

Salmon River Restoration Council

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Danika Carlson
ID Team Lead
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RE: Bear Country Project Environmental Assessment

Dear Supervisor Smith and ID Team Leader Danika Carlson,

Please accept these comments on behalf of the Salmon River Restoration Council for the Bear Country Project Environmental Assessment.

There are many aspects of the Bear Country Project that we support, in particular we are very supportive of the focus on wildfire safety and resilience around local communities, outlying neighborhoods and private inholdings, safe ingress and egress routes, and creation and maintenance of strategic ridge-top fuel breaks, and use of prescribed fire to help create forest resilience, reduce fuels and maintain fuels treatments. Additionally, we appreciate that the ID team and district took considerable time to get feedback from community members through community meetings and especially field trips. We feel that all USFS forestry projects should incorporate this approach, asking for more community input along the way and allowing for a true exchange of ideas.

While we commend the ID Team's willingness to include more community input in this project, we feel that this project would have been a great candidate to be a truly collaborative project. It would have made a great Western Klamath Restoration Partnership (WGRP) pilot project for the Salmon River, especially because it affects multiple communities, neighborhoods, and private inholdings, includes large areas that have burned in the past, as well as many important cultural landscapes. We feel that through a truly collaborative process, we could have arrived at an improved project proposal, created less opposition, and have the ability to garner considerable additional funding for project implementation, especially the important, non-commercial portions of this project that are most important to community safety and wildfire resilience. Over the last several years, WGRP has brought in over \$12,000 in implementation funds from diverse funding sources (such as CalFIRE and USFWS), within our collaborative projects on the Six Rivers National Forest (SRNF). WGRP is also ranked very highly to receive 10 years of CFLRP awards of ~\$3 million per year for implementation of collaborative projects.

Oaks:

We appreciate that oaks are called out in the overarching goals of the project. This is very appropriate for many areas of this landscape. Black oaks in particular, but all broad leafed deciduous oaks should be prioritized in fuel and thinning treatments and we hope that actual implementation cards make this clear. We have seen fuels treatments, even recent ones, within the landscape in plantations where insufficient effort was made to make sure that operators were prioritizing hardwoods and in particular oaks, resulting in less diverse and less fire resilient stands going into the future. It is hard to break the common habits of giving conifers preference for implementation crews, equipment operators, and for USFS personnel overseeing projects. The Bear Country landscape, especially the portion that burned in the 1977 Hog Fire and 1987 Glasgow Fire are prime areas to set the stage for future fire resilience, climate change resilience, and stand biodiversity. Black oaks were once a significant part of this landscape and through careful management, black oak woodlands and mixed hardwood/conifer stands can be restored. Unfortunately, this portion of the landscape is already influenced by past poor management decisions, such as extensive off-site pine plantations where hardwoods have been all but managed out of existence, and which now create almost no quality habitat, are highly susceptible to burning at high intensity and threatening surrounding stands, and greatly reduce diversity on the landscape. Black oaks, unlike white oaks, canyon live oaks and our scrub oak species, flourish on high site quality locations, thus they have been particularly susceptible to encroachment by Douglas fir, and have also been purposely managed against on the greater landscape in the push to grow more Douglas fir. Without frequent fire and protective management, black oaks are a remnant of what they once were on the landscape. There is a great opportunity in the Picayune North and South, and Indian Creek zones of this project to reverse this unfortunate trend and reestablish black oak woodlands. Take cues from the private parcels in this landscape, such as Blue Ridge, Godfrey Ranch, and Harris Ranch to see viable examples of managing this post fire landscape for hardwoods, species diversity, and wildlife food productivity.

We encourage treatments specifically designed not only to retain oaks on the landscape, but to actually restore oak woodlands. In the post fire areas this would include thinning fire re-sprouted oak clumps to 2-4 of the main stems, removing nearly all of the Douglas fir and most of the pine, leaving the remaining conifers dispersed at a wide spacing, up to 200 feet, maintaining other oak woodland aligned and wildlife food intensive shrub and tree species such as hazel, manzanita, dogwood, madrone, chinquapin, cedar, sugar pine, etc.

Other species of preference:

Beyond oaks and yews there are other species that should be called out to be preserved in this landscape both in commercial and manual units (you probably have mentioned some of them), these include dogwoods (great for wildlife and adored by local humans), hazel (especially in conjunction with black oak dominated units) (they can be thinned but some should be left, burning in a great treatment), redbud, elderberry (very important wildlife food source and cultural plant), sugar pine anywhere they exist, incense cedar, chinquapin (wildlife food and cavity nesting tree), madrone, especially large trees, (there are more, but I am tired).

Mastication:

We are particularly concerned about the amount of mastication being prescribed in this project. While we see mastication as a viable tool in fire behavior modification in certain limited areas, it is a high impact treatment and the result cannot and should not realistically be considered fuels reduction. Mastication does not reduce fuels, it rearranges them. This can result significant moderation of fire behavior under certain circumstances, but can lead to increased tree mortality due to increased residence time when fire burns through it. On the Salmon River we have seen that masticated debris stick around for a significant amount of time post treatment, especially in dryer S, SW, W slopes. Sadly, we have experienced 70% or greater top kill, particularly of black oaks, resulting from low intensity prescribed fire in previously masticated units within the Bear County landscape (intensive deer browse subsequently completed the killing of these trees, resulting in a site transition from post fire recovering black oak and

madrone woodland to knobcone and brush stands). Also from our experience with contracting fuels reduction in the Bear Country area, mastication does not really come as a cost savings. We have seen it cost more or less the same as cut and pile costs from contracting crews. If you take into consideration that mastication is an incomplete treatment that does not remove the fuels, and could decrease the ability to conduct safe and effective prescribed burns, it is even less cost effective as a treatment.

For these reasons, and the high impact of mastication in general on wildlife and herbaceous plant diversity, we recommend minimizing the use of mastication within this project. We especially recommend greatly reducing or even better eliminating mastication treatments within areas where prescribed fire is being called for as a treatment. We fear that mastication units will result in a roadblock for following through on the critically important prescribed fire called for in this project. Where mastication is used, we highly recommend including detailed prescriptions for the operators, making sure that they are aware of a desire for species diversity, call for leaving all deciduous hardwoods, and call for frequent skips of small pockets of shrubs for wildlife habitat and safety, including manzanita, dogwood, hazel, etc. For an example of more detailed prescriptions and masticator operator's ability to follow them, see the Blue Ridge Ranch mastication units that SRRC contracted. These units worked with the same operators as the adjacent USFS mastication units, but with very different results on the ground.

Meadows:

We are very supportive of historic meadow restoration within the Bear Country landscape. It is unclear on how meadows were located within the project, or perhaps I missed it, this is a lot of material to go through with my crazy busy schedule. Were historic aerial photos used to locate historic meadow systems that have already been encroached? Or were they simply identified as when folks stumbled across them?

We support the removal of conifers, especially Douglas fir, that are encroaching in these rare meadow features that exist on the landscape. The prescriptions generally look good, however we are concerned that all conifers are called for removal with the exception of a 1:1 match to old, historic stumps. Some of these meadow systems still have legacy conifers within them that should not be removed, this is especially true of cedars and large old pines. These mid slope meadow systems tend to evolve with cedars and sporadic large pines and these characteristics should be included in the prescriptions. Additionally, if there are pre-fire suppression firs, or very large firs with "wolfy" characteristics, they should also remain.

Several of the units with meadows in them are prescribed as ground based units due to their general flatness and lack of steep slopes. We are worried that ground based logging systems could degrade these important, and locally rare meadow ecosystems. Additionally, it isn't clear on the maps and the treatment specifications by unit (appendix c), which areas contain meadows. One known meadow system appears to be located in unit 77 (or 77NC). It is slated for ground based treatment but it does not mention that there are meadows present. On non-drought years this is a wet meadow system that would not be suitable for ground base logging systems. We would recommend working around the exterior of the meadow system, using directional felling within the surrounding oak woodlands, and cabling or end lining conifers out of the unit. Where this isn't feasible, we recommend girdling encroaching conifers and following up with prescribed fire at an appropriate interval. In general, girdling can be a good approach to removing encroaching firs that are within sensitive meadow systems.

New roads and temp roads (and legacy sites):

The Bear Country landscape is the most highly roaded landscape on the Salmon River. Which as we know has huge impacts on hydrology, wildlife, water quality, to name a few. Additionally, the USFS has not been able to adequately maintain the huge quantity of roads already existing on the landscape. For these reasons, we cannot support the creation of new roads within this project. We understand the need to reopen old temporary roads in order to conduct fuels reduction and thinning treatments in some units. However, there seems to be an inordinate amount of temporary roads proposed to be reopened in this

project, especially in the Mathews Creek drainage and around King Solomons Mine. All of these roads cannot be needed to improve forest health.

While we are speaking of roads, there are a huge amount of legacy sites related to roads within this project area. Some of the most used USFS road systems within the Salmon District are in this project area and are in great need of major maintenance and repair after year, decades, of neglect. The roads in the highest use, and most need of repair include the Godfrey Road (39N30), the Picayune Road (39), and the Shoe Fly (39N67). These roads all were heavily used in the past two fire seasons and their already poor road conditions were made significantly worse by this intensive, high weight, traffic.

Also, we would like to suggest including the instream restoration, Mathews Creek habitat enhancement project as a legacy site treatment within this project. We know that this is not going to happen at this point despite previous suggestions, but we do encourage the inclusion of high priority, instream restoration and meadow restoration sites in your projects when their boundaries overlap. This would be a great way to collaborate with SRRC, get legacy sites treated by matching funds and restoration work managed by partner organizations.

Helicopter units on steep terrain along river corridors:

There are numerous helicopter units on very steep terrain within the main river corridor that still remain in this project. We appreciate that many of the original units like this were removed from the project. These units are some of the few areas that have yet to have been affected by logging within the landscape due to the rugged steep terrain and inability to access the units. We are concerned that these hard to reach helicopter units will have increased fuels after treatment due to the difficulty of post logging piling and burning. We feel that the negative impacts of logging in natural stands in such steep terrain, within the river corridor, and the resulting increased fuel loads, far exceeds the potential financial and ecological benefits of the treatments. We suggest dropping these units from the project and focusing instead on fuels reduction and prescribed fire in this areas.

Canopy reduction in treatment intensity:

While we support certain forest thinning to promote climate and fire resilience and increase stand diversity, we are concerned about the potential reduction in canopy cover to 30-40% in what appears to be a very large portion of the natural stands in this project. While many of these stands could use some thinning and treatment, we are worried about the impacts of such intensive treatments on so many acres of this landscape. We are also worried that opening a large number of stands up so much will increase a brush response and will be hard to maintain. We know how hard it is to maintain the current treatments on the landscape. We hope that the forest, with partners will be able to scale of the level of landscape treatment maintenance, especially through prescribed fire and manual fuels reduction. We encourage the inclusion of multiple maintenance intervals within this NEPA, and an increase in the amount of areas that allow for prescribed fire. If canopy is going to be decreased to 30-40%, this should be accompanied by follow-up treatments of fuels reduction and preferably prescribed fire. If those treatments are not deemed feasible then we suggest leaving more of the existing canopy cover and in general using less intensive treatments.

While we don't prescribe to diameter limits in general, we think that they could be really helpful in many projects to make sure that the vast majority of legacy (pre-fire suppression) trees and the predominant and dominant trees remain on the landscape. So many of our largest and oldest trees have already been removed. We need to make sure that we are maintaining this legacy where we can. Within the riparian reserves it seems like leaving large trees, even those with mistle toa, should be a priority for wildlife.

Invasive species:

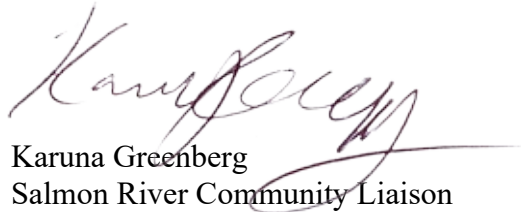
We are increasingly concerned about the spread of invasive species in our high impacted landscape. Of particular concern are cheat grass and medusa head grass, along with the numerous species that we at

SRRC already treat and manage in the watershed. Were surveys for these highly fire spreading species conducted within the project area? What mitigations will be made if these species are found within treatment units?

Rx fire:

We are encouraged to see that the amount of prescribed fire in this project has increased since scoping. We would encourage analyzing for even more prescribed fire on this landscape. We know that this landscape is very likely to burn in a forest fire, as much of it already has and is primed to do again. The more prescribed fire that we can get on the landscape the better. Watching what fire teams were able to accomplish for maximize positive fire effects on the landscape during the last two year's wildfire seasons in the watershed, showed me what is possible, especially with a little help from your partners. We encourage the inclusion of Rx fire in the O'Farrill, Black Bear, Murphy, and Mathews Creek drainages.

I have a lot more unit specific comments and recommendations but I have run out of time and struggled matching prescribed treatments to units. I hope to provide some follow-up feedback in the coming week.

A handwritten signature in dark ink, appearing to read 'Karuna Greenberg', is positioned above the printed contact information.

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