



February 7, 2020

Michelle Norton
US Forest Service Idaho Panhandle National Forest, Sandpoint Ranger District
1602 Ontario Street
Sandpoint, ID 83864

Subject: Idaho Department of Environmental Quality Comments on the Buckskin Saddle Integrated Restoration Project

Dear Ms. Norton:

Idaho Department of Environmental Quality (DEQ) has reviewed the Environmental Assessment and Resource Reports for the Buckskin Saddle Integrated Restoration Project. Below are our comments on this proposed project.

In light of 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 has increased the risk of catastrophic fires forest-wide, which could result in 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 be beneficial to water quality in north Idaho.

The proposed forest management plan on approximately 19,869 acres in the Buckskin Saddle Integrated Restoration Project (Project) seems an unprecedented size for the Panhandle region. Over a period of 15 years, the USDA Forest Service (USFS) proposes seedtree harvest on approximately 4,699 acres (with estimated 90% canopy removal) and shelterwood harvest with reserves on approximately 7,897 acres of (estimated 80% canopy removal). DEQ is concerned about cumulative effects of such a project within Project area boundaries and the potential for excessive hydrologic yield, erosion, and sedimentation in receiving waterbodies. DEQ is also concerned about the effect on air quality from prescribed burning efforts. To address our concerns, DEQ requests the following:

1. Project activities must comply with Idaho Water Quality Standards Antidegradation Policy (IDAPA 58.01.02.051).

2. 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.
3. Project activities must be consistent with restrictions of applicable Total Maximum Daily Loads (TMDL) for streams in the Project area.
4. Project planning and implementation should be 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 threatened and sensitive aquatic populations and for long-term stability, productivity, and biological diversity in the aquatic resources.
5. All burning activities are expected to conform to all Montana Idaho Airshed Group Operating Guide requirements, and use DEQ-recommended BMPs.
6. Annual programmatic planning will include coordination meetings between DEQ and USFS to discuss results from the previous year (including monitoring), and establish clear objectives for the coming year’s operations, including monitoring plans and protocols, and adaptive management strategies.

Comply with Idaho Water Quality Standards Antidegradation Policy

Idaho Water Quality Standards Antidegradation Policy assures minimum (Tier I) protection for all waterbodies, generally ensures that all applicable water quality criteria are met, and requires that water quality be maintained such that the beneficial uses of the water are supported. Waterbodies with this protection may already be of lower quality (IDAPA 58.01.02.051). Major watersheds affected by the Buckskin Saddle Project are Twin Creek, Johnson Creek, Granite Creek, Dry Creek, and the lower Clark Fork. The nearshore waters of Lake Pend Oreille may also be affected. These waterbodies are listed in Idaho’s 2016 Integrated Report as not supporting beneficial uses and are under the constraints of a Total Maximum Daily Load to restore beneficial uses (Table 1). However, recent data from Beneficial Use Reconnaissance Program (BURP) and Idaho Department of Fish and Game (IDFG) westslope cutthroat trout, bull trout, and bull trout redd monitoring indicate Johnson Creek, Twin Creek, and Granite Creek may currently fully support aquatic life and salmonid spawning beneficial uses. Furthermore, IDFG data indicate Granite Creek is a stronghold for bull trout. Therefore, forest management and road construction/maintenance activities under the Project should not degrade conditions in these and other creeks in the Project area to ensure protection of habitat and water quality for short-term persistence of these threatened and sensitive aquatic species and for long-term stability, productivity, and biological diversity in the Project area streams.

Table 1. Beneficial use status of waterbodies within the Buckskin Saddle project area.

Creek Name	Assessment Unit	Pollutant Impairment for Aquatic Life	Pollutant Impairment for Salmonid Spawning	TMDL
Granite Creek Dry Gulch Tom's Gulch	ID17010214PN027_02, ID17010214PN027_03	Temperature	Temperature	¹ Temperature
Johnson Creek	ID17010213PN019_02	Sediment, Temperature	Sediment, Temperature	² Sediment ² Temperature
Johnson Creek	ID17010213PN019_03	Sediment, Temperature	Temperature	² Temperature
Derr Creek	ID17010213PN001_02	Not Assessed	Not Assessed	N/A
Dry Creek	ID17010213PN004_02a	Temperature	Temperature	² Temperature
Twin Creek Delyle Creek	ID17010214PN004_02	Sediment	Sediment, Temperature	² Sediment ² Temperature
Lake Pend Oreille	ID17010214PN018L_0L	Phosphorus Flow Alteration Mercury	Phosphorus	³ Phosphorus

¹ Pend Oreille Lake Tributaries Temperature Total Maximum Daily Loads: Addendum to the Pend Oreille Lake Subbasin Assessment and TMDL (DEQ 2007).

² Lower Clark Fork River Subbasin Assessment and Total Maximum Daily Loads (DEQ 2007).

³ Nutrient TMDL for the Nearshore Waters of Lake Pend Oreille, ID (DEQ 2002).

Project Activities Comply with Idaho Forest Practices Act

DEQ commends the USFS for a rating of 97 percent compliance during the 2016 Idaho Interagency Forest Practices Act Water Quality Audit and 99 percent compliance with BMP rules since 1996 when BMPs are properly installed (DEQ 2016). However, the Interagency Audit looks at compliance in timber sales, not in areas where there were no timber sales. The USFS annual road maintenance objectives under the current Idaho Panhandle National Forests Land Management Plan target 15-20 percent of Operational Maintenance roads that “are drivable by passenger vehicles and provide primary access to many recreation opportunities” (USDA FS 2015). DEQ agrees that Alternative I would leave streams in the Project area vulnerable to chronic sedimentation from deteriorating road systems and periodic road/culvert failures. DEQ argues that current maintenance operations in the Project area under Alternative I would not meet the 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).

DEQ commends the USFS for obligating additional resources under Alternative 2 for priority maintenance of 173 miles of existing roads in the project area and for the proposed rerouting of 800 feet of road away from Granite Creek. DEQ reminds USFS that 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 also 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 Riparian Habitat Conservation Areas (RHCAs). DEQ agrees that preserving integrity of RHCAs would retain the canopy cover, thus prevent additional solar radiation and further degradation of water quality with respect to temperature. RHCAs also provide additional buffer from runoff-induced erosion and sedimentation.

Project Activities Consistent With Applicable TMDLs

According to Idaho state law, once a TMDL is developed, actions causing new or increased discharge of pollutants must be conducted in a manner consistent with the TMDL. If the TMDL requires a load reduction, then 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. DEQ requests priority road maintenance activities under Alternative 2 be done within the Twin Creek and Johnson Creek watersheds prior to initiation of Project activities within those watersheds using contemporary BMPs, adherence to site-specific design features as described in the Project EA, and in compliance with the Idaho Forest Practices Act. This will minimize existing delivery of sediment to these stream networks and fulfill a portion of sediment load reductions required for Twin Creek and Johnson Creek in the *Lower Clark Fork River Subbasin Assessment and Total Maximum Daily Loads* (DEQ 2007).

Approximately 65 miles of roads currently in storage would be reopened with 14 stream crossings. New road construction for the project area would contribute 11 new stream crossings and ¼ mile of road segment located close enough to waterbodies to deliver sediment. WEPP:Road modeling results as summarized in page 17-19 of the EA Hydrology Report indicate minimal sediment delivery to the stream network in the Project area from these activities. These offsets are consistent with the TMDL provided that 1) priority maintenance on the existing road system in the watershed is done prior to initiation of these activities, 2) the construction adheres to site-specific design features with modern BMPs as directed by Idaho Forest Practices Act, and 3) proper road maintenance would occur through the life of the road system as directed by Idaho Forest Practices Act.

DEQ reminds the USFS that any operational modifications to the RCHA under the Project must comply with the Idaho Forest Practices Act streamside tree retention rule or “Shade Rule” standards (IDAPA 20.02.01), and be consistent with *Pend Oreille Lake Tributaries Temperature Total Maximum Daily Loads: Addendum to the Pend Oreille Lake Subbasin Assessment and TMDL* (DEQ 2007). This pertains to areas where pre-commercial thinning units overlap with RHCA’s on Class I streams (RCHA units in the Project Area are defined in bullet #2 under the Aquatics section of the Project Design Features, Appendix A of EA), and where prescribed burning is allowed to “creep” into outer edges of RCHAs (as described in bullet #3 under the Aquatics section of Project Design Features, Appendix A of EA).

Phased Planning/Implementation with Consideration of Cumulative Effects

Both the Fisheries Report and the Hydrology Reports for the Project indicate the bulk of environmental consequences both direct, and indirect and cumulative, are due to fuel buildup, an increase in tree mortality and road construction and maintenance activities. As currently written in the EA and specialist reports, the USFS commits to phased road construction/maintenance activities with proper spatial and temporal controls to minimize water and sediment yield to receiving waterbodies. For example, page 22 of the Hydrology Report states of the 65 miles of re-opened and 30 miles of new road construction:

“would not be implemented all at the same time. Road density increases would be limited to some extent by design features, which control how many miles of road are reopened or constructed at any one time before others are returned to a stored condition . . . The re-opening of stored roads and construction of new roads would be limited so that all the miles of new and re-opened road are not present on the landscape at any one time”.

Unlike road construction/maintenance activities, timber harvest prescription design features in the EA give only limited temporal restrictions to such activities. DEQ requests the USFS, to the greatest extent possible, make this same commitment in the design features of the EA to phase planning and

implementation of timber harvest activities within each watershed with clear spatial and temporal controls to ensure minimized water and sediment yield to receiving waterbodies. With 80 percent or greater removal of canopy cover on over 12,500 acres of federal ground, DEQ would like more assurance than predictions in the EA for water yield and peak flow for these watersheds. As stated in the Hydrology Report, there are many limitations to predicting water yield using the Equivalent Clearcut Area (ECA) calculator. Most concerning, they do not take into account wet and high snowmelt seasons and extreme precipitation events such as high intensity rain or rain-on-snow events. Additionally, the ECA calculator does not discriminate between soil moisture or runoff complexities.

Cumulative effects analyses results in the EA and EA specialist reports consider other disturbances that have occurred or are occurring outside the Project area. With 80 percent or greater removal of canopy cover on over 12,500 acres of federal ground, DEQ argues cumulative effects need to be considered *inside* the Project area boundaries as well. A phased approach to planning and implementation of road construction/maintenance and timber harvest activities as mentioned above will help with this consideration. DEQ also requests the 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 threatened and sensitive aquatic populations and for long-term stability, productivity, and biological diversity in the aquatic resources inside and out of the Project area boundaries. DEQ will assist the USFS with the monitoring design and Quality Assurance Project Plan for such monitoring.

Although streams in the Hydrologic Report are more resilient to increased water yield due to their slope and geomorphic character, downstream cumulative effects are a concern. Both Twin Creek and Johnson Creek are more depositional as they reach valley floor of the Clark Fork River. Significant increase in sediment yield from the upper watershed could result in depositional features and channel adjustment to accommodate excess sediment load. A significant increase in sediment yield in Granite Creek could affect the nearshore waters of Lake Pend Oreille, where aquatic life and salmonid spawning beneficial uses are already impaired.

All Burning Expected to Conform to all Montana Idaho Airshed Group Operating Guide

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

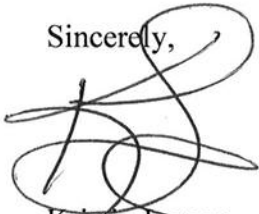
requests IPN Forest consider and apply appropriate emission reduction techniques for burning that occurs during the Project. Specifically, in the areas around main forests roads where accessibility allows the consideration of mechanical treatments to complete, and credit, emission reduction efforts for 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.

Annual Meetings

DEQ appreciates the opportunity to comment on the Buckskin Saddle Integrated Restoration Project. We are certain most of the concerns for this Project were addressed in the stakeholder consultation process through the Panhandle Forest Collaborative. It is unclear from the Project EA whether this group will meet periodically over the life of this 15 year Project. However, DEQ requests Annual coordination meetings between DEQ (Surface Water and Air Programs) and USFS to establish clear objectives for programmatic planning, including monitoring plans and protocols, and adaptive management strategies for the coming year.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Kristin Larson', with a large, stylized initial 'K' and 'L'.

Kristin Larson

Water Quality Analyst

Idaho Department of Environmental Quality, Coeur d'Alene Regional Office

2110 Ironwood Parkway

Coeur d'Alene, ID 83814

Literature Cited

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