



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

OFFICE OF  
ECOSYSTEMS, TRIBAL AND  
PUBLIC AFFAIRS

January 23, 2015

Keith Lannom  
Forest Supervisor  
500 N. Mission Street, Building 2,  
McCall, Idaho 83638

Re: EPA Region 10 Scoping Comments on the Middle Fork Weiser River Landscape Restoration Project (EPA Project number 98-043-AFS).

Dear Mr. Lannom:

The U.S. Environmental Protection Agency has reviewed the Notice of Intent dated December 24, 2014 regarding the Middle Fork Weiser River Landscape Restoration Project on the Payette National Forest in Idaho. Our review of the NOI was conducted in accordance with our responsibilities under National Environmental Policy Act and Section 309 of the Clean Air Act.

Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the draft EIS prepared for the proposed project will consider the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

According to the NOI, the purpose of the Project is to move vegetation toward the desired conditions (e.g., canopy closure in large tree class, species composition, and size class distribution) defined in the Payette National Forest Land and Resource Management Plan 2003 and consistent with the current science for restoration of ponderosa pine, Douglas-fir, grand fir, subalpine fir and lodgepole habitat types. The Middle Fork Weiser Project area is approximately 50,000 acres in size.

Proposed project components include up to 13,002 acres of commercial harvests, up to 5,280 acres of meadow restoration and 1,267 acres of restoration of low density timber stands. Noncommercial treatments include thinning up to 4,309 acres. These acreages include treatments designed for and within Riparian Conservation Areas and total approximately 3,428 acres. Additionally, burning would be conducted on up to 37,000 acres and approximately 13 miles of shaded fuel break would be created. Forest Service System road treatments proposed throughout the project area include maintenance and/or improvement of Forest Service System Roads.

The EPA supports the overarching purposes of the Project, and we recognize the importance of moving the area towards a more diverse and resilient landscape structure. We promote protection and improvement of watershed conditions on the forest and therefore, we encourage the Forest to consider limiting activities to those that enhance RCAs.

The scoping comments that follow are provided to inform the Forest Service of issues that the EPA believes should be considered as the EIS for the project is being developed. We appreciate the opportunity to participate early in the planning process, and we are available to engage further where needed. If you would like to discuss these comments, please contact me at (208) 378-5757 or by electronic mail at [hood.lynne@epa.gov](mailto:hood.lynne@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Lynne Hood". The signature is written in a cursive style with a large initial "L".

Lynne Hood

Environmental Review and Sediment Management Unit

Enclosure:

1. EPA Scoping Comments on the Middle Fork Vegetation Management Project EIS

## **EPA Scoping Comments on the Middle Fork Vegetation Management Project EIS**

### **Water Quality**

One of EPA's primary concerns is the effect of management actions on surface water quality. The EIS should identify those water bodies within the planning area that are included on the 303(d) list, and disclose which water bodies may be impacted, as well as the nature of the potential impacts.

The EIS should identify whether Total Maximum Daily Loads have been established in the watershed. Where TMDLs have not been approved, or they are at varying stages of completion, the EIS should discuss consistency with the 2002 Memorandum of Understanding and the Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters.

In addition, the EIS should identify where water bodies within the project area are not included on the state 303(d) list, and demonstrate that the proposed action will comply with antidegradation provisions of the CWA, preventing deterioration of water bodies that currently meet water quality standards unless an analysis shows that important economic and social development necessitates degrading water quality.

### ***Recommendations:***

1. Identify impaired, 303 (d) listed water bodies in the project area and the pollutants of concern.
2. Where TMDLs exist, discuss the TMDL allocations for pollutants relevant to forest activities and how the project supports improved watershed conditions.

### **Riparian Restoration**

The NOI and related scoping documents indicate that some restoration of riparian habitat conservation areas would occur. The EPA recognizes that silvicultural treatments can benefit riparian stands where stand density, structure, or species composition are not sustainable or appropriate to the forest type that would naturally occur on a site. In the Middle Fork Weiser project area, we anticipate that some riparian zones adjacent to high-gradient streams may exhibit the fire regime of the adjacent upslope environment (especially in areas of mixed conifer), and that there may be a need to restore the natural fire regime within these zones. In low-gradient reaches we would expect the riparian zone to be more dominated by hardwood and shrub vegetation and influenced more by hydrologic disturbances and depositional events than by fire. Restoration in these areas should be focused accordingly.

### ***Recommendations:***

1. Where silvicultural treatments are needed, the DEIS should provide site specific rationale for treatment based on the need to protect or restore the riparian ecosystem.
2. Silvicultural treatments should be designed to achieve or accelerate system potential riparian conditions.
3. Where need is established to enter a riparian zone, we encourage the Forest to consider an alternative that limits the use of heavy equipment in and around riparian areas.
4. Where fuel loadings allow and ecological benefit can be established, we support the directional felling (and leaving) of trees within the RCA.

## **Roads**

The NOI indicates that the project would include placing approximately 16.6 miles of system road in long-term closure status, decommissioning approximately 16.1 miles of system roads and 62.1 miles of unauthorized routes, and more generally road construction and reconstruction activities. Roads are of key concern to the EPA because roads contribute more sediment to streams than any other management activity and interrupt the subsurface flow of water, particularly where roads cut into steep slopes. In addition, roads and their use contribute to habitat fragmentation, wildlife disturbance, the introduction or exacerbation of noxious weeds, and increased fire danger from recreational activities. We support evaluating roads and designing project elements to address roads that post a risk to watershed conditions.

### ***Recommendations:***

1. We recommend that the DEIS include a description of how roads in the watershed currently impact resources and describe the change in road miles and density that will occur as a result of the project.
2. As alternatives are developed, we recommend that the Forest Service look for opportunities to reduce the number of roads needed to conduct the proposed timber harvest.
3. The EIS should also describe how temporary roads will be closed.
  - a. If the project includes administrative road closures, the EIS should describe what enforcement measures will be utilized and the monitoring program that will be implemented to ensure they are effective.
  - b. If the project includes road obliteration, the EIS should describe measures to be used to stabilize the soil and keep it in place.

## **Timber Harvest**

Timber harvest can accelerate erosion, impact sensitive resources, alter forest structure and composition, and increase the risk of introduction of invasive species.

### ***Recommendations:***

1. We recommend that the DEIS discuss how logging will proceed in sensitive areas (i.e., previously burned areas, fragile soils, steep slopes, riparian areas, watersheds with severe sedimentation problems, and fish population strongholds).
2. The DEIS should explore how the timing of entry can be adjusted to minimize environmental impacts. This should include a consideration of wildlife use and soil conditions.
3. Where conditions allow and sufficient utilizable material is available, we recommend utilizing a cut-to-length harvester/forwarder system to conduct thinning.
4. The DEIS should discuss how proposed prescriptions will promote and restore forest structure, composition, and function, especially in areas near or adjacent to stream corridors (see Ecological Forestry below).
5. Invasive Species. We recommend that the DEIS include the USFS's direction for noxious weed management, a description of current conditions, and BMPs that will be utilized to reduce the likelihood of introduction and spread of invasive species with the proposed management activities.

## **Ecological Forestry**

The EPA supports the use of silvicultural practices that are based on an understanding of natural disturbance and stand development processes (i.e. ecological forestry). Based on the NOI, it appears that the Forest is designing alternatives consistent with an ecological forestry approach. As thinning prescriptions are developed, we encourage the Forest to consider both landscape context and stand level spatial pattern. We believe this is of particular importance where larger openings are under consideration.

### ***Recommendations:***

1. We recommend the Forest consider new tools and approaches for incorporating spatial reference patterns into silvicultural prescriptions. One such approach, developed by Derek Churchill and others, is known as the Individuals, Clumps and Openings (ICO) approach. Relevant references include:
  - a. Churchill, D.J., A.J. Larson, S.M.A., M.C. Dalhgreen, and J.F. Franklin. 2013. The ICO approach to quantifying and restoring forest spatial pattern: Implementation guide. Version 2.0. Stewardship Forestry, Vashon, Washington, USA
  - b. Churchill, D.J., A.J. Larson, M.C. Dalhgreen, J.F. Franklin, Hessburg, P.F., and James A. Lutz. Restoring forest resilience: From reference spatial patterns to silvicultural prescriptions and monitoring. *Forest Ecology and Management* 291 (2013) 442-457
2. Other “ecological forestry” references include:
  - c. USDA General Technical Report NRS-19 “Natural Disturbance and Stand Development Principles for Ecological Forestry” [http://www.fs.fed.us/nrs/pubs/gtr/gtr\\_nrs19.pdf](http://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs19.pdf)
  - d. Larson, A.J., Churchill, D. 2012. Tree spatial patterns in fire-frequent forests of western North America, including mechanisms of pattern formation and implications for designing fuel reduction and restoration treatments. *Forest Ecology and Management*, 267 (2012) pp 74-92

## **Wildfire Effects Analysis**

We recognize the role of fuels reduction in meeting objectives for resilient forest conditions, fuels and fire behavior, and wildlife habitat. In order to ensure that this project effectively protects the long term sustainability of forest resources, we believe the EIS should include a wildfire effects analysis.

### ***Recommendations:***

1. The fire effects analysis should include a discussion of Fire Regime Condition Class<sup>1</sup>.
2. The fire effects analysis should describe how the proposed action – and subsequent actions if necessary – will decrease the risk of undesirable wildfire in the short, medium and long term.
3. The fire effects analysis should address the potential impacts of all alternatives (including no-action) for all resources<sup>2</sup> in a consistent and systematic manner.
4. The risks of uncharacteristic disturbances, such as catastrophic wildfire, should be evaluated against the effects of active restoration designed to reduce those risks (i.e. water quality, fisheries and wildlife effects).

<sup>1</sup> [http://frames.nbii.gov/portal/server.pt?open=512&objID=309&&PageID=2727&mode=2&in\\_hi\\_userid=2&cached=true](http://frames.nbii.gov/portal/server.pt?open=512&objID=309&&PageID=2727&mode=2&in_hi_userid=2&cached=true)

<sup>2</sup> For example: forest stand stocking density, forest stand structure, soils, fish populations, water temperature, sediment/substrate embeddedness, large wood in streams, pool frequency/ quality, water yield and peak flows, stream bank stability, late and old forest structure habitat, habitat connectivity, snag replacement trees, down wood, wildlife, undeveloped areas, recreation and visual resources and range.

## **Smoke Management**

We recognize that reintroduction of fire into fire-dependent ecosystems may be the only feasible option available to land managers to maintain key habitat elements. We also note, however, that there are public health issues associated with burning, particularly among sensitive populations.

### ***Recommendations:***

1. We recommend that the DEIS include an alternative that emphasizes slash chipping or removal for utilization over burning the slash on site.
2. We recommend that the DEIS analyze the potential impacts of prescribed burning. This should include an estimation of the number of tons of PM<sub>10</sub> and PM<sub>2.5</sub> generated by the alternatives, an analysis of direct effects on human health, and an analysis of indirect and cumulative effects, including any potential impact to Class I Airsheds.
3. We recommend that the EIS provide an overview of the smoke management program and measures that will be employed in order to reduce emissions, ensure adequate smoke dispersion and avoid public health impacts. The smoke management program for the proposed project may include a number of elements discussed in Section VI of the *Interim Air Quality Policy on Wildland and Prescribed Fires* by the EPA (see <http://www.epa.gov/EPA-AIR/1998/May/Day-21/a13616.htm>).

## **Invasive Weeds, Rare Plants**

### **Weeds.**

Vegetation removal and soil disturbance enable invasive weeds to become established. The EIS should identify management actions that would be taken to comply with Executive Order 13112 on Invasive Species. We recommend including the Forest Service's direction for invasive weed management, a description of current conditions, and best management practices that would be used to reduce the likelihood of introduction and spread of invasive species. Describe any invasive weed control projects planned in the action area, and future/ongoing weed monitoring and control activities.

### **Rare Plants.**

The EIS should identify whether there are any threatened or endangered candidates, sensitive, or other plant species of concern within or near the project area that could be affected by proposed actions. The EIS should include general locations of rare or special status plants, and how these sites would be managed to avoid impacts on the plants.

## **Habitat**

Project activities may directly and indirectly impact habitat quality and connectivity.

### ***Recommendations:***

To protect the quality and connectivity of aquatic and terrestrial habitat we recommend that the EIS:

1. Describe the current quality of habitat on and near the proposed project area;
2. Identify known fish and wildlife corridors, migration routes, and areas of seasonal fish and wildlife congregation;
3. Evaluate the cumulative alteration and fragmentation of aquatic and terrestrial habitat caused by roads, land use, management activities and human activity;

4. Evaluate effects on plants, fish and wildlife from habitat removal and alternation, aquatic and terrestrial habitat fragmentation caused by roads, land use, management activities and human activity;
5. Discuss how the proposed activities would support the retention of large snags, downed logs and large wood in streams; and
6. Incorporate the range of firewood gatherers from roads into the snag retention guidelines.

### **Cumulative Effects**

The EPA has issued guidance on how we are to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*, which can be found on the EPA's web site at: <http://www.epa.gov/compliance/resources/nepa.html>. The guidance states that in order to assess the adequacy of the cumulative impacts assessment, five key areas should be considered. The EPA tries to assess whether the cumulative effects analysis:

1. Identifies resources, if any, that are being cumulatively impacted.
2. Determines the appropriate geographic area (within natural ecological boundaries) and the time period over which the effects have occurred and would occur.
3. Describes a benchmark or baseline.
4. Looks at all past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern.
5. Includes scientifically defensible threshold levels.

The NEPA analysis should take these above steps to analyze and disclose cumulative impacts to identified resources of concern.

### **Climate Change Effects**

Ongoing climate change research as summarized by the United Nations Intergovernmental Panel on Climate Change (IPCC) ([www.ipcc.ch](http://www.ipcc.ch)) concludes that climate is already changing; that the change will accelerate, and that human greenhouse emissions, primarily carbon dioxide (CO<sub>2</sub>), are the main sources of accelerated climate change. Effects of climate change may include changes in hydrology, weather patterns, precipitation rates, chemical reaction rates, and susceptibility to fire and insect outbreaks.

### **Recommendations:**

1. Consistent with the guidance issued by the Forest Service in January 2009<sup>3</sup>, we recommend that the EIS discuss the potential effect of the proposed project on climate change (short-term GHG emissions and alteration to the carbon cycle caused by hazardous fuels reduction) and the effect of climate change on the proposed project.
2. Consider CEQ's *Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts* in evaluating affects to GHG emissions<sup>4</sup>.

### **Coordination with Tribal Governments**

Development of the EIS should be conducted in consultation with all affected tribal governments, consistent with Executive Order 13175 (*Consultation and Coordination with Indian Tribal Governments*). The EIS should discuss whether or not the proposed project would affect tribal natural

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<sup>3</sup> [http://www.fs.fed.us/emc/nepa/climate\\_change/includes/cc\\_nepa\\_guidance.pdf](http://www.fs.fed.us/emc/nepa/climate_change/includes/cc_nepa_guidance.pdf)

<sup>4</sup> [http://www.whitehouse.gov/sites/default/files/docs/nepa\\_revised\\_draft\\_ghg\\_guidance.pdf](http://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance.pdf)

and/or cultural resources and address any concerns of the tribes in accordance with Federal Tribal Trust responsibilities.

### **Monitoring**

Monitoring and adaptive management is an important element in maintaining and restoring the health of watersheds, riparian, and aquatic resources. Feedback of monitoring results to managers is critical to the success of a land management plan. It is only through monitoring that the Forest will be able to determine whether 1) goals and objectives are being met; 2) assumptions/indicators used in developing and implementing the plan are valid; 3) effects are as predicted (i.e. addressing uncertainties); and 4) if mitigation is effective.

We recommend that the project include a monitoring program designed to assess impacts from the project, and the implementation and effectiveness of measures taken to mitigate impacts. We support the use of multi-party monitoring and encourage the Forest to identify opportunities for collaboration. The EIS should describe the monitoring program, how it would be used in present and future resources management, and the likely extent to which it would be adequately implemented/funded.