requirements.
- There would be no peak flow effects to listed fish habitat due to maintaining canopy closures equal to or greater than 30 percent in the Criminal Creek watershed and due to the relatively small amount of openings <30 percent canopy closure in the Bear Creek watershed (EA section 3.3.2.1 Peak Flows effect).
- Action alternatives would abide by and meet State of Oregon water quality standards.
- The Proposed Action would maintain a minimum of 15 to 17 trees per acre (TPA) to maintain canopy closure above 30 percent within the Criminal Creek watershed for the purpose of minimizing potential impacts to peak flows during rain on snow events (EA section 3.2.2.1). In addition this level of retention will satisfy RMP objectives for green tree retention, future snag recruitment, and coarse woody debris (EA section 3.5.2.1).
- The Proposed Action would maintain a minimum of 15 TPA within the Bear Creek watershed to meet the RMP objectives for green tree retention, future snag recruitment, and coarse woody debris retention (EA section 3.5.2.1). The risks to peak flows in this watershed are low because this area has adequate canopy cover within the watershed to minimize this risk (EA section 3.2.2.1).

SOIL (EA section 3.4): Effects to this resource are not significant because:

- Soil compaction is limited to no more than 12 percent of the project's acreage. Additionally a large portion of pre-disturbance conditions would likely recover within one to several decades following disturbance (EA section 3.4.2.1).
- The action alternatives would not lead to any measureable increase in surface erosion, and soil erosion would remain within the range of background rates (EA section 3.4.2.1).

WILDLIFE (EA section 3.5): Effects to this resource are not significant because:

The action alternatives (and No Action Alternative) would have trade-offs in effects in both the short and long term which would be beneficial to some species and detrimental to other species. The variation within the action alternatives and maintaining untreated forest stands adjacent to all treated stands would provide a range of habitat conditions to balance the trade-offs of effects.

- Stands proposed for both action alternatives are not presently functioning as late-successional or old growth habitat and no remnant trees (greater than 35 inches dbh) would be cut and removed.
- The Proposed Action would retain existing snags and CWD on site. Up to 90 percent of existing snags could be lost during falling, yarding and site preparation. All snags felled or knocked over for safe and efficient logging would be retained as dead/down wood and CWD. The additional green trees over and above the six to eight required (RMP p. 21) would be left to compensate for snag and CWD deficit conditions and loss of up to 90 percent of snags in the proposed action and peak flow cumulative effects (EA section 3.2.2.1).
- Alternative A would retain existing snags and coarse woody debris (CWD) on site. All snags felled or knocked over for safe and efficient logging operation would be retained as dead/down wood and CWD. Fewer than 12 percent of CWD would be impacted by logging, based on 12 percent of the unit area being directly impacted (landings, skid trails, skyline corridors). All existing CWD would remain on site (EA section 3.5.2.2).
- No suitable habitat for the BLM Special Status Species (SSS) that are known or likely to be present would be lost. Therefore, the project would not contribute to the need to list any of the BLM Special Status Species (EA section 3.5.2.1).
- Habitat for species such as the pileated woodpecker, which use snags in late successional habitat, would be adversely impacted. Conversely, habitat would improve for species such as the western bluebird that utilized snags in more open environments. No species would be extirpated in the project area as a result of either action alternative.
- The amount of dispersal and suitable Northern spotted owl habitat within the provincial home range of any known spotted owls would not be changed as a result of implementing either action alternative.
- Current surveys show no spotted owl presence in the ThunderKat project or vicinity (EA 3.5.1 p. 64). There are no actual spotted owls that would be "harmed" by the action and thus the biological opinion (pp.133-134) did not issue any "take" of spotted owls associated with this project. Due to the presence of the barred owl and the location near the valley margin surrounded by private land, it is highly improbable the area supports any northern spotted owls now or in the foreseeable future. Cumulative effects to northern spotted owl are described under [40 CFR 1508.27(b) (7)].

AIR QUALITY, FIRE RISK, AND FUELS MANAGEMENT (EA section 3.6): Effects to this resource are not significant because:

- Air quality are predicted to be localized and of short duration for both action alternatives (Proposed Action; Alternative A). Both action alternatives will comply with the Clean Air Act and the State of Oregon Air Quality Standards and neither will produce significant impacts.
- No significant impacts to fuels accumulation or fire risk effects will occur from either action alternative.

CARBON STORAGE, CARBON EMISSIONS AND CLIMATE CHANGE (EA section 1.7.5):

- No significant impact to carbon emissions and climate change will occur from either action alternative. The carbon emissions (as opposed to carbon storage) attributable to the projects, both individually and cumulatively, and the difference in calculated total carbon storage are of such small magnitude that they are unlikely to be detectable at any scale (global, continental or regional) and thus would not affect the results of any models now being used to predict climate change.

RECREATION, RURAL INTERFACE, AND VISUAL RESOURCES (EA section 3.7): Effects to these resources are not significant because:

- Recreational access to the public is effectively prohibited in the project area being landlocked by private landowners. Therefore, the action alternatives would have no effect on recreational opportunities in the general area (EA section 3.7.2).
- No portion of the project area is visible from roads that are not gated, based on visual analysis. Evidence of harvest activities would not be observable within five years as understory vegetation returns to a more normal appearance and the remaining stand continues to mature (EA section 3.7.2).
- Implementing the action alternatives will have no effect on existing wilderness, wilderness study areas, or Lands with Wilderness Characteristics as there are none in or near the project area (EA section 3.7.2).

[40 CFR 1508.27(b) (2)] - The degree to which the proposed action affects public health or safety: The proposed project would not adversely affect public health or safety because the public does not have vehicular access to the project area during project operations and the project would not create hazards lasting beyond project operations (EA section 3.7).

[40 CFR 1508.27(b) (3)] - Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: The proposed project would not significantly affect historical or cultural resources because there are no known cultural resources that require protection within the project area including harvest units. Any cultural resources discovered in the future would be protected as determined by the BLM Archaeologist. The project would not affect parklands, prime farmlands, wild and scenic rivers, wilderness, or ecologically critical areas because these resources are not located within the project area (EA Section 1.7.5, 3.7, 3.8, 5.1).

[40 CFR 1508.27(b) (4)] - The degree to which the effects on the quality of the human environment are likely to be highly controversial: The proposed project is not unique or unusual. The BLM has experience implementing similar actions in similar areas without highly controversial effects over the course of many decades of managing timber resources.

[40 CFR 1508.27(b) (5)] - The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks: The BLM has experience implementing similar actions in similar locations and has designed the project, including project design features, to avoid highly uncertain, unique and unknown risks (EA section 2.0). See # 4, above.

[40 CFR 1508.27(b) (6)] - The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The proposed action would not establish a precedent for future actions nor would it represent a decision in principle about a further consideration for the following reasons: 1. The project is in the scope of proposed activities and resource objectives documented in the RMP EIS and RMP; and 2. the BLM has experience implementing similar actions in similar areas without setting a precedent for future actions or representing a decision about a future consideration.

[40 CFR 1508.27(b) (7)] - Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: EA Chapter 3, pages 40- 42, 48- 51, 55, 56, 61, 62, 71- 74, 79, 102 documented the cumulative effects of this project, including why cumulative effects would not be significant. Examples include the following.

- There would be no cumulative effects to the following resources because there would be little to no indirect or direct effects: stream channel morphology or wetlands outside the culvert replacement sites (EA 3.2.2.1, p. 48); watershed hydrology (EA p. 49); stream temperatures, pH, or dissolved oxygen (EA 3.2.2.1, p. 51), sediment yield (EA 3.2.2.1, pp. 51, 55), ESA fish (EA 5.1, p. 102);
- Cumulative effects to the following resources are not significant because:

- Soils: The extent of compacted/disturbed soil surfaces in the projects analyzed watersheds as a whole, including road surfaces, was estimated at five percent (approximately 189 acres). Increasing compacted surfaces by seven acres would result in a 0.1 percent cumulative increase in the percentage of compacted surfaces. This magnitude of compaction on a watershed scale is unlikely to result in any discernible cumulative effect since the compaction is dispersed across the landscape (EA 3.4.2.1, p. 61, 62);
- Late successional habitat: The ThunderKat Timber Management Project proposes to perform regeneration harvest on 58 acres (less than two percent) of late successional forests on the BLM lands (EA 3.5.2.1, pp. 71,72), After harvest, the watershed would remain above the late successional habitat guideline of 15 percent on federal lands (EA 3.5.2.1, p. 74);
- Northern spotted owl: No harvest would occur within the provincial home range of any known spotted owl sites and dispersal habitat would be maintained between known spotted owl sites and Late Successional Reserves. The proposed project would have minimal cumulative effects on northern spotted owl dispersal due to scattered federal ownership and its location in the foothills of the Cascades (EA 3.5.2.1 p. 73). The North Santiam Corridor and the Willamette Valley act as effective barriers to dispersal (Thomas Creek Watershed Analysis (TCWA) p. 85). The Thomas Creek Watershed was found not to be critical for the dispersal of spotted owls within the Oregon Cascades Physiographic Province (TCWA p. 96).

[40 CFR 1508.27(b) (8)] - The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The project would not affect these resources because cultural resource inventories of the affected area have occurred and no resources were found (EA section 1.7.5 #3).

[40 CFR 1508.27(b) (9)] - The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973: ESA Consultation is described in EA section 5.1. The proposed project is not expected to adversely affect ESA listed species or critical habitat for the following reasons:

- *ESA Wildlife – Northern spotted owl (EA Section 3.5):* The ThunderKat Timber Management Project proposal was submitted for formal consultation with U.S. Fish and Wildlife Service (USFWS) as provided in Section 7 of the Endangered Species Act (ESA) of 1973 (16U.S.C. 1536 (a)(2) and (a)(4) as amended) during the FY 2015 consultation process. The Biological Assessment of Likely to Adversely Affect Projects with the Potential to Modify the Habitat of Northern Spotted Owls, Willamette Planning Province – FY2015 (BA) was submitted in July 2014. Using effect determination guidelines, the BA concluded that the ThunderKat proposal may affect and is likely to adversely affect the northern spotted owl due to modification of suitable habitat (BA pp. 31, 33) but would have no effect on spotted owl Critical Habitat.

The Biological Opinion (BO) Regarding the Effects of Habitat Modification Activities on the Northern Spotted Owl and its Critical Habitat within the Willamette Province, FY2015 associated with the ThunderKat Project was issued in October 2014 (FWS reference #01E0FW00-2014-F-0221). The BO concurred that the habitat modification activities described in the BA, including the ThunderKat Project, are not likely to jeopardize the continued existence of the spotted owl and are not likely to adversely modify spotted owl critical habitat (BO p. 132).

Furthermore, the proposed action is not likely to diminish the effectiveness of the conservation program established under the NWFP to protect the spotted owl and its habitat on federal lands within its range (BO p. 132).

The timber harvests and connected actions described in this EA have incorporated the applicable General Standards that were described in the BA (pp. 9-10) and BO (pp. 22-24); and comply with all reasonable and prudent measures outlined in the BO (pp. 134-135). This includes delaying proposed activities to

and prudent measures outlined in the BO (pp. 134–135). This includes delaying proposed activities to avoid disrupting owls at known owl sites until after the critical nesting season, and monitoring/reporting on the implementation of this project to the U.S. Fish and Wildlife Service.

- **ESA Fish – UWR Chinook salmon and UWR steelhead trout. (EA Section 3.3)** Consultation with the National Marine Fisheries Service (NMFS) on effects of the ThunderKat harvest project on Upper Willamette River (UWR) Chinook salmon and UWR winter steelhead trout is not required because the project would have no effect on these species or on essential fish habitat. The harvest units are ≥ 2.2 miles from listed fish habitat (LFH) in Thomas Creek, and streams in the harvest units would have no-disturbance buffer widths of approximately 200 feet (one site potential tree height). These buffers would maintain large wood supplies, and stream shading and thus stream temperature, and also intercept and infiltrate water carrying sediment prevent its delivery to listed fish habitats (LFH).

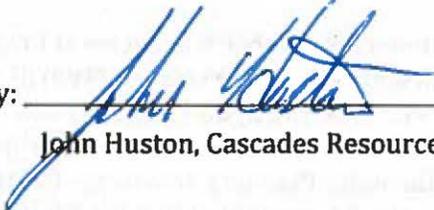
There would be no peak flow effects to listed fish habitat due to maintaining canopy closures >30 percent in the Criminal Creek watershed and due to the relatively small amount of openings with <30 percent canopy closure in the Bear Creek watershed (EA Section 3.2.2.1).

Hauling would not impact listed fish habitat in the ThunderKat Timber Sale for the following reasons:

- Log haul routes are all paved where they cross listed fish habitat in Jordan Creek, with no mechanism to deliver sediment to LFH.
- Potential increased turbidity caused by sediment movement from the gravel road surface during hauling is unlikely to be visible or detectable beyond 800 meters downstream of the stream crossing; the upper portion of the route crosses several tributaries to Thomas Creek at 1.6 up to 2 miles upstream of steelhead and chinook habitat. (EA Section 5.1.2).

[40 CFR 1508.27(b) (10)] - Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment: The proposed harvest activities have been designed to follow Federal, State, and local laws (EA sections 1.3, 1.6, 3.8).

Approved by: _____


John Huston, Cascades Resource Area Field Manager

Date: _____

11/12/2015