



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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JUN 23 2016

Ref: 8EPR-N

Joseph Alexander, Forest Supervisor
Shoshone National Forest
c/o Rob Robertson, NEPA Planner
333 East Main Street
Lander, WY 82520

Re: Scoping Comments for the Shoshone National Forest Travel Management
Environmental Impact Statement

Dear Supervisor Alexander:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service (USFS) May 27, 2016 notice of intent (NOI) to prepare an Environmental Impact Statement (EIS) for Shoshone National Forest Travel Management. We have also reviewed the scoping materials available on the USFS website. In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA), we are providing scoping comments. These comments convey important questions or concerns that the EPA recommends be addressed during the NEPA process.

Background

The Shoshone National Forest is located in Northwest Wyoming and encompasses 2.4 million acres of Park, Hot Springs, and Fremont Counties covering an area from the Montana state line south to Lander and west to Yellowstone National Park. This large area comprises a varied topography ranging in elevation from 4,600 to 13,140 feet and includes portions of the Absaroka, Wind River and Beartooth Mountains. The USFS has identified the following needs for the Shoshone National Forest's existing travel management system: provide motorized routes to a growing user group, including loop opportunities for motorized use; ensure or improve compliance and accountability on the existing system; remove or change current routes with resource concerns or enforcement issues; and designate winter use areas and produce an over snow vehicle use map. The USFS intends to prepare an EIS to analyze and disclose the environmental effects of implementing travel management activities that include designating the class of vehicles, season of use, and additions and subtractions to the roads, trails and areas open for recreational motorized use during summer and winter.

The Shoshone National Forest is proposing to modify its current summer Motorized Vehicle Use Map and to create an Over Snow Motor Vehicle Use Map. Proposed changes include the following: add 36

miles of motorized routes; close 12 miles of roads to address resource and/or enforcement concerns; add 61 miles of seasonal restrictions to reduce impacts to wildlife, increase wintertime safety, and protect road surfaces during the wet season; close 1,324 acres of cross country skiing areas to motorized users; and create two winter motorized seasons to establish a high elevation zone and a low elevation zone.

Key Topics the EPA Recommends the USFS Address through the NEPA Process

There are several important components of analysis for this type of project that we recommend including within the scope of analysis for the Draft EIS, including:

- A range of alternatives for reaching the management objectives;
- Resource objectives and site-specific baseline conditions, including vegetation cover and condition, soil conditions, watershed conditions, water quality, sediment loads, wetland and riparian health, wildlife/fish population and habitat health and trends, and air quality;
- Site-specific impacts or benefits to these baseline resource conditions that would likely result from project activities associated with each alternative and a comparative assessment of how each alternative will affect attainment of resource objectives;
- Consideration of mitigation measures to address any identified potential adverse impacts to resources; and
- A detailed monitoring plan that will be used to assess how well the selected alternative addresses concerns associated with each resource category determined to be significant through scoping.

Based on preliminary information, our initial areas of interest for the Shoshone National Forest Travel Management Draft EIS include: (1) baseline environmental conditions, (2) water resources, (3) air quality, and (4) enforcement. We recommend the Draft EIS disclose the direct, indirect and cumulative impacts associated with each alternative on environmental resources in a manner that will allow for the decision-maker to effectively plan to reduce potential impacts to such resources to the greatest extent possible.

(1) Baseline Environmental Conditions

When evaluating effects of project alternatives, we recommend that current existing environmental conditions be used as the baseline for comparison of impacts across all alternatives, including the No Action alternative. For all resources, we recommend that historical data (5 years or older) be verified as representative of current conditions. Comparison of the action alternatives to existing conditions is an important frame of reference to quantify and/or characterize the magnitude of effects and understand each alternative's impacts. The EPA recommends that the NEPA analysis use a consistent method to compare resource impacts against the existing conditions baseline for all alternatives. By utilizing existing environmental conditions as a baseline, future changes to environmental resources can be more accurately measured for all alternatives, including the No Action alternative.

(2) Water Resources

Existing Conditions

Existing resource conditions provide the basis for an effective analysis of potential impacts. Therefore, we recommend the Draft EIS include the following baseline water resource information (see additional information in sections below) for water resources in proximity to the travel system:

- A map and summary of planning area waters, including streams, tributaries, lakes, springs and wetlands. It would be helpful if the summary identified high resource value water bodies and their designated beneficial uses (e.g., agriculture, fisheries, drinking water, recreation);
- Watershed conditions, including vegetation cover and composition, soil conditions, and areas not meeting desired future conditions;
- Areas of geologic or other instability that may affect travel management and water quality (e.g., areas of unstable terrain, soil types, high erosion risk, and watershed sensitivity).
- Surface water information, including available water quality data in relation to current standards, stream functional assessments, stream channel/stream bank stability conditions, sediment loads and aquatic life;
- Types, functions and acreage of wetlands, fens, riparian areas, and springs;
- Available groundwater information, including quality and location of aquifers; and
- A map and most recent EPA-approved list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the planning area, including the designated uses of the water bodies and the specific pollutants of concern. The Wyoming Department of Environmental Quality (WDEQ) can identify/validate any CWA Section 303(d) listed water bodies potentially affected by the project.

Water Quality Data: Water quality data for the streams and lakes of the analysis area provide important information to guide travel management, as well as a baseline for future monitoring of impacts and evaluation of potential influence on downstream water quality. We recommend the Draft EIS provide a summary of available information and monitoring data on water quality for the planning area, including parameters such as total suspended solids, total dissolved solids, dissolved oxygen, total nitrogen, total phosphorus, conductivity, temperature and those of interest for impaired waterbodies within or downstream of the project area. Physical aquatic habitat parameters may also be important indicators for determining a waterbody's current impairment or stress as well as its sensitivity to further impacts. Identification of any significant gaps in data may be helpful in developing the project monitoring plan.

Groundwater: Alluvial aquifers are very desirable water sources due to the potential quantity produced and shallow depth to the water. It is not uncommon to find public water system wells near rivers and streams. Since stream-sides can be official and/or unofficial vehicle routes, roads over the alluvial aquifer may leave the aquifer vulnerable to spills and runoff contaminants. Maintenance chemicals such as road salts and those used for dust suppression may also be a concern.

Groundwater may discharge to lakes and streams or be recharged by these water bodies. Shallow aquifers are more susceptible to contamination because a contaminant introduced at the surface may

more rapidly enter the system, and there is less intervening soil to adsorb the contaminants before they reach the groundwater. We recommend that the Draft EIS identify and briefly describe the shallow aquifers, including alluvial aquifers along streams and rivers, in the planning area. Please include available groundwater quality information, and identify which shallow aquifers are sources for public water systems, domestic wells or stock wells.

Public Drinking Water Supply Sources: Source water protection is a key issue to consider with travel management planning. In order to ensure that public drinking water supply sources (e.g., surface water sources, including groundwater under the direct influence of surface water (GWUDISW) sources, and groundwater sources) are protected from potential impacts associated with USFS-authorized activities in the planning area, it is important to identify where these sources are located. Therefore, the EPA recommends that the Draft EIS include a map depicting municipal supply watersheds¹ and source water protection areas for public water supply wells and surface water intakes (streams, rivers and reservoirs) in accordance with state data security requirements.

Please contact the Wyoming Source Water/Wellhead Protection Program for these GIS layers. Note that more specific maps available from the Wyoming program should be utilized by the USFS when locating specific project activities. Information for the Wyoming Source Water/Wellhead Protection Program may be found at <http://deq.wyoming.gov/wqd/source-water-wellhead/>. Program contacts may be found at <http://deq.wyoming.gov/wqd/water-wastewater/resources/contacts-4/>.

Once these resources are identified, we recommend that the document include an analysis of the potential impacts associated with runoff and travel management activities to drinking water sources. We also recommend that the Draft EIS include a discussion of design criteria and mitigation options for protecting these high value drinking water resources from potential project impacts.

Effects to Wetlands

We recommend that the Draft EIS include a description of the impacts that may result from project activities to wetlands, fens, riparian areas, and associated springs. Such impacts may include wetland disturbance and changes to supporting wetland hydrology. If impacts are anticipated, we also recommend that the Draft EIS describe how the USFS intends “to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands” as described in Executive Order (EO) 11990, Protection of Wetlands, including how wetlands will be identified and avoided, and how unavoidable impacts would be mitigated. To ensure that wetlands are protected to the greatest extent possible, it may be necessary to consider exclusion of roads or trails in areas where wetlands or riparian areas would be adversely impacted.

¹ Forest Service Manual (FSM2542) defines Municipal Supply Watersheds to include: “surface supply watersheds, sole source aquifers, and the protection zones around wells and springs.”

Discharge of dredged or fill material into waters of the United States, including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the U.S. Army Corps of Engineers (Corps) and the EPA. Please consult with the Corps to determine the applicability of CWA Section 404 permit requirements to wetlands that would be impacted in the planning area.

We recommend avoiding impacts to aquatic resources that are considered “difficult to replace” under the EPA’s and the Corps’ Final Rule for Mitigation for Losses of Aquatic Resources [33 CFR Parts 325 and 332; 40 CFR Part 230 (73 FR 19594, April 10, 2008)]. The rule emphasizes the need to avoid and minimize impacts to these “difficult-to-replace” resources and requires that any compensation be provided by in-kind preservation, rehabilitation, or enhancement to the extent practicable. We recommend restoration plans require that soil profiles and hydrology are re-established as much as possible to the original state. In addition, the EPA recommends the USFS consider the mitigation rule to protect aquatic resources even when a CWA Section 404 permit is not required.

Fen wetlands provide particularly important hydrological and water quality functions by improving water quality in headwater streams, and may support rare assemblages of aquatic invertebrates. They also provide critical ecological functions such as providing base flows to streams during late summer and/or drought periods. The U.S. Geological Survey has also determined that peat wetlands are especially efficient filters of metals dissolved in groundwater and surface water. The capacity to filter metals contributes to improved water quality by lowering dissolved metal content in streams (Owens, D.O., and Breit, G.N., 1995).

The EPA recognizes fen-type wetlands as ecologically critical in that they provide local and regional biodiversity. The U.S. Fish and Wildlife Service (USFWS) designated fen wetlands a Resource Category 1 with respect to the USFWS Peatland Mitigation Policy. The mitigation goal of USFWS Resource Category 1 is no loss of habitat values and the Peatland Mitigation Policy places the protection and avoidance of fen wetlands as a priority during CWA Section 404 reviews. Further underlining the uniqueness and importance of fen wetlands in Wyoming, the U.S Army Corps of Engineers carefully assesses and scrutinizes instances in which the use of Nationwide Permits are sought such that the unique wetland type peatlands/fens are protected. In the EPA’s view, these wetland ecosystems are, for all practical purposes, non-renewable and irreplaceable.

Based on information available from the Wyoming Game and Fish Department (WGFD), it appears that there may be fen-type wetlands in the planning area, which may indicate the presence of high-functioning wetlands. Fen communities are very sensitive to hydrologic alternations and restoration is extremely challenging once function has been impaired. Due to the slow rate of accumulation of peat in fens, these ecosystems are generally considered to be irreplaceable. We recommend that the Draft EIS include a description and acreage of fens within the planning area and whether they would be impacted by travel management activities. If none exist, then we recommend that be so noted. Additionally, in accordance with the goal of no overall net loss of the nation’s remaining wetland base for the CWA Section 404 regulatory program, we strongly recommend that both direct and indirect impacts to these highly valued resources be avoided.

Effects to Impaired Water Bodies

We recommend that the USFS (a) analyze potential impacts to impaired water bodies within and/or downstream of the planning area, including water bodies listed on the most recent EPA-approved CWA Section 303(d) list, and (b) coordinate with WDEQ if there are identified potential impacts to impaired water bodies (in order to avoid causing or contributing to the exceedance of water quality standards). Where a Total Maximum Daily Load (TMDL) exists for impaired waters in the area of potential impacts, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the USFS work with WDEQ to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired water bodies within, or downstream of, the planning area still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened water bodies be either carefully managed to prevent any worsening of the impairment or avoided altogether where such impacts cannot be prevented.

Impact of Roads on Water Quality

We recommend that the Draft EIS include a discussion of the following potential impacts associated with roads and trails: road drainage and surface erosion; sediment delivery to streams; culvert sizing and potential for washout; effects on stream structure and seasonal spawning habitats; road density; number of road/stream crossings; and road/trail encroachment on stream, riparian, and wetland habitats. We support the USFS's approach, as stated in the NOI, to provide a travel management system that will be consistent with the Forest Plan, Executive Orders 11644 and 11989 (Off-Road Vehicles on Public Lands), and the USFS's travel management regulations at 36 FR CFR 212 subparts B and C. Consistency with these requirements should allow the USFS to develop an appropriate list of mitigation measures to address the types of potential impacts that are the EPA's primary areas of concern regarding roads and watershed health.

Design Criteria, Mitigation and Monitoring

We support the development of design criteria, mitigation and monitoring measures to reduce the potential for aquatic resource impacts. The EPA recommends the USFS reduce impacts through the use of Best Management Practices (BMPs) and adaptive management strategies to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat. The inspection, maintenance and adjustment of BMPs will help protect groundwater and surface water resources. Possible mitigation measures to consider include the following:

- Minimize road construction and reduce road density to reduce potential adverse effects to watersheds;
- Locate roads away from streams and riparian areas, steep slopes, landslide prone areas, or erosive soils;
- Minimize the number of road/stream crossings;
- Monitor revegetation efforts on closed roads for five years to ensure success; and

- Require special protections, such as buffer zones or exclusion of motorized use, for areas with high quality riparian and wetland resources such as springs and fens and other sensitive water resources including impaired waterbodies or high resource value waterbodies.

We recommend that any mitigation be consistent with the 2008 Rule on Compensatory Mitigation for Losses to Aquatic Resources for CWA Section 404 related impacts.

(3) Air Quality

The EPA recommends that the Draft EIS evaluate how project activities could affect air quality. The primary air quality impacts of travel management are due to dust (particulate matter) emissions from soil disturbance and vehicle travel on unpaved roads. Motorized vehicles are also a source of emissions of nitrogen oxides and volatile organic compounds (which may contribute to ozone formation). The planning area is near or includes towns, CAA mandatory Class I Areas (e.g., Yellowstone National Park, North Absaroka Wilderness Area, and Washakie Wilderness Area) and Sensitive Class II Areas. In addition to the health-based National Ambient Air Quality Standards (NAAQS) that protect ambient air quality, mandatory Class I Areas are certain large national parks and wilderness areas that the CAA provides with special protection for air quality and air quality related values (AQRVs), including visibility. Sensitive Class II Areas are areas for which Federal Land Managers have identified air quality and/or visibility as valued resources. The EPA recommends that the Draft EIS disclose the current air quality conditions in and near the planning area, as well as potential air quality impacts associated with activities contemplated in the planning area.

We recommend that the USFS characterize existing air quality conditions to set the context for evaluating travel management impacts. To that end, we recommend the Draft EIS include the following:

- Identification of sensitive receptors in the vicinity (such as population centers, Class I Areas and Sensitive Class II Areas);
- Airshed classifications and baseline conditions at nearby population centers;
- Disclosure of any regional concerns in the area (such as particulate matter and/or ozone); and
- Trends in air quality/visibility at nearby Class I Areas over the past several years.

Such data are available from the WDEQ and/or the VIEWS site for air quality related values (AQRVs) (<http://views.cira.colostate.edu/web/>).

Information regarding current conditions will be an important tool for monitoring the impacts of the various project activities. Further, decision-makers will need to understand baseline conditions in an effort to ensure that Shoshone National Forest travel management activities, when combined with air quality impacts from non-project sources, do not adversely impact the NAAQS or AQRVs such as visibility. Using the information on existing air quality conditions, we recommend that the Draft EIS analyze the potential impacts that travel management activities may have on air quality and AQRVs.

(4) Enforcement

Enforcement of the travel management system is critical to the success of resource protection efforts. User-created routes generally have the greatest potential to impact watershed processes, water quality, and riparian health because they do not have properly designed and maintained drainage features. These routes may also cross sensitive wildlife habitat, unstable soils, or other fragile resources. Further, based on our understanding of other past travel management plans in our region, roads can prove difficult to permanently close.

Given these concerns, we recommend that the Draft EIS provide information about illegal motorized uses (e.g., on closed roads/trails or off-road use) within the Shoshone National Forest and a discussion regarding how the USFS will commit adequate funding and personnel to regulate unauthorized motor vehicle use. Further, we recommend that the Draft EIS include a monitoring plan for determining the effectiveness of travel management on the Shoshone National Forest, including prevention of user-created routes and success of road closures. Effectiveness monitoring is discussed in the January 2011 Council on Environmental Quality guidance on “Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact” (see <http://energy.gov/nepa/council-environmental-quality>). Such a monitoring plan will support Shoshone National Forest travel management by allowing the USFS to justify adaptations in response to any resource issues that may arise.

Other Considerations

Wildlife: Roads and motorized uses can increase wildlife encounters with humans, displace wildlife, reduce migration corridors, and degrade and fragment wildlife habitat. This can change wildlife behavior, increase stress, reduce reproductive success, reduce security, and increase wildlife mortality. We recommend that the USFS coordinate on these issues with the USFWS and the WGFD as it evaluates wildlife impacts associated with travel management for the Draft EIS. We recommend that the alternatives and analyses address the following issues: existing quality and capacity of wildlife habitat; impacts upon wildlife habitat including security, displacement, fragmentation and connectivity; and known wildlife corridors/trails and maintenance of wildlife movement corridors. We additionally recommend that the travel management analysis address mitigation measures such as speed limits to minimize disturbance of wildlife.

Special Status Species: Since the planning area may contain numerous special status species, including the Endangered Species Act-listed threatened species grizzly bear and Canada lynx, early coordination with the USFWS on this Draft EIS will be very important. Documentation of USFWS’s consultation and recommendations for design criteria, mitigation, monitoring, and adaptive management strategies will be a valuable addition to the Draft EIS.

Noxious Weeds: Management of noxious weeds is an important topic to address in travel management analysis since these species tend to gain a foothold where there are disturbances in the ecosystem, such as those related to road construction or motorized vehicle use on dirt roads and trails. In addition, Inventoried Roadless Areas are often reservoirs for native plants and warrant rigorous efforts to limit

invasive species impacts. We recommend the Draft EIS provide information on the current state of invasive species in the planning area and how each alternative would impact the problem. Specifically, we recommend that the Draft EIS describe how management actions will incorporate and fulfill the purpose and goals of the USFS's Rocky Mountain Regional Invasive Species Management Strategy to address invasive species through prevention; early detection and rapid response; control and management; and restoration and rehabilitation.

General Mitigation Information: We recommend that each alternative include identification of appropriate mitigation where impacts are expected. Where impacts are not avoidable, we recommend that an explanation be provided as to why these impacts are necessary to make the travel management system feasible. With these considerations in mind, we recommend the Draft EIS include the following information:

- Designation of the entity responsible for implementing the mitigation;
- A defined monitoring plan;
- Specific management decision points - based upon protecting the minimum desired environmental conditions (thresholds) in the planning area - which would trigger action;
- Management alternatives and mitigation measures that would be implemented should a threshold be exceeded;
- Identification of funding sources;
- Mechanisms for public disclosure of the analysis and management decisions; and
- Specific temporal milestones to meet rehabilitation standards.

Closing

We appreciate your consideration of our comments at this early stage of the process. These comments are intended to help ensure a thorough assessment of potential environmental impacts, adequate public disclosure, and an informed decision-making process. If further explanation of our comments is desired, please contact me at 303-312-6704, or your staff may contact Amy Platt, at 303-312-6449 or platt.amy@epa.gov.

Sincerely,



Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

