
North Coast Regional Water Quality Control Board

April 27, 2015

Ms. Patricia Grantham
Attention: Ms. Wendy Coats
Klamath National Forest
1711 South Main Street
Yreka, CA 96097

Dear Ms. Grantham:

Subject: KNF Westside Fire Recovery Project DEIS Review

File: USDA – Klamath National Forest

On March 5, 2015, the United States Forest Service (USFS) published a notice titled, “Opportunity to comment on the Westside Fire Recovery Project.” This notice stated, “The draft Environmental Impact Statement (EIS) for the proposed Westside Fire Recovery Project (Project) is now available for public review.” The Project was developed in response to landscape-level changes to forested habitat resulting from the 2014 wildfires on the Klamath National Forest (KNF). The North Coast Regional Water Quality Control Board (Regional Water Board) appreciates the opportunity to comment on the Project and wish to remain on the mailing list.

In reviewing and analyzing the preferred alternative (Alternative 2), we are concerned that this alternative proposes activities with potential impacts to water quality that will not be mitigated to less than significant. Although this letter does not serve as a final determination, Regional Water Board staff currently do not believe that the Alternative 2 project would be eligible for coverage under Order No. R1-2010-0029, *Waiver of Waste Discharge Requirements For Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region* (Waiver). It is possible that Alternative 4, with some modifications, may be eligible for Waiver coverage. A final determination cannot be made until the final EIS with the alternatives is prepared and finalized and a Decision is issued. We will outline our concerns below.

The Project proposes to: 1) reduce safety hazards to the public and forest workers from falling trees or hazardous fuel conditions; 2) obtain the maximum economic commodity value from burned timber by offering a sale while the wood is still marketable; and 3) promote ecosystem sustainability by increasing the likelihood and speed by which burned forested areas are regenerated. Funds gained from the salvage logging can be used for additional restoration work. The preferred alternative (Alternative 2) project area is comprised of 214,848 total acres, including 184,502 acres of KNF land. Alternative 2 proposed treatments include: 11,700 acres of salvage logging; 650 miles of roadside hazard treatment along KNF roads, state highways, and county roadways; 22,900 acres of hazardous fuels treatment; and 7,900 acres of site preparation, planting, and vegetation release.

The Waiver waives certain activities conducted on NFS lands from the waste discharge requirements of Article 4 (commencing with Section 13260) of Chapter 4, Division 7 of the California Water Code, except as provided within the Waiver. In order to receive coverage under the Waiver, projects must meet specific eligibility criteria and conditions. Projects are defined as Waiver Category A (lower threat to water quality) or Category B projects depending on the risks of water quality impacts. The Westside Fire Recovery Project is considered a Category B project because it is a timber harvest project.

Condition number 14 on page 16 of the Waiver states, "Compliance with Waiver conditions will ensure that no significant environmental impact to water quality occurs from an activity covered by this Waiver. Activities that have potentially significant impacts to water quality that cannot be reduced to less than significant levels are not eligible for coverage under this Waiver and the USFS will need to submit a Report of Waste Discharge to the Regional Water Board." Our staff analysis of Alternative 2 suggests that potential impacts to water quality have not been mitigated to less than significant levels for the following reasons:

1. Aquatic Conservation Strategy Compliance

The Northwest Forest Plan Aquatic Conservation Strategy Objectives Guidelines state that Forest Service and BLM-administered lands within the range of the northern spotted owl will be managed to maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. The standards and guidelines for Riparian Reserves prohibit or regulate activities that retard or prevent attainment of Aquatic Conservation Strategy objectives.

Alternative 2 proposes about 3,920 acres of salvage units (about 2,000 acres of salvage logging) on steep, weathered granitic lands in Riparian Reserves. No salvage logging is proposed on inner gorges, active landslides or toe zones of dormant landslides. Also proposed is about 960 acres of site preparation and planting, 4,395 acres of roadside hazard tree removal, and 3,940 acres of fuels treatment on unstable lands considered to be Riparian Reserves. Alternative 2 also proposes construction of new log landings within aquatic Riparian Reserves and the reuse of existing log landings within Riparian Reserves. The number of new and reused landings could not be determined from the DEIS. These activities in Riparian Reserves may result in significant impacts to water quality, and the draft EIS has not

adequately proposed mitigation measures to reduce impacts to less than significant levels.

2. Roadside Hazard Treatments

Alternative 2 proposes to identify and remove hazard trees along about 650 miles of National Forest Transportation System roads, county roads, and state highways. This includes Maintenance Level 1 roads used by Forest Service employees and contractors for administrative purposes. Maintenance Level 1 roads are not routinely maintained.

Reopening 69 miles of Level 1 roads for salvage logging and hazard tree removal may result in significant impacts to water quality, especially in cumulatively impacted watersheds that have burned with a moderate or high intensity.

3. Cumulative Impacts

The water quality risk to channel morphology was evaluated in the Project DEIS using the ERA model. USLE and mass-wasting models were also used to assess cumulative impacts. These cumulative impact models rely on “risk ratio”, which is the model results (ERA, USLE or mass-wasting) divided by the watershed threshold of concern (WTOC) (model results/WTOC). The threshold of concern for the risk ratio is 1.0. According to the DEIS, “The threshold of concern does not represent the exact point at which adverse cumulative impacts will occur. Rather it serves as a “yellow flag” indicating increasing susceptibility for adverse effects to beneficial uses in a watershed.” For the DEIS, watersheds with risk ratios of less than 1.0 are considered to have a low risk of increased susceptibility for adverse effects to beneficial uses in a watershed. Watersheds with risk ratios between 1.0 and 1.5 have a moderate risk, and greater than 1.5 have a high risk.

For ERA, the DEIS states, “A low risk to channel morphology means that there is not likely to be a measurable change to peak flows and the channel bed, banks and floodplain will undergo natural modifications that are proportional to the storm events. A moderate risk indicates that peak flows may be artificially increased by the actions taken. The increased peak flow is likely to leave the channel susceptible to modifications that are slightly more than would occur under natural conditions. The perturbation of the geomorphic process would be over the short term (about two to four years). A high risk to channel morphology means that the increase in peak flows would lead to undesirable changes (such as channel straightening and loss of coarse wood) that would require long-term recovery (greater than 10 years).”

From the Westside Fire Recovery Report – Hydrology Report analysis, it appears all eleven 7th field watershed ERA risk ratios are greater than 1.0 post-fire, no action, with two of the eleven having risk ratios >1.5. According to this report, risk ratios increase in most cases when implementing the preferred Alternative 2, with three of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

For the mass-wasting analysis, all nineteen of the 7th field watershed have risk ratios are greater than 1.0 post-fire, no action, with five of the nineteen watersheds >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the nineteen 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

USLE modeling shows similar results. All eleven of the 7th field watershed have risk ratios greater than 1.0 post-fire, no action, with five of eleven being >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

Our staff analysis of Alternative 2 raises concerns that conducting salvage harvest and associated activities in watersheds already exhibiting elevated risks for cumulative impacts could result in significant impacts to water quality, especially in watersheds that have burned with a moderate or high intensity.

4. Riparian Zone Treatments

Regional Water Board staff have reviewed the fire burn severity maps. In general, the burn intensity in riparian zones within the fire area was generally low or very low. This is because in most instances the fire backed into the riparian zone and the fire intensity decreased as the fire approached the stream. In a few areas such as the North Fork of the Salmon River and in White's Gulch, high winds caused the fire to burn with high intensity across the riparian corridor. In these areas, there is charred timber with bare mineral hydrophobic soil with very little surface cover. In some cases, there are steep slopes leading directly to perennial fish-bearing watercourses. Much of the tree branches, leaves, and needles were consumed in the fire. These areas will be subject to elevated erosion rates and increased sediment delivery to the watercourses due to the steep slopes, hydrophobic soils, and lack of surface cover for erosion control.

None of the alternatives evaluated in the DEIS of the KNF Westside Fire Recovery Project propose to treat riparian zones that burned in the fire with a moderate or high intensity. Treating these riparian areas, perhaps by falling some trees and leaving them on the ground, and/or spreading slash on bare soils, could help to break up the hydrophobic crust, provide temporary sediment storage, and increase infiltration rates. Treating the riparian areas that burned at a high intensity could provide significant benefits to water quality, but were not included in the proposed action.

Additionally, the proposed Project lacks an approved plan to treat legacy sediment sites. The Regional Water Board provided scoping comments on the Westside Fire Recovery Project to KNF on December 5, 2014. Below are excerpts of our comments on the preparation of a legacy site treatment program for the Project.

"It is our understanding that some treatment of legacy sediment sites along the NFS roads within the project area is being accomplished as a part of the USFS Burned Area Emergency Rehabilitation (BAER) program. The legacy site treatment that is planned or accomplished

under the BAER program may result in progress toward TMDL compliance but Regional Water Board staff cannot determine whether BAER activities alone will be adequate for USFS Waiver compliance without additional details of that work. Given the huge size of the Project area, treatment of all the legacy sites may not be a realistic goal. However, treatment of some of the high priority legacy sediment sites in the Project area may be necessary in order for the Project to be eligible for Waiver coverage. KNF must propose an acceptable legacy site treatment program for the Project to comply with the Waiver and demonstrate reasonable progress towards TMDL compliance.”

The Regional Water Board received a draft legacy site treatment plan for the KNF Westside Fire Recovery Project on April 21, 2015, but has not yet had time to complete our review of the plan. An acceptable legacy site treatment program must be approved by the Executive Officer before Waiver coverage will be granted and Project activities can commence.

Most of the comments above are responding specifically to Alternative 2, the preferred alternative. Alternative 4 of the DEIS was designed to reduce watershed disturbance and impacts to water quality and fisheries, relative to Alternative 2, while still meeting the purpose and need for action on the Project. Alternative 4 addresses several of the above described water quality concerns, including not conducting roadside hazard tree removal and salvage logging on Maintenance Level 1 roads, and not constructing log landings within Riparian Reserves. It is possible that Alternative 4 could be modified to address the additional water quality concerns and be eligible for Waiver coverage. However, a final determination regarding Waiver coverage cannot be made until the final EIS is prepared with the alternatives finalized and a Decision is issued.

Thank you for the opportunity to comment on the KNF Westside Fire Recovery Project. If you have any questions, please contact Thomas Williams at (707) 576-2030.

Sincerely,

Matthias St. John
Executive Officer