



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Brad Little, Governor
Jess Byrne, Director

November 29, 2021

By email: Chandra.neils@usda.gov

Chandra Neils
US Forest Service Idaho Panhandle National Forest, Supervisors Office
3232 W. Nursery Road
Coeur d'Alene, ID 83815

Subject: Idaho Department of Environmental Quality Comments on the proposed Rosie Cedar Project.

Dear Ms. Neils:

The Idaho Department of Environmental Quality (DEQ) has reviewed the Environmental Assessment (EA) and supporting project documents for the Rosie Cedar Project (Project). We offer the following comments:

Considering the frequency and intensity of recent fires in North Idaho and Eastern Washington, DEQ understands the urgency for a change in forest management on federal lands in North Idaho. Persistent excessive fuel loading and poor forest health has increased the risk of catastrophic fires forest-wide, which could result in a significant increase in hydrologic yield and erosion, causing water quality degradation in receiving waterbodies. Therefore, large-scale forest management for protection from catastrophic fire is understood to decrease the risk to water quality in North Idaho. However, large-scale forest management must be designed and implemented such that Idaho's beneficial uses are protected, regardless of changes to fire risk. As proposed, it is not clear whether the Project adequately protects Idaho's beneficial uses.

Consistency with Total Maximum Daily Loads

Project activities must be consistent with applicable Total Maximum Daily Loads (TMDL) for streams in the Project area (IDAPA 58.01.02.055.05). Where TMDLs require a load reduction, the proposed activity must show a net decrease in the pollutant(s) of concern, and the full amount of load reduction should occur within a reasonable timeframe.

Subwatersheds affected by the Project are Cedar Creek, Rose Creek, and Fourth of July Creek.

These waterbodies are listed in Idaho's 2018/2020 Integrated Report¹ as not supporting beneficial uses and are under the constraints of a TMDL to restore beneficial uses. In the EA, the USFS inaccurately identifies impaired waterbodies within the Project boundaries as listed in Idaho's 2018/2020 Integrated Report, and inaccurately identifies all TMDLs applicable to waterbodies in the Project area. See Table 1 for accurate information. DEQ requests this information be corrected in all subsequent documentation. DEQ also requests USFS describe how the Project will be consistent with all applicable TMDLs.

Table 1. Beneficial use status of waterbodies within the Rosie Cedar Project area.

Creek Name	Assessment Unit	Pollutant Impairment for Aquatic Life	Pollutant Impairment for Salmonid Spawning	TMDL
Cedar Creek	ID17010303PN030_02	Temperature Sediment	Temperature	² Sediment ³ Temperature
Fourth of July Creek	ID17010303PN020_02 ID17010303PN020_03	Habitat Alteration Temperature	Temperature	³ Temperature
Rose Creek	ID17010303PN021_02	Sediment, Temperature	Temperature	³ Temperature

As shown in Table 1, applicable TMDLs for the Rosie Cedar Project are:

1. The *Coeur d'Alene Lake and River Subbasin Assessment and TMDL (DEQ 1999)* in which a 178 ton/year sediment load reduction is required from the US Forest Service property in the Wolf Lodge Creek watershed. Cedar Creek is a tributary to Wolf Lodge Creek and is included in the TMDL.
2. *Coeur d'Alene Lake Tributaries Temperature Total Maximum Daily Loads: Addendum to the Coeur d'Alene Lake and River Subbasin Assessment and TMDL (DEQ 2012)* in which solar load reductions (through improvements in riparian shade) are required for stream segments of concern on Cedar Creek, Fourth of July Creek, and Rose Creek.

It is unclear from the *Rosie Cedar Project Analysis of Project Effects to Water Resources* (hereafter Water Resources Report) what the total short-term increase and total long-term reduction in sediment delivery to Cedar Creek would be the result of Project activities. As such, DEQ cannot determine if a net decrease in sediment delivery will occur in Cedar Creek and

¹ <http://mapcase.deq.idaho.gov/wq2020/>

² *Coeur d'Alene Lake and River (17010303) Sub-basin Assessment and Proposed Total Maximum Daily Loads (DEQ 1999).*

³ *Coeur d'Alene Lake Tributaries Temperature Total Maximum Daily Loads: Addendum to the Coeur d'Alene and River Lake Subbasin Assessment and TMDL (DEQ 2012).*

whether Project activities in the Cedar Creek subwatershed will be conducted in a manner consistent with the TMDL. Modeling results as summarized in the Water Resources Report indicate *“a slight localized increase in sediment delivery focused mainly a haul route stream crossings”*. In the long term, the road maintenance, storage, and decommissioning would reduce sediment delivery to Cedar Creek by less than 0.1 ton/year (page 20, Water Resources Report). It is difficult to determine from the Water Resources Report if there is an additional long-term reduction in sediment delivery in the Cedar Creek subwatershed (above the less than 0.1 ton/year) from other Project activities.

The 0.9 ton/yr total cumulative sediment reduction to streams in the Project area include load reductions outside the Wolf Lodge Creek subwatershed (page 22, Water Resources Report). For example, decommissioning efforts on 1.6 miles of Forest Service Road 1545UDA will be within the Fourth of July Creek subwatershed, and load reductions from decommissioning this road cannot be counted toward the 178 ton/year sediment reduction requirements of the Wolf Lodge Creek Sediment TMDL.

DEQ reminds the USFS that any Project operational modifications to the Riparian Habitat Conservation Area (RHCA) on Cedar, Fourth of July, and Rose Creeks must comply with the Idaho Forest Practices Act streamside tree retention rule or “Shade Rule” standards (IDAPA 20.02.01) and be consistent with *Coeur d’Alene Lake Tributaries Temperature Total Maximum Daily Loads: Addendum to the Coeur d’Alene Lake and River Subbasin Assessment and TMDL (DEQ 2012)*. This pertains to areas where treatment units overlap with RHCA’s on Class I streams and where prescribed burning is allowed to “creep” into outer edges of RHCAs (as described on pages 19-20 in the Water Resources Report).

DEQ further requests USFS clarify what specific activities will be allowed within the RHCAs (i.e., pruning, thinning, burning, and road construction or maintenance activities). Activities occurring within the RHCA may increase thermal loading to surface water if shade-providing features are permanently removed. Please discuss how activities occurring in the RHCAs may affect thermal loading to surface water, and whether these activities are consistent with temperature TMDLs.

Roads and Road Crossings

The EA and supporting documents do not describe in detail the net gain or loss of roads or related infrastructure (e.g., culverts or bridges). What is the total mileage of non-stored roads within the project area, currently? What will be the net mileage of non-stored roads within the project area, post-activity?

Three new permanent road crossings are proposed. Will any road crossings be permanently removed? What will be the net number of stream crossings within the project area, post-activity?

The *Design Features* report, *Aquatics* section, item 3 states “Newly constructed or reconstructed roads do not encroach into stream and riparian areas in ways that impact channel function, geometry or sediment delivery (IPNF Forest Plan 2015, FW-DC-AR-07).” The reference, IPNF Forest Plan 2015⁴, FW-DC-AR-07 states, “A transportation system is in place that provides safe and efficient public and administrative access to the Forest for recreation, special uses, forest resource management, and fire management activities. It is efficiently maintained, environmentally compatible, and responsive to public needs and desires. The transportation system and its use have minimal impacts on resources including threatened and endangered species, sensitive species, heritage and cultural sites, watersheds, and aquatic species. Newly constructed or reconstructed roads do not encroach into streams and riparian areas in ways that impact channel function, geometry, or sediment delivery. Roads in intermittent stored service pose minimal risks to water quality and aquatic ecosystems. Drainage structures have a minimal risk of failure and provide adequate drainage that prevents accelerated runoff, erosion, and sediment delivery to streams. In addition, stream crossings provide for passage of aquatic organisms. Unauthorized roads and trails are no longer created.” Neither document specifies how USFS will determine the threshold at which encroachment into streams and riparian areas does in fact impact channel function, geometry, or sediment delivery in the project area.

The Water Resources Report, page 15, last paragraph states, “Sediment contributions from roads would remain largely unchanged from the existing condition. While periodic road maintenance would occur on some roads as part of the ongoing road maintenance program, due to very limited budgets, the amount and intensity of maintenance activities would be substantially less than under the proposed action. Roads would continue to provide chronic sources of sediment to streams, and undersized/failing culverts would continue to degrade stream channels and aquatic habitat. The failing stream crossing on Forest Service Road 1545UDA would continue to contribute several tons of sediment to Rose Creek in the long-term and other stream crossing culverts on the road would present a high risk of failure. As a result, the no action alternative could result in more sediment delivery from roads as well as a higher risk of culvert failures than the proposed action.” Given “very limited budgets,” please clarify how USFS can be certain that new roads will not contribute additional sediment as they age. How and when will these roads be maintained throughout their lifetime? For example, will the future implementation of maintenance activities to be limited as secondary goals of these larger projects, as opposed to primary goals occurring on a regular schedule?

The Water Resources Report, page 16, third paragraph states, “Within three years of project completion (including site preparation and planting), temporary roads would be rendered hydrologically stable through recontouring/obliteration (BMP #15.25).” This seems to imply

⁴ United States Department of Agriculture. 2015. Land Management Plan 2015 Revision, Idaho Panhandle National Forests. Found at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3826554.pdf

that at least some portions the 11 miles of temporary roads may not be hydrologically stable for up to three years after the project. Please clarify whether this is accurate.

The Water Resources Report, page 16, third paragraph states, “7.2 miles of new permanent system road would be built within a 300-foot sediment delivery distance of streams.” What effort was made by the USFS to avoid construction within the 300-foot delivery distance?

Does a comprehensive itemized list of road improvement needs exist for this project (e.g., locations of culverts to be replaced)?

DEQ requests alternative upslope road locations be secured in lieu of the proposed seven miles of new permanent system road within a 300-foot sediment delivery distance of streams. The permanent roads as proposed would include 22 stream crossings (*Rosie Cedar Fisheries Resource Report*, page 17). The *Rosie Cedar Fisheries Resource Report* (hereafter Fisheries Report) states “*higher road densities within 300 feet of streams and stream crossing frequencies can affect fish habitat, because they can cause modified stream flows and more readily contribute sediment to streams.*” The Project area was determined to have a “moderate” level of road density disturbance within 300 feet of streams (Fisheries Report, page 11). DEQ requests that the USFS follow its own directive in the Idaho Panhandle National Forests Land Management Plan to “trend 20 of subwatersheds that have a condition rating of “moderate” or high” toward a better condition through the removal or mitigation of risk factors that are within reasonable control of management” (Fisheries Report, page 11). Adding new permanent roads within the 300-foot distance would not meet this objective.

Compliance with Idaho Forest Practices Act

Project activities must comply with the rules pertaining to the “Idaho Forest Practices Act” (IDAPA 20.02.01) under Idaho Code §38-13 (Forest Practices Act [FPA]) using modern BMPs and site-specific design features to protect aquatic habitat and water quality. DEQ commends the USFS for compliance during the 2016⁵ Idaho Interagency Forest Practices Act Water Quality Audit. However, the Interagency Audit looks at compliance in timber sales, *not in areas where there were no timber sales*. DEQ argues that current road maintenance operations in the Project area (Alternative A in the EA) do not meet road maintenance directives under the Idaho Forest Practices Act to minimize disturbance and damage to water quality and fish habitat (IDAPA 20.02.01.04). Under the existing condition (Alternative A in the Project EA) “*Roads would continue to provide chronic sources of sediment to streams, and undersized/failing culverts would continue to degrade stream channels and aquatic habitat*” (Water Resources Report, page 15). DEQ believes the annual road maintenance objectives under the current USFS Idaho Panhandle National Forests Land Management Plan (USDA FS 2015) targeting only 15-20

⁵ Idaho Department of Environmental Quality. 2016. Idaho 2020 Interagency Forest Practices Water Quality Audit.

percent of Operational Maintenance roads is resulting in the deteriorating road conditions and associated chronic sedimentation across the Idaho Panhandle National Forest. This may not include deteriorating road systems/infrastructure in storage that may be at risk of failure or are in a condition of failure with resulting sedimentation to adjacent waterbodies. Maintenance of existing USFS road infrastructure should not be contingent on a timber sale. Therefore, DEQ requests no new roads or reconstructed roads be built within the Project boundaries until the existing active/stored road infrastructure is brought under compliance of the Idaho Forest Practices Act using contemporary BMPs, and adherence to site-specific design features as described in the EA. This is regardless of whether Alternative A or B are selected. In addition, those roads must be maintained under the life of the project and thereafter under the Idaho Forest Practices Act to minimize disturbance and damage to water quality and fish habitat (IDAPA 20.02.01.04).

DEQ commends the USFS for exceeding the Class I and Class II Stream Protection Zones as defined in the Idaho Forest Practices Act (IDAPA 20.02.01.59) by using RHCAs. DEQ agrees that preserving integrity of RHCAs would retain the canopy cover, thus prevent additional solar loading, and further degradation of water quality with respect to temperature. RHCAs also provide additional buffer from runoff-induced erosion and sedimentation.

Phased Planning/Implementation with Consideration of Cumulative Effects

Project planning and implementation should be conducted in a phased approach with clear spatial and temporal controls over the life of the Project. This, in addition to targeted monitoring and adaptive management, will minimize cumulative effects from activities within the Project boundaries and will ensure protection of habitat and water quality for short-term persistence of sensitive aquatic populations and for long-term stability, productivity, and biological diversity in the aquatic resources.

As currently written in the EA and supporting documents, the USFS does not commit to phased road construction/maintenance and timber treatment prescription activities with proper spatial and temporal controls to minimize water and sediment yield to receiving waterbodies and to Coeur d'Alene Lake. DEQ requests the USFS, to the greatest extent possible, make the commitment to phase planning and implementation of timber harvest activities and road/construction within each subwatershed with clear spatial and temporal controls to ensure minimized water and sediment yield to receiving waterbodies, particularly Cedar Creek, and to Coeur d'Alene Lake.

Over a period of 10 years, the USDA Forest Service (USFS) proposes clearcut harvests on an estimated 1,779 acres (100 % canopy removal), seedtree harvest on approximately 1,205 acres (with estimated 90% canopy removal), and shelterwood harvest with reserves on

approximately 428 acres (estimated 80% canopy removal). Canopy removal estimates were taken from USFS, 2019⁶. Much of this activity would occur in the Cedar Creek subwatershed, where activities would affect 16.4 percent of the subwatershed. DEQ is concerned a subsequent increase in peak stream flows resulting from the project may affect the channel form and function of Cedar Creek. In addition, the Project may result in significant temporary increase of sediment to Coeur d'Alene Lake.

With 80 percent or greater removal of canopy cover on over 2,984 acres of federal ground, DEQ would like more assurance than predictions in the EA for water yield and peak flow for these subwatersheds. Therefore, DEQ requests a phased approach be coupled with targeted hydrologic and water quality monitoring and adaptive management to ensure protection of habitat and water quality for short-term persistence of sensitive aquatic populations and for long-term stability, productivity, and biological diversity in the aquatic resources inside and out of the Project area boundaries.

The Water Resources Report indicates 17 percent of the Cedar Creek subwatershed is already in an "open" condition due to recent timber harvest or land clearing. The current condition is a 10-11 percent increase in peak stream flow over the unharvested condition (page 14). As a result of Project activities, Cedar Creek will experience a 3-5 percent increase in water yield over existing conditions and a *14-16 percent cumulative increase in peak stream flows over unharvested conditions* (DEQ staff estimate).

It is stated in the Water Resources Report that the lower ¼ mile of South Fork Cedar Creek and several sections of main fork Cedar Creek may be susceptible to this increase in peak stream flows which in turn may affect channel form and function. This vulnerability was dismissed with USFS data indicating the existing stable banks and channel of Cedar Creek would be maintained when subject to such an increase in peak stream flows. However, 2015 DEQ BURP data on Cedar Creek downstream of the USFS boundary indicate it is currently not supporting the cold-water aquatic life and salmonid spawning beneficial uses due to poor habitat condition including unstable/uncovered banks, embeddedness, and channel incision. DEQ requests the USFS re-run models with DEQ data to be certain existing stream bank stability, water quality, and stream channel function of lower Cedar Creek will be maintained under the proposed increase in peak stream flows.

Watershed Restoration

DEQ requests USFS consider design and implementation of watershed restoration activities in the project area. Restoration activities that meet the objectives of the existing sediment and temperature TMDLs should be given priority.

⁶ United States Department of Agriculture, Forest Service 2019. Buckskin Saddle Project Hydrology Report.

Recently, congress passed the federal Bipartisan Infrastructure Bill, which may provide funding to the agency. Please consider prioritizing restoration activities as funding is made available.

All Burning Must Conform to Montana Idaho Airshed Group Operating Guide

All burning activities are expected to conform to all Montana Idaho Airshed Group Operating Guide requirements and use DEQ-recommended BMPs.

All burning, whether underburning or pile burning, is expected to conform to all Montana Idaho Airshed Group Operating Guide requirements including but not limited to requirements of; registration, request to burn, and the burn approval processes - regardless of the season that burning occurs. DEQ anticipates Idaho specific rules pertaining to all prescribed fire activity, (natural fuels and activity fuels), to be enacted at some point during the implementation of the Buckskin Saddle project. Please be sure to update any burn plans as appropriate as these rules become effective.

DEQ appreciates the IPN Forest's Burn Boss's consistent consideration and use of appropriate smoke management practices throughout their past projects. Although the Buckskin Saddle project is relatively remote, mop-up considerations and actions should be included in each fire plan to prepare a response to any unintended smoke impacts that underburning could have on other prescribed fire activity in the area, such as private or state forest management burning. Increased monitoring of smoke impacts by deploying PM2.5 monitors from the Region 1 cache in downwind populated areas is highly recommended as well.

DEQ Recommended BMPs

Use of emission reduction techniques should be considered for every forest plan project that includes areas to be treated by burning due to the potential to provide air quality protection, not just in the immediate vicinity, but also at downwind populated locations and Mandatory Class 1 Areas. DEQ requests IPN Forest consider and apply appropriate emission reduction techniques for burning that occurs during the Project. Specifically, in the areas around main forests roads where accessibility allows the consideration of mechanical treatments to complete, and credit, emission reduction efforts for the IPN Forest:

- The use of mechanical removal may eliminate or limit the need to burn in these easily accessible areas offering overall emission reductions for the Forest.
- Mechanical treatment and redistribution of material avoids smoke impacts to public land users during summer and early fall seasons.
- Treating fuels in easily accessible areas by using alternatives to burning extends the season for fuel treatment projects in the Forest.

- By reducing these fuels during times of higher fire danger this would relieve the IPN Forest's strain on personnel resources later in the fall when other prescribed burning must occur.

Agency Coordination

DEQ appreciates USFS coordination with DEQ staff. Please consider including DEQ surface water staff in project area walk-throughs as site-specific design features are considered by planning and engineering staff, particularly regarding work within stream channels and RHCA's.

If you have questions regarding these comments, please contact Chantilly Higbee by calling (208) 769-1422 or via email at Chantilly.Higbee@deq.idaho.gov.

Sincerely,

A handwritten signature in cursive script, reading "Chantilly Higbee".

Chantilly Higbee
Water Quality Compliance Officer
Idaho Department of Environmental Quality