March 31, 2016

Heather McRae Fuels Specialist USDA Forest Service Shasta McCloud Management Unit PO Box 1620 McCloud, CA 96057

Re: Lower McCloud Fuels Management Project

Dear Forest Service,

Thank you for accepting these scoping comments on behalf of the Klamath Siskiyou Wildlands Center, the Klamath Forest Alliance and the Environmental Protection Information Center. Contact information for our organizations may be found at the conclusion of this document. Please send hard copies of all forthcoming documents regarding this project to our mailing addresses.

In many fire-suppressed dry forest stands our organizations have supported Forest Service plantation thinning and understory thinning of fire suppressed stands. We also have supported Forest Service efforts to utilize prescribed fire in many instances. Unfortunately, the Shasta-Trinity National Forest in general, and the Shasta-McCloud Ranger District in particular, are making it harder and harder for us to support Forest Service management activities in the Late Successional Reserve system. Please refrain from activities know to harm forest, soil and watershed health. In particular please avoid the significant negative impacts associated with machine piling of activity slash and the establishment of new dozer lines.

We would like to support the re-introduction fire, the proposed Fuel Management Zones (FMZ), and the utilization of prescribed fire over time. These activities comprise the bulk of the project, and as demonstrated in forests throughout the NW Forest Plan, the purpose and need for LSR management can be met without the negative impacts associated with new dozer lines and machine piling activities.

Findings of the Watershed Analysis

Please note that at E-20, The Northwest Forest Plan requires that:

[The Watershed Analysis] will serve as the basis for developing project-specific proposals, and determining monitoring and restoration needs for a watershed. Some analysis of issues or resources may be included in broader scale analyses because of their scope. The information from the watershed analyses will contribute to decision making at all levels. Project-specific NEPA planning will use information developed from watershed analysis. For example, if watershed analysis shows that restoring certain resources within a watershed could contribute to achieving landscape or ecosystem management objectives, then subsequent decisions will need to address that information.

Hence the following findings of the 2011 Lower McCloud Watershed Analysis should be addressed in project development and implementation:

- Consider the amount of fragmentation in the watershed when proposing management activities, such that additional fragmentation does not result from actions on national forest lands. Page 164.
- Consider management actions that may reduce fragmentation in the watershed where possible, in an effort to somewhat offset the current trend toward increased fragmentation on private commercial timber land. Page 164.
- Conduct a road sediment source inventory to identify sediment sources. Page 166.
- Develop and implement actions to mitigate sediment sources. Page 166.

Transportation Management

We urge the Forest Service to propose and implement a vegetation management project that implements the ACS of the Northwest Forest Plan and the findings and recommendations of the Watershed Analysis by:

- Avoiding and deferring new road construction;
- Minimizing new landing construction; and
- Decommissioning unneeded roads.

Inventoried Roadless Area

While the scoping notice is unclear on this point, it appears that commercial logging is proposed within the West Girard Inventoried Roadless Area (IRA). We urge the Forest Service to avoid logging activities within the IRA.

Spotted Owl Critical Habitat

The scoping notice does not indicate if the Forest Service is proposing to downgrade existing spotted owl habitat within the Interior California Coast subunit. While we encourage the use of prescribed fire to increase stand resiliency within NSO critical habitat, we urge project planners to avoid logging activities that will downgrade or remove critical habitat for this ESA listed species.

Bald Mountain Spur Road

It is unclear to us why the Forest Service is proposing a 600' foot FMZ on the Bald Mountain spur road off of 38N36. This spur does not tie into a unified fire management and fire line strategy. The spur negatively fragments both the IRA and the LSR in a project area in which both the LSRA and the Watershed Analysis recommend against additional fragmentation. Logging along this spur will exacerbate and contribute to existing fragmentation.

Soils

Soil integrity is a key issue for this timber sale. Please address soil chemistry, productivity, hydrology, and biological integrity on a site-specific (*i.e.*, unit-by-unit) basis. Please map soil types and composites using field reconnaissance data and include the maps in the NEPA document. Include a qualified, journey-level soil scientist on the ID Team. Design actions and mitigation *after* you have collected field reconnaissance data on soils at every site proposed for action.

The Forest Service may only yard timber if the activity will be "carried out in a manner consistent with the protection of soil." 16 USC \$1604(g)(3)(F)(v); 36 CFR \$219.27(c)(6). Management plans and projects must "insure that timber will be harvested from National Forest System lands only where-"soil, slope, or other watershed conditions will not be irreversibly damaged." 16 USC \$1604(g)(3)(E)(i). By enacting this section, Congress intended that the Forest Service "provide empirical guarantees that timber harvesting will not damage soils, water conditions, and fish habitats."

Please note that ground-based logging causes higher incidences of root damage and scarring of residual trees (compared to skyline systems).

Soil loss with respect to method of harvest is directly related to the amount of soil disturbed and bared by harvest activity, especially the density of skid trails and roads required to access the timber. Megahan (1981) found tractor logging on granitics to result in 28 percent of the soil disturbed, ground cables with 23 percent, suspended cables with five percent and helicopter logging with two percent. Similarly, Swanston and Dyrness (1973) found tractor yarding in granitics to result in 35.1 percent bare soil, hi-lead in 14.8 percent and skyline in 12.8 percent. In a Trinity County study on mixed soil types, skid trails averaged four to eight percent (6-12 km/sq.km) for clearcut areas (Scott et al., 1980). http://www.krisweb.com/biblio/klamath_srcd_sommarstrometal_1990.pdf

Machine Piling

Please note that recently your colleagues in the Six Rivers National Forest recently concluded:

"Machine piling/burn piles would increase ground disturbance and soil displacement when the machine turns." -Little Doe and Low Gulch Timber Sale DEIS p 110.

In response to a request from the timber industry (AFRC) to allow machine piling in federal logging units the Medford District BLM responded as follows:

Comment 4: We asked that BLM provide some flexibility in how fuels would be treated by focusing on the desired goals. The BLM has restricted fuels treatments to handpiling and burning. Contractors could use light weight equipment to treat fuels without detrimentally compacting soils.

Response: The commenter has not provided details on methodology or supporting science that would support the claim that machine piling could be done without detrimentally compacting soils in excess of RMP standards for percent area compacted by current activities.

Resource management plans call for limiting compaction in harvested areas in order to minimize soil productivity losses. Therefore, no additional use of mechanical equipment for fuels reduction was proposed, as ground-based logging would compact up to 12 percent of the harvest units. This is particularly important in the Cottonwood planning area as the majority of soils contain high rock content. It was identified that ripping the soils in this area would bring rocks and cobbles to the surface. The priority was given to minimizing the soil area compacted instead of trying to mitigate the effects. Additionally, the harvest prescription resulting in relatively few trees per acre being cut minimizes the slash, and consequently, also reduces the need for mechanical fuel treatment.

Medford BLM Cottonwood Project EA Appendix A, Response to Comments. Page 3-2

Shasta Trinity National Forest timber planners generally refuse to acknowledge the significant (and avoidable) impacts of tractor piling. Indeed, rather than address the impacts of machine turns on soil health, the "personal communication" lauding the efficacy of "modern mechanical slashpiling" included in the Forest's response to previous comments simply avoids the issue of the machine turns required to conduct tractor piling.

Manual piling is a reasonable alternative to the avoidable impacts associated with machine piling while mechanical piling is universally recognized as an outdated practice that has disproportionately harmful impacts on watershed and soil resources.

Please see:

Evelyn Bull et al. Trees and Logs Important to Wildlife in the Interior Columbia River Basin PNW-GTR-391 (1977).

BLM, USGS, Biological Soil Crusts: Ecology and Management (Technical Reference 1730-2 (2001) (Available from BLM Publication Management Distribution Service, Bldg 41, E-16 (BC-650B) Denver, CO 80255

We further encourage the agency to examine the soil compaction monitoring reports from 1985 through 1997 on the Payette National Forest. While the Payette contains different ecotypes and soil types than does the Lower McCloud project area, the monitoring reports clearly show long-lasting and significant soil damage from tractor piling activities. Similar monitoring in the Idaho Panhandle (Jerry Niehoff) and the Kootenai National Forest (Lou Kuennen) demonstrate significant impacts to soils.

We also encourage the agency to review the findings of Geppert, R.R., Lorenz, C.W., and Larson, A.G., 1984. Cumulative Effects of Forest Practices on the Environment: A State of the Knowledge. Wash. For. Practices Board Proj. No. 0130, Dept. of Natural Resources, Olympia, Wash.

Our organizations remain convinced that manual piling is far preferable to tractor piling. Manual piling has none of the negative impacts to soils associated with tractor piling, provides an increased opportunity for local employment and significantly reduces longterm damage to soil health and productivity. Hence manual piling would better achieve the stated forest health purpose and need for the project.

Please further note that the proposed machine piling violates NFMA requirements that a given logging system cannot be chosen because of dollar value alone. There is no other justification for implementing the proposed tractor piling provided in the administrative record other than economic considerations and many reasons why the use such systems is not appropriate.

Conclusion

We hope to support a project that addresses the legacy of the agency's fire suppression policy though the thoughtful implementation of FMZs and prescribed fire. Please avoid the significant negative impacts associated with tractor piling and dozer line establishment in the Iron Canyon LSR.

Best regards,

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