

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Twin Falls District  
Shoshone Field Office  
400 West F Street  
Shoshone, ID 83352**

**SCOPING INFORMATION PACKAGE  
BEAVER CREEK REMEDIATION OF DRAINAGES AND ROAD CONSTRUCTION  
For  
BIG BEAVER AND LITTLE BEAVER DRAINAGES  
PROJECT # DOI-BLM-ID-T030-2016-0014-EA**

This information package summarizes a Bureau of Land Management (BLM) proposal to authorize road rehabilitation, best management practice (BMP) implementation, and stream bank erosion control in the Little Beaver and Big Beaver drainage in accordance with the Sun Valley Management Framework Plan (MFP) (1981). The Little Beaver and Big Beaver drainage is part of the North Camas Unit referred to in the Sun Valley MFP. Federal actions must be analyzed in accordance with the National Environmental Policy Act (NEPA), and other relevant Federal and State laws and regulations to determine potential environmental consequences and regulatory compliance.

The purpose of this package is to provide information to interested and affected parties of this proposal, and to solicit comments to assist the BLM with the NEPA analysis of the proposal and development of the alternatives to the proposed action. The development of this proposal is currently ongoing, and will eventually be documented in an Environmental Assessment (EA) with an estimated completion date of summer/fall of 2016. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

### **PURPOSE AND NEED FOR ACTION**

The purpose of this action is to bring the Little Beaver and Big Beaver drainages into compliance with the Clean Water Act (CWA). Currently the drainages, including ephemeral tributaries (drainages 1, 2, 3, and Haystack Canyon (**Map 1**)) are out of compliance with the CWA, and not meeting water quality standards.

The need for this action is to correct violations found by the regulatory agencies (Environmental Protection Agency (EPA), Army Corps of Engineers (ACE), and the Idaho Department of Environmental Quality (IDEQ)) following unpermitted road maintenance work completed by Camas County Road and Bridge as a result of flood events in 2013 and 2014.

## **LOCATION AND BACKGROUND INFORMATION**

The project area is located in the Little Beaver and Big Beaver drainages and includes the adjacent roads, Little Beaver and Big Beaver creeks and ephemeral drainages 1, 2, 3, and Haystack Canyon as shown on **Map 1**. The project area is located east of Willow Creek, approximately 11 miles east-northeast of Fairfield, Idaho, and 8 miles north of Highway 20.

### **Princess Blue Ribbon Mine**

The Princess Blue Ribbon Mine is located northeast of the project area. In March 1990, the tailings pond dam failed and approximately 100 cubic yards of sediment washed into Big Beaver Creek. The Princess Blue Ribbon Mine was abandoned soon thereafter. Evidence of the historic operation of this mine includes road crossings, a culvert, and an abandoned pond on Little Beaver Creek.

### **Area of Critical Environmental Concern**

The project area is located within the Beaver Creek Area of Critical Environmental Concern (ACEC). An ACEC is an area of public land where the BLM has determined through the land use planning process that special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources and other natural systems or processes, or to protect life and safety from natural hazards. The Beaver Creek ACEC has been classified due to the presence of crucial elk winter range. The ACEC provides winter range that is crucial to the survival of one of the most productive elk herds in the region. The Sun Valley MFP contains direction to the BLM to maintain and improve crucial elk winter range.

### **Camas County Road and Bridge Department**

Camas County has had a right-of-way IDI-25782 granted for Little and Big Beaver Creek Road since 1988 from its junction with the Willow Creek Road to the 'hairpin curve' (**Map 1**). Due to court order IBLA 94-583, access to private land is required to be maintained via the Big Beaver Creek Road. Access is also required for continued maintenance and monitoring of the Princess Blue Ribbon Mine (**Map 2**) which is reached using the Little Beaver Creek Road.

### **The Beaver Creek Complex Fire**

The Beaver Creek Complex Fire in August 2013 burned approximately 2,100 public land acres within the Little Beaver Allotment (**Map 2**). The lightning-caused fire started in Camas County and burned into Blaine County, burning a total of 111,500 acres (state, private and public land acres). Storms occurred immediately following the fire that resulted in significant debris flows and erosive flooding in the majority of the burned area, including the Little Beaver and Big Beaver drainages. The soils affected from the Beaver Creek Complex Fire are still susceptible to accelerated rates of erosion.

### **2015 Road Maintenance and Construction**

In 2015, personnel from the BLM and Camas County met to discuss opening the Little Beaver and Big Beaver Creek roads. As a result of the meeting, the BLM agreed that Camas County Road and Bridge would perform work on their authorized right-of-way that included, 1) relocation and reconstruction of

a portion of the Little Beaver Creek Road that was eroded and gullied (P.E., 2015); 2) removal of sediment fans along the Little Beaver Creek Road as a result of the first flood event.

The BLM also authorized Camas County Road and Bridge to reconstruct a portion of the Big Beaver Creek Road that had become part of the creek during the 2013 and 2014 flood events. The Big Beaver Creek Road was re-routed and Camas County Road and Bridge built an entirely new road section to access private land. Work to build this new section of the Big Beaver Creek Road was built without sediment stabilizing BMPs or permits.

In addition, work was performed outside of the authorized right-of-way that involved the removal of material from, and the channelization of, the four ephemeral tributaries that drain into Little Beaver Creek.

All of the work by Camas County Road and Bridge resulted in the direct side-cast of soils into the creeks and wetlands, causing unstable and unconsolidated materials to enter the Big Beaver and Little Beaver creeks, and a public safety and resource hazard due to the threat caused by the construction of check dams that channelized the ephemeral tributaries to Little Beaver Creek. The work was performed without the necessary authorizations and permits required by the appropriate federal regulatory agencies (i.e., ACE, IDEQ, and EPA) which oversee water quality standards and require the use of BMPs during construction activities to prevent the discharge of point sources into surface waters.

## **CURRENT CONDITIONS**

In 2015, the BLM hired North Wind Resource Consulting, LLC to assess the effects from the unpermitted road maintenance and realignment actions performed by Camas County Road and Bridge. The contract included a road survey and a wetlands delineation survey. These reports found portions of the road work occurred in wetlands or waters of the United States which are under the jurisdiction of the ACE. Ground disturbing activities in these areas require a Clean Water Act Section 404 permit prior to implementation. During the county road maintenance soil disturbing activities created 2.93 acres of fill material (North Wind 2015). Additionally approximately 0.45 acres of wetlands were disturbed (LLC, 2015). In a separate evaluation, IDEQ also assessed the road work performed by the county along approximately 3.7 miles of the Big Beaver and Little Beaver Creek roads. IDEQ estimated a possible 6.5 acres of surface area disturbance occurred from the road work (IDEQ 2015). Land disturbance greater than one acre requires by law a General Construction Permit and a sediment and erosion control plan prior to any work being done. The result of the North Wind and IDEQ assessments will be incorporated into the road remediation action for the Big Beaver and Little Beaver Creek roads.

Little Beaver Creek and the Big Beaver Creek are currently not meeting the CWA. Work conducted by Camas County Road and Bridge on the Little Beaver and Big Beaver creeks will have long-term effects to the riparian area, flood plain, and wetlands. These systems were determined by the regulatory agencies and the BLM to have been compromised during the road maintenance work of 2015. Re-routing the Big Beaver Road by 111 linear feet has reduced soil integrity on the slope of Big Beaver Creek (LLC, 2015).

Along the Little Beaver and Big Beaver creeks, the stream banks have sediment loading and granitic soils built up along the edge of the roads for pull outs. These granitic soils have little to no vegetation cover to hold soils in place.

### **Drainages 1, 2, 3, and Haystack Canyon**

Four ephemeral tributaries within the project area were impacted (**Map 1**). The impacted portions of these drainages were channelized, and check dams (sediment capturing ponds) were built to contain runoff. These drainages were also surveyed for the presence of wetland characteristics. Due to the extent of disturbance, no wetland characteristics remained in these areas. Small areas in ephemeral tributary 2 and Haystack Canyon displayed willow regeneration within the disturbed areas.

### **Factors determined to have adversely impacted water quality include:**

1. The improved roads adjacent to Big Beaver Creek and Little Beaver Creek actively contribute sediment loading via surface erosion and bank instability.
2. Throughout the spring and summer of 2014 the Little Beaver Creek experienced debris flows and channel restructuring.
3. In 2013 the Beaver Creek Complex Fire occurred partially within the Beaver Creek drainage. Mass wasting and surface erosion originating within the burn scar.

The unpermitted road construction and maintenance degraded the stream banks, floodplain and soil integrity along the Little Beaver and Big Beaver creeks. The four compromised ephemeral tributaries have sediment loading occurring and unstable check dams built with granitic soils. Within a precipitation event these check dams will present a public health and safety hazard. Large amounts of sediment could be washed down from the failure of these check dams and may cause slumping or mud slides. To meet EPA and IDEQ regulations in the riparian area, roads and drainages will need reconstruction, material removal and re-vegetation performed to correct the aforementioned departures.

## **RESOURCES**

### **Vegetation Condition**

Vegetation data collected during the 2011 monitoring season showed a departure in the plant community. ESR monitoring reports from 2015 show the area to be in an early seral state due to the 2013 Beaver Creek Fire. Many components of the plant community, such as perennial forbs, grasses, and the shrub component are lacking or absent in the project area that burned. Post fire restoration efforts involved aerial seeding a mixture of native and non-native perennial forbs and grasses.. While recovery is occurring, it is a slow process, the predominant vegetation (annuals) lack the root structure to hold soils in place, resulting in higher rates of runoff and erosion. A number of invasive weeds have been identified within the project area.

### **Soils/Watersheds**

Soils are derived from a parent material of alluvium within the project area and are well drained (LLC, 2015). The soils in the Little Beaver and Big Beaver drainage are characterized as being very granitic and therefore tend to be susceptible to relatively high levels of erosion. The soils along Big Beaver and Little

Beaver creeks have been mapped by NRCS as Soil Map Unit 11 – Earcreek gravelly coarse sandy loam, 25 to 60 percent slopes (United States Department of Agriculture, Soil Conservation Service, 1981). The soils ability to resist the forces of erosion that naturally occur in the area is reduced when native perennial vegetation is lacking or in low abundance relative to site potential.

The majority of the soils in the Little Beaver and Big Beaver drainage are classified with very rapid surface run-off and hazard of erosion is high. Data collected in 2009 indicated the amount of bare soil was higher than expected in some areas. Because of this, the soils are more vulnerable to mechanical impacts from livestock use and trailing and grass plants are susceptible to dislodging, reducing soil and slope stability. Impacts from the road maintenance and the drainage construction activities have further compromised the soils in the Little Beaver and Big Beaver drainages. The granitic soils used to construct the check dams are eroding away and will affect the site's ability to meet state water quality standards.

### **Riparian areas and Wetlands within project area**

The riparian and wetland vegetation in the Big Beaver and Little Beaver creeks are comprised of both woody and herbaceous plants. The dominant tree species in the riparian and wetland areas include quaking aspen (*Populus tremuloides*) and spotted alder (*Alnus incana*). The wetland shrubs are dominated by Booths willow (*Salix boothii*), narrow-leaf willow (*Salix exigua*) and Wood's rose (*Rosa woodsii*). The understory vegetation is dominated by reed canarygrass (*Phalaris arundinacea*), common mullein (*Verbascum thapsus*), stinging nettle (*Urtica dioica*), Canada thistle (*Cirsium arvense*), cheatgrass, and various other plant species (LLC, 2015).

Riparian condition assessments were completed by the BLM on Big Beaver and Little Beaver creeks from 1998 to 2010. These assessments, which are commonly referred to as PFC assessments, are a broad-scale assessment that uses hydrology, vegetation, and erosion/deposition attributes and processes to qualitatively assess riparian conditions. There have been five PFC assessments for Little Beaver Creek and three PFC assessments for Big Beaver Creek within the project area. Both streams contained reaches that were rated as "Functioning-at-risk" due to conditions that the stream channels or floodplain were not in balance with the landscape. Examples of the indicators for reduced riparian condition include stream channels that are wider and shallower than is appropriate for the channel type, elevated sediments, reduced abundance and diversity of riparian vegetation. Information from these assessments can be used in the future to evaluate riparian and wetland recovery after implementation actions are completed.

### **Wildlife**

The project area contains Greater sage-grouse (GRSG) habitat classified as a "General Habitat Management Area (GHMA)". GHMA is BLM-administered GRSG habitat that is occupied seasonally or year-round and is outside of Priority Habitat Management Areas. The project area provides suitable habitat conditions for a variety of migratory bird species, including BLM sensitive species and migratory bird species of conservation concern. The project area is classified as crucial elk winter range. Elk frequent this area in the winter, and predominately graze south-facing slopes. The project area is also used by elk for calving and by mule deer for fawning.

## **Water Resources**

Big Beaver Creek and Little Beaver Creek are classified as perennial streams on the United States Geological Survey's National Hydrography Dataset (USGS, 2014). Perennial streams are streams which flow continuously and are generally associated with the water table in the watersheds they flow through (BLM, 1998). At sometimes of the year, Little Beaver Creek and segments of Big Beaver Creek may only contain water below the streambed (subsurface flows).

Big Beaver Creek and Little Beaver Creek are included in water quality Assessment Unit (AU) ID1704022 which includes all of the Camas Creek watershed and its tributaries as noted in an IDEQ 2012 Integrated Report (IDEQ 2014). Big Beaver Creek and Little Beaver Creek are tributaries to Willow Creek, which is a tributary to Camas Creek. The designated beneficial use for Big Beaver and Little Beaver creeks are cold water aquatic life, salmonid spawning, and secondary contact recreation. Water quality in segments of Big Beaver and Little Beaver Creeks are not supporting the designated beneficial uses for cold water aquatic life and salmonid spawning but are meeting the standard for the beneficial use of secondary contact recreation (IDEQ 2014). The IDEQ lists the cause for water quality impairment as (elevated) water temperature.

## **Fish**

Big Beaver and Little Beaver creeks are fish bearing streams (IDEQ 2014). IDEQ water quality assessment crews with the Beneficial Use Reconnaissance Program confirmed the presence of rainbow trout (*Oncorhynchus mykiss gairdneri*) in Big Beaver and Little Beaver creeks in 2012. In the Columbia River Basin, rainbow trout that do not migrate to the ocean are classified as redband rainbow trout (Wallace and Zaroban, 2013). Non-game fish such as sculpin (*Cottus spp.*), speckled dace (*Rhinichthys osculus*) and bridgelip sucker (*Catostomus columbianus*) are native to Idaho streams and are likely to be present in Big Beaver and Little Beaver creeks.

Wood River sculpin are present in streams throughout the Wood River watershed including tributaries such as Willow Creek (Wallace and Zaroban, 2013). Since there are no physical barriers between Big Beaver Creek and Willow Creek, Wood River sculpin are likely to be present in Big Beaver and Little Beaver creeks when streamflow and water temperature are suitable for the species. Non-native fish such as brook trout and brown trout are present in Willow Creek and are also assumed to be present in Big Beaver Creek.

## **Livestock Grazing**

The project area is located within the boundaries of two grazing allotments; the Little Beaver #80121 and Big Beaver #80122 Allotments. There are three permittees currently authorized to run cattle and sheep in both allotments. Due to the Beaver Creek Fire that occurred in August 2013, there is currently no grazing permitted on the burned areas to allow for recovery. The unburned portions of the allotments are open to livestock grazing. A trailing permit was approved and signed in May 2015 (Map 3), which permitted cattle trailing to occur up the Big Beaver Creek drainage with restrictions. The trailing permits allow for one day per trailing event with no staging, stopping, watering, or mothering-up of cattle while actively moving livestock through Little Beaver and Big Beaver Allotments. The Little Beaver Allotment also included a sheep trailing permit restricting livestock to unburned areas west of

the area. Restrictions on livestock grazing in these allotments will resume once re-entry vegetation standards are met.

### **Recreation and Visitor Services**

The project area is within Idaho Department of Fish and Game Hunt Unit 44. The Little Beaver and Big Beaver drainage and roads are popular during deer and elk seasons. During the summer the roads are popular to Magic Valley and Wood River Valley residents for a variety of recreation opportunities.

This project area is currently included in the Wood River Valley Travel Management Plan planning area. A travel planning effort was begun in 2008, put on hold in 2012, and is in the process of being re-initiated.

### **Access**

The 1997 IBLA decision requires the BLM to provide access to private land via the Big Beaver Creek road. The road is required to remain open with access rights to private lands (William N. Brailsford Flying Traingle, INC., 1997). The Little Beaver Road will also need to have access maintained to monitor the Princess Blue Ribbon mine. The Wood River Valley Travel Management Plan decision is planned for 2017, and will designate roads and trails, potentially leaving some roads and trails open for unrestricted use, limiting use on some, and closing others.

## **PROPOSED ACTION**

The BLM is proposing to authorize implementation actions of maintenance, reconstruction, soil removal and re-vegetation to stabilize sediment and control runoff from further degrading the Little Beaver and Big Beaver drainage. This work will be done according to the requirements set forth by the EPA CWA-10-2016-0002 notice (Camas County Road & Bridge, 2015) and the ACE Notice of Violation of Section 9 of the CWA letter detailing the expectations to correct this violation (Gill, 2016).

Riparian remediation along the road would authorize removal of up to 4,780 cubic yards of sediment from the flood plain and wetland. The four ephemeral drainages (1, 2, 3, and Haystack Canyon) will have soil stabilizing maintenance done (LLC, 2015). Drainages will be armored with rip-rap to reduce sediment run-off into the creeks. Approximately 3 acres of vegetation will be hydro-seeded or planted to stabilize banks, road edges, and drainages (LLC, 2015).

### **Implementation Actions Common to Alternatives to comply with the EPA, ACE, and IDEQ.**

#### **Little Beaver Creek Road and Big Beaver Creek Road**

- Pull back and remove side-cast fill materials that are along the roads and adjacent to the riparian areas which are either in, near, or threatening entry into the creeks.
- Add drainage features to the Little Beaver Creek Road.
- Within Big Beaver Creek stabilize the road building activities that took place in 2015.

#### **1<sup>st</sup> Drainage**

- Grade and reshape the tributary above the road to allow drainage and prevent head cutting of the tributary.
- Construct a rolling-dip across the road to allow drainage of water and stabilize the road.
- Armor the rolling-dip with rock.

**2<sup>nd</sup> Drainage**

- Breach man-made check dams in the tributary.
- Drain the ponded portion of the tributary to its lowest point.
- Place rock rip-rap in tributary channel and allow it to fill in naturally over time with material.
- Construct a rolling-dip across the road to allow drainage of water and stabilize the road.
- Armor the rolling-dip with rock.

**3<sup>rd</sup> Drainage**

- Breach man-made check dams in the tributary.
- Drain the ponded portion of the tributary to its lowest point.
- Place rock rip-rap in tributary channel and allow it to fill in naturally over time with material.
- Construct a rolling-dip across the road to allow drainage of water and stabilize the road.
- Armor the rolling-dip with rock.

**Haystack Canyon**

- Breach man-made check dams in the tributary.
- Drain the ponded portion of the tributary to its lowest point.
- Allow tributary channel to fill in naturally over time with material.
- Allow water in tributary to drain via the existing spillway.

**Alternative actions being considered**

Alternatives to be developed may include a combination of the following actions: restricting access, changing access type, and changing livestock use. Access restrictions could result in changing a road or roads to administrative access or limiting access of ATV/UTV's within the project area temporarily or permanently. Changing livestock use may be accomplished by temporarily or permanently restricting grazing or trailing in the project area. Other action could include fencing off the drainages and riparian area within the project area. Use restrictions could be in place until vegetation has recovered and the CWA is being met.

**PRELIMINARY ISSUES**

Resource	Preliminary Issues
Soils	Soils in the Little Beaver and Big Beaver Creek project area are highly erodible and must be stabilized during maintenance activities.
Soils	The Beaver Creek Complex Fire will have a continued impact on soils until vegetation recovers. These impacts will have a

	cumulative effect to the disturbance and impact with road maintenance activities.
Range	Livestock trailing and grazing restrictions and/or closures within the project area of the Big Beaver and Little Beaver Allotments.
Safety	The tributaries present a safety hazard to the public from the check dams made with granitic soil that may washout with any precipitation event.
Water Quality	Big Beaver Creek and Little Beaver Creek are identified by IDEQ as not meeting the designated beneficial uses of cold water aquatic life and salmonid spawning due to impaired water quality. The reason for the impairment is (elevated) water temperature.
Water Quality	Currently the Big and Little Beaver creeks are out of compliance and in violation of the CWA. See violation Camas County Road & Bridge, CWA-10-2016-0002. Little Beaver and Big Beaver creek have been placed on the 303(d) list by IDEQ and are not meeting temperature with a number of segments considered impaired.
Fisheries	The proposed road remediation areas are adjacent to Big Beaver Creek and Little Beaver Creek which contain BLM sensitive fish such as redband rainbow trout and Wood River sculpin. There are several other native fish species that are present in Big Beaver and Little Beaver creeks.
Floodplains	Portions of the roads proposed for remediation actions occur within the floodplains for Big Beaver Creek and Little Beaver Creek.
Riparian Areas And Wetlands	The functional condition of the riparian areas and wetlands associated with Big Beaver and Little Beaver creeks have been degraded by historic land uses, wildland fire and subsequent erosion and debris flows, road location and use, and unpermitted road maintenance and reconstruction activities.
Recreation and Visitor Services and Travel Management	Restricting the type of access and/or season of use will impact recreation opportunities within the area.
Travel/Access	Road and trail restrictions and/or closures within project area.

**DECISION TO BE MADE**

As a result of this environmental analysis, the BLM Shoshone Field Manager will select among the alternatives, those actions that will bring the Little Beaver and Big Beaver drainages into compliance with the Clean Water Act (CWA).

## **PUBLIC INPUT NEEDED**

Your comments are specifically requested on the proposed action, preliminary issues, and alternatives. Comments made on this proposal would be most helpful if they are received by April 15, 2016 and are directly relevant to the proposal. The BLM will not reject public feedback outside established public involvement timeframes; however, these comments may be considered secondary to comments received in a timely manner and may only be assessed to determine if they identify concerns that would substantially alter the assumptions, proposal, design, or analysis presented in the EA. Written comments must be submitted to:

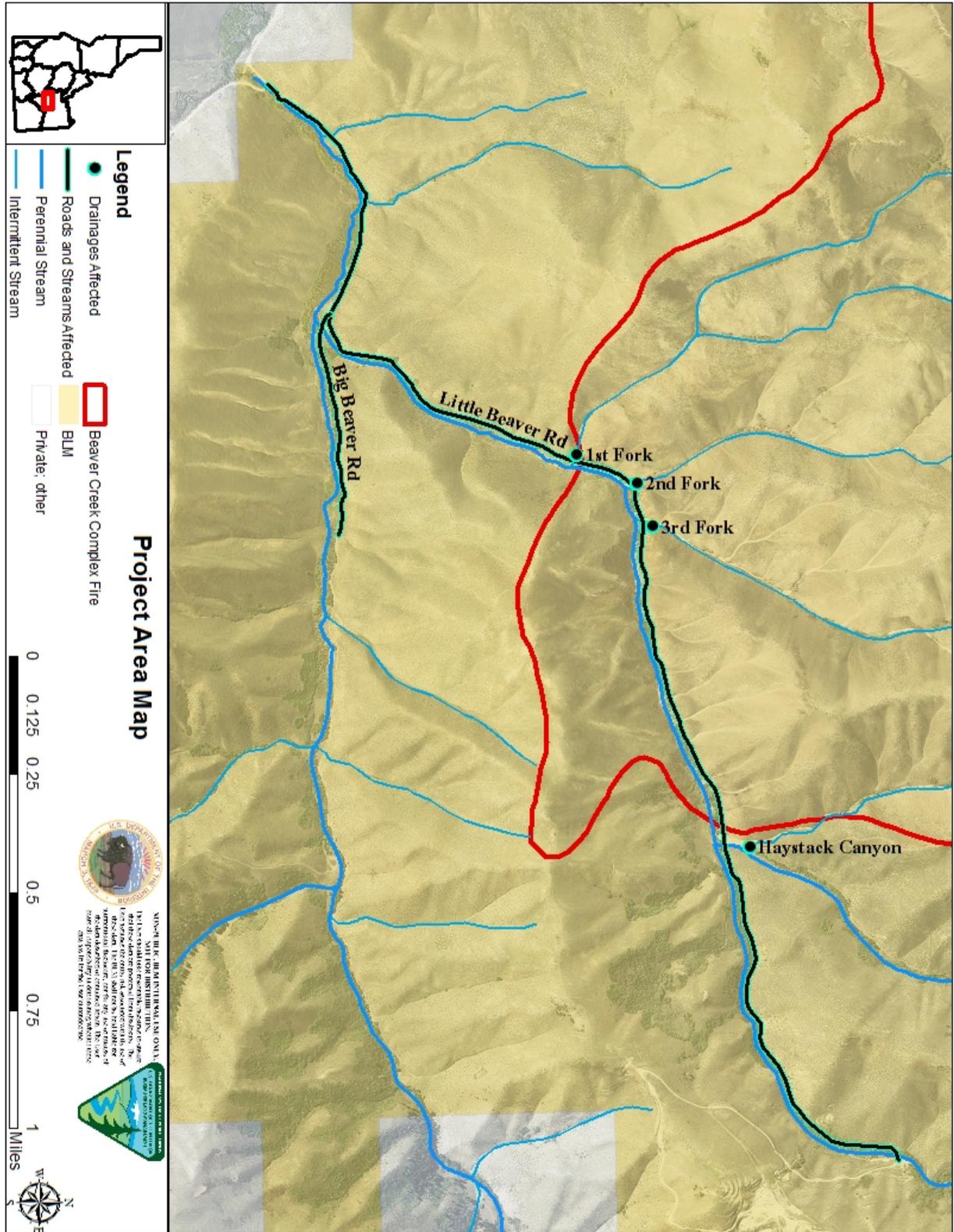
Codie Martin  
Shoshone Field Manager  
400 West F Street  
  
Shoshone, ID 83352.

The office business hours for submitting hand-delivered comments are 7:45 am through 4:30 pm, Monday through Friday, excluding holidays. Electronic comments must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), Word (.doc), or portable document format (.pdf) to [mcallen@blm.gov](mailto:mcallen@blm.gov). E-mails submitted to e-mail addresses other than the one listed, in other formats than those listed, or containing viruses will be rejected. To be most helpful, comments sent electronically should include the title of this project in the subject line. Please identify whether you are submitting comments as an individual or as the designated spokesperson on behalf of an organization. Issues that are outside the scope of the proposal will not be addressed at this planning level.

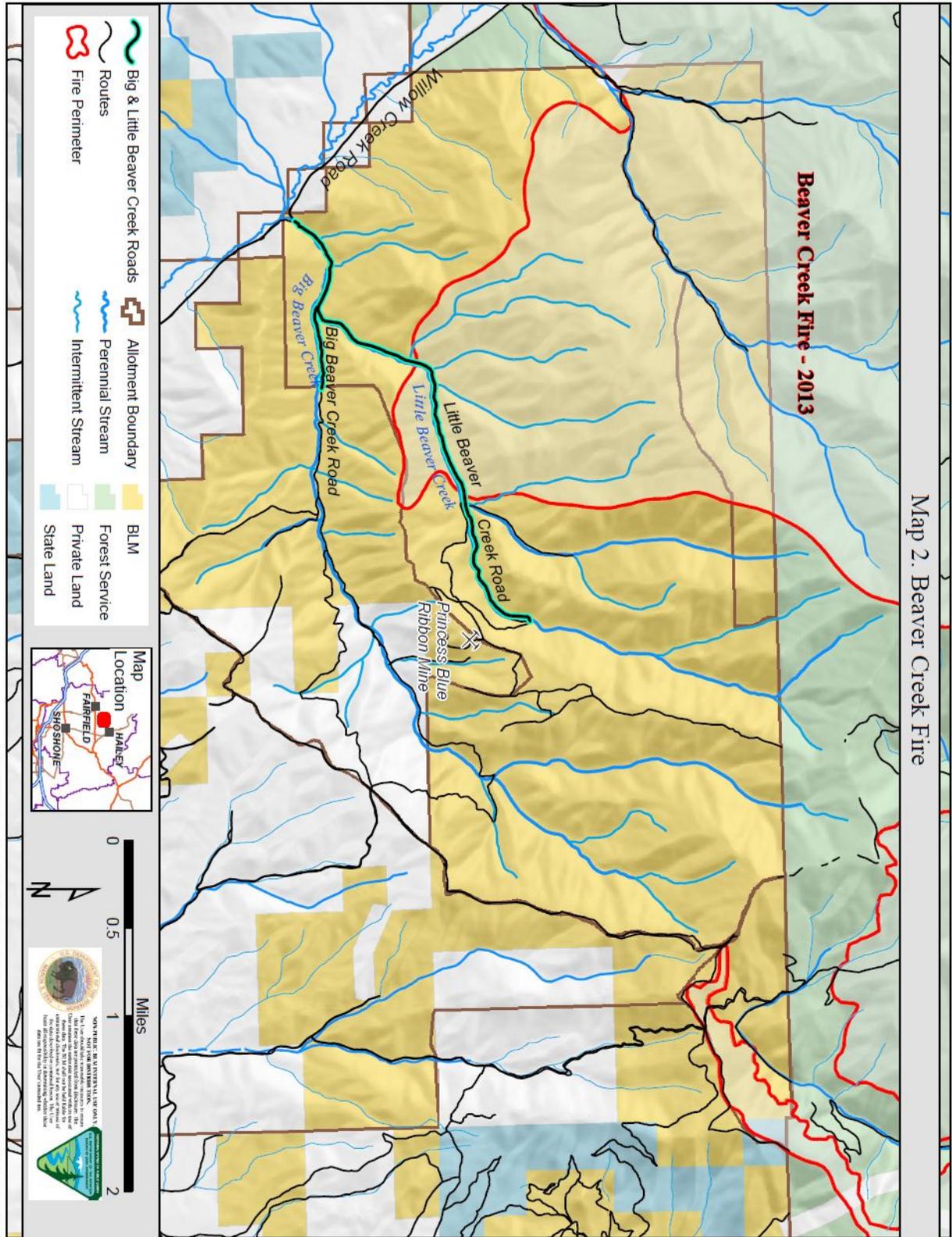
Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

The primary contact for questions and comments for this project is Michael Callen, Natural Resource Specialist, 400 West F Street, Shoshone ID, 83352.

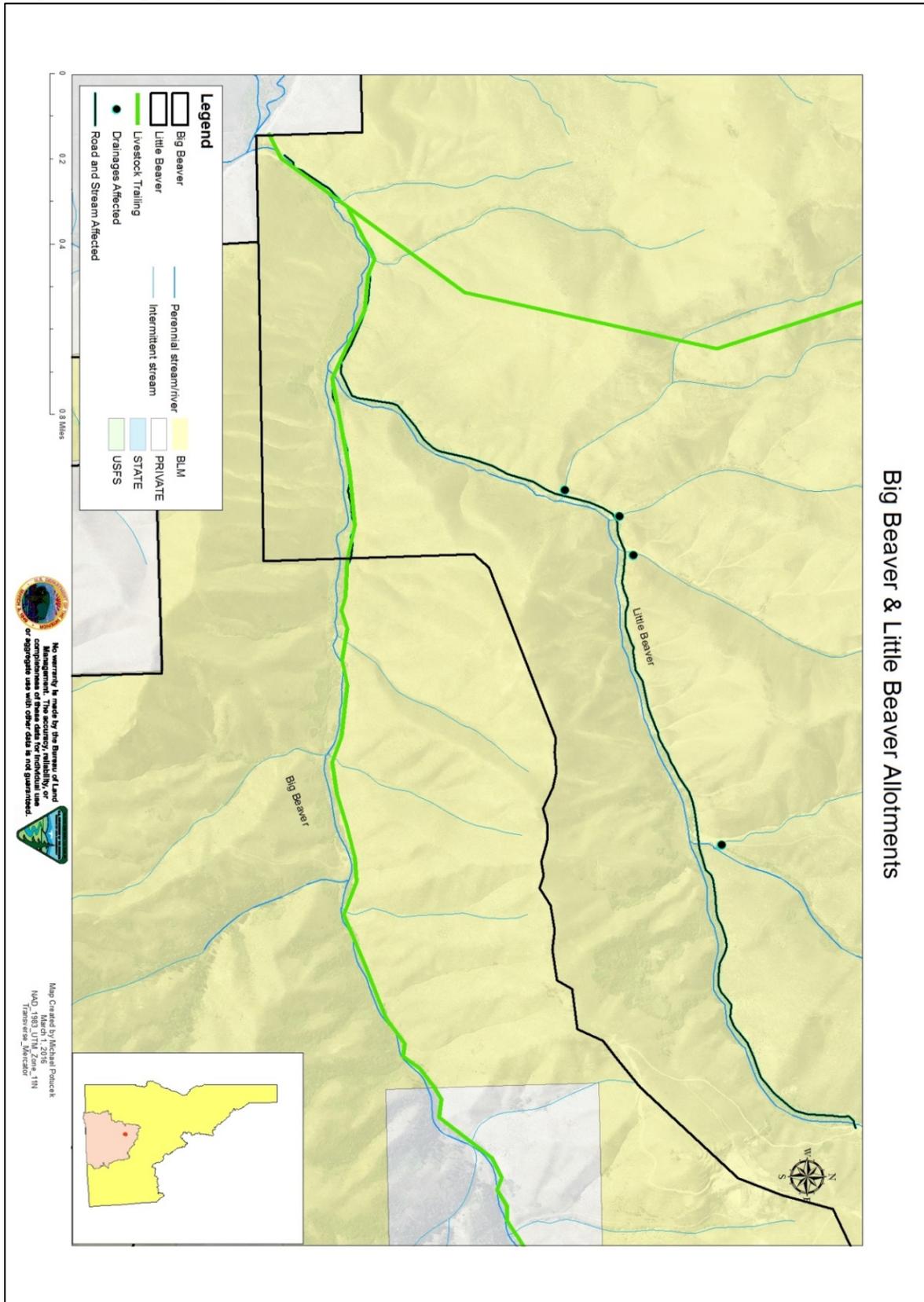
**Appendix A**  
**Maps 1 Project Area**



# Map 2 Project Area 2013 Little Beaver Complex Fire



Map 3 Trailing in Project Area



Big Beaver & Little Beaver Allotments

### **Works Cited**

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