Baker Habitat Restoration and Fuels Project
DOI-BLM-OR-V050-2013-014-EA

Decision Record

Prepared By:
U.S. Department of the Interior
Bureau of Land Management
Baker Resource Area
Baker City, Oregon 97814

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BAKER FIELD OFFICE

Environmental Assessment Number DOI-BLM-OR-V050-2013-014

DECISION RECORD

This decision record documents my decision to adopt the Baker Habitat Restoration and Fuels Project as presented under the proposed action.

There are no federally listed threatened or endangered plant species known or suspected to occur within the project area. Nor have any Bureau special status species been documented in or near the project area. Additionally, surveys for sensitive species were conducted within the project area. Furthermore, no consultation was required with National Oceanic and Atmospheric Administration (NOAA) fisheries and / or U. S. Fish and Wildlife Service because there are no Endangered Species Act (ESA) species located within the project area watersheds.

Design elements are in place to avoided or mitigate any potential effects on archeological sites that are found during implementation. There is no adverse effect to traditional food habitats. The proposed action will follow the protocol for Managing Cultural Resources on Lands Administered by the Bureau of Land Management in Oregon. This protocol describes how the BLM and the Oregon State Historic Preservation Office (SHPO) will cooperate under a national Programmatic Agreement to meet the requirements of Section 106 of the National Historic Preservation Act. The proposed action would not cause the loss or destruction of significant scientific, cultural, or historical resources.

PUBLIC INVOLVEMENT

Public involvement consisted of separate face-to-face meetings with all involved permittees, potential cooperators, the Baker County, and the Oregon Department of Fish and Wildlife. The proposed action was directly mail to the Confederated Tribes of the Umatilla (CTUIR) and the Burns Paiute tribal councils for review in March of 2010. A presentation concerning the project was made to the CTUIR cultural committee in July of 2010.

On February 15, 2013, a Notice of Internet Availability for the EA, Appendixes and unsigned Finding of No Significant Impact (FONSI) were sent to 118 individuals, groups and agencies that had expressed an interest in the project. Also, a legal notice requesting public comment to the EA and FONSI appeared in the *Baker City Herald* newspaper of Baker City. The EA and FONSI were released for public comment from March 6, 2013 to April 5, 2013. As a result of this scoping, one letter was received. Some of the concerns raised in the letter were addressed with additional material in the EA. Other concerns and issues raised are addressed in an attachment with the Decision Record, as well as the BLM responses. A complete list of the response to comments received can be found in Addendum 1 to this Decision Record. As a result of the comments, some clarification and additional supporting information was added to the EA.

A summary of the key issues / concerns raised includes:

- Travel and access management: Construction of new roads, skid trails, and landings fragments wildlife habitat, degrades water quality and spreads noxious weeds

- Treatment prescriptions: Treatment prescriptions should be appropriate for dry eastern Oregon woodlands and rangelands. Treatments should mimic natural processes, promote ecological diversity, protect old-growth, and not be driven by economics.

- Carbon sequestration / climate change: Western juniper could be a response to increased CO2 in the atmosphere and may sequester carbon help off-set carbon emissions.

- Juniper control and invasive species: Removal of western juniper from the landscape can increase amounts of cheatgrass and medusahead annual grasses.

DECISION

My decision to select the proposed action is based upon the interdisciplinary analysis contained in the EA DOI-BLM-OR-V050-2013-014 and the comments received.

Implementation of the proposed action would accomplish the following objectives:

- Restore fire as a natural process within the fire-dependent plant communities of the planning area to an extent that is feasible under the constraints of human safety, private property values, and resource values.

- Reduce fuel loading and continuity within ponderosa pine dominated forest and woodlands within the project area.

- Reduce the influence of western juniper and other conifer expansion within sagebrush–bunchgrass plant communities in the project area.

- Move riparian hardwood stand conditions toward their historical niche on the landscape.

- Enhance the number and vigor of shrubs within mountain mahogany stands by removal of competing western juniper and ponderosa pine.

- Improve the quality of wildlife habitat within the project area. Big game and sage-grouse habitat values that have been degraded by juniper encroachment within the project area would be enhanced under the proposed action.

In addition, implementation of the proposed action would enhance cultural resources, and aquatic resources. Impacts on air quality, recreation, soils, noxious weeds, and water quality would be completely avoided or minimized through project design and monitoring. There would be some positive local socioeconomic effect.

Summary of Proposed Action

Juniper Cut/Lop/Scatter: Juniper growing at low densities or consisting primarily of small trees (Phase I) will be mechanically cut and left in place where there would be negligible risk of fire spread associated with increasing hazardous fuels. Branches will be lopped and scattered to limit vertical height of downed trees to less than four feet. This treatment would be the primary treatment method applied and would account for approximately 36,000 acres.

Juniper Cut/Limb/Jackpot Burn: Juniper growing at moderate to high densities (Phase II) would be cut and branches protruding vertically above four feet in height would be limbed and stacked on top of the bole. This pile would be jackpot burned in one to three years after drying. This would be the second most used treatment and cover approximately 4,500 acres.

Juniper Cut/Pile/Burn: Juniper growing at moderate to high densities (Phase II-III) would be cut and machine or hand piled prior to being burned. This treatment would account for approximately 3,400 acres.

Non-Commercial Thinning: Within the warm-dry forest treatment areas (e.g., ponderosa pine and Douglas fir dominated), ladder fuels would be reduced sufficiently enough to interrupt the initiation of a crown fire by reducing the density of understory trees so that they are spaced at an average of 22 feet. If economically feasible, non-commercial material generated by thinning activities would be removed for biomass utilization. Otherwise, the treatment would include a follow-up application of piling (hand or machine) and burning, and then underburning to reduce surface fuels. This treatment would cover approximately 3,700 acres.

Riparian/Aspen Conifer Removal: Within riparian stands all non-commercial sized conifer trees would be felled. Commercial sized conifers would be girdled or felled and left as woody debris; in some cases large (e.g., > 24 inches dbh) diameter conifers would be retained. None of the commercial sized trees would be sold as timber or biomass. Some aspen stands would require fencing for protection. This treatment would be applied on approximately 50 miles of riparian areas and scattered aspen stands.

Curlleaf Mountain Mahogany Thinning and Conifer Removal: All non-commercial trees (< 9 inches dbh) would be felled within 16ft of a mahogany patch. Within mountain mahogany stands there would be limited mechanical equipment operations for construction of machine piles or biomass utilization.

The Project Area includes the communities of Auburn, Hereford, and Durkee, Oregon which were identified in the Baker County Community Wildfire Protection Plan (CWPP) (2004) as communities at risk. The plan included recommendations for treatments to reduce hazardous fuels. In addition, Bridgeport, Oregon is a community of interest in the Baker County CWPP.

Resource values are protected through observation of project design elements. Project design elements included in the proposed action include:

- Protect cultural resource values throughout the life of the project. Archaeological sites would be avoided within the mechanical treatment units and activity generated fuels would not be piled within the boundaries of sites. Sites with combustible constituents would be protected during the deployment of prescribed fire by black-lining resources and use of appropriate ignition techniques. The District Fire Archaeologist would review burn plans prior to project implementation. Project implementation would cease if new cultural resources are encountered within treatment areas and District cultural resource staff would be notified. Prior to resuming work, historic property documentation and evaluation would be completed. Mitigation plans would be developed in consultation with the State Historic Preservation Office (SHPO) if necessary.
- Protect special status vegetation species throughout the life of the project. As needed, a no treatment buffer of up to 200-feet may be placed around special status plant sites to avoid impacts from herbicides and surface disturbing activities (e.g., skid trails, non-commercial thinning, pile burning, biomass removal, etc.) A botanist would be involved with final lay out of the units prior to implementation to assure that disturbance to documented special status plant sites is avoided.
- Protect special status wildlife species (terrestrial and avian) habitat throughout the life of the project. Structures or areas with special status species habitat value identified during wildlife surveys would be protected during project implementation. The Baker Resource Area wildlife biologist would review burn plans prior to project implementation.
- Avoid the use of broadcast burning (A prescribed fire in areas with little or no forest stand present. Generally, broadcast burning is used in grasslands, shrublands, and juniper woodlands for restoration and fuels reduction purposes) in areas dominated by nonnative annual grasses.
- Assess the need for treatment of individual aspen stands and if needed the type of treatments to apply using Aspen Management Decision Flowchart for the Blue Mountains, from Aspen Biology, Community Classification, and Management in the Blue Mountains (USFS PNW-GTR-806, May 2010).
- Avoid placing skid trails, slash accumulations, or burn piles in low sagebrush plant communities. Sites that lack sufficient understory species, such as fully developed juniper woodlands (Phase III), or areas that have burned at a high severity may require seeding following a prescribed fire treatment to attain the desired post-fire response. Mixtures of native grass, forb, and shrub seed may be applied to designated areas with aerial or ground-based methods. Candidate sites for seeding would be determined on a case-by-case basis as monitoring data is gathered.
- Pastures that have been treated with a jackpot burning would be rested for a period of at least two growing seasons to allow for recovery of understory species. Additional rest may be prescribed if needed to meet resource objectives.
- In forested stands no downed logs greater than 12 inches diameter and no snags greater than 15 inches diameter at breast height (dbh) would be intentionally burned in any unit.
- Cutting and burning of juniper with old growth characteristics or obvious wildlife occupation (cavities or nests) would be avoided. Old-growth juniper would be determined using structural characteristics of the tree. Specific characteristics include:

broad, non-symmetrical tops, deeply furrowed bark, twisted trunks or branches, dead branches and spike tops, large lower limbs, trunks containing narrow strips of cambium, hollow trunks, large trunk diameters relative to tree height, and branches covered with bright yellow green lichen (Miller 1999).

- Invasive juniper would be treated aggressively within a three mile buffer around Greater sage-grouse leks. Treatment methods should be limited to cutting, piling and or jackpot burning within the lek buffer areas. Mechanical treatments within the buffered areas should not take place between March 1 and May 30th. All created fuels would be lopped to a level below four feet. Prescribed fire activities should not take place between April 1 and June 30. Each lek can be evaluated on a case by case basis by an ODFW biologist for entry during these times.
- Prior to treatment of a unit noxious weed populations in the area would be inventoried. Weed populations identified in or adjacent to the Project Area would be treated in accordance with the Vale District Standard Operating Procedures (SOPs) for noxious weed treatment.
- Following all treatments, the areas would be monitored for noxious weed invasions (See Appendix 1, Project Monitoring Plan). Weed populations that are identified in the Project Area would be treated in accordance with the Vale District Standard Operating Procedures for noxious weed treatment. All pertinent Standard Operating Procedures and Mitigating Measures from the Vegetation Treatments Using Herbicides on BLM Lands in Oregon ROD (Oct 2010) would be observed during implementation (Appendix 2. pp. 457-467).
- All vehicles and equipment used during implementation would be cleaned before and after treatments to guard against spreading noxious weeds.
- Prescribed burning would follow the Oregon State Smoke Management Plan in order to protect air quality and reduce health and visibility impacts on designated areas.
- All burns would be planned based on either instructions given by, or in consultation with the Oregon Department of Forestry (ODF) and the State Implementation Plan (Smoke Implementation Plan) for prescribed fires. Coordination with other prescribed fire projects occurring at the same time may be required.
- All constructed fire line will be dug by hand to a width of no more than two feet wide and down to mineral soil. Fire line would be water barred and have removed material placed back in the line if on slopes steeper than 40 percent or visible in areas of VRM II (Visual Resource Management).
- Prior to burning around any large diameter trees (e.g., greater than 24 inches) all large diameter debris and duff within 4-10 feet of the bole would be pulled away.
- Skid trails and landings would be approved by an employee of the Bureau of Land Management prior to biomass removal and utilization.
- Skid trails and landings would be water barred and re-seeded with native species.
- Within 50’ from the bole of all large diameter (e.g., greater than 24 inches) ponderosa pine/Douglas fir/western larch all non-commercial trees would be removed, a minimum

spacing in this area is not required. Exceptions would be in curlleaf mountain mahogany and aspen stands where larger trees may be girdled or felled for downed woody debris.

- Berms, large boulders, and other kinds of barriers would be placed at strategic locations as needed after biomass processing to prevent off-highway vehicles from driving in the treated area and causing erosion.
- To avoid IPS bark beetle infestations non-commercial thinning would occur from July 1 to early December 1 (ponderosa pine dominated stands, only).
- In areas of VRM II (Visual Resource Management) all stumps would be flush cut and covered lightly with soil to reduce visibility within 150 feet of high use roads. Then from 150 feet out to 250 feet, cut trees at angles so that stump cut is not visible from high use roads.
- Only hand-thinning treatments, hand piling, and pile burning (A prescribed fire that burns material piled either by hand or mechanical resulting from fuel management activities – are burned during the wetter months to reduce damage to residual stand and to confine fire to the size of the pile. Piling allows for the material to cure, producing less smoke and rapid consumption when burned.) would be allowed within default or modified RMA widths. With the exception of chainsaws, no mechanized treatments would occur within default or modified RMA widths.
- Within default or modified RMA widths, timber shall be directionally felled and retrieved by lifting, left downed in place, or strategically placed where suggested by ID team specialists.
- Biomass haul in all units shall be restricted to dry or frozen ground conditions to prevent potential increases in sediment delivery to stream channels or wetlands.
- Ground-based skidding systems shall not be used on slopes greater than 35percent.
- Skidding material down or across stream channels or draws that collect and convey water shall not occur. Ground disturbing activities would be limited to 10 percent exposed soil or less within riparian ecosystems.
- Utilize existing stream crossings (i.e., fords) where possible. New crossings would need to be approved by the fisheries biologist or other aquatic resource ID team specialist(s).
- Minimize the number of stream crossings and cross streams at right angles to the main channel.
- To minimize detrimental soil conditions total acreage impacted (compaction, puddling, displacement, and severe burning) shall not exceed 12 percent of the total acreage within the biomass treatment area including landings and system roads.
- Utilize old landings and skid trails to the extent possible, or try to locate landings on previously disturbed sites such as roads, road shoulders, and borrow pits. Landings should be located on level ground and should not require excavation.
- New landings, designated skid trails, staging, and decking should not occur in RMAs, unless there are no reasonable alternatives, in which case they should be constructed outside the active floodplain.

- Prohibit storage and mixing of fuels and other chemicals, including refueling, within RMAs unless there are no other practicable alternatives. Refueling sites and storage areas within or adjacent to an RMA must have an approved refueling and spill containment plan.
- When underburning (A prescribed fire that burns the understory of a conifer stand consuming surface fuels but not the overstory vegetation, can be used after initial thinning treatment or a maintenance burn, to maintain the desired fuel loading conditions.), ignition would occur outside of RMAs, although fire is allowed to back into the RMAs.
- When creating burn piles within RMAs, locate the piles a minimum of 25 feet from the top of the streambank or steep slope break adjacent to the stream channel or wetland.

Alternatives analyzed other than the proposed action include:

Alternative 1 - No Action: Under this alternative, there would be no cutting of juniper on rangelands, within stands of mahogany or aspen, or thinning of conifer stands. Management under the no action alternative would proceed under the current Baker RMP and all other relevant policy direction.

Alternative 3 – No Commercial Biomass Utilization: This alternative would be the same as the proposed action with the exception that no commercial biomass utilization would take place anywhere in the project area. Under this alternative, all biomass generated by the treatments would be machine piled, left in place or jackpot burned only. All other aspects of this alternative would be identical to the proposed action.

Two alternatives were considered but eliminated from detailed analysis. These included a prescribed fire only alternative and an alternative that would reduce the influence of western juniper on rangelands through the use of herbicides. These alternatives were not fully analyzed because they would not likely meet project objectives for juniper mortality and fuels reduction; or would not be economically feasible or provide for public safety.

Rationale for Decision

After reviewing the EA developed for this project and the comments received on impacts, the BLM has selected the Proposed Action with the listed design elements. This alternative would meet the purpose and need by:

- The proposed action would reduce risks associated with large-scale, high severity wildland fire in the project area; especially in forests and woodlands that are adjacent to private and publicly owned forest lands.

- The proposed action would interrupt the transition of shrub-grassland and pine woodland plant communities to juniper woodlands within the project area. Fire would be restored as a key disturbance process within the planning area to an extent feasible under the constraints of human safety, private property values, and resource values.

- The proposed action would enhance stands of mountain mahogany and aspen within the project area.

The Proposed Action has been reviewed and found to be in conformance with the Baker Resource Management Plan (RMP) (1989) and federal fire management policy, as described in the National Fire Plan (2000), A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: Ten-Year Comprehensive Strategy (2001), and the local Baker County Community Wildfire Protection Plan (CWPP) (2012).

The Proposed Action has been found to be in conformance with Section 7(a)1 of the Endangered Species Act. It is in compliance with Federal laws that mandate the management of public land resources (Federal Land Policy and Management Act of 1976). It is in compliance with the various Federal laws, regulations, and Executive Orders dealing with cultural resources. In addition, the proposed action is in conformance with State, local, and Tribal land use plans, laws, and regulations.

The decision does not result in any undue or unnecessary environmental degradation. Resource values are protected through observation of project design elements.

Special attention was paid to the Hooker Gulch and French Gulch wilderness characteristics inventory units when making this decision. Portions of the Hooker Gulch (OR-035-014) and French Gulch (OR-035-015) wilderness characteristics inventory units fall within the project area. They were evaluated in a separate analysis using current wilderness characteristic protocols. The BLM has determined that these inventory units while possessing more than the requisite 5,000 contiguous acres without roads, do not possess outstanding opportunities for solitude, or outstanding opportunities for primitive and unconfined recreation. Therefore, no further analysis of effects to wilderness character is necessary.

The decision considered multiple resource and uses including wildlife habitat, riparian restoration, range, fisheries, cultural, local economies and communities, and forest health and fuels. The BLM concludes the selection of the proposed action best meets the fuels management and ecological restoration purpose and need statement. The proposed action will move approximately 43,600 acres of rangeland, woodlands, and riparian habitat toward pre-settlement reference conditions. Additionally the project will improve sage-grouse and big game habitat within the Burnt River and Powder River watersheds.

CONFORMANCE WITH LAND USE PLANS, POLICIES AND PROGRAMS

The Baker Habitat Restoration and Fuels Management Environmental Assessment (EA) is tiered to the Baker Resource Management Plan (RMP) and Record of Decision (ROD), which was approved July, 12 1989. This proposal has been reviewed to determine if it conforms with the Baker RMP/ROD, terms and conditions as required by 43 CFR 1610.5. This proposal has been found consistent with all applicable terms, conditions, standards, and guidelines specified in the Baker RMP/ROD.

It is in conformance with Section 7(a) 1 of the Endangered Species Act.

It is in compliance with Federal laws that mandate the management of public land resources (Federal Land Policy and Management Act of 1976).

It is in compliance with the various Federal laws, regulations, and Executive Orders dealing with cultural resources. In addition, the proposed action is in conformance with State, local, and Tribal land use plans, laws, and regulations.

The decision does not result in any undue or unnecessary environmental degradation.

Appeal Rights:

This decision may be appealed to the Interior Board of Land Appeals, Office of Hearings and Appeals, in accordance with the regulations contained in 43 CFR, Part 4 and Form 1842-1. If an appeal is filed, your notice must be filed in the Vale District Office, 100 Oregon Street, Vale, Oregon, 97918 within 30 days of receipt. The appellant has the burden of showing that the decision appealed is in error.

Filing an appeal does not by itself stay the effectiveness of a final BLM decision. If you wish to file a petition for a stay of the effectiveness of this decision, pursuant to 43 CFR 4.21, the petition for stay must accompany your notice of appeal. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

A petition for stay is required to show sufficient justification based on the standards listed below.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied.
2. The likelihood of the appellant's success on the merits.
3. The likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether or not the public interest favors granting the stay.

A notice of appeal electronically transmitted (e.g. email, facsimile, or social media) will *not* be accepted as an appeal. Also, a petition for stay that is electronically transmitted (e.g., email, facsimile, or social media) will *not* be accepted as a petition for stay. Both of these documents must be received on paper at the office address above.

Persons named in the *Copies sent to:* sections of this decision are considered to be persons "named in the decision from which the appeal is taken." Thus, copies of the notice of appeal and petition for a stay must also be served on these parties, in addition to any party who is named elsewhere in this decision (see 43 CFR 4.413(a) & 43 CFR 4.21(b)(3)) and the appropriate Office of the Solicitor (see 43 CFR 4.413(a), (c)) at the same time the original documents are filed with this office.

For privacy reasons, if the decision is posted on the internet, the *Copies sent to:* section will be attached to a notification of internet availability and persons named in that section are also considered to be persons "named in the decision from which the appeal is taken."

Any person named in the decision, *Copies sent to:* section of the decision, or who received a notification of internet availability that receives a copy of a petition for a stay and/or an appeal and wishes to respond, see 43 CFR 4.21(b) for procedures to follow.

CONTACT PERSON

For additional information concerning this decision, contact Jason Simmons AFMO Fuels, Vale BLM, 100 Oregon Street, Vale Oregon 97918; telephone (541) 473-6336.

Lori Wood
Baker Resource Area Field Manager

06/24/2013
Date

ADDENDUM 1 – PUBLIC COMMENTS AND RESPONSES

On February 15, 2013, a Notice of Internet Availability for the EA, Appendixes and unsigned Finding of No Significant Impact (FONSI) were sent to 118 individuals, groups and agencies that had expressed an interest in the project. Also, a legal notice requesting public comment to the EA and FONSI appeared in the *Baker City Herald* newspaper of Baker City. The EA and FONSI were released for public comment from March 6, 2013 to April 5, 2013. As a result of this scoping, one letter was received. Some of the concerns raised in the letter were addressed with additional material in the EA. Other concerns and issues raised are addressed in this Addendum to the Decision Record. As a result of the comments, some clarification and additional supporting information was added to the EA.

Public Comment #1

Commercial harvest and biomass removal will increase skid trails and roads in the project area which will result in ecosystem degradation.

Commercial harvest of timber was considered but eliminated from detailed analysis because it is economically infeasible (EA, page 7). Therefore no skid trails will be constructed to remove commercial timber.

Alternative 2 is the only alternative that authorizes the removal of commercial biomass and would result in temporary skid trails. They would be needed to remove juniper form 2,500 acres (EA, page 13). Alternative 3 and the no action alternative do not have removal of biomass and would not result in the construction of temporary skid trails. Due to economic constraints, sites where biomass is authorized for removal are in close proximity to system roads, easily accessible by heavy equipment, and in Phase II or III juniper or mixed conifer stands. A small percentage of the juniper that would be removed for biomass would be directly adjacent to system roads and no skid trails would be required. The remaining acres of biomass removal would require a short skid trails, no more than 900 feet and most being less than 200 feet in length. Skid trails construction would follow the Project Design Elements listed on pages 10-13 of the Baker Habitat Restoration and Fuel Reduction Project that are designed to reduce impacts to the ecosystem.

Public Comment #2

Research has been shown that fire suppression and heavy livestock grazing are the main factors causing juniper to encroach into sagebrush plant communities. Oregon Wild suggests the BLM develop an Alternative that eliminates heavy grazing and reintroduces wildfire back into the ecosystem.

Reducing Livestock grazing

Livestock grazing is beyond the scope of this project, the purpose of this project is to restore rangelands, woodlands and riparian areas, while reducing the hazardous fuel loading. The current level of grazing use occurring in the project area (slight to moderate) leaves sufficient residual vegetation to carry fire. Therefore, the BLM believes that current livestock grazing is no longer facilitating juniper encroachment, see pages 6 and 7 of the EA for additional information.

Reintroduce Fire

An Alternative that would use only prescribed fire to accomplish fuels management and conifer reduction needs identified in the Project Area was considered but not developed for further analysis because it would not meet the purpose and need. Specifically, some of the non-juniper forested stands in the Project Area have high tree densities and without pre-treatment the risk of the prescribed fire escaping and becoming a stand replacement fire is substantially increased. Furthermore, only using prescribed fire to treat juniper encroachment within sagebrush-steppe and riparian communities would not allow for sufficient retention of shrubs that are important sources of wildlife browse, cover and connectivity (EA, page 6).

Public Comment #3

Oregon Wild recommends treatment areas be rested from livestock grazing for at least two years.

Pastures that have been treated will be rested for a minimum of two growing seasons to allow for appropriate recovery of understory species (EA, page 11).

Public Comment #4

Mosaic of treatment within the project area (i.e. stand replacement, thinning and no treatment)

Both action alternatives would result in an increase of ecological diversity and mosaic vegetation patterns across the landscape while moving shrub-steppe and woodland communities toward historic conditions. Treatments would focus on removing western juniper from sagebrush-steppe communities and from patches of riparian hardwoods and mountain mahogany, promoting retention of those species in the project area. Other treatments would thin overstocked conifer stands and reduce the threat of stand-replacement wildfire within forests and woodlands. Woodland underburns and jackpot burning will also result in a mosaic pattern of burned and unburned patches across the landscape while reducing surface fuel loading.

Public Comment #5

Old Growth tree are important to the ecosystem. Therefore the BLM should retain all old growth trees regardless of size

Old growth trees are important to the ecosystem. Cutting and burning of juniper with old growth characteristics or obvious wildlife occupation (cavities or nests) would be avoided. Old-growth juniper would be determined using structural characteristics of the tree. Specific characteristics include: broad, non-symmetrical tops, deeply furrowed bark, twisted trunks or branches, dead branches and spike tops, large lower limbs, trunks containing narrow strips of cambium, hollow trunks, large trunk diameters relative to tree height, and branches covered with bright yellow green lichen (Miller 1999) (EA, page 11).

Public Comment #6
Juniper reduction projects may increase off highway vehicle expansion

The BLM does not expect OHV use to increase above the current level, light to moderate, as a result of the treatments identified in the Baker Habitat Restoration and Fuel Reduction Project. After considering the comments on OHV, BLM considered the concern in the Transportation and Access section of the EA (EA, page 68).

Public Comment #7
Encroaching juniper is sequestering carbon and may offset greenhouse gas emotions.

After considering the comments on potential effects of the project on carbon sequestration, BLM has incorporated some additional scientific literature into the analysis file and placed additional attention to effects on carbon sequestration within the EA (EA, page 71).

Public Comment #8
Juniper removal increases noxious and invasive plant (e.g. cheatgrass and medusa head) and reduces native perennial grasses

There are several design criteria (EA, page 10, 11) that will be implemented to minimize the potential spread of noxious and invasive plants. Monitoring for noxious weeds would occur for three years post-treatment and any weeds found would be treated using an integrated weed management approach in accordance with the Vegetation Treatments Using Herbicides on BLM Lands in Oregon EIS (October, 2010) (EA, page 29).

Initially the remove of juniper could open up areas for weed colonization by creating disturbed habitat favoring noxious week invasion. However it is expected there would only be minimal increased in the long term (EA, page 29). Also management that promotes healthy shrub-steppe, forest, riparian, and open woodlands (which this project would do) would reduce the threat of large-scale fires. These healthier communities would be more resistant to noxious weed introduction and dread than declining plant communities or communities impacted by a large fire (EA, page 29).

The BLM expects that cheatgass would increase in the short term after juniper treatment in the project area, however after 13 years the treated sites would be statistically similar to the non-treatment.

Oregon Wild cites a study, conducted in California, where native perennial grass decreased after juniper removal. However a study in Oregon, Bates et al. 2005, documents an increase in perennial grass production when compared to the no treatment sites. Bates et al 2005 found that if 2-3 perennial bunchgrasses per square meter present prior to treatment is sufficient for natural recovery, resulting in higher production of perennial grasses and forbs when compared to the control plots. The Baker Habitat Restoration and Fuel Reduction Project would remove all/most juniper from sites that had adequate understory vegetation (i.e. 2-3 perennial grasses per square meter). Sites that did not have adequate understory vegetation would be seeded with native

vegetation after treatment (EA, page 10) or treated initially with a partial cut to allow the native understory vegetation to expand. Once there is adequate native vegetation the remaining trees would be cut (EA, page 13).

Public Comment #9
In appropriate dry forest types, consider the restoration concepts, vision, priorities, and recommended prescriptions described in Tim Lillebo and Oregon Wild's Practical Guide for Ecological Restoration of Eastern Oregon's Dry Forests.

The BLM reviewed the document written by Oregon Wild and found very little management recommendations specifically identified for juniper woodland, but rather the document focused protecting old-growth ponderosa pine and mixed conifer. Oregon Wild's document also recommends limiting road construction in Roadless areas. The Baker Habitat Restoration and Fuel Reduction Project would not treat old growth juniper stands and no new access roads would be constructed. Therefore, the BLM believes that the Baker Habitat Restoration and Fuel Reduction Project is consistent with Oregon Wilds forest management recommendations.

Public Comment #10
Only a small subset of needed restoration activities are "profitable," so we can't let logging economics determine restoration priorities.

Most of the Baker Habitat Restoration and Fuel Reduction Project treat juniper stands that are not profitable and do not have a commercial component. The BLM has only identified 2,500 acres where biomass removal is economically feasible the remaining Commercial biomass removal is only a component of Alternative 2 and accounts for approximately 5 percent of the project area (EA, page 65).

Public Comment #11
Thinning should focus on areas accessible from existing roads. Building new roads will cause degradation that typically erases any alleged benefit of treatments.

All thinning identified in the Baker Habitat Restoration and Fuel Reduction Project is pre commercial therefore no new haul roads will be needed or constructed (EA, page 15).

Public Comment #12
Prioritize treating stands that are already degraded by past logging, and place less priority on treating unlogged forests.

This comment is outside the scope of the Baker Habitat Restoration and Fuel Reduction Project. However, juniper encroachment is threatening the ecological integrity of the native sagebrush community by reducing native sagebrush, grass and forb cover, which is the purpose of this project.

Public Comment #13

New evidence indicates that far more of the "dry" forests, rather than being typified low severity fire regimes, were in fact dominated by mixed severity fire regimes (including significant areas of stand replacing fire), so mixed severity fire is an important part of the historic range of variability that should be restored.

Although a large majority of the Baker Habitat Restoration Project Area is considered a sagebrush-steppe type of habitat (~92%), some is classified as forest or woodland. Considering the current condition of these forested stands, the threat of a wildfire becoming a catastrophic stand replacement fire is excessively high. A wildfire occurring in these conditions would likely not result in a mosaic of mixed severity fire. Therefore, with our proposed treatments we are trying to reduce the risk of catastrophic fire while mimicking some of the effects of a mixed severity fire through are variable tree spacing thinning prescriptions. There will be a sufficient amount of area remaining untreated in every unit to provide habitat and vegetative diversity. Basically after implementing either action alternative, the stand conditions will closely resemble those of a mixed severity wildfire.