Finding of No Significant Impact
for the
Big Butte Creek Forest Management Project
DOI-BLM-OR-M050-2014-0010-EA

Introduction

The Medford District Bureau of Land Management, Butte Falls Resource Area (BLM) analyzed forest management activities, road work, activity fuels treatments, and restoration work on 2,339 acres of matrix lands and 12 acres of riparian reserves in the *Big Butte Creek Forest Management Project Environmental Assessment* (EA). Proposed projects are located in the Big Butte Creek fifth field watershed.

The EA analyzed the potential effects of the following forest management activities: regeneration harvest (shelterwood retention, overstory removal and structural retention), disease management, proportional thinning, variable density thinning, thin from below, small diameter thinning, and riparian thinning. Timber yarding systems included in the analysis were ground-based, skyline-cable and helicopter. The activity slash resulting from the forest management activities would be lopped and scattered, piled and burned, underburned, or removed for biomass utilization.

Road projects that would be completed to support the timber harvest activities include road renovation and temporary route construction, reconstruction, and renovation. Temporary routes would be decommissioned after use. The Big Butte Creek Forest Management Project also analyzed closing or decommissioning roads that are surplus to BLM needs at this time, but could be used in the future.

Projects to restore water sources, hazardous fuels reduction maintenance and Gentner's Fritillary habitat enhancement were included to reduce adverse impacts to soil and water resources and plant and wildlife species.

Based on the context and intensity of the effects analyzed in the EA (p. 44–124), I have determined Alternative 2, the Selected Alternative, with the associated project design features from the Big Butte Creek Forest Management Project, is not a major Federal action that would significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area.

The Big Butte Creek Forest Management Project will not have significant effects beyond those described in the broader analyses conducted and disclosed in the environmental impact statements (EISs) for the 1995 Medford District Resource Management Plan (RMP) and the 1994 Northwest Forest Plan, or the effects have been determined to be insignificant. Environmental effects do not meet the definition of significance in context or intensity as defined in 40 CFR § 1508.27. Therefore, an environmental impact statement is not necessary and will not be prepared.

In making this finding, I considered the following criteria, as required in 40 CFR § 1508.27 by the Council on Environmental Quality (CEQ) for evaluating the significance of the effects of the activities proposed in the Big Butte Creek Forest Management Project.

Context

The 28,275-acre Big Butte Creek Project Area is located in the Upper Big Butte Creek, Lower Big Butte Creek, and North Fork Big Butte Creek sixth-field watersheds. A small portion of the Project Area is located within the Lower South Fork Big Butte Creek sixth-field watershed. The entire Project Area is within the 157,000-acre Big Butte Creek fifth field watershed. The Big Butte Creek Forest Management Project EA analyzed site-specific actions on 2,351 acres, or 8% of the Project Area. The BLM manages 12,842 acres (45%) within the Project Area and management activities would occur on 18% of those lands. BLM lands in the Project Area have the following land use allocations: matrix, riparian reserve, and late-successional reserve (known northern spotted owl activity centers). Activities analyzed in the Selected Alternative are located on matrix and riparian reserve lands. No activities will occur in late-successional reserves.

Under the Selected Alternative, a total of 2,351 acres (8% of the Project Area and 18% of BLM lands in the Project Area) will receive the following forest management treatments: 46 acres of disease management, 18 acres of shelterwood retention, 103 acres of structural retention, 1,191 acres of proportional thinning, 7 acres of overstory removal, 134 acres of thin from below, 78 acres of variable density thinning, 12 acres of riparian thinning, and 762 acres of small diameter thinning. Slash (branches, twigs, bark, wood debris) created from the timber harvest will be treated by lopping and scattering, piling and burning, or biomass removal. The Selected Alternative also contains up to 67 miles of road renovation, 2.5 miles of road decommissioning, 18.4 miles of road closure (gates or barricades), 0.4 mile of temporary route construction and decommissioning, 0.8 mile of temporary route reconstruction and decommissioning, and 1.6 miles of temporary route renovation and decommissioning.

The Selected Alternative will include implementation of the project design features listed in the EA (p. 31–44), applicable Best Management Practices in Appendix D of the 1995 Medford District ROD/RMP, and relevant Best Management Practices incorporated into the Medford District ROD/RMP in 2011. By implementing these protective measures, the BLM will avoid or reduce adverse effects from management activities.

The Big Butte Creek Forest Management Project is consistent with the 1995 Medford District ROD/RMP and any plan amendments in effect at the time this document is published and the effects anticipated from implementation of that plan.

Intensity

I have considered the intensity of the effects anticipated from the Big Butte Creek Forest Management Project relative to the severity of the effects, as described in the 10 considerations for evaluating intensity in the CEQ regulations at 40 CFR § 1508.27(b).

Chapter 3 of the EA (p. 44–124) details the effects of the project. None of the effects identified, including direct, indirect, and cumulative effects, are considered to be significant and all anticipated effects are of the type and within the magnitude of effects analyzed and described in the EIS for the Medford District RMP.

The following discussion is based around the 10 considerations for evaluating intensity.

1. Effects that may be both beneficial and adverse.

Based on the analysis documented in the EA, no significant adverse or beneficial effects will result from implementing the Selected Alternative (Alternative 2) in the Big Butte Creek Forest Management Project EA. All effects are of the type and within the magnitude of effects described in the EIS for the Medford District ROD/RMP.

The EA documented the site-specific analysis of effects to the environment. Required project design features (EA p. 31–44), an integral part of the project, will ensure the potential for adverse effects on resources is avoided or minimized to the extent possible.

a) The Big Butte Creek Forest Management Project will protect water quality by implementing no-cut buffers. The riparian thinning in T34S, R2E, section 7 would use road 34S-2E-7.1 as the delineation for no treatment and this would be approximately a 120-feet from the perennial stream. The riparian thinning on the intermittent stream in T35S, R2E, section 3 would have a 35-foot no-cut buffer, this is because it would be harvested with a helicopter (EA, p. 37). This will protect stream temperatures and stream sediment levels and prevent hazardous materials from entering streams.

b) Fuel levels will increase immediately following forest management activities and prior to slash disposal; however, the majority of fuels treatments will begin within 90 days of completion of harvest activities. After slash disposal treatments have been completed, a reduction in potential fire behavior would occur due to the reduction in surface fuel loading and change in horizontal and vertical fuel arrangement (EA, p. 120).

c) Timber harvest from the Big Butte Creek Forest Management Project will provide economic benefits by supporting jobs and contributing to community stability. Timber harvest under the Selected Alternative will result in an estimated return to the Federal Treasury of about $4.8 million under current market conditions and an estimated volume of 11.6 million board feet of timber. Direct employment from timber harvest and processing will result in approximately 104 full-time equivalent jobs. The effects to economics are discussed in the EA on page 112−113.

d) Small diameter thinning will result in an estimated 1.5 MMBF and employment equivalent to 12 jobs (EA, p. 113).

e) The project has the potential to introduce or spread noxious weeds during implementation; however, it is not possible to distinguish the impacts from the project from the background risk of ongoing activities in the Project Area. The potential for the introduction or spread of existing noxious weed populations is reduced by applying project design features during project implementation and conducting post-project monitoring and weed treatments as needed (EA, p. 32).

f) Effects to Endangered Species Act (ESA) listed threatened and endangered (T&E) wildlife and plant species are discussed in CEQ consideration number 9.

2. The degree to which the selected alternative will affect public health or safety.

The Big Butte Creek Forest Management Project will not significantly or adversely affect health or safety because

- treatment activities will meet Occupational Safety and Health Association regulations for worker and public safety,
- fire hazard and risk will be reduced within the treated stands (EA, p. 119-121),

- the effects from activity slash burning will be short-term and localized,
- road renovation and water source restoration will increase firefighting capability by enhancing firefighter access and egress and providing more available water during wildfire suppression,
- prescribed burning operations will comply with the guidelines established by the Oregon Smoke Management Plan to protect air quality, especially in Smoke Sensitive Receptor Areas.

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 Big Butte Creek Forest Management Project Area does not contain and will not affect wild and scenic rivers or park lands. Prime farmlands are found within the project boundary on private lands; however, no projects are located within or would affect prime farmland. Where required, the BLM completed surveys and inventories to identify areas with unique characteristics. This allowed the BLM to design the project in such a way to avoid effects to these features as follows:

- Cultural surveys for the Project Area were completed and the project archaeologist determined the project will have no adverse effect on historic properties.
- No projects will occur within wetlands; therefore, wetlands will not be destroyed, lost, or degraded in accordance with Executive Order 11990, Protection of Wetlands.
- The project is located within Northern Spotted Owl critical habitat unit (CHU) 10, subunit KLE-5. Of the total acres of owl habitat in Alternative 2 that would be thinned and maintained, 619 acres are within NSO CHU 10, subunit KLE-5 (22 acres of nesting/roosting/foraging, 276 acres of roosting/foraging, and 321 acres of dispersal habitat). The BLM has determined the proposed projects (proportional thinning and variable density thinning) that would maintain NSO habitat within critical habitat would have an insignificant effect to NSO critical habitat and would not adversely affect critical habitat (EA, p.84). Timber harvest (including small diameter thinning and riparian thinning) proposed in Alternative 2 would likely adversely affect NSO habitat in the short term because 144.5 acres of nesting/roosting/foraging and 181 acres of roosting/foraging would be downgraded to dispersal habitat and 20 acres of nesting/roosting/foraging, 28 acres of roosting/foraging, and 129 acres of dispersal habitat would be removed. In addition, 1 acre of nesting/roosting/foraging, 3 acres of roosting/foraging, and 6 acres of dispersal would be removed for landing and temporary route construction outside of timber harvest units (EA, p. 83).
- Under the 1995 RMP, the BLM found 21.7 miles of Big Butte Creek, including South Fork Big Butte Creek, eligible for inclusion into the National Wild and Scenic River System. It was classified as recreational with an ORV (outstanding remarkable value) of fisheries. Big Butte Creek flows from southeast to northwest, with 1,001 acres of its 0.5 mile-wide corridor on BLM-administered lands, of which approximately 477 acres is found within the southwest corner of the project planning area. Approximately 44 acres of timber harvest treatments are proposed within the 0.5 mile-wide eligible river segment, all located within T35S, R2E, section 3. Full riparian reserve widths, PDFs and BMPs will be applied to minimize effects to fish and aquatic habitat. All proposed activities are also compliant with the Clean Water Act. Because the units are located high above the canyon bottom, timber harvest is not anticipated to affect the fisheries ORV or the recreational classification of the river segment.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the Selected Alternative for the Big butte Creek Forest Management Project are similar in nature to many other projects that have been implemented across the Medford District BLM. The anticipated effects of the projects, documented in the EA, are disclosed in Chapter 3 of the EA (p. 44–124). There is a continuing full range of debate, findings, and opinions about the potential effects of land management activities as evidenced by public comments received regarding this project. Opposition to the project is not the same as controversy. The Ninth Circuit held that a project is highly controversial if there is a "substantial dispute [about] the size, nature, or effect of the major Federal action rather than the existence of opposition to a use." *Blue Mountains Biodiversity Project* v. *Blackwood*. 161 F.3d 1208, 1212 (9th Cir. 1998) (quoting *Sierra Club* v. *U.S. Forest Service*, 843 F.2d 1190, 1193 [9th Cir. 1988]).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The analysis did not indicate the effects of the Selected Alternative will involve any unique or unknown risks. The anticipated effects of implementing the Big Butte Creek Forest Management Project are similar in nature to the effects estimated and observed for other projects implemented on lands in the Medford District BLM and are well supported with referenced literature throughout the EA.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about future considerations.

The decision to implement Alternative 2 of the Big Butte Creek Forest Management Project will not set any precedents for future actions with significant effects nor does it represent a decision in principle about future considerations. The project will implement actions that meet management direction in the Medford District RMP. Any future action will have its own set of conditions and will be evaluated through a future NEPA process.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant effects.

The analysis did not identify any significant cumulative effects outside of those addressed and anticipated in the EISs for the 1995 Medford District RMP and the 1994 Northwest Forest Plan. The project's interdisciplinary team performed analyses for various resources at multiple scales and included past, current, and foreseeable future actions on both private and Federal lands. The effects of Alternative 2 for each resource issue analyzed are disclosed in the EA in Chapter 3 (EA, p. 44–124).

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 archaeologist surveyed the Project Area for cultural and historic resources. Implementation of Alternative 2, including project design features, will not adversely affect objects listed on the National Register of Historic Places, nor will it cause destruction of significant scientific, cultural, or historic resources. If cultural resources are located during project implementation, the project will be stopped and the BLM archaeologist will determine appropriate mitigation.

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 of 1973.

T&E Plant Species

The Big Butte Creek Forest Management Project is within the range of one T&E plant: federally endangered Gentner's fritillary (*Fritillaria gentneri*). The Project Area also contains suitable habitat for the Gentner's fritillary. The BLM documented 19 sites of Gentner's fritillary in the Gentner's Fritillary Habitat Enhancement Project Area and fuels reduction units. The actions proposed in Alternatives 2 would be **"not likely to adversely affect"** to this Federal Endangered plant because the BLM conducted predisturbance surveys and would protect sites according to Project Design Criteria in the programmatic consultation (#01EOFW00-2014-I-0013) (Bureau of Land Management 2013) (Fish and Wildlife Service 2014). The Gentner's Fritillary Habitat Enhancement Project would improve habitat conditions for this species. There would be **"no effects"** to this Endangered species from the rest of the proposed actions because no plants occur in those areas (EA, p. 115).

T&E Fish Species

The Big Butte Creek Forest Management Project Area contains one T&E fish species, the federally threatened Southern Oregon/Northern California Coast Coho Salmon. The project fish biologist determined the actions proposed in this project would have **"no effect"** on coho salmon, coho critical habitat, or essential fish habitat; therefore, consultation was not required (EA, p. 126).

T&E Wildlife Species

The Big Butte Creek Forest Management Project Area contains two threatened and endangered wildlife species, the Gray wolf (endangered) and the northern spotted owl (threatened). The Medford District prepared a biological assessment for timber harvest projects proposed in the Big Butte Creek Forest Management Project and submitted it to the US Fish and Wildlife Service on November 5, 2015.

Consultation with the USFWS has been completed for this project. The Biological Opinion (FWS Reference Number 01EOFW00-2016-F-0240) from the U.S. Fish and Wildlife Service (USFWS) transmitted on April 11, 2016 determined that the proposed activities **"are not likely to jeopardize the spotted owl"** and they **"do not anticipate that the project will adversely modify critical habitat at the subunit or range wide scale"** (USDI FWS 2016, p. 59).

Northern Spotted Owl (NSO)

The BLM worked to meet the intent of Recovery Action 10 by planning the project to minimize effects to spotted owl sites. BLM incorporated RA10 to the extent it was compatible with the purpose and need of the project: provide for a sustainable supply of timber and help meet Medford BLM's annual timber volume target and improve forest health. To the extent practicable, the Butte Falls Resource Area biologist and core team followed principles in the SW Oregon Recovery Action 10 Guidance Document (USDA USDI 2013) to reduce impacts to sites with recent pair and/or reproduction activity within the project area.

The NSO sites within the project area were prioritized in high and low categories based on occupancy and reproductive success data.

Of the 12 sites within the Big Butte Project, three rated as high in the RA10 prioritization because of their recent occupation and reproductive status or their history of extensive pair occupation and reproduction. The core team's objective at these sites was to avoid adverse effects by not removing or downgrading NRF habitat within the home range. While some adverse treatments are anticipated at these three sites, the proposed action is not likely to impact the reproduction or survival of the owls at these sites because the vegetation treatments are in areas where owls were not located in previous breeding seasons or only small amounts of NRF habitat would be removed from temporary route and landing construction. The project core team focused on reducing the amount of treat and maintain units within the 0.5-mile core area, because the core area provides important habitat elements of nest sites,

roost sites, and access to prey, benefiting spotted owl survival and reproduction (Bingham and Noon1997).

The remaining nine sites within the Big Butte Creek Action Area rated as low in the RA10 prioritization because of the poor NSO occupation history. The core team's objectives at these sites were to accelerate the growth of spotted owl habitat or treat stands for ecological benefits as described in the Recovery Plan and the 2012 designated critical habitat rule. These objectives would result in short-term adverse effects for long-term benefits.

Northern Spotted Owl Critical Habitat (CHU)

Subunit KLE-5 would maintain the intended function of providing demographic support for spotted owls. The total acres of owl habitat that would be thinned and maintained, 619 acres are within NSO CHU 10, subunit KLE-5 (22 acres of nesting/roosting/foraging, 276 acres of roosting/foraging, and 321 acres of dispersal habitat). The BLM determined the proposed projects (proportional thinning and variable density thinning) would maintain NSO habitat within critical habitat and have an insignificant effect to NSO critical habitat and would not adversely affect critical habitat because

- canopy cover within treated nesting/roosting/foraging, roosting/foraging, or dispersal stands would be retained at or above 60%, 60% and 40%, respectively;
- decadent woody material, such as large snags and down wood, would remain post-treatment;
- multiple canopy, uneven-aged tree structure that was present prior to treatment would remain post-treatment in proportional thinning units;
- heterogeneity in tree structure would be promoted in variable density thinning units;
- no NSO nest trees would be removed; and
- all nesting/roosting/foraging and roosting/foraging habitat on Federal lands in the Project Area would be surveyed for NSOs prior to stand treatments. If NSOs are located in new areas, the project will either be modified to avoid negatively affecting owls, or the BLM will reinitiate consultation with the USFWS (EA, p. 84).

The impacts to proposed critical habitat primary constituent elements would be insignificant and undetectable and adverse impacts are unlikely to occur. At the subunit scale, the removal of dispersal habitat would not affect the intended north-south and east-west connectivity conservation functions of subunit KLE-5 because the proposed removal of dispersal habitat would result in a reduction of 0.03% of the dispersal habitat within subunit KLE-5. Substantial habitat would be retained to maintain the intended dispersal function of the subunit (EA, p. 85)

Even with the proposed removal of NRF and dispersal habitat within critical habitat, subunit KLE-5 would maintain the intended function of providing demographic support for spotted owls because none of the 40 historic spotted owl sites in this critical habitat subunit would be adversely affected by proposed treatments in critical habitat. Additionally, the Big Butte Creek NSO sites with site centers in critical habitat would not be adversely affected by proposed treatments in the home range that are outside of critical habitat (BA, p.44)

With the removal of NRF and dispersal-only habitat, the proposed action would not affect the intended conservation function of north-south and east-west connectivity between subunits and critical habitat units because the proposed removal of NRF habitat and dispersal-only habitat would result in a reduction of 0.01 percent of the dispersal habitat (NRF + dispersal-only habitat) within subunit KLE-5. Habitat supporting the transience phase of dispersal contains stands with adequate tree size and canopy

cover to provide minimal foraging opportunities and protection from avian predators. This may include younger and less diverse forest stands, such as even-aged, pole-sized stands, than foraging habitat but such stands should contain some roosting structures and foraging habitat to allow for temporary resting and feeding during the movement phase (USDI 2011). Spotted owls are able to move successfully through highly fragmented landscapes typical of the mountain ranges in western Washington and Oregon (Forsman, et al. 2002) (BA, p. 44).

The impacts to proposed critical habitat primary constituent elements would be insignificant and undetectable and adverse impacts are unlikely to occur. At the subunit scale, the removal of dispersal habitat would not affect the intended north-south and east-west connectivity conservation functions of subunit KLE-5 because the proposed removal of dispersal habitat would result in a reduction of 0.03% of the dispersal habitat within subunit KLE-5. Substantial habitat would be retained to maintain the intended dispersal function of the subunit (BO, p. 85).

Gray Wolf

A portion of the Big Butte Creek Project is within the known wolf activity area of the Rogue Pack. Effects from this project are not expected because the proposed activities would not disturb key wolf areas such as den sites and rendezvous sites, would not change prey availability, and would not increase public access in the area known to be used for denning and rendezvous sites. No effects from disturbance are expected at this time, but will need to be assessed on an ongoing basis throughout the life of the proposed project (EA, p. 126)(BA, p. 2).

10. Whether the action threatens a violation of Federal, State, or Local law or requirements imposed for the protection of the environment.

The Selected Alternative will not violate Federal, state, or local environmental protection laws. Project design features, an integral part of this project, ensure project activities are consistent with the 1995 ROD/RMP, as well as comply with legal requirements applicable to this project (EA, p. 18).

Finding

I have determined Alternative 2, the Selected Alternative, does not constitute a major Federal action having a significant effect on the human environment; therefore, an environmental impact statement is not necessary and will not be prepared. This conclusion is based on my consideration of the CEQ's criteria for significance (40 CFR §1508.27) with regard to the context and intensity of the effects described in the EA, and on my understanding of the project, review of the project analysis, and review of public comments. As previously noted, the analysis of effects has been completed within the context of the Medford District RMP and the Northwest Forest Plan. This conclusion is consistent with those plans and the anticipated effects are within the scope, type, and magnitude of effects anticipated and analyzed in those plans. The analysis of project effects has also occurred in the context of multiple spatial and temporal scales as appropriate for different types of effects and the effects were determined to be insignificant.

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4/28/2016
Date