



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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OFFICE OF  
ENVIRONMENTAL REVIEW  
AND ASSESSMENT

November 27, 2018

Erin Phelps  
New Meadows Ranger District  
Payette National Forest  
P.O. Box J  
3674 Highway 95  
New Meadows, Idaho 83654

Dear Ms. Phelps:

The U.S. Environmental Protection Agency has reviewed the Forest Service's October 31, 2018 Notice of Intent to prepare an environmental impact statement for the Granite Meadows Project (EPA Project Number: 18-0067-AFS). Our review of the NOI was conducted in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The Granite Meadows project is a landscape-scale effort to improve conditions across multiple resource areas. The purpose and need of the project is to increase the diversity and resilience of the landscape with an emphasis on promoting early seral, fire-resistant species and to improve watershed functions. The Proposed Action includes commercial and non-commercial treatments, prescribed fire, and road maintenance across 83,000 acres.

The EPA supports the overarching purpose of the project, and we recognize the importance of addressing issues on a landscape scale to promote resiliency more broadly. We are also supportive of the goal to restore degraded riparian habitat and wetlands.

The scoping comments that follow are provided to inform the Forest Service of issues that the EPA believes should be considered as the EIS is developed. Given the scale of the project, we welcome the opportunity to talk with you about the proposed activities. Please contact me at 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".

Lynne Hood

Environmental Review and Sediment Management Unit

Enclosure:

U.S. Environmental Protection Agency Detailed Scoping Comments Granite Meadows Project

**U.S. Environmental Protection Agency  
Detailed Scoping Comments  
Granite Meadows Project**

**Water Quality**

One of the EPA's primary considerations on any project is the potential effect of management actions on surface water quality. We recommend the EIS identify water bodies likely to be impacted by the project, the nature of the potential impacts, and the specific discharges and pollutants likely to impact those waters. The EIS should disclose information regarding relevant Total Maximum Daily Load allocations for any impaired waters listed on the latest state Clean Water Act 303(d) list or Integrated Report, along with the water quality standards and pollutants of concern. As the CWA anti-degradation provisions will also apply, we recommend the EIS demonstrate that the proposed action will prevent the deterioration of any water bodies that currently meet state water quality standards.

The scoping notice states that management within riparian reserves is proposed. Those activities would include diversity thinning, wood placement in creeks and cutting and leaving conifers in areas of hardwoods to encourage hardwood growth. The EIS should demonstrate that these activities are designed to provide adequate temperature regulation, nutrient filtering, streambank stability, and a supply of coarse woody debris to channels. Consistent with this recommendation, we anticipate that the alternatives will be designed to minimize impacts to shade in the primary shade zone. As prescriptions are developed, we encourage the Forest to consider the 2011 Northwest Forest Plan Temperature TMDL Implementation Strategy<sup>1</sup>.

***Recommendations:***

1. Where waters are listed as impaired under section 303(d) of the Clean Water Act, the EIS should describe existing restoration and enhancement efforts for those waters, how the project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of water quality within impaired waters;
2. Where waters are not impaired, the EIS should demonstrate that the proposed action will comply with anti-degradation provisions of the CWA that prevent deterioration of water quality within waterbodies that currently meet water quality standards; and
3. We recommend that the primary shade zone widths in the EIS reflect those in Table 4 of the Updated TMDL Strategy<sup>1</sup> (i.e., 70 to 85 feet depending on hill slope).

**Riparian Restoration**

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. Where silvicultural treatments are needed to achieve or accelerate restoration of riparian conditions, we support those treatments. We recommend that a site-specific demonstration that treatments are needed to achieve or accelerate riparian conditions should be made in the EIS, particularly where riparian treatments have the potential to impact water quality and associated riparian functions.

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<sup>1</sup>Northwest Forest Plan Temperature TMDL Implementation Strategies – Evaluation of the Northwest Forest Plan Aquatic Conservation Strategy and Associated Tools to achieve and maintain stream temperature water quality standards. USFS and BLM. Update of September 5, 2005 DEQ Conditionally Approved Version November 15, 2010

***Recommendations:***

1. Where silvicultural treatments are proposed, the EIS should provide site specific rationale for treatment based on the need to protect or restore the riparian ecosystem;
2. We recommend that silvicultural treatments be designed to achieve or accelerate system potential riparian conditions; and
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; and

Where ecological benefit can be established, we support the directional felling (and leaving) of trees within the riparian reserve.

**Roads**

Road construction and reconstruction 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. Given these concerns, overall, we encourage the Forest to focus on the use of existing system roads that do not require extensive reconstruction and minimize road construction to the extent practicable.

***Recommendations***

1. We recommend that the EIS include a description of how roads in the watershed currently impact resources and describe the change in road miles and density that would result from the project.
2. If road reconstruction is incorporated as a project element, it should be noted that roads that have been closed for a long time may have stabilized. The EIS should disclose where existing roads will be reconstructed and the current impacts or improvements they present to the resources of concern.
3. Where roads are proposed for closure, we recommend the EIS describe how roads will be closed.
4. If the project includes administrative road closures, we recommend the EIS describe what enforcement measures will be utilized and the monitoring program that will be implemented to ensure they are effective.
5. 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, Invasive Weeds and Rare Plants**

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 EIS 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 EIS should explore how the timing of entry can be adjusted to minimize environmental impacts.
3. We recommend that the EIS discuss how proposed prescriptions will promote and restore forest structure, composition, and function, especially in areas near or adjacent to stream corridors.

4. We recommend that the EIS include a description of current conditions, and best management practices, which will be utilized to reduce the likelihood of introduction and spread of invasive species.
5. The EIS should identify whether there are any threatened, endangered, candidates, sensitive, or other plant species of concern within or near the project area that could be affected by proposed actions. We recommend that the EIS include general locations of rare or special status plants, and how these sites would be managed to avoid impacts on the plants.

### **Ecological Forestry**

The EPA supports silvicultural practices which are based on an understanding of natural disturbance and stand development processes. Such an approach has come to be referred to as ecological forestry. Managing established stands to sustain or restore structural and compositional heterogeneity is an important principle of ecological forestry.

### **Recommendations**

1. We recommend that the EIS describe how proposed harvest and thinning prescriptions reflect the consideration of natural disturbance and stand development processes.
2. We recommend the EIS reflect consideration of the existing seed bank (i.e. what is likely to regenerate naturally), and the level, extent, and species composition of any replanting.
3. We recommend that thinning and treatments should create and maintain structural and compositional complexity and heterogeneity consistent with stand development processes and disturbance agents. Relevant references include:
  - a. Churchill, D.J., A.J. Larson, S.M.A. Jeronimo, P.W. Fischer M.C. Dalhgreen, and J.F. Franklin. 2016. The ICO approach to quantifying and restoring forest spatial pattern: Implementation guide. Version 3.3 Stewardship Forestry and Science, Vashon, Washington, USA.<sup>2</sup>
  - b. 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
  - c. 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
  - d. USDA General Technical Report NRS-19 “Natural Disturbance and Stand Development Principles for Ecological Forestry”<sup>3</sup>
  - e. 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
  - f. Franklin, J.F., K.N. Johnson, D.J. Churchill, K. Hagmann, D. Johnson, and J. Johnston. 2013. Restoration of dry forests in eastern Oregon: a field guide. The Nature Conservancy, Portland, OR. 202 p.

### **Habitat**

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

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<sup>2</sup> [https://www.fs.usda.gov/nfs/11558/www/nepa/103397\\_FSPLT3\\_3986281.pdf](https://www.fs.usda.gov/nfs/11558/www/nepa/103397_FSPLT3_3986281.pdf)

<sup>3</sup> [http://www.fs.fed.us/nrs/pubs/gtr/gtr\\_nrs19.pdf](http://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs19.pdf)

## ***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*.<sup>4</sup>

The guidance states that to assess the adequacy of a cumulative impacts assessment, five key areas should be considered. The EPA assesses whether the cumulative effects analysis of an EIS:

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; and
5. Includes scientifically defensible threshold levels.

We recommend the NEPA analysis take these above steps to analyze and disclose cumulative impacts to identified resources of concern.

## **Ecosystem Services**

The juxtaposition of landscape features affects key physical, chemical, and biological functions that convey myriad social, ecological, and economic benefits.<sup>5</sup> For example, mature, complex forests recharge groundwater, provide clean drinking water, regulate stream flows, purify air and water, absorb greenhouse gases, and offer scenery, recreation, and wildlife habitat. Fully functional floodplains enhance water quality, provide valuable aquatic habitat, and reduce flooding. Maintenance and restoration of such key functions enhance the resilience of communities and ecosystems to stressors, such as those that may arise due to changes in climate. We recommend these services be acknowledged, accounted for using quantitative (where feasible) or qualitative means, and fully considered in decision making.

We recommend the assessment and integration of ecosystem services into agency decision making include the following elements of the NEPA process:

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<sup>4</sup> <https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf>

1. Describe the federal action;
2. Identify and classify key ecosystem services in the location of interest, i.e., the affected environment;
3. Assess the impact of the Federal action on ecosystem services relative to baseline;
4. Assess the effect of the changes in ecosystem services associated with the federal action; and
5. Integrate ecosystem services analyses into decision making.

### **Climate Adaptation**

EPA recommends that the EIS include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed project and the project area. This could help inform the development of measures to improve the resilience of the proposed project. If projected changes could notably exacerbate the environmental impacts of the project, EPA recommends these impacts also be considered as part of the NEPA analysis. These recommendations are also consistent with the guidance issued by the Forest Service in January 2009.<sup>6</sup>

### **Coordination with Tribal Governments**

We recommend that EIS development 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 the proposed project would affect tribal natural and/or cultural resources and address any concerns of the tribes in accordance with federal tribal trust responsibilities.

### **Monitoring**

We recommend the project include a monitoring program designed to assess impacts from the project, and the implementation and effectiveness of measures taken to mitigate impacts. The EIS should describe the monitoring program, how it would be used, and the likely extent to which it would be adequately implemented/funded.

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<sup>6</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)