Data Submitted (UTC 11): 7/6/2018 7:00:00 AM
First name: Veronica
Last name: Warnock
Organization: Greater Hells Canyon Council
Title: Conservation Director
Comments: July 6, 2018

Monte Fujishin, District Ranger

Pomeroy Ranger District

Umatilla National Forest

71 West Main

Pomeroy, WA 99347

Submitted via https://cara.ecosystem-management.org/Public//CommentInput?Project=45689

Dear Ranger Fujishin,

I am writing on behalf of the Greater Hells Canyon Council ([ldquo]GHCC[rdquo]) to provide comments on the Draft Environmental Impact Statement ([ldquo]EIS[rdquo]) for the Sunrise Vegetation and Fuels Management Project ([ldquo]Sunrise project[rdquo]) GHCC is a non-profit conservation organization based in La Grande, Oregon. For over 50 years we have worked to protect and restore the inspiring wildlands, pure waters, unique habitats and biodiversity of the Hells Canyon-Wallowa and Blue Mountain Ecosystems through advocacy, education and collaboration, advancing science-based policy and protective land management. GHCC actively participates in Forest Service proceedings and decisions concerning the management of public land[mdash]and is an interested public for timber sales[mdash]within the Umatilla National Forest.

Project Area

The area being evaluated as part of the Sunrise project covers approximately 32,000 acres of Umatilla National Forest land in the northernmost part of the forest. The area is bordered on the east by the Asotin Creek Wildlife Area, which is owned and managed by the Washington State Department of Fish and Wildlife. It contains the entire Asotin Creek Inventoried Roadless Area (IRA) along with other important roadless areas and is adjacent to Wenatchee and Tucannon IRAs. Ecosystems in and around Sunrise project planning area are diverse, ranging from shrub/ grasslands to subalpine coniferous forests. There are numerous recreation sites. There are two inholdings in the project area owned by the state of Washington within the project boundary, totaling 1,130 acres.

Purpose and Need for the Project

The stated purpose of this project is to improve forest health, vigor, and resilience to fire, insect, and disease. This is based on the stated need to move the project area towards the historical range

of variability ([ldquo]HRV[rdquo]). Currently, forests in the Sunrise project area are outside their assumed historical conditions for species composition, structural diversity, stocking densities, and fuel loadings. In addition, there is a stated need to provide and manage wildlife habitat and its components (cover and forage) in the Sunrise project planning area, given forest plan direction for the area. Sunrise DEIS pp. iii-iv.

Alternatives Analyzed

The draft EIS looks at a [ldquo]no action[rdquo] alternative (Alternative A) and two action alternatives. Alternative B is most similar to the alternative proposed during scoping, except that acreages have been adjusted to reflect additional field reviews and updated GIS information. Alternative C was developed to more effectively respond to the key issue of wildlife habitat and the potential negative impacts the proposed action could have on elk distribution and habitat quality due to decreased cover and security areas, as well as old forest distribution, old forest connectivity, and snag habitat.

Alternative B would remove of 26.5 million board feet (MBF) of live trees from 5,520 acres including 2130 acres of regeneration cutting (e.g. group selection, shelterwood, or seed-tree, or clearcutting). This alternative would necessitate the building of skid trails, landings and 51 temporary road segments totaling 13.7 miles. 6 miles of this temporary road construction would be on new road prisms. This alternative also use 39 miles of closed roads which may need reconstruction. Alternative B also includes pre-commercial thinning of an additional 2,270 acres. Treatment of activity fuels would include mastication, lop and scatter, hand piling, grapple piling, pile burning, jackpot burning and/or broadcast burning. Prescribed fire is proposed for 14,055 acres of forest and grassland. According to the draft EIS, Alternative B was designed to produce forest products to benefit timber industry and reduce stand densities with the hope of reducing wildfire intensity.

Alternative C would remove 12.1 MBF of live trees from 2,550 acres including 940 acres of regeneration harvest. This would necessitate the building of skid trails, landings and 30 temporary road segments totaling 8.4 miles, 3 miles of which would be on new prisms. This alternative would require reopening 34 miles of closed roads in order to facilitate project activities. Alternative C contains the same amount of pre-commercial thinning as Alternative B: 2,270 acres. Treatment of activity fuels and proposed prescribed fire would also be the same.

Alternative B would result in a considerable change of forest conditions in the area. The resulting distribution of elk cover would be less than desirable. A substantial amount of old forest would be affected by changing it from OFMS to OFSS. Alternative C would change forest conditions but at a lesser magnitude than Alternative B. The balance of improving habitat for some species (e.g. increases in dry OFSS) and decreasing the amount of habitat for other species (e.g. marten,

elk cover) is more in balance, while still reducing fuels to a more natural level. Sunrise DEIS p.

vi.

Comments on the Draft EIS

In general, GHCC supports projects which propose vegetation management activities in forest types that would benefit ecologically from management activities; that protect all of our last remaining unroaded wildlands; reduce overall road density by returning expensive and deteriorating forest roads to the wild; and include components to improve watershed conditions and forest resiliency. In addition to being in the [ldquo]right place,[rdquo] management activities need to be the right ones for that location. Prescriptions should emulate natural disturbance processes and aim for fostering historical patterns at the stand and landscape scale. Therefore, when reviewing projects that such as the Sunrise project, GHCC carefully evaluates the proposed action against the following criteria:

[bull] Fuel reduction thinning should be applied only in ecologically-appropriate dry ponderosa pine and pine intermixed with Douglas fir plant association group forests. This is the only fire-regime where fire suppression has potentially outlasted the range of the fire return interval and therefore stand structure may be outside of a historical condition. These projects should be ecologically constrained by elevation and by site-based evidence of non-lethal surface fire on a short return interval.

[bull] Focus on previously logged sites. Forests that have not experienced the same levels of logging

and road-building as other federal lands are relatively rare and have high conservation value. Restoration using fire alone is generally appropriate in these stands.

[bull] A compelling ecological need that is clearly identifiable and warrants the proposed action. Returning stands to the Historical Range of Variability (HRV) alone should not be used as a justification for landscape-scale commercial thinning.

[bull] Protect all trees with old growth characteristics regardless of their diameter or species. Old growth characteristics include thick bark, colored bark, asymmetrical growth, large branches, and dead tops. These old trees will generally be the some of the most fire resilient trees on the landscape and provide important wildlife habitat.

[bull] Comply with the [ldquo]Eastside Screens[rdquo] and protect all large trees. All trees 21 inches in diameter at breast height (DBH) and larger of all species should be retained.

These large trees are generally some of the oldest and can stand in for old growth where it is deficient.

[bull] Holistic landscape management, with an awareness of effect of fuels reduction and other vegetation management activities on wildlife species, non-native species, soil and soil processes, and insect and disease risks.

[bull] Utilize existing roads for removing and hauling wood products. Eliminate unneeded roads. No construction of new temporary roads.

[bull] Protect all Inventoried Roadless Areas and Potential Wilderness Areas as identified in the Blue Mountains Forest Plan Revision process from commercial logging and mechanical activities along with other undeveloped lands with significant ecological value.

[bull] Maintain wildlife permeability throughout the project area. Movement to and from large core habitat areas should be consciously planned for. All roadless areas such as inventoried roadless areas, uninventoried roadless areas and any areas with potential wilderness quality should be protected.

[bull] Maintain effective elk habitat throughout project area taking into account a distance banding approach.

[bull] Utilize natural disturbances processes to achieve project goals. When active management activities are used, they should replication natural disturbance processes.

Review of the analyzed alternatives shows that the project would avoid impacts to threatened and sensitive plant species and protect all trees 21[rdquo] and larger. We appreciate these aspects of the project along with the prescribed fire planned for the project area[rsquo]s forests. However, we have concerns with the impacts of both alternatives on roadless areas, impact to elk, snag and other habitat, fuel treatments in inappropriate vegetation types, the project[rsquo]s focus on restoring HRV, the regeneration prescriptions proposed, and the amount of temporary road construction and road reopening proposed.

1.Impacts to PWAs, IRAs, and Other Wildlands

One Potential Wilderness Area (PWA), the Asotin Creek PWA, and one IRA, the Asotin Creek IRA, are located within the project planning area. In addition, [ldquo]other undeveloped lands[rdquo] comprise approximately 14 percent of the Sunrise project planning area. These lands, together with the Asotin Creek IRA and PWA, make up approximately 64 percent of the planning area. Sunrise Project Wilderness, IRA, PWA, and other Undeveloped Lands Report p. 10. 47 percent

of the [ldquo]other undeveloped lands[rdquo] are made up of two large polygons: polygon 1 (1,303 acres) and polygon 2 (845 acres). Sunrise Project Wilderness, IRA, PWA, and other Undeveloped Lands Report p. 11.

Under both action alternatives about 6,139 acres of landscape burning would take place within the Asotin Creek PWA (approximately 38% of the PWA). Under Alternative B approximately 186 acres of the Asotin Creek PWA would be logged and under Alternative C approximately 26 acres of the PWA would be logged. Sunrise Project Wilderness, IRA, PWA, and other Undeveloped Lands Report p. 5 In addition, Alternative B would log approximately 2,252 of these areas or 50 percent and Alternative C would log 1,318 acres or 29% of [ldquo]other undeveloped lands.[rdquo] Sunrise Project Wilderness, IRA, PWA, and other Undeveloped Lands Report p. 14

NEPA requires the Forest Service to consider the environmental impacts of a proposed project on all roadless areas including inventoried and non-inventoried. The agency must analyze the attributes of such areas, including water resources, soils, wildlife habitat, and recreation opportunities, and discuss the effects of the proposed

logging on these attributes. Smith v. U.S.Forest Service, 33 F.3d 1072 (9th Cir. 1994); National Audubon Society v. United States Forest Service, 46 F.3d 1437 (9th Cir. 1993) Additionally, the agency is required to discuss a project's impacts on areas of "sufficient size" for future wilderness designation, not just those over 5000 acres in size. Lands Council v. Martin 529 F.3d 1219, 1231, citing 16 U.S.C. [sect] 1131(c).

Under both action alternatives, the Sunrise project would conduct logging, road building, mechanized activities, thinning, and/or extensive burning in undeveloped and unroaded areas that currently provide ecologically important habitat and refugia.

a. The PWA analysis is inadequate as it as it relied upon the flawed Blue Mountain Forest Plan Revision process.

The PWA analysis for the project used the forest plan revision PWA evaluation to determine PWA lands within the project area. The forest plan draft 2010 PWA inventory is flawed. The revision team used old Forest Service Handbook directives that doesn[rsquo]t reflect current thinking as to what constitutes substantially undeveloped lands. These directives (FSH CH 70) have since been updated. Further, the team interpreted the old FSH directives in such a way that heavily skewed their interpretation against classifying lands as PWAs. For example, we used the old FSH directive to identify non IRA lands that meet the PWA criteria. Much of our inventory was field verified and developed used advanced GIS technology. The revision team disqualified 203 out of the 205 areas we identified from inclusion in their inventory. While it would be understandable to not agree on every area, the almost complete disqualification of all the areas we identified using the Forest Service[rsquo]s own criteria shows just how flawed the revision team[rsquo]s process was.

Since the forest plans relied upon a flawed process, that inventory cannot be used here. Instead all lands within the project area should be analysed using the updated FSH Chapter 70 directives or some other methodology that that conforms with the Wilderness Act and Congress[rsquo] explicit direction. The Wilderness Act which does not contain language unequivocally requiring no past management activities. See 16 U.S.C. [sect] 1131(c). Numerous Wilderness areas have been designated where past logging and other management activities are present. Finally, and perhaps most importantly, Congress has expressly asked the Forest Service to abandon the [ldquo]purity doctrine.[rdquo] In a Senate Report from the Committee on Energy and Natural Resources regarding the Endangered American Wilderness Act of 1977, the Committee stated: [ldquo]Generally, the committee believes that the so-called [lsquo]purity[rsquo] concept of wilderness long adhered to by the Forest Service, is unnecessarily restrictive and should be abandoned.[rdquo] S.Rept. 95-490 on H.R. 3454. 95th Cong. 1st sess. October 11, 1977.

We ask that the PWA analysis be redone in a manner that conforms with the Wilderness Act. We recommend that the current FSH Chapter 70 is used to do so. Such an analysis should include areas with maintenance level (ML) 1 roads and areas within 300[rsquo] of ML 2, 3, 4, 5 and county roads if evidence of firewood cutting, dispersed camping and other activities is substantially unnoticeable. Areas of a [ldquo]sufficient size[rdquo] for

management must be included, not just areas over 5000 acres in size1. This will result in a analysis that complies with Ninth Circuit precedent to discuss a project's impacts on areas of "sufficient size" for future wilderness designation. We anticipate that such an analysis will identify additional lands that qualify as PWAs.

b. The draft EIS erroneously removed areas within 300 feet of a road and areas containing [ldquo]closed roads[rdquo] from its undeveloped lands analysis

Lands 300 feet on either side of the centerline of all ML 1, 2, 3, 4, and 5 Forest Service roads and open County Roads are considered developed by the draft Sunrise EIS due to evidence of stumps from firewood cutting and hazard tree removal, dispersed campsites, and other activities allowed under the current Forest Plan. However, review of images from google earth show that most of

1 The 5,000-acre figure contained in the Wilderness Act is only a guideline. Approximately one out of every 15 of the 757 Wilderness areas designated by Congress since 1964 are less than 5,000 acres in size. Congress has also designated other contiguous, multi-unit Wilderness areas of which at least one of the units is less than 5,000 acres in size. Within Oregon we have a number of Wilderness areas that are under 5,000 acres or made up of a series of units where the individual units are under 5,000 acres. For example, the Lower White River Wilderness on the Mount Hood National Forest is 2,870 acres; the Menagerie Wilderness on the Willamette National Forest is 4,800 acres; and more germane to the potential wilderness discussion for the Sunrise project, the Clackamas Wilderness on the Mount Hood National Forest in Oregon consists of four separate unconnected units, all of which are less than 5,000 acres in size. The Forest Service has also recommended or identified PWA of less than 5,000 acres. For example, the agency has recommended that two areas on the Fremont-Winema National Forest [ndash] the 821-acre Bad Lands and the 511-acre Devils Garden Inventoried Roadless Areas [ndash] be designated as Wilderness along with the 2,370-acre Umpqua Spit Wilderness in the Oregon Dunes National Recreation Area managed by the Siuslaw National Forest.

the areas adjacent to roads are not developed and contain intact undeveloped forests or grasslands. These areas should have been looked just like the other undeveloped lands: where the orthophoto did not clearly indicate substantially noticeable management conditions should have been verified on the ground.

Further, the methodology and justification for ruling out ML 1 roads was not provided in the draft EIS or Wilderness, IRA, PWA, and other Undeveloped Lands Report. Such an approach does not harmonize with how the agency determines PWAs. We request that the the [ldquo]other undeveloped lands[rdquo] analysis is re-done along with the PWA analysis and the two are harmonized. We assume that when the PWA analysis is redone, much of the lands identified here as [ldquo]other undeveloped lands[rdquo] would be identified as PWAs. especially the larger polygons.

c. The draft EIS fails to incorporate the best available science on roadless forests

Scientific research clearly enumerates the many reasons why remaining roadless areas should be protected. Roadless areas can be used as benchmarks for assessing the ecological integrity (e.g. genes, species, and assemblages) and processes (e.g., pollination, demography, biotic interactions, nutrient and energy dynamics, and metapopulation processes) expected in the natural habitat or region (see Karr and Chu 1995, Pimentel 20002). The species-rich native communities found in roadless areas are more likely to withstand invasions (Gelbard and Harrison 20053). Roadless areas often contribute disproportionately to landscape and regional connectivity (see Strittholt and DellaSala 20014), a critical component of adaptation strategies for climate change, and should be protected as climate refugia.

Scientific literature also emphasizes the importance of unroaded areas greater than 1,000 acres as strongholds for the production of fish and other aquatic and terrestrial species, as well as sources of high quality water. In a letter to President Clinton urging the protection of roadless areas, 136 scientists noted:

There is a growing consensus among academic and agency scientists that existing roadless areas[ndash]irrespective of size[ndash]contribute substantially to maintaining biodiversity and ecological integrity on the national forests. The Eastside Forests Scientific

2 Karr, J. R. and E. W. Chu. 1995. Ecological integrity: Reclaiming lost connections. Pages 34[ndash]48 in L. Westra and J. Lemons, eds. Perspectives in Ecological Integrity. Kluwer Academic, Dordrecht, Netherlands; Pimentel, D. and 8 other authors. 1997. Economic and environmental benefits of biodiversity. BioScience 47:747[minus]757.

3 Gelbardi, J.L., and S. Harrison. 2005.Invasibility of roadless grasslands: An experimental study of yellow starthistle. Ecological Applications 15:1570[ndash]1580.

4 Strittholt, J.R., and D.A. DellaSala. 2001. Importance of roadless areas in biodiversity conservation in

forested ecosystems: Case study of the Klamath Siskiyou ecoregion of the United States. Conservation Biology

15:1742[ndash]1754.

Societies Panel, including representatives from the American Fisheries Society, American Ornithologists[rsquo] Union, Ecological Society of America, Society for Conservation Biology, and The Wildlife Society, recommended a prohibition on the construction of new roads and logging within existing (1) roadless regions larger than 1,000 acres, and (2) roadless regions smaller than 1,000 acres that are biologicallysignificant[hellip]. Other scientists have also recommended protection of all roadless areas

greater than 1,000 acres, at least until landscapes degraded by past management have recovered[hellip]. As you have acknowledged, a national policy prohibiting road building

and other forms of development in roadless areas represents a major step towards balancing sustainable forest management with conserving environmental values on federal lands. In our view, a scientifically based policy for roadless areas on public lands should, at a minimum, protect from development all roadless areas larger than 1,000 acres and those smaller areas that have special ecological significancebecause of their contributions to regional landscapes.

Letter to President Clinton signed by 136 scientists (Nov. 14, 1997) (emphasis added).

In addition, many scientific studies indicate the significant value of roadless areas smaller than 5,000 acres and larger than 1,000 acres include the following:

? Strittholt, J.R., and D.A. DellaSala. 2001. Importance of roadless areas in biodiversity conservation in forested ecosystems: a case study [ndash] Klamath-Siskiyou ecoregion, U.S.A. Conservation Biology 15(6):1742-1754.

? DeVelice, R.L., and J.R. Martin. 2001. Assessing the extent to which roadless areas complement the conservation of biological diversity. Ecological Applications 11(4):1008-1018.

? C. Loucks, N. Brown, A. Loucks, and K. Cesareo. 2003. USDA Forest Service roadless areas: potential biodiversity conservation reserves. Conservation Ecology 7 (2)

? Crist, M.R., B. Wilmer, and G.H. Aplet. Assessing the value of roadless areas in a conservation reserve

strategy: An analysis of biodiversity and landscape connectivity in the Northern Rockies, USA. Journal of Applied Ecology (2005) 42, 181[ndash]191

? Juliane Schultze, Stefanie G[auml]rtner, J[uuml]rgen Bauhus, Peter Meyer, Albert Reif, Criteria to evaluate the conservation value of strictly protected forest reserves in Central Europe, Biodiversity and Conservation, 2014.

The Forest Service has a legal obligation under NEPA to accurately, scientifically, and objectively describe the environmental consequences of logging and road building in

ecologically significant areas. NEPA requires that the agency disclose all pertinent science, including ongoing scientific research and controversy. NEPA requires the agency to develop scientifically sound environmentally protective action alternatives in its EIS. The analysis for this project, including the two developed action alternatives, both degrade undeveloped lands and fail the requirements of the NEPA concerning these requirements, and the requisite disclosure of scientific research and recommendations pertaining to roadless and unroaded areas.

Despite the well-established science supporting the protection of roadless areas 1,000 acres or larger along with all ecologically significant roadless areas regardless of size, under Alternative B approximately 186 acres of the identified PWAs would be logged and under Alternative C approximately 26 acres of the identified PWAs would be logged. This does not include areas improperly excluded from the PWA analysis. Based upon the above information and countless other papers supporting the protection of roadless areas we ask that these acres are dropped from harvest units in the decision for this project.

Project activities would reduce identified [ldquo]undeveloped lands[rdquo] within the project area in Alternative B by 2,252 acres (50%) and 1,318 acres (29%) in Alternative C. Please examine these areas and maintain the undeveloped character of all ecologically important roadless areas in the project area. For example, all cutting units in polygons 1 and 2 should be dropped. Polygon 1 is located in the lower portions of the upper reach of North Fork Asotin Creek and a tributary to NF Asotin creek-in Cougar Canyon and is has been identified as 1,303 acres but it appears that it is actually be larger. The polygon is mostly in the creek bottoms and on forested side slopes that have not been previously harvested. Polygon 2 is located in the northeast portion and is comprised of grassy ridge tops and stringers of timber on steep side slopes. There has been no management in this area. Sunrise Project Wilderness, IRA, PWA, and other Undeveloped Lands Report pp. 11-12. While this area is just under 1000 acres, it appears that adjacent lands were improperly excluded from the PWA and/or undeveloped lands inventory.

The final EIS must take a hard look at the science provided here incorporate it into the project design. Units

within Polygon 1 and 2 may not be the only units that should be dropped due to their ecological significance.

2.Impacts to Rocky Mountain Elk

Surveys conducted by WDFW in 2017 indicated that there are approximately 650 elk in the Lick Creek Unit (the management unit within the project area), which is low compared to the previous 5 years. The 8-year average in Lick Creek is about 850 elk and, in some years, has achieved the management objective of 1,000 elk. Wildlife Resource Report Sunrise Project p. 7-8. This management objective makes up 15-20 percent of the total objective for Washington State.

Because Alternative C would have fewer miles of roads being used and fewer miles of vegetation disturbed for temporary access, there would be less effect to elk during project activities. Wildlife Resource Report Sunrise Project p. 14. Alternative C proposes closing the gate on Forest Road 4000-360 on August 1 to match nearby roads. Having the same closure date would reduce confusion on travel maps, reduce administrative costs, and improve elk security. The first mile of the road would remain open year-round. Cover is currently limited along this road, due to natural openings as well as past harvest. Alternative B proposes treatments along the entire length of this road, and much of it on both sides of the road. Regeneration harvest would remove nearly all of the elk cover (canopy cover > 40%) that currently exists along the road. The remainder of the road would be thinned, removing substantial amounts of hiding cover. Wildlife Resource Report Sunrise Project pp. 14-15. Alternative C also maintains 200 more acres of cover along this road than Alternative B. The earlier closure date in Alternative C would provide additional elk security habitat during late summer and fall, a time when elk are putting on weight to last through the winter. It would also potentially reduce elk movements onto private land. Wildlife Resource Report Sunrise Project p. 16. Alternative B could result in a negative habitat trend due to the resulting poor distribution of cover in elk summer range. Alternative C would maintain a better distribution of summer range cover and the change in Forest road 4000-360 closure date would improve elk security. Alternative C would likely result in no net change in mid to long-term habitat trend. Wildlife Resource Report Sunrise Project p. 16.

While both actions alternative are consistent with forest plan requirement, as outlined in the project[rsquo]s wildlife report and summarized above, Alternative C is much better for elk and would better met one of the projects stated purposes: [ldquo]given the Forest Plan management area allocations for big game and wildlife habitat goals (C3, C3A, and C4), there is a need to continue to provide and manage wildlife habitat and its components (cover and forage) in the Sunrise project planning area.[rdquo] Sunrise DEIS p. Iii. For this reason, we ask that Alternative C (as modified to address issues raised here) be selected for this project.

3.Impacts to moist and cold forests

There is substantial scientific evidence that thinning in the moist and cold forests can increase the risk of wildfire.

Logging can exacerbate fire risk by removing fire-resistant trees, putting more fine fuels on the ground, and increasing fuel loading by spurring the rapid growth of small shrubs and trees (Hanson and Odion, 2006; Raymond and Peterson, 20055). There is also evidence that fires may burn more severely in early seral vegetation and burn less severely in closed canopy forests. This may be related to the fact that closed canopy forests maintain a cool-

5 Hanson, C.T., Odion, D.C. 2006. Fire Severity in mechanically thinned versus unthinned forests of the Sierra Nevada, California. In: Proceedings of the 3rd International Fire Ecology and Management Congress, November 13-17, 2006, San Diego, CA; Raymond, Crystal L. 2004. The Effects of Fuel Treatments on Fire Severity in a Mixed-Evergreen Forest of Southwestern Oregon. MS Thesis.

moist microclimate that helps retain higher fuel moisture and more favorable fire behavior (Odion 20046). It is important to recognize the potential to increase the fire risk due to logging because it confirms the importance of applying cautious fuels reduction treatments in ecologically appropriate areas. The mixed conifer zone is in general not the appropriate area for fuels reduction work. Even when extensive thinning occurs, this zone will still burn when climatic conditions are conducive for wildfire (extreme heat, drought or winds).

If a goal of the project is to reduce wildlife intensity (as stated in the draft EIS), then logging in these forest types is ill-advised. We ask that the final EIS look at this research and incorporated it into the effects analysis. Furthermore, we ask that the agency drop harvest units in moist forests especially in areas where they overlap with undeveloped lands or where there is a need to construct a temporary road segments to reach them.

4. Restoring HRV should not direct project activities, instead the focus should be on supporting forest resiliency to future conditions

Forest restoration projects tend to rely heavily on restoring conditions to historical baselines. Regarding the usage of historical baselines to guide current management, Millar et al. (2007)7 states:

There is no doubt that historical data have immense value in improving our understanding of ecosystem processes to environmental changes and setting management goals (e.g. Swetman et al. 1999). However, many forest managers also use the range of historical ecosystem conditions as a management target, assuming that by restoring and maintaining historical conditions they are maximizing chances of maintaining ecosystems (their goods, services, amenity values, and biodiversity) sustainably into the future. This approach is often taken even as ongoing climate changes push global and regional climates beyond the bounds of the last several centuries to millennia (Intergovernmental Panel on Climate Change, 2007). [hellip] Attempts to maintain or restore past

conditions require increasingly greater inputs of energy from managers and could create forests that are ill adapted to current conditions and more susceptible to undesirable changes.

Mature forests are one example where historical baselines may not be particularly well suited as a measure for improving forest health. Some stands may have more grand fir and/or Douglas-fir now than compared to historical conditions. However, because of the absence of mature and old

6 Odion, D.C., E.J. Frost, J.R. Strittholt, H. Jiang, D.A. DellaSala and M.A. Moritz. 2004. Patterns of fire severity and forest conditions in the western Klamath Mountains, California. Conservation Biology 18(4): 927-936.

7 Millar, C. I., N. L. Stephenson, and S. L. Stephens. 2007. Climate Change and Forests of the Future: Managing in the Face of Uncertainty. Ecological Applications. 17:2145-2151.

trees on the Umatilla National Forest and surrounding areas, due to historical logging, protecting these mature stands regardless of species could be very important for maintaining structural heterogeneity and providing habitat for wildlife. Brown et al. (2004)8 states:

Past management practices may have led to development of old-growth stands with [ldquo]unnatural[rdquo] multiple canopy layers or accumulations or snags and logs, but these areas may provide key habitat that compensates for the loss and degradation of these habitat elements elsewhere (ICBEMP 2000; Wisdom et al. 2000). It may often be appropriate to attempt to secure such habitats from wildfire by treating adjacent areas (Agee 1996, 1998). Attention should be given to protecting large and old trees (Henjum et al. 1994, Allen et al. 2002). Large fir trees, especially those with heartwood decay, provide important habitat for many species (Bull et al. 1992, 1997; Bull & Hohman 1993), and efforts to [ldquo]cleanse[rdquo] the landscape of true firs should be avoided.

Past and ongoing management actions have had a very large impact on the type of forest structure available to wildlife today in the project area. Adjacent to the Umatilla National Forest there are typically industrial forest lands which have been heavily logged or grasslands that have been converted to other uses. These activities on private land have likely displaced wildlife onto the project area.

Another example where HRV may not be a good management target is for multi-storied mature forests like those in the project area. These multi-stratum forests are at a higher risk to disturbance than single-stratum forests. Management actions that reduce these multi-stratum forests should be keep to a minimum (Wales et al. 20079). Large wildfire activity is increasing across the western U.S. due to increased spring and summer temperatures and longer wildfire seasons (Westerling et al. 200610). This trend is expected to continue. Wales et al. (2007) cautions that active management approaches that reduce closed canopy forests could overshoot reductions in HRV.

For these reasons we question the project[rsquo]s focus on restoring HRV. We ask that the agency take a hard look at the literature cited here and incorporated it into the effects analysis of the proposed activities.

8 Brown, R. T., J. K. Agee, and J. F. Franklin. 2004. Forest Restoration and Fire: Principles in the Context of Place. Conservation Biology. 18: 903-912.

9 Wales, B. C., Suring, L. H., and M. A. Hemstrom. 2007. Modeling potential outcomes of fire and fuel management scenarios on the structure of forested habitats in northeast Oregon, USA. Landscape and Urban Planning. 80:223-236.

10 Westerling, A.L., H.D. Hidalgo, D.R. Cayan, and T.W. Swetnam. 2006. Warming and earlier Spring increase Western U.S. forest wildfire activity. Science 313:940-943.

5.Impacts to multistoried old forest

Under Alternative B there are 3,030 acres of OFMS and 100 acres of OFSS affected by cutting units, totaling 3,130 acres. This includes 2,130 acres of commercial logging of trees 20[rdquo] dbh and smaller, plus 1,000 acres of tree cutting with removal of small trees only (up to 10 inches dbh). Alternative C includes 880 acres of old forest affected by commercial logging plus the same 1,000 acres of small diameter cutting. The goal of silvicultural treatments in old forest is to convert old forest multi-strata (OFMS) to old forest single-stratum (OFSS) Wildlife Resource Report Sunrise Project p. 20. Alternatives B and C are similar in the amount of OFMS converted to OFSS in dry forest. This is because the treatments are same for the majority of dry forest. There is a larger discrepancy in moist old forest between alternatives because many units retained for elk cover in

Alternative C happen to be moist upland, old forest. The end result of both alternatives is a substantial change from OFMS to OFSS. Wildlife Resource Report Sunrise Project pp. 20-21

There is a high level of uncertainty with respect to the long-term ecological consequences of the Forest Service[rsquo]s strategy of converting old forest multi-story (OFMS) to old forest single story (OFSS). The Ninth Circuit has held that the Forest Service[rsquo]s failure to disclose the scientific uncertainty of its decisions to [ldquo]treat[rdquo] old growth forest violated NEPA. Ecology Ctr., Inc. v.Austin, 430 F.3d 1057, 1065 (9th Cir. 2005); Lands Council v. McNair, 494 F. 3d 771 (9th Cir. July 7, 2007). In Ecology Center, the Forest Service sought to [ldquo]correct uncharacteristic forest development resulting from years of fire suppression.[rdquo] Id. at 1063. This [ldquo]treatment[rdquo] was [ldquo]designed to leave most of the desirable old-growth trees in place and to improve their health.[rdquo] Id.

Although treatment may be designed to restore old-growth to [lsquo]historic conditions,[rsquo] . . . this can be a misleading concept: for example, information regarding historic conditions is incomplete; altering particular sections of forest in order to achieve "historic" conditions may not make sense when the forest as a whole has already been fundamentally changed; many variables can affect treatment outcomes; and the treatment process is qualitatively different from the [lsquo]natural[rsquo] or [lsquo]historic[rsquo] processes it is intended to mimic.

Id. (citing Plaintiffs[rsquo] arguments). The Ninth Circuit concluded that the Forest Service violated NEPA because it [ldquo]treat[ed] the prediction that treatment will benefit old-growth dependent species as a fact instead of an untested and debated hypothesis[rdquo] and it failed to [ldquo][rsquo]address in any meaningful way the various uncertainties surrounding the scientific evidence[rsquo] upon which the decision to treat the [ ] old-growth rests.[rdquo] Id. at 1065. Although, the Ninth Circuit ultimately overruled Ecology Center, to the extent it suggested that the Forest Service always violates NEPA every time it fails to address some scientific uncertainty in its analysis, it reaffirmed that

the agency must at least acknowledge and respond to comments by outside parties that reasonably state such uncertainties exist. Lands Council v. McNair, 537 F.3d 981, 1001 (9th Cir. 2008).

We do not doubt the severe deficiency in OFSS or the proposition that stands that were historically single-story may have shifted to more multi-storied conditions due to past management and fire suppression. However, we remain unconvinced that converting OFMS forest to OFSS stands is the appropriate solution, particularly when deficiencies exist in both forest types and the latter is simply more severe. This logic is akin to [ldquo]robbing Peter to pay Paul.[rdquo]

Please address this in the final EIS and take a hard look at the full spectrum effects of converting OFMS to OFSS.

6.Silviculture treatments

The project would include mechanical tree cutting activities across approximately 7,790 acres under Alternative B and 4,800 acres under Alternative C. Sunrise Silviculture Report p. 23. For Alternative B includes this includes 5,520 acres of commercial logging including 2130 acres of regeneration cutting and over 3000 acres of old forest conversion from OFMS to OFSS. For Alternative C this includes 2,550 acres of commercial logging including 940 acres of regeneration harvest and 880 acres of old forest conversion.

These seems like prescriptions designed to maximize the extraction of commercial forest products instead of improving forest health and resiliency[mdash]which is the main stated goal for this project. Please explain how the areas for logging were selected and project prescriptions designed. We also request an explanation of how these areas and treatments are the appropriate ones for restoring these forests.

7.Impacts to watershed health

Alternative B includes 13.7 miles of temporary road construction and Alternative C contains 8.4 miles of temporary roads. This includes building new road prisms and using old prisms (the condition of which was not disclosed in the project documents). Additionally, under both alternatives, over 30 miles of closed roads would be reopened for project activities and then reclosed.

Temporary roads increase erosion and stream sedimentation and accelerate run-off during precipitation events causing aquatic and watershed damage. For that reason, the scientific literature activities such as temporary road building should be avoided when treating forests for

fuel reduction or forest health reasons. For example, see Crist et al. 2009, Noss et al. 2006, Rhodes et al. 200811. The following is an excerpt from The Watershed Impacts of ForestTreatments to Reduce Fuels and Modify Fire Behavior by Jonathan Rhodes, 2007.

Avoid practices that consistently cause severe and persistent watershed damage, including machine piling and burning and the construction of roads and landings, including [ldquo]temporary[rdquo] ones. The numerous negative effects of roads are one of the primary sources of aquatic and watershed damage on a continental scale. Additional road construction is inimical to reducing road effects. (citing USFS et al., 1993; USFS, 2000b;

Beschta et al., 2004)

Temporary roads are not temporary in impact. Temporary roads left in a state of non-use can have impacts on forests and soils that last for decades. The public often continues to use these roads long after implementation of camouflaging and other activities designed to leave them in a state of non-use. As a result, soil compaction/disturbance and sedimentation impacts will continue to persist. The permanent impacts of temporary road construction have been thoroughly documented (e.g., Beschta et al., 2004; Karr et al., 200412).

Additionally, the re-opening of closed or unclassified roads for access, and then re-closure following treatment activities has very serious ecological impacts. Extensive and intensive road reconstruction greatly increase road impacts on watershed systems, as documented, in Karr et al (2004). Reconstruction impacts are extremely significant because the elevated sedimentation they cause is already a ubiquitous water quality problem throughout the West and a major cause of the loss of aquatic biodiversity.

The project area contains Snake River Basin (SR) steelhead, Bull trout, Snake River Spring/Summer Chinook salmon and their designated critical habitats and salmon essential fish habitat. To project these fish, water quality and soils and prevent the spread of invasive weeds, we ask that any areas that need temporary road to access them be dropped from logging, especially where those areas overlap with undeveloped lands, moist or cold forests. Any temporary roads that are build must be removed from the landscape directly following project

11 Crist, M.R., T.H. DeLuca, B. Wilmer, and G.H. Aplet. 2009. Restoration of Low- Elevation Dry Forests of the Northern Rocky Mountains: A Holistic Approach. Washington, D.C.: The Wilderness Society; Noss, R.F., J.F. Franklin, W.L. Baker, T. Schoennagel, P.B. Moyle. 2006. Managing fire-prone forests in the western United States. Frontiers in Ecology and Environment 4: 481-487; Rhodes, J. J., W. L. Baker. 2008. Fire Probability, Fuel Treatment Effectiveness and Ecological Tradeoffs in Western U.S. Public Forests. The Open Forest Science Journal. 1: 1-7.

12 Karr, J.R., J.J. Rhodes, G.W. Minshall, F.R. Hauer, R.L. Beschta, C.A. Frissell, and D.A. Perry. 2004. Postfire salvage logging's effects on aquatic ecosystems in the American West. BioScience 54: 1029-1033.

activities so they cannot be traveled. We also ask that these areas be monitored for unauthorized use and detrimental aquatic impacts post-project implementation.

Conclusion

Of the alternative analyzed, Alternative C appears to best meet the project[rsquo]s purpose to provide and manage wildlife habitat and improve forest resiliency. We recommend that the forest consider our comments in their entirety and use them to modify Alternative C by dropping units (such as those in PWAs and other undeveloped lands) and modifying prescriptions as appropriate and then select Alternative C as modified for this project. We thank you for the opportunity to participate in this planning process and for your review of these comments. GHCC looks forward to working with the district as this project progresses. Please do not hesitate to contact me with any questions.

Sincerely,

Veronica Warnock, Conservation Director

GHCC

PO Box 2768

La Grande, OR 97850

541-963-3950 x 3

veronica@hellscanyon.org