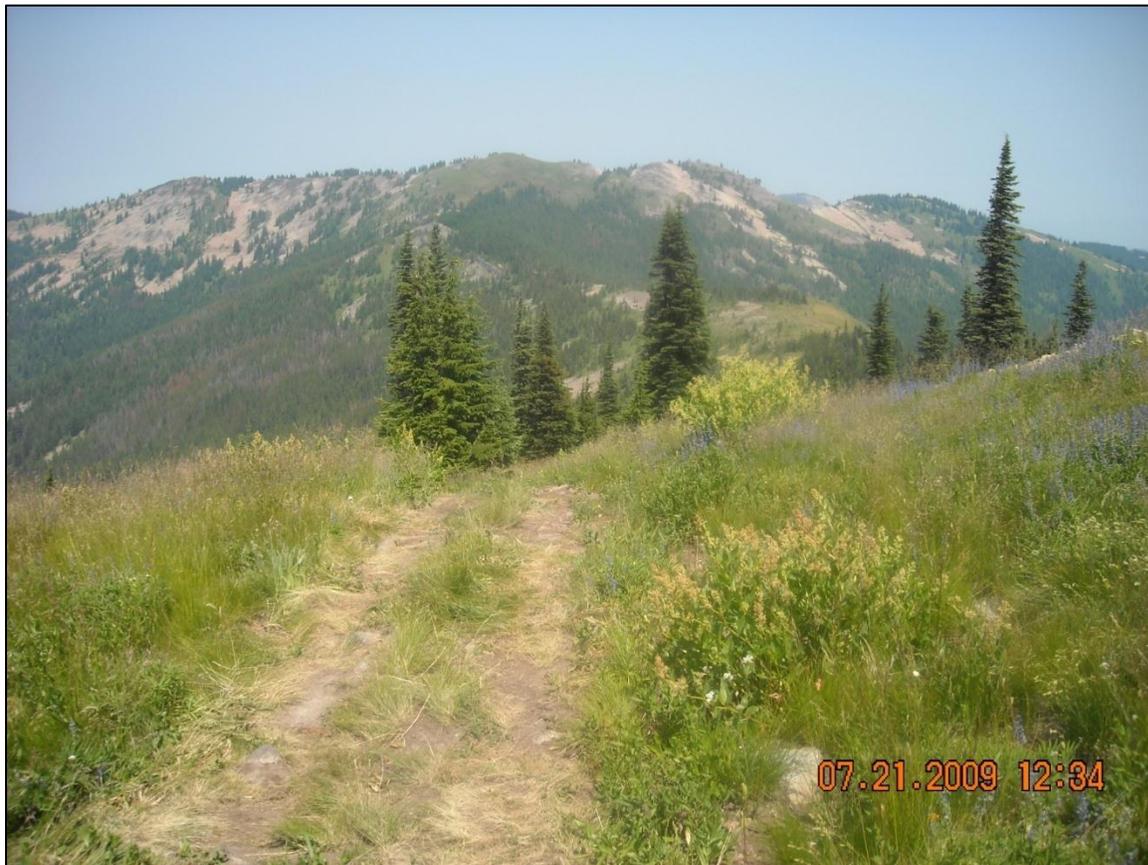


# Crystal Lake Wilderness Study Area Trail Restoration

## ENVIRONMENTAL ASSESSMENT



DOI- BLM-ID-C010-2011-0001-EA

June 2012

BLM

Coeur d'Alene, Idaho



It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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# Crystal Lake WSA Trail Restoration

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## Attachments

- Map 1 - Crystal Lake WSA Vicinity Map and Ownership
- Map 2 - Crystal Lake WSA Trail Restoration Project Area

# Crystal Lake WSA Trail Restoration

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## 1 INTRODUCTION

The BLM, Coeur d'Alene Field Office is proposing to restore and rehabilitate trails within and adjacent to the Crystal Lake Wilderness Study Area (WSA) that have been widened from single track to two-track width due to unauthorized all-terrain vehicle (ATV) use. The Crystal Lake WSA is in Shoshone County on the mountainous divide south of Cataldo, ID and northeast of St. Maries, ID (See Map 1).

### 1.1 Purpose and Need

This project is needed to restore wilderness character and protect natural and cultural resource values within and adjacent to the Crystal Lake WSA. Currently, the non-impairment standard in the Interim Management Policy for Lands Under Wilderness Review (BLM Handbook H-8550-1)<sup>1</sup> is not being met along the trail corridor within the WSA. Purposes of the project are to: reduce the likelihood of future ATV use on the trails by obscuring and obliterating the widened portions of trail; prevent unauthorized ATV use from further impacting the WSA; protect cultural resources within and adjacent to the WSA from damage by unauthorized trail and cross-country ATV use; maintain and enhance natural and cultural resource conditions consistent with Native American trust responsibilities; prevent soil erosion and damage to native vegetation; and encourage only authorized uses along the trails .

The Federal Land Policy and Management Act of 1976 (FLPMA) mandated the Secretary of Interior to report to the President on the wilderness suitability of lands managed by the Bureau of Land Management (BLM) by October 21, 1991. The U.S. Department of the Interior Bureau of Land Management Idaho Wilderness Study Report (1991) conducted a thorough review of the criteria set for in FLPMA and recommended several areas for wilderness designation within the state of Idaho. Crystal Lake was not recommended for wilderness designation in the Wilderness Study Report. Crystal Lake Wilderness Study Area (WSA) must be managed to maintain its wilderness characteristic until congress acts to designate the WSA as a wilderness area or release the area from further consideration as a wilderness study area. The only motorized use that occurred in the 1970s was motorcycle and snowmobile use. Since establishment of the WSA, the Coeur d'Alene Resource Management Plan (RMP) was approved to include direction for management of the WSA and adjacent areas to limit motorized travel to existing trails by these 'one-track' uses (BLM 2007). Therefore, ATV use or UTV use is not allowed within the boundaries of the Crystal Lake WSA. The proposed trail restoration project would have net long-term resource benefits by restoring sensitive areas that have been damaged by unauthorized and increasing ATV use.

### 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.

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<sup>1</sup> The BLM Interim Policy for Lands Under Wilderness Review (H-8550-1), as released on July 9, 1995, is available on the internet at <http://www.wilderness.net/NWPS/documents/BLM/H-8550-1.pdf>

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## 1.2.1 BLM Land Use Plan Conformance

The proposed action as described in chapter 2 of this EA is in conformance with the Coeur d'Alene Resource Management Plan (RMP), approved June 29, 2007. The project is proposed in accordance with BLM Interim Policy for Lands Under Wilderness Review (H-8550-1), and the RMP goal for Special Designations (SD-3, page 62), which is to “*Manage WSAs so as not to impair their suitability for preservation as wilderness until such time as Congress either designates them as wilderness or releases them from further study.*” The project is further consistent with meeting objectives from the RMP for recreation (Objectives RC-1.5,p. 52), cultural resources (CR-1.2, p. 43), and travel management (TM-1.1 p.56), and would implement the action for non-forested vegetation (VN-1.1.2, p. 16), to “*Actively prevent non-authorized off-road motorized and mechanical vehicle access/use*”.

## 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.

The most southerly segment (about 150 linear feet) of the Twin Crags / Crystal Lake trail is on approximately 80 acres of U.S. Forest Service (USFS) land and they are cooperating with the BLM in this proposed trail restoration project.

The Idaho Panhandle Forest Plan (1987) – Forest Wide Direction:

Section A. Goal # 7 – *Manage Special Areas for the unique qualities that precipitated their designation; i.e., Wild and Scenic Rivers, Scenic Areas, Botanical Areas, etc.*

Section E. Standard #1 – *The Forest will continue to provide a share of recreation opportunities and diversity in relation to other public and private entities; recreation planning and operations will be coordinated with other federal, state, local, and private recreation managers.*

Standard #2 – *Forest Service recreational programs will be complimentary with other public and private programs where possible.*

Standard #10 – *Trails will be managed in accordance with management area requirements as identified in a more site specific analysis of needs.*

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## 2 ALTERNATIVES

This chapter describes the Proposed Action and No Action alternatives.

### 2.1 Proposed Action

The project area is located in the Rochat Divide area adjacent to and within the Crystal Lake WSA (See Map 1). Trail restoration efforts would be focused in five work areas on the northeast and southwest ends of a 7-mile multiple use trail generally known as the Twin Crag / Crystal Lake trail. As shown on the project map, (See Map 2) area #1 and #5 are outside the WSA on a section of land acquired by BLM in 2008. The roughly 640 acres within T. 47 N., Range 1 W., Section 36 was under management of the Idaho Department of Lands (IDL) until it was transferred to BLM. Work areas 2-4 are within the WSA, north of privately-owned land crossed by the trail in T. 47 N., R. 1 E., Sections 17 and 20.



Photo 1: Two track trail to be restored (southwest end of trail, Area #1)

The project would consist of using hand tools and native materials to restore approximately one-half the width of the two track trail to natural contour and encourage the reestablishment of native vegetation. After the best path for a single-track trail is selected for each segment, the other would be restored to the prevailing natural ground contours. Techniques such as vertical mulching, spreading natural detritus, and strategically placed rock would be used to finish and conceal the restored portion of the trail. Native plants would be planted at locations deemed best for transplant survival (e.g. deeper soils, sunlight, etc.). A list of native species to be used is found in Section 3.2.5 (Vegetation, including Special Statue Plants). Typical drainage features such as drain dips and water bars would be installed as needed to ensure trail stability of the preferred single-track and to minimize

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erosion. Duff and forest detritus material would be gathered from dispersed locations away from the trail and no mineral soil would be disturbed outside the impacted trail corridor.

The intensity of work would also be dependent on the degree of impact found within each targeted trail segment. Photos 1 and 2 show actual trail segments to be restored, and are examples of highly-impacted trail areas. Other trail segments would require less intensive work as they are narrower and/or already restricted by forest vegetation, rock, or other natural features.

Project work would be limited to hand tools, materials would be hauled from the main road to the extent possible, and the work would involve no new soil disturbance outside of the existing disturbed trail area, therefore, no new disturbance would be created by the project.

Source location for fill material would be the cut bank area of Latour Creek Road. Hauling, via wheelbarrow, is expected to be minimal and limited to the first few hundred yards of the trail. Again, no excavation would occur outside the existing trail corridor.

Vertical mulching would be employed on a trial basis in high-visibility areas along the trail corridor. This technique involves embedding small dead trees/shrubs in an upright position on the restored section of trail to reduce the linear scar of the trail from the near and middle-distance visual perspectives. This technique has not been used extensively within subalpine areas but has been widely and successfully used in more arid/desert areas to improve compliance with travel regulations and obscure illegal routes. It will be evaluated as to its effectiveness under these conditions.

Dead and/or down organic debris would be used to cover filled areas (i.e. duff, sticks, small dead/down trees if available). Efforts would be made to spread a collection of these materials over a wide area to minimize disturbance and not reduce the organic layer unnecessarily. This material would be placed to intercept incoming precipitation and runoff, deflect any flow of water, and obscure/hide the restored area of trail. Using native seed mixes and/or plantings to augment re-establishment of desirable vegetation potentially would reduce weed invasion into native plant communities and competition for sunlight, water, nutrients, and pollinators, and decrease risk of soil erosion. The following species are a list of potential native species to augment re-establishment of the trail; *Achillea millefolium*, *Arcstaphylos uva-ursi*, *Epolobium angustifolium*, *Spiraea Splendins*, *Vaccinium membranaceum*, *Xerophyllum tenax*, and *Lupine*.

**Area #1:** Restore/repair approximately 800 yards nearest Rochat Road will require the most intensive work of the entire project as it is the most heavily impacted by OHV use (See Photo 1, above).

**Area #2:** Restore/repair 50 yards of grassy area just beyond the barrier installed in 2009. This will be primarily obscuring one of the two tracks. (See Photo 2).

**Area #3:** Restore/repair 80 yards of grassy slope area descending a steep slope; work would consist primarily of obscuring one of the two tracks.

**Area #4:** About 150 yards. This is a heavily wooded saddle area where a variety of woody material is available for the restoration methods described in proposed action.

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**Area #5:** About 300 yards. This is an old road bed leading to Pearson Ridgeline. This is the lowest priority for summer 2012 and will likely be conducted at a later time. This segment of trail, unlike the other four work areas, is closed to all motorized use at this time.



**Photo 2.** Impacted trail area to be restored (Northeast end of trail, area #2)

The Proposed Action meets RMP Objective CR-1.2 – *Identify cultural properties requiring physical or administrative protection measures to protect site integrity and implement necessary measures.* Restoring the trail to a single track will reduce erosion and discourage future unauthorized use which will meet the RMP cultural resource objective.

## **2.1.1 Environmental Design/Resource Protection**

Any areas along the trail corridor found to have resource issues serious enough to preclude any of the proposed work will be clearly marked and avoided during project work. Any other mitigation measures recommended by appropriate staff specialists have been incorporated into the proposed action.

## **2.1.2 Monitoring**

Photo point monitoring, which has been conducted annually since 2006, will continue at five points along the subject trail to monitor resource conditions and will help BLM determine if project objectives of the proposed action are being met.

## **2.2 No Action**

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The proposed action would not be implemented.

## 3 AFFECTED ENVIRONMENT AND EFFECTS OF ALTERNATIVES

### 3.1 Scope of Analysis

#### Setting

The Twin Crags/Crystal Lake Trails are in the Crystal Lake WSA. The project area is a subalpine ridgeline trending southwest to northeast for approximately six miles between Latour Creek (Rochat) and Boise Peak Roads. Elevations generally range between 5,400 and 6,100 feet in elevation. Vegetation is primarily subalpine fir and western/mountain hemlock, interspersed with broad talus and open meadow areas. Beargrass, huckleberry, and forb species are common as understory. The area is very scenic and commands fine views of the St. Joe and Coeur d'Alene River valleys.

A private landowner has expressed concern over the increased impacts of ATV use crossing their land along the trail. The landowner in question holds approximately 640 acres at the approximate midpoint of the trail in Section 29. This project would not include any work on the private lands.

#### 3.1.1 Potentially Affected Resources and Uses

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	Wilderness	Project area is within/adjacent to the Crystal Lake WSA, ATV's are not an authorized use in the WSA.	9,027
3.2.2	Recreation	The trail is in the Rochat Divide/Pine Cr. SRMA which has moderate and diverse use.	46,445
3.2.3	Visual Resources	Objective to be met in the project area is VRM Classes I (WSA) and II (SRMA)	46,445
3.2.4	Cultural Resources	The Crystal Lake area includes historic and traditional cultural resources of concern to the Coeur d'Alene Tribe.	46,445
3.2.5	Vegetation, including Special Status Plants	Trail rehabilitation will disturb soil and have some impacts to native species during construction. Seedlings and plantings should use native species.	46,445
3.2.6	Invasive, Nonnative Species	Trail areas are typically avenues of spread for invasive species.	46,445
3.2.7	Special Status Wildlife Species and Migratory Birds	Trail rehabilitation may disturb wildlife and nesting bird species.	46,445

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## 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 future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” As noted in BLM’s policy for lands under wilderness review (H-5580-1), it is recognized that many minor impacts of non-impairing uses or facilities could accumulate to the point at which the total impact would impact wilderness suitability. To prevent cumulative impacts, the BLM will take steps to control those impacts, and new proposals for uses and facilities will be analyzed in NEPA documents (H-5580-1).

### Past and Present Actions

The roughly 640 acres within T. 47 N., R. 1 W., Section 36 was under management of the Idaho Department of Lands (IDL) until it was transferred into BLM ownership in fall of 2008. Prior to that time, IDL had not actively managed recreational uses within the area. Several primitive trails and routes had been pioneered over time along the ridgelines, and these routes had been commonly used by the public during hunting season. With the transfer to BLM in 2008, public land regulations regarding recreational and motorized vehicle use went into effect upon the property in Section 36 for the first time.

Projects were undertaken in 2009 and 2010 to prevent ATV access onto the designated single-track (motorbikes and non-motorized use only) trail. In 2009, a steel and concrete width-limiting barrier was installed at the location indicated as #2 on Map 2 (re: DOI-BLM-ID-C010-2010-0006-CX).

In 2010, an identical barrier and signage was installed at the southern end of the trail immediately adjacent to Latour Creek (Rochat) road just west of the location indicated as #1 on Map 2. In the summer of 2009, the private landowner of Section 29 utilized heavy equipment to obliterate an access road via Honey Jones Ridge that intersected the subject trail at approximately its midpoint in Section 29. These actions have proven effective in reducing unauthorized ATV use along all segments of the trail. This includes segments within the WSA boundary, the acquired segments in section 36, and the portion of the trail that crosses private land in Section 29.

### Reasonably Foreseeable Future Actions

In response to increased resource concerns within the project area, both summer and winter monitoring and law enforcement patrols within the area are being increased. These patrols will better assess summer and winter use of the area, and enforce the travel management restrictions for the area.

## 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 Wilderness/Wilderness Study Area

#### Affected Environment

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The subject trail traverses the eastern portion of the 9,027 acre Crystal Lake WSA. Approximately five miles of the seven-mile trail is within the WSA, while the other two miles are on private land, non-WSA BLM lands, and a small portion of USFS land at the trail's southern terminus along Latour Creek (Rochat) Road.

## Effects of Alternatives

### Proposed Action

The proposed action is expected to have positive resource impacts upon the Crystal Lake WSA by reducing the overall trail footprint (area of disturbance) back to single-track width, a reduction of 40-70% dependent on the overall width of a given trail segment prior to the project. Using hand tools to complete the trail work would reduce disturbance to the restoration sites. Project sites #1 and #5 are outside of the WSA boundary, but constitute the primary access to the WSA and are the logical project points to stop unauthorized ATV/UTV traffic to the WSA.

Restoring and concealing the two-track trail while reducing its width to about 36" would discourage future unauthorized ATV use within and adjacent to the WSA.

### No Action

The trail "footprint" would continue to be that of a double-track on segments of trail within and adjacent to the WSA. Continued ATV use would reduce the likelihood of natural vegetation regeneration and lead to long-term negative impacts to WSA resource values.

## **3.2.2 Recreation**

### Affected Environment

The project area is entirely within the Rochat Divide/Pine Creek SRMA which offers primitive non-motorized and primitive motorized recreation opportunities. The subject trail and project area is essentially a linear corridor within the otherwise primitive non-motorized zone of the SRMA.

The trail has historically been used by all motorized vehicle types, including unauthorized ATV use, to varying degrees along its length. The central portion of the seven mile trail typically sees much less use due to its distance from the main road and the very rugged nature of the trail along the crest of Reed's Baldy.

The trail sees light non-motorized use, primarily by hikers accessing Crystal Lake for fishing, backpacking, or sightseeing. Hunters frequent the main road areas and occasionally use this trail for non-motorized access.

## Effects of Alternatives

### Proposed Action

Users accustomed to driving ATV's or high-clearance 4WD vehicles along the trail were affected by the installation of the two width-limiting steel and concrete barriers installed in 2009 and 2010. Access to the central portion of the trail was also restricted by road obliteration on private lands in 2009 (in Section 29).

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However, the trail has been formally designated as closed to all motorized uses except motorcycles and snowmobiles since the June 2007 approval of the Coeur d'Alene RMP.

The project will not adversely affect non-motorized users, nor authorized motorized users (snowmobiles and motorcycles). The project will likely have a positive impact on these users due to reduction in the trail's width and visual impact.

Users of the main road network and the two developed sites in the area will be unaffected by the proposed action. These users account for about 75-80% of area visitors.

## No Action

All users of the trail will continue to encounter the wide two-track impacted trail bed when using the trail. Overall recreation opportunities within the Rochat Divide/Pine Creek SRMA would be unchanged.

### **3.2.3 Visual Resources**

#### Affected Environment

The analysis area for Visual Resources was determined to be the Rochat Divide/Pine Creek Special Recreation Management Area (SRMA) considering the relatively homogenous resource objectives for that area as described in the 2007 RMP. Although the entire SRMA is 46,445 acres, the project would be visible from only portions of the SRMA, primarily from higher elevations along the ridgelines or from primary access roads.

Visual Resource Management (VRM) classes within the project area are VRM Class I within the Crystal Lake WSA, and VRM Class II in the primitive motorized and non-motorized zones of the SRMA. Therefore, only limited actions affecting the visual character of the area are allowed that do not attract attention from the casual user, nor should they dominate the landscape.

#### Effects of Alternatives

#### Proposed Action

The restoration techniques described in the proposed action would serve to improve visual resource conditions within the project area, and move trail conditions toward desired width and function. The overall visual "footprint" of the trail would be reduced by 40-70% depending on the initial width of the particular trail segment.

Any reduction in ATV use within the area would have net positive impacts to visual resources over time as the restored areas recovered to natural vegetation and contour. This effect is expected to be long term, particularly when considered in conjunction with the other actions described in Section 3.1.2.

#### No Action

The two steel and concrete width-limiting barriers and work on private lands would serve to reduce ATV use on the trail regardless of implementation of the proposed action (See Section 3.1.2). However, natural recovery of the trail to single-track width may not be realized at all due to continued use across its existing width, or such

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recovery would take a very long period of time due to the harshness of the subalpine environment and the degree of existing disturbance within the two-track trail corridor.

## Cumulative Effects

In 2010, the USFS concurred with the BLM's installation of a steel and concrete ATV barrier (DOI-BLM-ID-C010-2010-0006-CX) at the southern terminus of the trail.

## **3.2.4 Cultural Resources**

### Affected Environment

An on-the-ground inventory was conducted in the area of potential effects and consultation with Coeur d'Alene Tribe initiated. Several historic properties were located, none of which were in areas of planned ground disturbing activities. Some existing historic properties have been affected by vandalism, recreation use, and natural deterioration.

### Direct and Indirect Effects for the Proposed Action

There will be no direct effects to historic properties from the proposed trail restoration actions. Improving soil stability will reduce erosion. Reducing the existing two-track trail to a single-track route will discourage unauthorized vehicle traffic and protect historic properties.

### Direct and Indirect Effects for No Action Alternative

Existing agents of deterioration to historic properties are from recreation use, vandalism, use of trails by unauthorized off-road vehicles, and erosion. By not implementing any restoration activities erosion will continue and there may be continued unauthorized vehicle use which leads to potential effects to historic properties. If No Action is taken to reduce continued soil erosion or unauthorized vehicle use, historic properties could be adversely impacted by erosion, unauthorized vehicle use, and increased recreation use.

## Cumulative Effects

Existing agents of deterioration to historic properties are from past recreational use of trails, vandalism, unauthorized off-road vehicle use, and erosion. Whether or not the Proposed Action is taken, future recreational use of the area is expected to increase. The proposed trail restoration project will implement actions that would decrease adverse effects from unauthorized off-road vehicle use and protect historic properties, and thus result in beneficial and long-term cumulative effects.

## **3.2.5 Vegetation/Special Status Plants**

### Affected Environment

Vegetation Communities, including Special Status Plant Species

### Vegetation Communities

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A mosaic of plant communities currently grows in the project area, mainly due to differences in soil type; a steep elevation gradient; changes in slope aspect; and disturbance history. Subalpine fir (*Abies lasiocarpa*), mountain hemlock (*Tsuga mertensiana*), Engelmann spruce (*Picea engelmannii*), lodgepole pine (*Pinus contorta*) and common shrub and herbaceous plant associates dominate the forested portions of the trail route. In areas where trees cannot survive, subalpine “parks” (Moseley 1993) or “meadows” flourish, primarily composed of species such as green fescue (*Festuca viridula*), sedges (*Carex* spp.), beargrass (*Xerophyllum tenax*), and a variety of wildflowers. Small to large talus patches occur within the project area and generally support scattered vegetation, along with several lichen species.

Plant communities within the project area are affected by use of the access roads and trails; past fire activity; insect and disease outbreaks; deep snowpack; and/or small-scale avalanches. Weedy species currently are rather sparse in the areas proposed for restoration, likely because the surrounding native plant communities are in good ecological condition and, thus far, have been able to out-compete non-native, invasive species.

## Threatened, Endangered, and Candidate Species

The Idaho Natural Heritage Program database was searched for known occurrences of rare plants in the project area. Field work was done in the project area during the past three years.

No water howellia (*Howellia aquatilis*; threatened) or Spalding’s catchfly (*Silene spaldingii*; threatened) individuals, populations, or potential habitat occur in the project area. While no whitebark pine (*Pinus albicaulis*; candidate) trees were found during fieldwork, the highest elevations along the trail may represent potential habitat for this species.

## BLM Sensitive and Other Rare Species

No Cascade reedgrass (*Calamagrostis tweedyi*), clustered lady’s-slipper (*Cypripedium fasciculatum*), Constance’s bittercress (*Cardamine constancei*), deerfern (*Blechnum spicant*), rare moonworts (*Botrychium* spp.), or pine broomrape (*Orobanche pinorum*) (all BLM Sensitive) individuals or populations were found during inventory of the project area. Potential habitat for Cascade reedgrass, clustered lady’s-slipper, and rare moonworts is present, though. Other rare species including Bourgeau’s milkvetch (*Astragalus bourgovii*), California sedge (*Carex californica*), dryland sedge (*Carex xerantica*), Sitka mistmaiden (*Romanzoffia sitchensis*), Tweedy’s ivesia (*Ivesia tweedyi*), western starflower (*Trientalis latifolia*), and white shooting-star (*Dodecatheon dentatum*) also were searched for in the project area. No individuals of any of these rare species were seen, but potential habitat is present for California sedge, dryland sedge, and Tweedy’s ivesia.

## ENVIRONMENTAL EFFECTS

### Proposed Action

#### Direct and Indirect Effects

#### Vegetation Communities

The proposed project would benefit native plant communities along about 0.8 miles of the Crystal Lake Trail by reducing the total area that is being impacted by ATVs, motorcycles, or mountain bikes. Since the plant communities that currently border the trail generally are in good ecological condition, over time, the closed track would likely re-vegetate naturally, though the high elevation, shorter growing season, soil compaction,

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and/or rocky conditions could slow or limit site recovery. Supplemental planting of portions of the restoration work areas, with six different nursery-raised, native species may help reduce recovery time over the short term. However, if ATVs are not successfully excluded from these areas, or if motorcycle or mountain bike riders stray onto the recently restricted/restored track, the recovery of the rehabilitated areas would be disrupted because plants would be injured or killed. The restored areas also would be vulnerable to weed invasion until native plants establish to out-compete invasive species. Weeds may out-compete and displace desirable, native vegetation, altering plant community composition, structure, and function both in the present and future.

## Threatened, Endangered, and Candidate Species

The proposed action would not affect water howellia or Spalding's catchfly individuals, populations or potential habitat; or whitebark pine individuals or populations. Potential habitat for whitebark pine likely would be improved because the total disturbance area associated with the Crystal Lake Trail would be reduced; part of the restored area would be replanted with native species; and the native plant community adjacent to the trail would gradually invade the abandoned, restored track. Weed invasion of the project area potentially could still occur and degrade the potential habitat.

## BLM Sensitive and Other Rare Species

The proposed action would not affect Constance's bittercress, deerfern, pine broomrape, Bourgeau's milkvetch, Sitka mistmaiden, western starflower, or white shooting-star individuals, populations, or potential habitat. While no individuals or populations of Cascade reedgrass, clustered lady's-slipper, rare moonworts, California sedge, dryland sedge, or Tweedy's ivesia would be affected by this project, similar to whitebark pine, potential habitat for this second group of species may be improved because of this restoration project.

## Cumulative Effects

The analysis area is the entire Twin Crags/Crystal Lake Trail corridor, approximately seven miles long.

Past disturbances to vegetation in the analysis area likely included fire activity; insect and disease outbreaks; deep snowpack; small-scale avalanches; cross-country ATV travel; and road and trail building, use, and maintenance. Non-native, invasive herbaceous species were introduced into isolated portions of the analysis area. ATV-limiting barriers were installed by the BLM on either end of the trail in 2009 and 2010, and the private landowner obliterated an ATV access point in Section 29 in 2009. These management efforts were intended to decrease damage associated with unauthorized ATV use, and, in turn, would help to protect vegetation.

Present disturbances that affect vegetation in the analysis area include insect and disease outbreaks; deep snowpack; small-scale avalanches; cross-country ATV travel; and trail use and maintenance. Weedy herbaceous species continue to grow in isolated portions of the analysis area. ATVs have successfully bypassed the barrier at the north end of the trail by running over off-trail vegetation.

Reasonably foreseeable disturbances to vegetation in the analysis area include insect and disease outbreaks; deep snowpack; small-scale avalanches; fire activity; or trail use and maintenance.

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

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vegetation is left undisturbed, while plant communities that revert to earlier ecological succession stages due to disturbance such as being run over by ATVs 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 (BLM 2007).

The proposed action would affect approximately 0.8 miles of vegetation along this seven-mile trail. Because this project would include a vegetation restoration component, it would likely contribute beneficial cumulative effects to vegetation communities or potential habitat for special status plant species in the analysis area.

### No Action Alternative

#### Direct/Indirect Effects

#### Vegetation Communities

Plant communities along the Crystal Lake Trail would continue to be impacted by unauthorized ATV use, because there are currently two tracks where there should be one track. Weeds could still be transported into the project area and could threaten native species, especially where soil vegetation cover is low to absent.

#### Threatened, Endangered, and Candidate Plant Species

This alternative would have no effect on water howellia or Spalding catchfly individuals, populations or habitat; or whitebark pine individuals or populations. However, an opportunity to improve potential habitat for whitebark pine would not move forward, and impacts due to unauthorized use would continue.

#### BLM Sensitive and Other Rare Species

This alternative would have no effect on Constance's bittercress, deerfern, pine broomrape, Bourgeau's milkvetch, Sitka mistmaiden, western starflower, or white shooting-star. Likewise, individuals or populations of Cascade reedgrass, clustered lady's-slipper, rare moonworts, California sedge, dryland sedge, or Tweedy's ivesia would be unaffected, though an opportunity to improve potential habitat for this second group of species would not occur, and impacts due to unauthorized use would continue.

#### Cumulative Effects

If unauthorized use and associated vegetation impacts continue, the current amount of damage over the seven mile trail length may increase, and contribute to detrimental cumulative effects in the analysis area.

### **3.2.6 Invasive, Nonnative Species**

#### Affected Environment

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Weeds are non-native plant species with the ability to out-compete and displace desirable, native vegetation. Invasive vegetation and noxious weeds degrade or reduce soil productivity, water quality and quantity, native plant communities, wildlife habitat, wilderness values, and recreational opportunities. Historic activities in the project area (ATVs, hiking, hunting, and roads) have created disturbances allowing the invasion of noxious weeds. All of the current weed populations are closely associated with roads and trails. Despite these activities, the majority of the area is weed free or has only minor weed infestations.

Noxious weeds currently identified in the project area are:

Spotted knapweed	Centaurea maculosa
Meadow hawkweed	Hieracium caespitosum
St. Johnswort	Hypericum perforatum

## Effects of Alternatives

### Proposed Action

#### Direct and Indirect Effects

The Development Actions would have a direct effect by creating temporary ground disturbance that may allow existing invasive plant populations to expand into the project area. Short term results would likely be an increase in invasive plants following trail work activities. Trail restoration efforts would disturb the soil, creating available sites for invasive plant establishment.

Indirect effects would be caused by human traffic and possible ongoing ground disturbance and possible introduction of new invasive species into the area. Trails also provide a conduit for invasive species spread. Weed seeds or other reproductive plant parts may inadvertently be carried into new areas by ATV, hikers, pets or wildlife.

Past ATV use of these trails have created significant, ongoing ground disturbances. ATVs often carry noxious and invasive weed seed or plant parts on the tires and chassis (frequently adhered to the ATV by dried mud.) These seeds can be deposited into un-infested areas either exacerbating existing infestations or introducing new weeds in to the area. Restricting ATV use from these trails will reduce the ongoing ground disturbance of the trails as well as reduce the likelihood of weed seed transport into the project area.

Administrative actions will further decrease the likelihood of invasive species establishment and/or spread. Trailheads will be posted with information on noxious weeds and requirements for weed-free hay and straw to limit weed introduction into surrounding plant communities. Disturbed areas will be monitored for post-project vegetation recovery. Long term results from the project will result in fewer ground disturbing activities and fewer opportunities for weed introductions.

### Cumulative effects

There are many factors in the analysis area that contribute to the spread of noxious weeds including: recreation, wildlife, wildland fires, and other uses.

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Noxious weed control efforts in the project area would be conducted as part of the Inland Empire Cooperative Weed Management Area (IECWMA). These cooperators have noxious weed control responsibilities and interests on adjacent and co-mingled lands in the area. Uncontrolled weed populations in one jurisdiction greatly affect the ability of other land managers to control weeds on lands they administer. The IECWMA promotes an integrated weed management program throughout the area that includes public relations, education and training in the noxious weed arena, along with coordination of weed control efforts and methods, and sharing of resources.

Past events such as road-building and use and recreational activity have contributed to weed invasion on BLM and non-BLM lands. Where left untreated, these weeds may have persisted and continued to threaten native plant communities. Where effective treatment has occurred, weeds have been either eradicated or their spread into native vegetation was curtailed. Ongoing and reasonably foreseeable actions on non-BLM land which would increase the threat of weed invasion into native plant communities include road-building and use; logging; fire; wildlife, and recreational activity.

The short term effects of the proposed action may result in increased weed establishment and spread in areas of ground disturbance. Over the long term, established trails may provide avenues for weed seed dispersal into the project area. However, restriction of ATV use of the trails will reduce the ground disturbance and the likelihood of weed introduction. Weed control activities such as monitoring and treatment by BLM on public lands would contribute positive cumulative effects on noxious weeds through participation in the IECWMA and implementation of the proposed action.

## No Action

Unauthorized ATV use would continue along the Crystal Lake Trail. Ground disturbance by ATVs would continue and weeds could still be transported into the project area and could threaten native species, especially where soil vegetation cover is low to absent.

## **3.2.7 Special Status Wildlife and Migratory Birds**

### Affected Environment

The proposed action area is in alpine and sub- alpine environments. Portions of the area are above tree-line, while others are right at tree-line. This habitat is unique and as a result, there are unique wildlife species that may be found here. Because of the very short growing season, effects of disturbance to sites like these are longer lasting and more difficult to reclaim. For this very reason, minimizing disturbance to the fragile plant community and unique wildlife community is a high priority.

### Endangered, Threatened, and Candidate Species

None of the three threatened or endangered species in the Idaho Panhandle are likely to be found in the project area. Conservation Data Center information, does not indicate any recent (within the last 40 years) documentation of Canada lynx (*Lynx canadensis*), grizzly bear (*Ursus arctos horribilis*), or woodland caribou (*Rangifer tarandus*) within the project area. In addition, there are no special habitat designations for any of these species in the proposed action area.

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However, wolverines (*Gulo gulo*) may be found here and have been documented nearby in the past. Wolverine is a Candidate species for Federal protection under the Endangered Species Act (USFWS 2010). The Idaho Conservation Data Center (2007) has 141 records of wolverines in northern Idaho. A two year-old male was incidentally trapped in the upper Latour Creek drainage during autumn 1992. Because of its age, this animal was thought to be dispersing or preparing to disperse because it was approaching sexual maturity (IDFG 2003). Another wolverine was photographed by an Idaho Fish and Game remote camera within the project area near St. Joe Baldy in February 2003 (IDFG 2003). Given the large home range of wolverines, it is reasonable to assume that there may be wolverines in the project area. The proposed action area is one of only a few places on BLM lands in northern Idaho that have recorded wolverine presence. No wolverine surveys have been conducted on the Rochat Divide by Idaho Fish and Game or the BLM since 2003. But BLM lands in the Rochat Divide are considered to be potential denning habitat (Hugo, 2010), as well as potential year-round habitat for wolverine.

### Special Status and Migratory Birds

The northern alligator lizard is a Species of Greatest Conservation Need (SGCN) that occurs in coniferous forests, often in clearings or along forest edges up to 11,000 feet in elevation. Sites typically have a prominent understory that includes grass or brush and surface debris, such as leaf litter, exfoliated bark, rotting logs, bare ground and talus. Northern alligator lizards consume a variety of arthropods and perhaps mollusks and earthworms (IDFG 2005). They are one of only two lizard species in Idaho that give birth to live young rather than laying eggs.

There are several Special Status Species and Migratory birds that use sub-alpine and alpine habitat and could be affected by the proposed project. Table 3.2.7-1 lists the species that may be found or were encountered in the project area. Species Accounts located on the “Birds of North America Online” website ([www.bna.birds.cornell.edu](http://www.bna.birds.cornell.edu), 2012) and in the Idaho Fish and Game Statewide Wildlife Conservation Strategy (2005) were used to compile the species list and habitat use information below.

Table 3.2.7 - 1 Special Status Species and Migratory Birds

Species	Status	Habitat Type
Northern alligator lizard <sup>SGCN</sup>	Special Status	Rocky outcrops, bare ground
American pipit	Migratory	Alpine meadow
Cassin’s finch <sup>BCC, MB,</sup>	Migratory, Special Status	Forest edge
Chipping sparrow <sup>MB</sup>	Migratory	Forest edge
Clark’s nutcracker	Migratory	Tree line conifers
Cooper’s hawk	Raptor	Forest nesting, foraging in open areas
Dusky grouse <sup>BCC</sup>	Special Status	Adjacent forest
Fox sparrow <sup>MB</sup>	Migratory	Forest edge
Gray-crowned rosy finch <sup>MB</sup>	Migratory	Cliffs, talus slopes, alpine meadows
Mountain bluebird <sup>MB</sup>	Migratory	Meadow edge
Ruby-crowned kinglet <sup>MB</sup>	Migratory	Forest edge
Sharp-shinned hawk	Raptor	Forest nesting, foraging in open areas
Townsend’s solitaire <sup>MB</sup>	Migratory	Forest edge

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SGCN=Species of Greatest Conservation Need, BCC=Bird of Conservation Concern, MB= Migratory Bird

## Effects of Alternatives

### Proposed Action

#### General Effects Applicable to Most Wildlife Species

The “footprint” of the project is relatively small and work will be occurring on already disturbed trails. During project implementation there will be disturbance to wildlife and to habitat. Further analysis of these effects is detailed below. However, the purpose of the project is to eliminate the impacts of ATVs in this unique high-elevation community. Not only will this reduce on-the-ground impacts to vegetation, but it will likely reduce the disturbance to wildlife from ATVs (noise, trampling, increased human access). If the physical trail restrictions are effective, total numbers of people accessing the area will decrease as ATV users are prohibited access. This project aims to create physical restrictions that match and enforce the current travel restrictions for this area. The proposed project should provide a benefit to most wildlife species by reducing the likelihood of direct negative impacts from ATV traffic and reducing the indirect impacts of increased human presence and noise.

#### Endangered, Threatened, and Candidate Species

Because woodland caribou, Canada lynx, and grizzly bear have never been documented in this area, and there are no special habitat designations for any of these species; impacts to any federally listed species resulting from this project are unlikely. No adverse impacts to individuals, populations or their habitat are expected.

Wolverines have been documented very close to the proposed action area during the winter months (IDFG 2003). However, their low occurrence on the landscape and their mobility make the likelihood of wolverine being in the vicinity during implementation low. Because wolverines are highly mobile, disturbance would likely result in temporary movement away from the action area until human activity levels return to baseline. During the summer months when implementation would occur, wolverine denning would be complete and kits would be mobile enough to move away from any perceived threat or disturbance resulting from project implementation. This, coupled with the nature of the disturbance, which is short in duration and low in severity, make the likelihood of any significant direct or indirect impacts to this species almost negligible. No negative impacts to habitat used by wolverine would result from the project. The end result of the project will be reduced motorized access which would benefit wolverine using this area and increase overall habitat suitability (Krebs et al. 2007).

#### Special Status Species and Migratory Birds

Northern alligator lizards use rocky bare ground habitats, forest clearings and edges. Much of the trail work will occur in areas that include this habitat type. The most likely impact to northern alligator lizards would be injury or mortality during ground disturbance, or general disturbance requiring individuals to leave the project area.

Because access to the area is limited by snow, the only window of opportunity for trail work will occur within the window of breeding for high elevation migratory and Special Status birds. While the area of disturbance in the proposed action is fairly small, construction and trail restoration will undoubtedly occur during the breeding

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season for several migratory birds and raptor species. This may result in disturbance to adults that are nesting in the vicinity of or within the proposed area of disturbance. While it is unlikely, it may also result in destruction of nests, nesting sites, and mortality to eggs or offspring. Table 3.2.7-2 below shows the birds that may be found in the Action Area and the habitat and nest type they would be associated with at the time of implementation.

Table 3.2.7 - 2. Potential Species in Action Area

Species	Nest Location	Habitat Type
American pipit <sup>MB</sup>	Ground	Alpine meadow
Cassin's finch <sup>BCC, MB,</sup>	Conifer	Forest edge
Clark's nutcracker <sup>MB</sup>	Conifer	Tree-line conifers
Cooper's hawk <sup>Raptor</sup>	Conifer	Forest nesting, foraging in open areas
Dusky grouse <sup>BCC</sup>	Ground	Adjacent forest
Fox sparrow <sup>MB</sup>	Ground	Forest edge
Gray-crowned rosy finch <sup>MB</sup>	Talus, rock cavity, cliff	Cliffs, talus slopes, alpine meadows
Mountain bluebird <sup>MB</sup>	Tree cavity	Meadow edge
Ruby-crowned kinglet <sup>MB</sup>	Conifer	Forest edge
Sharp-shinned hawk <sup>Raptor</sup>	Conifer	Forest nesting, foraging in open areas
Townsend's solitaire <sup>MB</sup>	Ground, road cut, rocks, talus	Forest edge

SGCN=Species of Greatest Conservation Need, BCC=Bird of Conservation Concern, MB= Migratory Bird

Birds nesting in adjacent conifers would experience some level of disturbance. Nest proximity to the work site would determine the level of disturbance and if it were significant enough to interrupt the nesting process. Ground nesting birds would be the most vulnerable to direct impacts from project implementation. Workers could inadvertently step on nests, destroy them with tools, or damage them while transporting supplies to the work site.

### No Action

If the proposed action is not implemented, there will be no ground disturbance or human activity in the proposed project area related to implementation. This would eliminate direct and indirect effects on nesting migratory birds, raptors, and Special Status Species. There would be no threat or disturbance to northern alligator lizard or wolverine resulting from soil disturbance or human activity. Ground nests would not be disturbed or destroyed as a result of project work and the breeding activities of birds adjacent to the project area would not be interrupted.

ATV access and the resulting degradation to the trail, soil, and vegetation community would continue to occur. Current levels of human access facilitated by ATV use on the trail would continue or increase. Current levels of disturbance to wildlife resulting from this access would continue or increase. Ground nests may be inadvertently destroyed by ATVs or their passengers, and noise associated with ATVs would continue to disturb or deter wildlife from using this habitat.

### Cumulative Effects

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The cumulative effects analysis area for wildlife considerations is the Rochat Divide/Pine Creek Special Recreation Management Area. This area was given a special designation in the 2007 Resource Management Plan because of the unique opportunities it provides for dispersed undeveloped recreation. The 46,445 acre area includes the Crystal Lake Wilderness Study Area, which is 9027 acres. The analysis area includes widely variable habitat types; from talus slopes, sub-alpine forest, alpine meadows, riparian corridors, dense old growth forest stands, to lower elevation dry forest stands of ponderosa pine and Douglas fir. This area also includes much of the alpine and sub alpine habitat in the Rochat Divide.

Historic activities in the area include timber harvest and forest health and fuels management projects, mining, recreational use (both motorized and non-motorized), habitat degradation from weed infestation, low amounts of human development in the lower portions of the Pine Creek watershed, and communications infrastructure development on St. Joe Baldy. Extensive timber harvest has occurred on private lands within the Pine Creek watershed, while the Rochat watershed remains relatively untouched. Road density increases within the Pine Creek watershed while roads are almost absent from the Rochat watershed. Within this analysis area, alpine and subalpine habitat has been affected largely by recreational use, some road development, and communications infrastructure placement and maintenance.

Reasonably foreseeable activities include fuels management and heli-spot construction within the Rochat watershed. These activities were analyzed under DOI-BLM-ID-C010-2011-0004-EA . The project includes brush field burning and clearing brush and trees for heli-spot construction. The USFS will also be conducting fuels reduction activities in the nearby Street Creek watershed at lower elevations. Timber harvest and road development will continue on private lands within the analysis area. Associated impacts with these activities, such as expansion of weeds, increased access by humans when road building occurs, and adverse impacts to wildlife during hauling and harvest will also continue. Concentrated and dispersed recreational use on public and private lands will continue and perhaps increase as human populations increase and demand for outdoor recreation increases. Growing use of ATVs and UTVs will also result in greater impacts to trails, adjacent vegetation, and wildlife. Maintenance of communications infrastructure will also continue.

Many of these activities will not impact alpine and sub alpine habitats. However, increased recreation in high elevation habitat is a concern because of the fragile nature and long recovery times for these plant communities. Because of the small area of impact, the short duration of disturbance, and the fact that this project will result in better protection of these areas, reduced ATV access, and restored vegetation in disturbed areas; the conclusion of this analysis is that no cumulative effects to Special Status Wildlife or Migratory Birds or their habitat will occur.

### **3.3 Mitigation and Monitoring**

All resource values have been evaluated for cumulative impacts. It has been determined that no adverse cumulative effects would result from implementation of the Proposed Action.

Project Staff will be cognizant of the possibility of northern alligator lizards and ground nesting migratory birds in the project area. Care will be taken to ensure that no nests or individuals are inadvertently disturbed or destroyed. Any nests found on the ground will be buffered and work will not continue in that area until the nesting cycle is complete. The Field Office Wildlife Biologist will conduct a walking survey of the project site prior to implementation to look for nests and any nests will be marked with flagging (placed nearby) and mapped.

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If it is apparent that nearby tree or shrub nesting birds are distressed by implementation activities, the Wildlife Biologist can be consulted for recommended modifications to activity timing and location. As per RMP Objective FW 2.3.2 any raptor nests in the project area will be buffered by 100 yards.

Restored areas should be monitored for up to three years following the project to determine if plant cover needs to be augmented with additional, site-appropriate, native plant materials (seed, bareroot, etc.).

## 4 Consultation and Coordination

### 4.1 Persons, Groups or Agencies Consulted

Scoping for preparation of this EA included coordination with the following affected interests.

- Panhandle National Forests, St. Joe Ranger District, St. Maries ID
- State Historic Preservation Office, Boise ID
- Coeur d'Alene Tribe, Plummer ID
- Forest Capital Partners, Saint Maries, Idaho

A notice of availability or copy of this EA will be sent to the above interested entities, and this EA will be available from the Idaho BLM public internet site at:

<http://www.blm.gov/id/st/en/info/nepa.html>

Copies may be requested by calling or visiting the BLM office in Coeur d'Alene (208-769-5000) or Cottonwood (208-962-3245).

### 4.2 Preparers

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LeAnn Abell, Botanist

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Doug Evans, Natural Resource Specialist

Lorrie West, Planning and Environmental Coordinator

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