



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

NOV 10 2016

Ref: 8EPR-N

Tristram S. Post, District Ranger
Saguache Ranger District
Rio Grande National Forest
46525 State Highway 114
Saguache, Colorado 81149

Re: Draft Environmental Impact Statement for the La Garita Hills Restoration Management Project; CEQ #20160224

Dear District Ranger Post:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service's (USFS's) Draft Environmental Impact Statement (EIS) for the Rio Grande National Forest (RGNF) La Garita Hills Restoration Management Project (LGH Restoration Project). The USFS has prepared this Draft EIS in cooperation with the Bureau of Land Management (BLM). Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act (CAA).

Project Background

The LGH Restoration Project analysis area consists of approximately 179,000 acres of federally managed lands located in southcentral Colorado – specifically in Saguache County southwest of the town of Saguache. Approximately 145,700 acres of the analysis area are managed by the USFS and 33,300 acres are managed by the BLM. The analysis area also includes four Colorado Roadless Areas (CRAs). All proposed activities would occur only on federal lands. Proposed vegetation management activities to be implemented over a 10 to 15 year period include commercial timber harvest using ground-based logging equipment; thinning; prescribed burning; and tree planting. No new permanent roads would be constructed, but additional temporary roads would be needed for commercial timber harvest activities. All temporary roads would be closed and rehabilitated upon completion of these activities. All action alternatives also include the relocation or re-alignment of up to ten miles of selected road segments to improve watershed condition, reduce road maintenance needs, and/or reduce sedimentation.

Alternatives identified in the Draft EIS include the following:

- Alternative 1 (No Action);
- Alternative 2 (Preferred Alternative) includes up to 56,390 acres of commercial timber harvest and up to 64,725 acres of non-commercial treatments (e.g., thinning, prescribed burning, and

- cutting encroaching conifers out of upland meadows and riparian areas);
- Alternative 3 includes up to 18,155 acres of commercial timber harvest and up to 70,025 acres of non-commercial treatments similar to those described under Alternative 2; and
 - Alternative 4 includes up to 37,795 acres of commercial timber harvest and up to 45,060 acres of non-commercial treatments similar to those described under Alternative 2.

Comments and Recommendations

The EPA provided scoping comments for this project with a November 13, 2014 letter. We support the Draft EIS project design criteria and forest guidelines that will be implemented to reduce project impacts on resources, including efforts directed at watershed improvement. We particularly appreciate the inclusion of detailed design features to protect air resources and watersheds from potential impacts associated with prescribed fire and harvest activities. In addition, it appears that the closure and rehabilitation of temporary roads and the relocation/re-alignment of selected road segments may reduce sediment delivery to area streams.

Our remaining recommendations are intended to further inform the decision to be made and the public's understanding of potential impacts to public health and the environment. Based on our review of the Draft EIS, the EPA's comments and recommendations focus on issues related to (1) water resources including wetlands and (2) air quality. These issues serve as the basis for the EPA's EC-2 rating discussed in the closing of this letter.

(1) Water Resources Including Wetlands

The EPA considers protection of water resources to be among the most important issues to be addressed in the NEPA analysis for vegetation management activities. As outlined in the Draft EIS, we note that most treatments contemplated under the action alternatives (e.g., ground-based logging equipment, prescribed fire, and temporary road construction) have the potential to adversely impact aquatic resources, including surface and ground waters, wetlands, streams, riparian areas, and their supporting hydrology. We support the proposed LGH Restoration Project benefits to watersheds due to improvements from the relocation/realignment of road segments and the minimization of project impacts due to implementation of the project design criteria identified in Appendix D.2.

Public Drinking Water Supply Sources: Source water protection is a key issue to address in vegetation management activities. In order to ensure that public drinking water supply sources (e.g., surface water sources, including groundwater under the direct influence of surface water sources, and groundwater sources) are protected from potential impacts associated with USFS-authorized activities in the project area, it is important to identify where these sources are located. Therefore, the EPA recommends that the Final 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 (if none exist in the project analysis area, then so state in the Final EIS). Once these resources are identified, we recommend including an analysis of potential impacts to drinking water sources from USFS-authorized activities in the project area and mitigation options for protecting these high value drinking water resources. Note that more specific maps, available from the

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."

CDPHE, should be utilized by the USFS when locating future project activities. Please contact CDPHE Source Water Protection Program for more information and these Geographic Information System (GIS) layers.

Effects to Impaired Water Bodies: The Draft EIS includes a brief discussion of water quality within the project area based on the CDPHE's 2012 Clean Water Act (CWA) Section 303(d) list. We recommend that this discussion be updated for the Final EIS to analyze potential impacts to impaired water bodies both within and downstream of the analysis area, including water bodies listed on the most recent EPA-approved CWA Section 303(d) list, which is 2016. If impacts are anticipated, then coordination with CDPHE will be necessary to avoid causing or contributing to the exceedance of water quality standards. Where a Total Maximum Daily Limit (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 CDPHE 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 project 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.

Impacts to Water Quality and Watershed Function Due to Sediment Delivery to Streams: The Draft EIS includes a discussion of soil resources and estimates of erosion potential by treatment type. Based on timber harvests and prescribed broadcast burns proposed on high erosion potential soils, impacts to soil resources over the project implementation timeline would vary by alternative, as follows: Alternative 2 - 50,680 acres; Alternative 3 - 26,930 acres; and Alternative 4 - 30,460 acres. To reduce concerns associated with high erosion potential and detrimental soil disturbance, best management practices (BMPs), project design criteria (e.g., no mechanical treatments on slopes steeper than 40 percent), on-site soil analyses, and additional design criteria developed during the pre-implementation process would be implemented.

An erosion and sediment load analysis is particularly important given the potential water quality impacts that may result from accelerated surface erosion and sediment delivery in the project area, as well as downstream waterbodies that may be considered impaired for sediment based on the most recent EPA-approved CDPHE CWA 303(d) list. To fully disclose and, if necessary, mitigate the potential impacts of soil disturbance, we recommend that the Final EIS include an estimate of erosion rates and resulting impacts to water quality for each alternative. For example, the Wyoming BLM's Bighorn Basin Draft RMP/EIS estimated erosion rates based on projected amount of surface disturbance, types of surface disturbance and general characteristics of the basin (erodible soils, slopes, etc.). Erosion rates were calculated using the Water Erosion Prediction Project model (WEPP), a web-based interface developed by the U.S. Department of Agriculture, Agricultural Research Service, which can be accessed at <http://www.ars.usda.gov/Research/docs.htm?docid=18084&pf=1>. We recommend that the USFS consider using this model or another appropriate model that would be applicable to this project area. Based on such an analysis, the EPA may recommend that the USFS decision consider minimizing temporary sediment increases in an effort to ultimately achieve a net reduction in sediment loading. We note that Alternatives 3 and 4, with fewer acres of vegetation treatments on high erosion potential soils, would likely result in less soil effects.

Impacts to Water Resources from Roads: We support the project design criteria related to watershed protection, including requirements for road reconstruction to correct erosion or sediment problems that impact water resources. The Draft EIS Figures 3-5 show proposed treatment areas and haul routes by action alternative. We recommend expanding these maps and including a discussion to distinguish between the existing road network and miles of additional roads (e.g., new temporary roads and re-opened roads) that will be necessary to complete project activities, including those proposed in CRAs.

Wetlands: Existing resource conditions provide the basis for effective analysis of potential impacts. While the Draft EIS includes project design criteria, pre-implementation review, and monitoring intended to protect wetlands, it does not appear to provide information related to baseline wetlands condition or potential impacts associated with project activities. We recommend that the Final EIS include a discussion of the types, functions and acreage of wetlands, riparian areas, and springs in the project area. In addition, we recommend that the Final EIS include a description of the impacts to wetlands and associated springs that may result from project activities. Such impacts may include functional conversion of wetlands (e.g., forested to shrub-scrub); changes to supporting wetland hydrology (e.g., snow melt patterns, sheet flow, and groundwater hydrology); and wetland disturbance.

Fen Wetlands: Fen wetlands provide 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 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 Colorado, the U.S. Army Corps of Engineers revoked the use of Nationwide Permits in peatlands/fen-type wetlands to protect this unique wetland type. As you are aware, fen communities are very sensitive to hydrologic alterations and restoration is extremely challenging once function has been impaired. In the EPA's view, these wetland ecosystems are, for all practical purposes, non-renewable and irreplaceable due to the slow rate of accumulation of peat in fens.

Based on information available from the Colorado Natural Heritage Program, including the April 2016 report, "Fens Mapping for the Rio Grande National Forest," it appears that there are fen wetlands in the RGNF, which may indicate the presence of high-functioning wetlands. We recommend that the Final EIS include a description and acreage of fens within the project area and a description of potential impacts that could occur from LGH Restoration Project activities. Additionally, in accordance with the goal of no overall net loss of the nation's remaining wetland base for the Section 404 regulatory program, we strongly recommend that the Final EIS include requirements to avoid both direct and indirect impacts to these highly valued resources. If there are no fens located within the project area, then we recommend that the Final EIS state so.

Monitoring - We support the Appendix D.6, Key Resource Monitoring, requirements for monitoring of conditions that have the potential to impact water resources and water quality. We recommend the Final EIS include enhanced monitoring for impacts from project activities adjacent to high value water resources, as well as monitoring to assess effectiveness of road closures, range improvements, and revegetation in protecting aquatic resources.

(2) Air Quality

The Preferred Alternative 2 proposes a large amount of acreage for potential prescribed fire treatment, including pile burning, over a 10 to 15 year project implementation timeframe. The Draft EIS includes a qualitative discussion of emissions associated with pile burning and describes prescribed fire use guidelines (e.g., Appendix D.5, Silviculture-Prescribed Fire Guidelines for Project Implementation). In order to fully describe potential short-term impacts, we recommend that the Final EIS include a discussion of the estimated acreage, by year, to receive prescribed fire treatments and an estimated number of piles to be burned, by year, of the 10 to 15 year implementation timeframe for each alternative. We also recommend the Final EIS include more detail regarding potential short-term air quality impacts associated with pile burning. For an example disclosure of air quality impacts associated with pile burns, please refer to the Black Hills National Forest's Calumet Project Final EIS (see the Fire and Fuels Section, p. 159). This document provides an estimate of PM_{2.5} emissions for an average size burn pile. Finally, we suggest the Final EIS include a discussion of how the La Garita Hills process for implementing prescribed fire treatments corresponds with the Interagency Prescribed Fire Planning and Implementation Procedures Guide (April 2014).

Other Considerations

Documentation of the U.S. Fish and Wildlife Service (USFWS) Recommendations: The Draft EIS confirms that the Endangered Species Act (ESA)-listed threatened Canada lynx is present on the RGNF. Under all action alternatives, the Canada lynx is identified as likely to be adversely affected by the proposed project on USFS lands due to negative effects on lynx habitat. Design criteria have been incorporated to reduce or minimize impacts from vegetation treatments on high quality lynx habitat. The Draft EIS notes that Preferred Alternative 2 would likely have the largest impact on Canada lynx since it proposes more acreage for vegetation treatments than contemplated under Alternatives 3 or 4.

We recognize that the USFS will discuss with the USFWS its project determinations and findings for ESA-listed species. Documentation of the USFWS's consultation and concurrence, along with its recommendations for project design criteria, mitigation, and monitoring will be a valuable addition to the Final EIS.

Closing

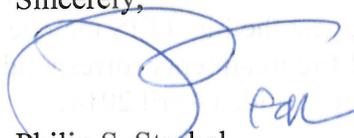
Consistent with Section 309 of the CAA, it is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based on the procedures the EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed project, the EPA is rating the Draft EIS as Environmental Concerns – Insufficient Information (EC-2). The "EC" rating indicates that the EPA review has identified environmental impacts that need to be avoided in order to fully protect the environment. The "2" rating indicates that the EPA has identified additional information, data, analyses, or discussion that we recommend for inclusion in the Final EIS. A description of the EPA's rating system can be found at: <http://www2.epa.gov/nepa/environmental-impact-statement-rating-system-criteria>.

Due to the decreased acreage proposed for commercial timber harvest and non-commercial treatments, it appears that both Alternatives 3 and 4 would have reduced impacts to water resources and air quality when compared to the Preferred Alternative 2. The USFS may want to consider revising the Preferred

Alternative in the Final EIS to include reduced acreages for the specific treatment types that have the greatest water resources and air quality impacts. In addition, we are aware that the RGNF is in the process of updating its Forest Plan with completion expected in May of 2018. Since this timeframe is well within the 10 to 15 year implementation horizon of the LGH Restoration Project, we recommend consideration of the updated Forest Plan standards and guidelines relevant to this type of project, when available.

We appreciate the opportunity to participate in the review of this project, and are committed to working with you as you prepare the Final EIS. If we may provide further explanation of our comments during this stage of your planning process, 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