

Prichard Creek Channel Restoration

ENVIRONMENTAL ASSESSMENT



Actively eroding stream banks along Prichard Creek downstream of Murray, Idaho. BLM photo taken July 26, 2012.

Coeur d'Alene Field Office, Idaho

DOI-BLM-ID-C010-2012-008-EA

August 2012



Prichard Creek Channel Restoration

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Map 1 - Project Location Map

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1 INTRODUCTION

The BLM, Coeur d'Alene Field Office, is proposing to begin stabilizing eroding stream banks and restoring channel function in a reach of Prichard Creek near Murray, Idaho (see cover photo and attached map). The over-steepened banks and unstable floodplains are a chronic source of sediment directly entering Prichard Creek. Under existing conditions, high flows constantly undermine the toe of the banks and cause accelerated channel shifting, even in moderate floods. The restoration work would be completed under a contract, beginning in the late summer or early fall of 2012, when the stream is dry or flows are very low.

This Environmental Assessment (EA) has been prepared by the Coeur d'Alene Field Office for compliance with the National Environmental Policy Act of 1969 (NEPA).

1.1 Purpose and Need

Within the project reach of Prichard Creek, seasonal high flows remove and transport sediment from the eroding banks and inhibit natural stabilization processes including: a shifting of the channel away from the toe; development of a stable angle of repose; and establishment of deep-rooted vegetation.

One of the primary triggers of hill slope erosion at this site is the constant undermining of the base, or "toe" of the stream banks by Prichard Creek. If not treated, the highly erosive and over-steepened hill slopes will continue to deliver significant volumes of sediment directly into Prichard Creek for many years. Without restoration measures, this reach of Prichard Creek will continue to dry up in the summer due to excessive sediment deposition.

Prichard Creek supports a fishery including Westslope cutthroat trout, an Idaho BLM-Sensitive species. Stabilization of the eroding banks and floodplain is proposed to reduce the frequency and volume of sediment delivery to the stream; improve trout habitat, and benefit other aquatic species.

1.2 Relationship to Laws, Policies and Land Use Plans

The Federal Land Policy and Management Act of 1976 (FLPMA) requires an action under consideration be in conformance with the applicable BLM land use plan, and be consistent with other federal, state, local and tribal policies to the maximum extent possible.

1.2.1 BLM Land Use Plan Conformance

The proposed action conforms to the Coeur d'Alene Resource Management Plan (RMP), as it was approved June 29, 2007 (BLM, 2007). It is specifically provided for by the following decisions for the management of soil and water resources (SO and WA) on page 14 of the RMP. Goals and actions include "Manage soils on public land to maintain, restore, or improve soil erosion class and watershed health."; "Apply appropriate reclamation measures to mitigate adverse erosion and sediment delivery." (Action SO-1.1.3); "Maintain, improve, or restore water

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quality to sustain designated beneficial uses on public lands” (Goal WA-1); and “Prescribe and implement Best Management Practices (BMPs) to reasonably prevent degradation of water quality (RMP, Appendix C, page C-6)”.

1.2.2 Consistency with Non-BLM Authorities

The proposed action is further consistent with other Federal, State and local land use policies and plans to the maximum extent possible. This includes work to be completed in accordance with sections 401 and 404 of the Clean Water Act.

2 ALTERNATIVES

This chapter describes the Proposed Action and No Action alternatives.

2.1 Proposed Action

The Prichard Creek project area is located on BLM-administered land less than one-half mile west (downstream) of the town of Murray, Idaho, in T49N, R5E, Section 6, (see attached location map). Access is off of the county road near the Shoshone County wareyard.

Reducing erosive impacts of the stream against the stream banks is expected to reduce one of the primary causes of slope failure. Smaller landslides along the face of the scarp periodically provide a start towards natural slope stabilization. When the stream is dry (September to early October), an excavator would be used to construct a variety of stable anchor points along, and slightly offset from, the eroding banks. These will include boulders and logs of sufficient size and proper placement to withstand flood flows.

A BLM hydrologist or other riparian specialist would oversee work by a contractor when the stream is dry. Working with stable points including standing trees and rock outcrops, logs, root-wads and large boulders would be placed by a hydraulic excavator. Rather than a continuous wall of riprap, approximately 15-20 boulder and wood anchor points would be constructed at various critical locations within the project stream reach to deflect erosive flows away from the raw banks and help establish a well-vegetated floodplain.

This multi-year project is expected to take approximately one week in 2012 and would disturb less than 0.5 acres along Prichard Creek.

2.1.1 Environmental Design/ Resource Protection

Best management practices, including completing the work when the stream is dry (or minimal flow) would be required to minimize the potential for water quality impacts. To reduce potential invasive weed problems, equipment used by the contractor would be required to be cleaned prior to entering the work site.

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Fueling of equipment will be outside of the riparian zone, a minimum distance of 300 feet from the stream channel. The contractor would be required to submit and follow a spill contingency plan.

2.1.2 Monitoring

BLM would be onsite to inspect the contract work. Post-project monitoring would include photo-documentation and stream cross-section and profile surveys for a minimum of three years following construction. Pre -and post project photo points would be used to evaluate the effectiveness of the slide stabilization and treatment and vegetative recovery, and the surveyed channel profiles and cross-sections would be used to evaluate channel response. Post-project inventory would be done to track any weed invasion problems in the action area. If necessary, weed control measures would be implemented.

2.2 No Action

If no action is taken, the areas of active erosion are expected to increase and continue to contribute elevated levels of bedload sediment. The Prichard Creek stream channel would continue to shift alignment excessively thus inhibiting the development of a stable pattern, and establishment of riparian vegetation and perennial stream flow.

3 AFFECTED ENVIRONMENT AND EFFECTS OF ALTERNATIVES

3.1 Scope of Analysis

Setting

Prichard Creek is tributary to the North Fork of the Coeur d'Alene River, and ultimately Lake Coeur d'Alene. The analysis area is the 98 square mile Prichard Creek watershed (see **Figure 1**). At the project site, Prichard Creek has an upstream contributing drainage area of about 45 square miles. Approximately six miles downstream of the project area, Prichard Creek joins the North Fork of the Coeur d'Alene River.

The watershed is steep and forested, with elevations ranging from about 6800 feet at Granite Peak in the Rocky Mountains along the Bitterroot Divide, down to 2600 feet at the project site. Soils are classified as gravelly silt loams on very steep, north-facing mountain slopes and breaklands. These soils are typically well-drained and consist of weathered material derived from metasedimentary bedrock, primarily siltite and argillite, with a mantle of volcanic ash. (USDA, 1992). Average annual precipitation in the contributing drainage basin is 50 inches, primarily from snowpack.

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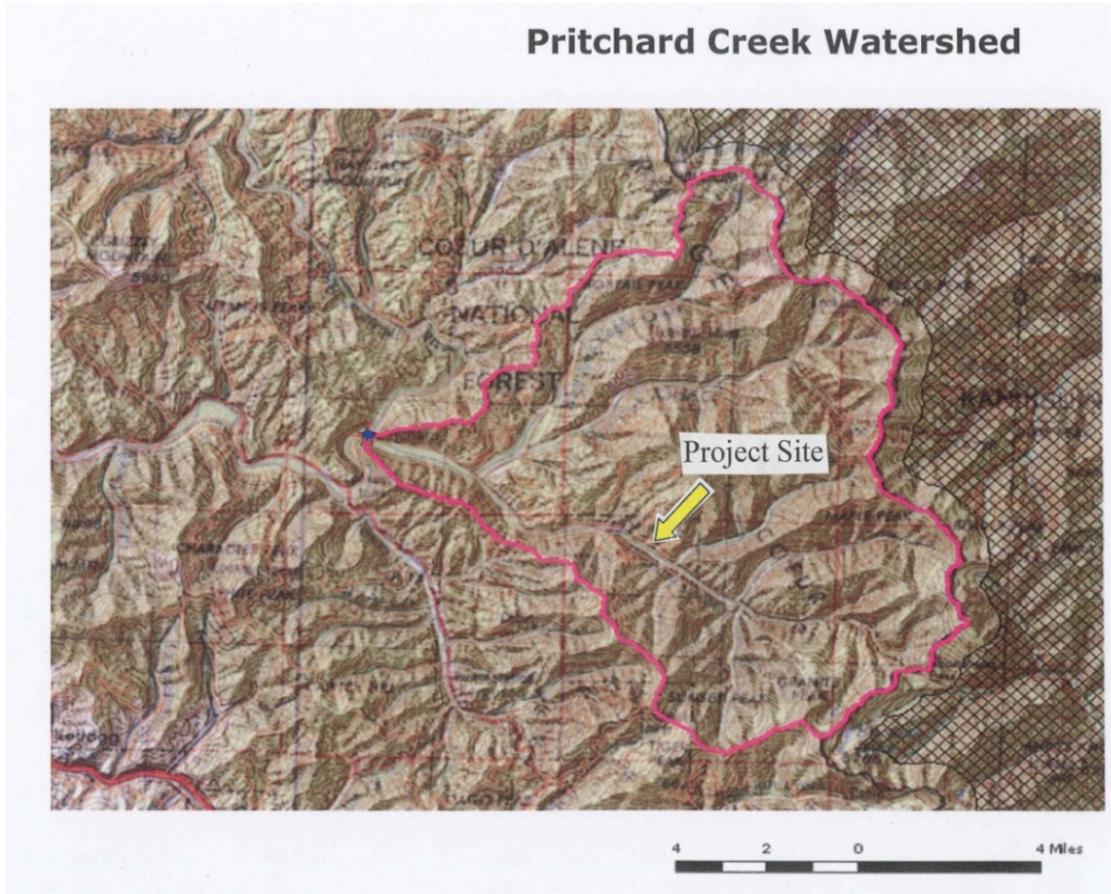


Figure 1 - Project Site within the Prichard Creek Watershed

3.1.1 Potentially Affected Resources and Uses

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Issues analyzed for impacts in section 3.2 of this EA are summarized in the table below. The geographic extent of resources and uses affected by the proposed action varies by the type of resource and impact.

Table 3.1.1: Issues Analyzed and Extent of Study Area

Section #	RESOURCE/USE	Issue Statement(s)	Acres
3.2.1	Water Resources	Some minor sediment transport may occur from the first post-construction flows, but overall project will lower sediment loading. No fueling or storage of fuel will be permitted near the channel.	62,720
3.2.2	Vegetation, including Special Status Plants	The risk of weed invasion from construction would be reduced by requiring equipment washing prior to entering the action area, and by post-construction monitoring and evaluation of vegetation establishment.	0.5
3.2.3	Fisheries, including Special Status Species	Some short-term and minor sediment transport may occur from the first post-construction flows. Impacts to fish and aquatic habitat due to sediment mobilization as a result of project implementation would be negligible.	62,720
3.2.4	Special Status Wildlife Species and Migratory Birds	Project work may result in habitat destruction, or disturbance and mortality to adults, eggs, or larval stage individuals of Coeur d'Alene salamander, Idaho giant salamander, tailed frog and northern alligator lizard. Implementation when the stream bed is dry will reduce or eliminate some of these impacts.	0.5

3.1.2 Related Past, Present and Reasonably Foreseeable Actions

As defined by NEPA regulations (40 CFR 1508.7), “Cumulative impacts result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable

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future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

Past and Present Actions

Prichard Creek has been heavily impacted by historic mining, road construction and timber harvest. Gold was discovered in the area in 1880 and by 1884, the towns of Eagle and Murray were established. There were four sawmills operating to supply the mining operations with timber (Strong & Webb 1970). In some areas the floodplain width is constrained by the Thompson Pass Highway. Placer gold operations on Prichard Creek have altered the entire floodplain and valley floor, as well as the channel. Between 1917 and 1926 floating dredges worked the main stem of Prichard Creek. Ongoing activities include smaller-scale mining.

Historical timber harvest has also had a major impact within the North Fork Coeur d’Alene watershed. Timber harvest in the North Fork of the Coeur d’Alene began in the lower elevation valleys in the late 1800’s. Cutting and bucking trees within the harvest units themselves did not cause severe erosion, but methods of moving trees from the hillsides to the mills included flumes, splash dams, and log drives down rivers that resulted in widespread erosion. According to the Watershed Characterization (USFS 1998), “The related riparian cleaning, including removal of any timber that might catch transported logs; channel straightening; and the extreme nature of dam operations have altered the functions and processes of streams and riparian areas to an extent that it is difficult to see any recovery even today.”

In 2010, the BLM placed logs and boulders along the toe of an actively eroding landslide located about 1 mile upstream of the proposed project. The slide became active following a large flood in 1996 and had been a chronic and significant point source of sediment to Prichard Creek, creating an intermittent channel. In the first year following the restoration work, the structures effectively reduced sediment input from the slide, allowing the channel to scour out the excess slide material and become perennial adjacent to the toe. Some similar construction methods used in the 2010 landslide project, including partially burying logs below scour depth and interlocking logs and boulders to create stable woody debris complexes, would be employed in the proposed action.

3.2 Effects of the Alternatives

The degree to which resources/uses may be affected by the proposed activities are discussed in the following subsections. Each subsection includes discussion of the:

- (1) Affected Environment (current condition) of the resource or use;
- (2) Effects (direct and indirect) of the Proposed Action and No Action alternatives;
- (3) Cumulative Impacts.

3.2.1 Water Resources

Affected Environment

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Prichard creek is perennial upstream of the proposed site and then becomes intermittent downstream for several miles adjacent to historic dredge tailings. Coarse sediment transport from the project area likely settles out in the lower gradient, braided areas of Prichard Creek before reaching the North Fork of the Coeur d'Alene River, about 8.3 miles downstream.

Proposed Action

Direct effects of construction would be minimal due to the lack of surface water in the channel, when the work would be completed. Placement of boulders would require minimal if any excavation. Placement of root wads and tree stems would in some cases require excavation of channel bed material. Excess material would be integrated into the structure along with trees and boulders.

Effects of the project would be to reduce elevated sediment inputs from the eroding, raw banks and from the frequent remobilization of floodplain sediment. The seasonal high flows in year one after construction would have a greatly reduced impact on the stabilized banks.

The impact of the proposed stabilization project would be beneficial, as it is expected to reduce sediment input to Prichard Creek. Though some continued erosion and sediment input is unavoidable due to the steepness of the banks and the proximity to the channel, addressing the primary cause, undermining of the toe, would help reduce the problem. Localized channel stability would be improved, and consequently fish habitat, as sediment input is reduced and vegetation establishes.

No Action

If the project is not implemented, the eroding banks would continue to be a substantial and chronic source of sediment input to Prichard Creek. Without some type of stabilization, the input of about 80-90 cubic yards of coarse sediment would increase over time as the raw banks extend laterally and upslope in response to stream caused erosion at the toe.

Cumulative Impacts

The cumulative impact of the proposed project would be beneficial, resulting in an overall reduction in sediment input to Prichard Creek. Though some continued erosion and sediment input is unavoidable due to the steepness of the banks and the proximity to the channel, addressing the primary sediment sources would help reduce the problem. For the sediment budget of the entire 98 square-mile Prichard Creek watershed, overall effects of the project would be minimal, due to the relatively small scale of the project. The section of Prichard Creek adjacent to and near the stabilization work would be expected to display improvements in channel function, fish habitat and riparian vegetation.

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3.2.2 Vegetation/Special Status Plants

Affected Environment

The hillside adjacent to the project area is covered by forest vegetation, consisting of an assortment of tree, shrub, and herbaceous species characteristic of slopes of this elevation and aspect in northern Idaho. With the exception of the lower portion of the slide, willows, alders, black cottonwood, western red cedar, and western hemlock dominate the narrow Prichard Creek riparian zone.

Special Status Plant Species: The proposed action would **not** affect any plant species listed or proposed for listing under the Endangered Species Act, or any Idaho BLM sensitive species known to occur in the vicinity. No water howellia (threatened) or Spalding's catchfly (threatened) individuals, populations or potential habitat occur in the action area. No BLM Sensitive species, including clustered lady's-slipper, Constance's bittercress, deerfern, or rare moonwort individuals, populations or potential habitat occur in the action area.

Invasive, Non-native Species: Spotted knapweed (noxious), meadow hawkweed (noxious), ox-eye daisy (noxious), common tansy, and common St. John's-wort are present between Prichard Creek and the highway. The primary locations of these weeds are directly tied to areas where previous ground and/or vegetation disturbance has occurred, including short "spur-roads" used to access Prichard Creek.

Proposed Action

The proposed action would reduce the displacement of vegetation and improve the ecological condition of about .5 acres in the project and analysis area. A small amount of existing riparian vegetation would be disturbed along the base of the slide in order to install slope-stabilizing project features. However, once the lower portions of the eroding banks are stabilized, vegetation could begin re-establishing. The riparian corridor at the foot of the banks would begin to fill-in, becoming denser than it currently is, and further decreasing the stream's erosive action. Increased slope stability would develop as both riparian and upland plant roots penetrate into the substrate, leading to a gradual decrease of upland vegetation displacement along the actively eroding upper areas of the treated stream banks.

Invasive, Non-native Species: Equipment used to stabilize the stream banks would disturb soil, making project area native plant communities more vulnerable to invasion by weedy species (already on-site or what could be carried on-site). The risk of invasion would be reduced by requiring equipment be washed prior to entering the action area, and by post-construction monitoring and evaluation of vegetation establishment.

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No Action

If no action is taken, the stream banks would remain unstable. As additional hillside areas slough away, more upland and riparian vegetation would be displaced, causing further instability. The “unraveling” of the eroding hillsides would continue until the stream shifts away from the base of the raw banks; an angle of repose is reached; and/or stabilizing vegetation re-establishes.

Weeds would still grow in the disturbed areas adjacent to the treated banks, and could populate the treated areas themselves, though likely only on a short-term basis before being sloughed away.

Cumulative Effects

The analysis area is the Prichard Creek watershed. Vegetation in the vicinity of the proposed project area has been impacted by historic mining; road-building, highway upgrade, and maintenance; fire activity; timber harvest; and the establishment of the town of Murray. Ongoing and reasonably foreseeable, future activities that disturb vegetation include smaller-scale mining.

Past land use practices and natural disturbances in the analysis area have influenced the composition, structure, and function of existing plant communities. Some sites have been replanted with native conifer species or non-native, landscaping-type vegetation. Invasive or seeded, introduced herbaceous species grow on adjacent lands. Currently, various stages of ecological succession are present in the analysis area due to past disturbances.

Ongoing and future vegetation-disturbing activities in the analysis area would continue to promote a mosaic of plant communities in various stages of ecological succession. Ecological succession would proceed where vegetation is left undisturbed. Plant communities that revert to earlier ecological succession stages due to disturbance such as timber harvest or erosion would begin the process of maturing all over again. Ongoing and proposed activities that impact vegetation would open up sites favorable to weed invasion due to ground disturbance and/or reduction of tree canopy cover. Where left untreated, weeds would continue to threaten native plant communities.

The proposed action would reduce the displacement of vegetation and improve the ecological condition of about .5 acres. Due to the relatively small level of disturbance within the analysis area, this project is unlikely to contribute cumulative effects to upland and riparian vegetation communities; rare plant species; or invasive non-native species.

3.2.3 Fisheries, including Special Status Species

Affected Environment

Pritchard Creek is a tributary to the North Fork Coeur d’Alene (NFCdA) River. The Coeur d’Alene (CdA) River watershed, including the NFCdA River and Pritchard Creek, contains

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westslope cutthroat trout (WCT), *Oncorhynchus clarki lewisi*, a BLM sensitive species. Other native species known to inhabit the CdA River watershed include mountain whitefish, *Prosopium williamsoni*, shorthead sculpin, *Cottus confusus*, and torrent sculpin, *C. rhotheus*. Brook trout, *Salvelinus fontinalis*, and rainbow trout, *O. mykiss*, both introduced species, are also present. Prichard Creek from its mouth to its confluence with Eagle Creek is designated bull trout critical habitat. The site of the proposed action is located about 2 miles upstream of proposed critical habitat in Prichard Creek. Bull trout do inhabit parts of the CdA River watershed but are not known to be present in Prichard Creek.

Westslope cutthroat trout spawn mainly in small, low gradient tributaries with gravel substrate from March through July, when water temperatures warm to about 50°F (USFWS 1999). Juvenile WCT are found in stream pools and runs with a diversity of cover, while adult WCT are strongly associated with pools and cover (USFWS 1999). Westslope cutthroat trout stocks in the Coeur d'Alene Basin exist at a fraction of historic levels due to habitat degradation from activities such as mining, logging, development, and highway construction. Fishing pressure and introduction of non-native fish species has also contributed to reducing cutthroat numbers (DuPont and Horner 2003). Due to low numbers, the current fishing regulations for westslope cutthroat trout are catch-and-release in the entire Spokane River drainage, which includes the Coeur d'Alene River and all tributary streams (Idaho Fish and Game website).

The habitat in Prichard Creek has been highly altered by dredge mining in the past which probably limits the number of fish currently inhabiting the stream. The section of Prichard Creek included in the proposed action has large gravel and cobble substrate and little to no cover. There is no WCT spawning habitat due to the substrate being too large, and little rearing habitat due to lack of cover and structure. During field visits a variety of aquatic insects were observed in Prichard Creek, including members of the orders Ephemeroptera, Plecoptera, and Tricoptera; these orders of aquatic insects are generally indicators of good water quality and are a source of food for many fish species, including trout.

Proposed Action

The proposed project would be implemented in late summer, when the Prichard Creek stream channel is expected to be dry; no fish would be in the project area, thus no direct impacts would occur.

Placement of large wood and boulders would mobilize some amount of sediment that would enter the water when stream flows start again in the fall, possibly leading to indirect impacts to fish, specifically WCT, through turbidity or cobble embeddedness. The project would greatly reduce the sediment moving into the stream channel from the slide. The sediment input to the stream from implementation of the project is expected to be much less than the current sediment input from the slide, and will mainly occur during the first flow after project construction. In addition, the logs and boulders will provide cover and may help form pools, which will serve as rearing habitat for WCT, and may aid in sorting of substrate to provide areas of WCT spawning habitat. Overall the proposed action would improve aquatic habitat and be beneficial to WCT and other fish species. Impacts to fish and aquatic habitat due to sediment mobilization as a result of project implementation would be negligible.

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No direct or indirect impacts would occur to bull trout or proposed bull trout critical habitat. No bull trout are in the area of the proposed action, and sediment associated with implementation of the project is not expected to move downstream two miles to proposed critical habitat.

No Action

If no action is taken, the unstable banks will continue to move sediment into the stream channel. The excess sediment will likely cause cobble embeddedness of the stream substrate and turbidity. Cobble embeddedness reduces trout spawning habitat and primary habitat for benthic species, including sculpin and a variety of aquatic insects. Turbidity can interfere with aquatic species by disrupting normal behavior, such as feeding, and may also impact their ability to obtain oxygen. These impacts would continue to occur as long as the streambanks remain unstable. As the water continues to cut the toe of the slope the size of the slide may increase. Impacts will mostly occur downstream of and may reach down to the proposed bull trout critical habitat.

Cumulative Impacts

The analysis area is the Prichard Creek watershed. Westslope cutthroat trout stocks in the Coeur d'Alene Basin exist at a fraction of historic levels due to habitat degradation from activities such as mining, logging, development, and highway construction. These activities have all occurred in the smaller watershed of Prichard Creek, with dredge mining in particular heavily impacting fish habitat. Fishing pressure and introduction of non-native fish species has also contributed to reducing cutthroat numbers (DuPont and Horner 2003). All these activities are expected to continue in the present and into the future. Mining, which probably has had the greatest impact on Westslope cutthroat trout and other native fish species, will likely have less of an impact in the future due to stronger regulations and increasing restoration work occurring in the watershed. Fishing pressure on Westslope cutthroat trout has been reduced due to catch and release regulations set by the Idaho Department of Fish and Game, so effects from fishing also should decrease in the future.

The proposed stabilization project is expected to be beneficial to Westslope cutthroat trout, other native fish species and aquatic habitat. Some of the effects of past, present and future actions are lessening. Cumulative effects are not anticipated.

3.2.4 Wildlife/BLM Special Status Species

Affected Environment

Prichard Creek is a highly disturbed riparian area recovering from the past effects of mining. Dredging within the creek bed, adjacent erosion from roads, contamination from mining equipment, and associated mining activities have left the riparian area heavily impacted, limiting the biological potential of the creek to provide high quality aquatic and riparian habitat. Despite all this, there is an existing community of wildlife species that take advantage of this degraded habitat. During the nesting season migratory birds can be found in the project area along stream banks and in adjacent forest. Examples include yellow warblers, MacGillivray's warblers,

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Cordilleran flycatchers, American robins, Hammond's flycatchers, killdeer, and Pacific wren. All of these species can be found nesting near riparian areas where shrubs and coniferous or deciduous tree cover is present.

Aside from fishes, there are other aquatic species that may be found in the project area. These include Coeur d'Alene salamander (*Plethodon idahoensis*) tailed-frog (*Ascaphus montanus*), Idaho giant salamander (*Dicamptodon aterrimus*), and northern alligator lizard (*Elgaria coerulea*), all of which have been found in the Prichard Creek Drainage (IDFG 2011, MT Field Guide 2012). Other wildlife species, such as small mammals, ungulates, bear, cougar, raccoon, skunk, and mink may use the project area as a water source or foraging area.

No federally protected species are expected to use or reside within the project site. Woodland caribou (*Rangifer tarandus*), Grizzly bear (*Ursus arctos horribilis*), and Canada lynx (*Lynx Canadensis*) are the three listed species found in the Idaho Panhandle. Wolverines (*Gulo gulo*) are a candidate species for protection under the Endangered Species Act. The proposed project site does not provide suitable habitat for any of these species. The site is not within a Bear Management Unit, Canada lynx critical habitat, or proposed woodland caribou critical habitat. There is no potential denning habitat for wolverine in or near the project area. There are no records of these any of these species within the Prichard Creek Drainage.

Effects to Special Status Species

Because the implementation of the proposed project will occur in fall, no direct impacts to Migratory Birds are expected. Impacts to nesting habitat will be minimal and the resulting stream bank stabilization will ultimately prevent the existing habitat from being eroded away.

Direct impacts to Special Status Species would largely be limited to Coeur d'Alene salamander, Idaho giant salamander, tailed frog and northern alligator lizard. These species reside in or near high gradient streams, rocky exposed stream banks, riparian buffers, seeps, or pools (MT Field Guide 2012). Project work may result in habitat destruction, or disturbance and mortality to adults, eggs, or larval stage individuals. Implementation when the stream bed is dry will reduce or eliminate some of these impacts. However, because Coeur d'Alene salamander and Idaho giant salamander may be found under logs, bark or rocks, they may be particularly vulnerable to ground disturbance, regardless of whether water is in the stream bed (MT Field Guide 2012). Also northern alligator lizards may be found on the sloughing exposed soils that are being stabilized (MT Field Guide 2012). While these species are all uncommon, if they are present in the project area during implementation, mortality and disturbance would be expected.

No Action

If the project is not implemented, there will be no direct impacts to Idaho giant salamander, tailed frog, Coeur d'Alene salamander or northern alligator lizard. Habitat for these species will remain undisturbed but will continue to be degraded by sediment from sloughing stream banks. Migratory bird habitat will not be affected; however, losses of nesting habitat to the processes of erosion and sloughing will continue reducing the habitat available.

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Cumulative Effects

As mentioned, Prichard Creek is currently heavily impacted by historic mining. Other activities in this watershed that effect wildlife habitat include erosion from roads, contamination from human activities within the floodplain, recreation use of the stream and adjacent floodplain, forest management adjacent to the stream, and small scale development for human use. All of these activities are expected to continue. However the most significant impacts from mining are declining and are expected to decrease further over time.

Because the project seeks to repair some of the degradation caused by the above activities and preserve remaining riparian habitat, cumulative effects of this project are not expected. Implementation will ultimately benefit wildlife species that use the aquatic and riparian environments within the project area. Any mortality to tailed frog, Coeur d'Alene salamander, Idaho giant salamander, or northern alligator lizard will not rise to the level of significance. No impacts to any federally protected species would result from implementation; therefore, no cumulative effects to these species are expected.

3.2.4 Cultural Resources

Affected Environment

A cultural resource inventory and evaluation will be completed before project implementation.

3.3 Mitigation and Monitoring

No additional mitigation and monitoring measures are recommended beyond those described as part of the Proposed Action. Mitigation includes working in the dry or minimal stream flow conditions, planting riparian vegetation, and protecting against fuel spillage from heavy equipment operating. Post-project monitoring would include photo-documentation as well as stream cross-section and profile surveys for a minimum of three years following construction.

4 CONSULTATION AND COORDINATION

Coordination with federal and state agencies and potentially affected interests occurred informally as this project was scoped by the BLM interdisciplinary team. The proposed stabilization project is expected to reduce chronic sediment input into Prichard Creek and improve floodplain and watershed conditions. It can be permitted in accordance with requirements of the U.S. Army Corps of Engineers and Idaho Department of Environmental Quality. The proposed action is not likely to adversely affect any species listed as threatened or endangered under the Endangered Species Act, and should not contribute to the need to list a sensitive plant or fish species. Therefore, the BLM did not ask for technical assistance from the U.S. Fish and Wildlife Service.

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4.1 Persons, Groups or Agencies Consulted

Mike Burgan, U.S. Army Corps of Engineers, Coeur d'Alene, ID
June Bergquist, Idaho Department of Environmental Quality, Coeur d'Alene, ID
David Miller, Mining claimant, Murray ID

4.2 Preparers

Mike Stevenson, Water and Soil Resources (Project Lead)
LeAnn Abell, Vegetation, including Special Status Plants
Cindy Weston, Fisheries, including Special Status Species
David Sisson, Cultural Resources and Native American Concerns
Carrie Hugo, Wildlife, including Special Status Species
Lorrie West, NEPA compliance
Suzanne Endsley, NEPA compliance

4.3 Distribution

This EA will be available from the Idaho BLM internet site at https://www.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do Copies may be requested by calling or visiting the BLM's Coeur d'Alene Field Office, telephone (208) 769-5000.

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References

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