USDA Forest Service - Region 4 - Salmon-Challis National Forest

Biological Evaluation
South Slope and Elk Ridge Springs Water Development Projects

28 March 2004

For the Following FS Region 4 SensitiveTerrestrial Species:

Sensitive Species
North American Wolverine (*Gulogulo (luscus)*)
Fisher (*Martes pennanti*)
Western big-eared bat (*Corynorhinus townsendi pallesceni*)
Spotted bat (*Euderma maculatum*)
Harlequin duck (*Histrionicus histrionicus*)
Peregrine falcon (*Falco peregrinus anatum*)
Northern goshawk (*Accipiter gentilis*)
Great gray owl (*Strix nebulosa*)
Boreal owl (*Aegolius funereus*)
Flammulated owl (*Otus flammeoulus*)
Three-toed woodpecker (*Picoides tridactylus*)
Columbia spotted frog (*Rana luteiuentris*)
Greater sage-grouse (*Centrocercus urophasianus)*
Pygmy rabbit (*Brachylagus idahoensis)*
Pink agoseris (*Agoseris lackschewitzii*)
Lemhi penstemon (*Penstemon lemhiensis*)
Flexible alpine collomia (*Collomia debilis camporum*)
Douglas' biscuitroot (Cymopterus douglassii)
Salmon twin bladderpod (*Physaria didymocarpa var. lyrata)*
Marsh's bluegrass (*Poa abbreviata marshii)*
Idaho range lichen (*Xanthoparmelia idahoensis)*

This is the final Biological Evaluation for terrestrial Region 4 Regional Forester Sensitive Species for the proposed South Slope and Elk Ridge Springs Water Development Projects, scheduled for implementation in spring or summer 2004.

The Biological Evaluation was prepared in accordance with Forest Service Manual direction to review all Forest Service activities to ensure that such activities do not contribute to a downward trend in population numbers or density of Sensitive species and/or a downward trend in habitat capability, either of which might ultimately result in the need for federal listing (FSM 2672.1 and 2672.4).

This project has been determined to have a finding of:

1. **May Impact**, but **Not Likely to Adversely Impact** Sensitive Species: North American wolverine, fisher, spotted bat, peregrine falcon, northern goshawk, pygmy rabbit, Lemhi penstemon, and Salmon twin bladderpod.

2. **May Impact, but not likely to Adversely Impact with adherrence to Mitigation Measures Needed to Achieve No Impact Status** on Sensitive Species: sagegrouse, Columbia spotted frog, and pink agoseris. Mitigation measures include: 1) The incorporation of watertrough ingress/egress and escape ladders so that sagegrouse, songbirds, and small mammals may safely utilize watertroughs as watering sites**. 2)** The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source. These measures will benefit sage grouse, Columbia Spotted frog, and pink agoseris

3. **No Impact** for Sensitive Species: western big-eared bat, harlequin duck, great gray owl, boreal owl, flammulated owl, three-toed woodpecker, flexible alpine collomia, Douglas' biscuitroot, Marsh's bluegrass, and Idaho range lichen.

The rationale for these determinations is as follows:

1. There is no known vital habitat for R4 Sensitive Species within or in close proximity to the project area, which if removed from their potential usage would cause a negative impact to these species

2. Suitable habitat for R4 Sensitive Species: wolverine, fisher, western big-eared bat, spotted bat, peregrine falcon, northern goshawk, great gray owl, boreal owl, flammulated owl, three-toed woodpecker, Columbia spotted frog, sage grouse, pygmy rabbit, pink agoseris, Lemhi penstemon, and Salmon twin bladderpod does occur within the project evaluation area. But, as previously stated, no habitat vital to the survival of these species, which if removed from their usage would cause a negative impact to these species and result in a trend towards Federal listing, occurs within the project area.

3. Suitable habitat for R4 Sensitive Species: harlequin duck, flexible alpine collomia, Douglas' biscuitroot, Marsh's bluegrass, and Idaho range lichen does not occur within the project area.

4. No presence of R4 Sensitive species has been formally documented within the project area.

Prepared By: Michael Steck
Signature:_____
Title: Leadore Ranger District Wildlife Biologist
Date:_____

Project Information

Project Name: South Slope and Elk Ridge Springs Water Development Projects	**Type:** Range- Livestock water enhancement
District: Leadore	**Project Contact:** Joe Robson- Leadore District Range Conservationist
Project Description: The South Slope and Elk Springs Water Developments are proposed for installation in T.16 N., R.28 E., Section 20 NENE, of the Hawley Creek watershed (see attached map). This proposed action is intended to provide for more consistent water availability, improve livestock distribution and prevent livestock drift into riparian areas in Reservoir Creek. The proposed water developments include developing two springs, enclosure fencing around spring sources and installing a water trough on each, probably within 100 yards of each spring source. The water developments are proposed to locate livestock water out of stream bottoms and riparian areas. These developments would service the Little Bear/Stove Creek Unit of the Hawley Creek Grazing Allotment. The pipelines from the spring sources to the water troughs will be buried to a depth of approx. 18 inches by a small bulldozer equipped with a pipe-layer tooth. Access for vehicles to the project site will be via an existing road system, with an approx. 600 ft travel distance over open terrain from the road to each spring. No new roads will be constructed as part of project activities. No timber harvest is planned as part of project activities. The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source.	
Project Duration: Installation in spring or summer 2004	

Description of Project Analysis Area

Project Evaluation Area Descriptions: Leadore Ranger District of the Salmon-Challis National Forest. Legal description: T.16 N., R.28 E., Sections 16, 17, 20, 21, and 29 (see attached map), Boise Principal Meridian, Lemhi County, Idaho. The project area being evaluated includes Reservoir Creek drainage between Quaking Aspen and Cabin creeks, and the springs on the southeast facing slopes of Reservoir Creek drainage. The evaluation area lies within the Hawley Creek subwatershed (1706020403 5th Field HUC), of the Lemhi River watershed (17060204 4th Field HUC), of the Salmon River subbasin, of the Columbia River Basin. The area also is located within the Continental Divide Canada Lynx Linkage Unit. The total project area being evaluated encompasses approx. 1000 acres.

The project evaluation area lies within a Salmon National Forest Plan Management Area 4B-1, where emphasis is on managing key elk summer range to enhance habitat conditions (see attached map). Within Management Area 4B-1 "Investments in compatible resources occur but will be dictated by big game habitat requirements. Livestock grazing may be compatible but must be managed to favor wildlife habitat. Structural range improvements must benefit wildlife. Motorized use of new and/or existing roads and trails is managed to prevent unacceptable stress on big game animals during primary use period." Road densities on federal and state lands within the Hawley Creek subwatershed equal 0.8- 1.7 miles of road/square mile of area (see attached map). No groomed snowmobile trails exist within the Hawley Creek subwatershed.

The project evaluation area lies within Timber Stand Compartment 146. All timber stands within this compartment are typed as "Unproductive Forest." No old-growth timber stands exist within the project area. Willow/sedge habitat exists, or has the potential to exist, along riparian corridors and at spring sites.

The project evaluation area encompasses a sagebrush-grassland upland on the southeast facing slopes of the Reservoir Creek drainage that extends uphill to the northwest to a sagebrush covered ridgeline. The north end of the project area encompasses the confluence of Short and Reservoir Creeks and a manmade water impoundment reservoir located there. The east and southeast side of the project area encompasses the northwest facing Douglas-fir and lodgepole pine timber/sagebrush slopes of the Reservoir Creek drainage. The south end of the project area begins just upstream from the confluence of Reservoir and Quaking Aspen Creeks (see attached map).

Project Site Description: The elevation range of the project site lies between 7680 and 7600 feet elevation. Aspect is generally southeast. Slope is between 0-45 percent. The South Slope and Elk Ridge spring sources are located on a Sedimentary Landtype Association, Fluvial Landtype, V120as volcanic soil type described as "weakly dissected mountain slopes, hot and dry sites." Willow shrub/sedge wet-meadow habitat exists at both South Slope and Elk Ridge Spring sources.

HABITAT/SPECIES DISTRIBUTION & DETERMINATION OF EFFECTS

Determinations for Regional Forest R4 Sensitive Species:

A). "No impact"
B). "Beneficial impact"
C). "May impact individuals but not likely to cause a trend to Federal listing or loss of viability"
* D). "May impact individuals and likely to result in a trend to Federal listing or loss of viability"

*Considered a trigger for a significant action

SensitiveSpecies	Habitat Present	Habitat Absent	Survey Conducted	Species Present	Species Absent	Effects
Terrestrial vertebrates:						
North American Wolverine	X		No	Unknown		C
Fisher	X		No	Unknown		C
Western big-eared bat	X		No	Unknown		A
Spotted bat	X		No	Unknown		C
Harlequin duck		X	No	Unknown		A
Peregrine falcon	X		No	Unknown		C
Northern goshawk	X		No	Unknown		C
Great gray owl	X		No	Unknown		A
Boreal owl	X		No	Unknown		A
Flammulated owl	X		No	Unknown		A
Three-toed woodpecker	X		No	Unknown		A
Spotted frog	X		No	Unknown		C
Sage Grouse	X		No	Unknown		C
Pygmy Rabbit	X		No	Unknown		C
Plants:						
Pink agoseris	X		No	Unknown		C
Lemhi penstemon	X		No	Unknown		C
Flexible collomia		X	No	Unknown		A
Douglas' biscuitroot		X	No	Unknown		A
Salmon twin bladderpod	X		No	Unknown		C
Marsh's bluegrass		X	No	Unknown		A
Idaho range lichen		X	No	Unknown		A

A. Determination Information for the Project

Sensitive Species	Type of Potential Suitable Habitat Present		
	Reproduction	Foraging	Migration
Terrestrial vertebrates			
North American Wolverine	No	Yes-Winter	Yes-Winter
Fisher	Yes	Yes	Yes
Western Big-eared Bat	No	Yes	No
Spotted Bat	No	Yes	No
Harlequin Duck	No	No	No
Peregrine Falcon	Yes	Yes	Yes
Northern Goshawk	Yes	Yes	Yes
Great Gray Owl	Yes	Yes	Yes

Boreal Owl	Yes	Yes	Yes
Flammulated Owl	Yes	Yes	Yes
Three-toed Woodpecker	No	Yes	Yes
Spotted Frog	Yes	Yes	Yes
Sage Grouse	No	Yes	Yes
Pygmy Rabbit	Yes	Yes	Yes
Plants			
Pink agoseris	Yes	-	-
Lemhi penstemon	Yes	-	-
Flexible collomia	No	-	-
Douglas' biscuitroot	No	-	-
Salmon twin bladderpod	Yes	-	-
Marsh's bluegrass	No	-	-
Idaho range lichen	No	-	-

Yes = Suitable habitat is present, based on the species' known habitat preferences.
No= Suitable habitat is not present.

Sensitive Species- Terrestrial Vertebrates

North American Wolverine: Suitable wolverine habitat includes tundra and coniferous forest zones at higher altitudes in summer, and at mid to lower elevations in winter. Wolverine is a rare, low-density, wide-ranging species. It is reclusive, primarily using high-elevation forests and cirque basins, and travels long distances in search of prey and other food. Wolverines prefer to hunt around small meadows, timbered thickets, cliffs, riparian, and ecotonal areas. Wolverines generally avoid large meadows and large clearcuts. Wolverine subsist on rabbit, hare, gopher, rats, mice, marmots, grouse, occasional songbirds, fruits, berries, insect larvae, and carrion of large game such as elk and deer.

No wolverine occurrence has been formally documented within the proposed project area. Suitable reproductive habitat for North American Wolverine does not occur within the project analysis area. Suitable winter foraging and migration habitat is present in the 1000 acres of the project analysis area.

The proposed project will not impact any wolverine suitable reproductive habitat. It will not impact suitable summer foraging or migration habitat. It will not impact suitable winter foraging and migration habitat, because project construction will take place in the summer. Project activities will not impact individual wolverine, in the short-term, during project implementation by harvest noise and elevated human presence causing wolverine to avoid using the project area as foraging, or migration/dispersal habitat, because said habitat will not be suitable for wolverine during the duration of the project. Project activities will not impact wolverine reproductive behavior. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Long term and cumulative impacts on wolverines are not expected to occur. This project will not impact the viability of the species, or result in a trend of wolverine towards federal listing.

Based on the knowledge that:

1) The occurrence of North American Wolverine within the project analysis area is unknown, since official surveys for this species were not conducted within the project area.
2) Suitable reproductive habitat for North American Wolverine does not exist within the project analysis area.
3) Suitable winter foraging and migration/dispersal habitat for wolverine does exist within the project analysis area.
4) The proposed project will not affect any known wolverine den/reproductive sites.
5) Proposed project activities do not include vegetation alteration (logging) strategies that would impact wolverine.
6) Proposed project activities do not include increases in road density or amounts, since no new roads are to be constructed as part of project activities.
7) The proposed project will not affect individual wolverine, in the short-term during project implementation, by making individual animals temporarily avoid the project area.
8) Cumulative adverse impacts on North American Wolverine by proposed actions will not occur.
9) The limited scope, scale, and duration of the proposed action means that wolverine reproductive, foraging and migration/dispersal habitat is not at risk. North American Wolverine population viability is not at risk.

Based on current information, the project will have **No Impact** on North American Wolverine.

Fisher: Suitable habitat for fisher include continuous-canopied mature to old-growth spruce-fir forests for denning, and areas with dense understories of young conifers, shrubs, and herbaceous cover for hunting and foraging. Fisher diet includes rabbit, hare, squirrel, chipmunk, mice, porcupine, raccoon, young Felidae spp., smaller mustelids, grouse, songbirds, hawks, reptiles, amphibians, insects, carrion, and berries and other fleshy fruits. Fisher usually avoid open areas such as large meadows, grasslands, and clearcuts.

No fisher occurrence has been formally documented within the project evaluation area, or within 30 miles of the project area. But, suitable foraging and reproductive habitat is present in the north facing timbered slopes of the Reservoir Creek valley. The proposed project will not affect any fisher suitable reproductive or foraging habitat. Project activities will not individual fisher, in the short-term, during project implementation by harvest noise and elevated human presence causing fisher to avoid using the project area. Project activities will not impact fisher reproductive behavior. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Long term and cumulative impacts on fisher are not expected to occur. This project will not impact the viability of the species, or result in a trend of fisher towards federal listing.

Based on the knowledge that:

1) The occurrence of fisher within the project analysis area is unknown, since official surveys for this species were not conducted within the project area.
2) Suitable reproductive habitat for fisher does exist within the project analysis area.
3) Suitable foraging and migration/dispersal habitat for fisher does exist within the project analysis area.
4) The proposed project will not impact any known fisher den/reproductive sites.
5) Proposed project activities do not include vegetation alteration (logging) strategies that would impact fisher.
6) Proposed project activities do not include increases in road density or amounts, since no new roads are to be constructed as part of project activities.
7) The proposed project will not affect individual fisher, in the short-term during project implementation, by making individual animals temporarily avoid the project area.
8) Cumulative adverse effects on fisher by proposed actions will not occur.
9) The limited scope, scale, and duration of the proposed action means that fisher reproductive, foraging and migration/dispersal habitat is not at risk. Fisher population viability is not at risk.

Based on current information, the project will have **No Impact** on fisher.

Western big-eared bat: No western big-eared bat occurrence has been formally documented in the project area. Western big-eared bat is consistently found in areas with canyons or cliffs. Western big-eared bats roost in exposed, open areas in cool, damp caves or mine tunnels, old buildings, and at rocky outcroppings. Western big-eared bat foraging habitat is comprised of juniper/pine forests, shrub steppe grasslands, deciduous forest, and mixed coniferous forests from sea level to 10,000 feet elevation. It forages near tree and shrub foliage for moths and other flying insects. Suitable reproductive, roosting, and migration/dispersal habitat does not occur within the proposed project area, and not within the proposed project site. Suitable foraging habitat does occur in the riparian areas and the north facing timbered slopes of Reservoir Creek Valley. The proposed project will not affect big-eared bat suitable reproductive, foraging or migration/dispersal habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities will not affect bat use of the project area. Long term and cumulative impacts on bats are not expected to occur. This project **will not impact** the viability of the species, or result in a trend of western big-eared bat towards federal listing.

Spotted bat: No spotted bat occurrence has been formally documented within the proposed project area. Potential reproductive habitats for spotted bat are crevices high up on steep cliff faces. Cracks and crevices in limestone or sandstone cliffs are critical roosting sites. Potential foraging habitat for spotted bat includes open ponderosa pine and pinyon-juniper forests, open desert scrub shrubland, open pasture and hay fields. Spotted bat suitable reproductive, roosting, and migration/dispersal habitat, in the presence of cliffs and rocky outcroppings does not occur within the proposed project area. Suitable foraging habitat does occur within the proposed project area and at the project site.

The proposed project **may impact, but is not likely to adversely impact**, spotted bat suitable foraging habitat, even though the proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period. Since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities will not impact bat use of the project area, since spotted bat forages at night. Long term and cumulative impacts on bats are not expected to occur. This project will not impact the viability of the species, or result in a trend of spotted bat towards federal listing.

Harlequin duck: No harlequin duck occurrence has been formally documented within the proposed project area. Harlequin duck ground nests within 6 to 60 feet of water on islands, in stream bank recesses, under bushes or trees, in hollow trees or cavities among rocks all with overhead cover. It prefers cold, shallow, low gradient, meandering, mountain streams in forested areas. Harlequin duck consumes crustaceans and mollusks, stone flies, other insects, and fish. Suitable reproductive and foraging habitat for harlequin duck does not occur within the proposed project area. The proposed project will not impact harlequin duck suitable reproductive, roosting, and migration/dispersal habitat. Since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities will not affect harlequin duck use of the project area. Long term and cumulative impacts on harlequin ducks are not expected to occur. This project **will not impact** the viability of the species, or result in a trend of harlequin duck towards federal listing.

Peregrine falcon: No peregrine falcon occurrence has been formally documented within the proposed project area. Potential reproductive habitat for peregrine falcon includes high cliff ledges, potholes or small caves. Nest sites also include old stick nests of ravens and hawks, and holes and stubs of large trees. Potential foraging habitat includes high mountains and open forests, preferably where there are rocky cliffs overlooking rivers, lakes, or other open water. Peregrine falcon feeds on a variety of small to medium bird species, some mammals, and insects. Peregrine falcon suitable reproductive, foraging,and migration/dispersal habitat, does occur within the project evaluation area.The proposed project **may impact, but is not likely to adverselyimpact**, peregrine falcon suitable foraging habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period. Since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact falcon use of the project area. Long term and cumulative impacts on falcons are not expected to occur. This project will not impact the viability of the species, or result in a trend of peregrine falcon towards federal listing.

Northern goshawk: No northern goshawk occurrence has been formally documented in the project analysis area, but goshawks have been documented 2 miles to the west in 1992. Preferred habitat includes mature to over-mature coniferous forest with a 75-80% intermediate -closed canopy, moderate (15-35%) slope, and northern aspect. Goshawk nests are normally found within stands of large trees with dense canopy and open understory. Foraging activities are conducted within intermediate-closed canopy, open-understory forest, and within small forest openings. Northern goshawk prey upon grouse, quail, pheasant, ducks smaller hawks and owls, hare, rabbit, squirrel, woodchuck, chipmunk, mice, and shrews. The project evaluation area does reside within suitable northern goshawk reproductive, roosting, foraging, and migration/dispersal habitat. Project activities may impact goshawk reproductive behavior. The proposed project will not impact suitable goshawk reproductive, roosting, foraging or migration/dispersal habitat, since all forms of such are located of sufficient distance from proposed project activities and routes. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact goshawk use of the project area during project construction. Long term and cumulative impacts on northern goshawks are not expected to occur. This project **may impact, but is not likely to adversely impact** the viability of the species, or result in a trend of Northern goshawk towards federal listing.

Great gray owl:. In the Intermountain Region potential great gray owl habitat is composed of mixed lodgepole pine/Douglas fir/ and aspen forest usually bordering small openings or meadows. Optimum habitat for great gray owl is dense coniferous forest for roosting and nesting, near semi-open areas where small rodents are abundant. Nests are constructed on top of broken-topped snags, in abandoned nests of raptors or ravens, and on debris platforms formed by dwarf mistletoe. Great gray owls feed primarily on voles and pocket gophers, foraging along edges of clearings.

No Great gray owl occurrence has been formally documented within the project evaluation area, but has been documented 3 miles to the west in 1996. Project activities will not impact great gray owl reproductive behavior. The proposed project will not impact suitable great gray owl reproductive, foraging, or migration/dispersal habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period. Since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact owl use of the project area during project construction. Long term and cumulative impacts on owls are not expected to occur. This project **will not impact** the viability of the species, or result in a trend of great gray owls towards federal listing.

Boreal owl: Boreal owl suitable reproductive habitat is composed of old woodpecker cavities in relatively high density, large diameter (12+" dbh) mixed coniferous, aspen, Douglas-fir, or spruce-fir forest with an open understory and multi-layered canopy. Potential foraging habitat includes cool, high elevation spruce-fir forests. Boreal owl feeds primarily on small mammals such as red-backed vole, pocket gopher, flying squirrel, and shrew. They also will consume insects and small birds. Boreal owls avoid open areas, such as clearcuts and meadows, except for occasional use of the edges for foraging.

No boreal owl occurrence has been formally documented in the proposed project area. Project activities will not impact boreal owl reproductive behavior. The project site and activities will not impact suitable boreal owl reproductive, foraging or migration/dispersal habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact boreal owl use of the project area during project construction during daylight hours. Long term and cumulative impacts on boreal owls are not expected to occur. This project **will not impact** the viability of the species, or result in a trend of boreal owl towards federal listing.

Flammulated owl: Preferred habitat is composed of mature ponderosa pine-douglas-fir forests with open canopies. Flammulated owls have been found in mixed pine, spruce, and fir forests at high elevations, and in aspen and second growth ponderosa pine. Potential reproductive habitat includes large diameter (20+" dbh) dead trees. Flammulated owls are almost exclusively insectivorous, feeding on moths, beetles, caterpillars, crickets, spiders, scorpions, and other arachnidea which they glean from tree branches, or hawk while flying. They avoid foraging in young, dense timber stands.

No flammulated owl occurrence has been formally documented within the proposed project area. The project evaluation area does reside within suitable flammulated owl reproductive, foraging, and migration/dispersal habitat on the north-facing slopes of Reservoir Creek Valley. Project activities will not impact flammulated owl reproductive behavior. The project site will not impact suitable flammulated owl reproductive, foraging or migration/dispersal habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact flammulated owl use of the project area during daylight hours. Long term and cumulative impacts on flammulated owls are not expected to occur. This project **will not impact** the viability of the species, or result in a trend of flammulated owl towards federal listing.

Three-toed woodpecker: Potential habitat for three-toed woodpecker is mixed-coniferous forest containing spruce, fir, tamarack, lodgepole pine, and aspen, with abundant dead and decayed trees, between 4000 and 9000 feet elevation. Three-toed woodpecker is a snag-dependent species, which typically occurs at low endemic levels until abundant dead and decayed trees, in diseased and/or newly burned areas, become available. Nest cavities are excavated in trees with heartrot, while snags with the most bark and limbs remaining on are used for foraging on wood-boring larvae of moths and beetles, caterpillars, and ants. Snags are required for feeding, perching, nesting, and roosting.

The occurrence of three-toed woodpecker has not been formally documented within the project evaluation area. Suitable three-toed woodpecker reproductive, roosting, foraging, and migration/dispersal habitat does exist within the project evaluation area on the north-facing timbered slopes of Reservoir Creek Valley. Project activities will not impact three-toed woodpecker reproductive behavior. The project site and activities will not impact suitable three-toed woodpecker reproductive, roosting, foraging, or migration/dispersal habitat. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project construction period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Project activities may impact individual woodpeckers, in the short-term, during project implementation by construction noise and elevated human presence causing woodpeckers to avoid using the project area during working hours of project construction. But, long term and cumulative impacts on woodpeckers are not expected to occur. The proposed project **will not impact** three-toed woodpecker. This project will not impact the viability of the species, or result in a trend of three-toed woodpecker towards federal listing.

Columbia Spotted frog: Spotted frog suitable reproductive habitat is based around permanent water such as marshy edges of ponds or lakes, in algae-grown overflow pools of streams, near slow-moving water at streamside, or near springs with emergent vegetation. After breeding spotted frog may move considerable distances from water into mixed conifer and subalpine forest, grassland, or brushland of

sage or rabbitbrush. Spotted frog is thought to hibernate in holes near springs or other areas where water remains unfrozen and is constantly renewed.

Spotted frog occurrence has not been formally documented within the project evaluation area Suitable reproductive, foraging, migration/dispersal, and hibernation habitat for spotted frog does occur within the proposed project area within riparian habitat along Reservoir, Short, and Cabin Creeks, at the Reservoir located at the confluence of Short and Cabin Creeks, and at isolated spring sites within the project evaluation area. Suitable habitat does exist at the project sites. With adherence to mitigation measures the proposed project **may impact but is not likely to adversely impact** spotted frog suitable habitat. Suitable spotted frog habitat may be directly impacted by project construction activities at the spring sites. Suitable habitat at the spring sites may be decreased in abundance by water developments decreasing the moisture content of the soil within the spring sites, thus decreasing the size of the spring sites themselves. The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source. Suitable spotted frog habitat may be benefited by the fencing of spring sites to exclude livestock grazing. There will be a short-term increase in the amounts of vehicle traffic during project implementation. Since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact frog use of the project sites, but should not impact the rest of the evaluation area. Long term and cumulative impacts on spotted frogs are not expected to occur. This project will not impact the viability of the species, or result in a trend of Columbia spotted frog towards federal listing

Sage grouse: Sage grouse is a sagebrush obligate species of sagebrush habitat. Sagegrouse utilize traditional reproductive grounds called leks, located on the main Lemhi Valley floor, where coutship and breeding occur. Nesting is within sagebrush habitat. Eighty percent of nesting occurs within 2 miles of a lek, although long distance travels of up to 40 miles from a lek to a selected nest site have been documented. Early brood-rearing activities occur in the vicinity of spring and riparian habitat in the general vicinity of nesting sites. In mid-summer, as main vallet floor heats and dries up, sagegrouse broods move uphill onto cooler sagebrush slopes in the vicinity of riparian and spring sites. During winter sagegrouse tend to move back to the main Lemhi valley floor. Some sagegrouse remain in the vicinity of leks, while others undertake long-distance migrations down-valley.

No occurrence of sage grouse has been formally documented within the proposed project area. Sagebrush habitat does occur within the project evaluation area. Suitable reproductive habitat for sage grouse does not exist within the proposed project area. Suitable late brood-rearing habitat does exist within the project area and at the project sites. Proposed project activities **may impact** sage grouse late brood-rearing habitat, but with adherrance to mitigation measures **will not adversely impact** sage grouse. Mitigation measures include the incorporation of watertrough ingress/egress and escape ladders so that sagegrouse may safely utilize watertroughs. Suitable habitat at the spring sites may be decreased in abundance by water developments decreasing the moisture content of the soil within the spring sites, thus decreasing the size of the spring sites themselves. The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source. These measures will benefit sage grouse, Columbia Spotted frog, and pink agoseris. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact sage grouse use of the project area during project construction. But, long term and cumulative impacts on sage grouse are not expected to occur. This project will not impact the viability of the species, or to result in a trend of sage grouse towards federal listing.

Pygmy Rabbit: Pygmy rabbit is a Salmon-Challis National Forest Management Indicator Species, which is also an obligate species, of sagebrush habitat.

No occurrence of pygmy rabbit has been formally documented within the proposed project area. Sagebrush habitat does occur within the project evaluation area. The proposed project will lead to a short-term increase in the amounts of human presence and vehicular traffic within the project area during the project implementation period, but since no new roads will be constructed as part of project activities the project will not result in a long-term increase in the amounts of human presence or vehicular traffic in the area. Noise from proposed project activities may impact pygmy rabbit use of the project area during project construction. Proposed project activities **may impact, but are not likely to adversely impact** pygmy rabbit. Long term and cumulative impacts on pygmy rabbit are not expected to occur. This project will not impact the viability of the species, or to result in a trend of pygmy rabbit towards federal listing.

Sensitive Species- Plants

Pink agoseris: Habitat for pink agoseris is restricted to perennially wet montane meadows on a variety of substrates, in which the soil is saturated throughout the agoseris growing season.

No occurrence of pink agoseris has been formally documented within the project evaluation area. Suitable habitat for pink agoseris does occur within the proposed project area in riparian habitat along Reservoir, Short, and Cabin Creeks, around the manmade reservoir at the confluence of Short and Cabin Creeks, and within the project sites themselves. With adherence to mitigation measures project site construction activities **may impact** suitable pink agoseris habitat, but **are not likely to adversely impact** the species.

Suitable habitat at the spring sites may be decreased in abundance by water developments decreasing the moisture content of the soil within the spring sites, thus decreasing the size of the spring sites themselves. The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source. Fencing of the spring sites **may result in a beneficial impact** to the species by excluding livestock grazing of the sites. Long term and cumulative impacts on pink agoseris are not expected to occur. This project will not impact the viability of the species, or result in a trend of pink agoseris towards federal listing

Lemhi penstemon: Habitat for Lemhi penstemon is composed of open sagebrush and grassland-coniferous forest communities on stable to semi-disturbed sites, mostly in deep soils, between elevations of 4000-8000 feet.

No occurrence of Lemhi penstemon has been formally documented within the project evaluation area. Suitable habitat for Lemhi penstemon does occur within the project evaluation area, but not within the project sites themselves. Proposed project activities, such as cross-country travel by construction machinery and vehicles **may impact but are not likely to adversely impact** Lemhi penstemon habitat. Long term and cumulative impacts on Lemhi penstemon are not expected to occur. This project will not impact the viability of the species, or result in a trend of Lemhi penstemon towards federal listing

Flexible alpine collomia: No occurrence of flexible collomia has been formally documented within the proposed project area. Habitat for flexible collomia is comprised of stable rock talus and scree slopes that have a soil substrate. Suitable habitat for flexible collomia, does not exist within the project area, and not within the proposed project site itself. Proposed project activities **will not impact** flexible collomia suitable habitat. This project will not impact the viability of the species, or individual plants, or result in a trend of flexible collomia towards federal listing

Douglas' biscuitroot:

Description: A member of the parsley family, it is a low, tufted, herbaceous perennial. It grows long and tufted (4-15 cm tall) with a straight to curved (6-20 cm long) taproot. The crown has few to several branches, arising 1-3 cm below ground, which are enveloped by marcescent, papery leaf sheaths. Its leaves are oblong, 2-5 cm length, green to grayish-green, or strongly blueish-grey in color (glaucous). It has once-pinnate with entire leaflets, or with few to many unequally bilobed to pinnately 3-7 lobed or twice-pinnate (especially below) leaflets. The leaflets are in 3-5 opposite, elliptic, distinct pairs, which are crowded and greatly overlapping. The inflorescence consists of subcompact, compound umbels (3-8 mm in diameter). The flower stalk is 4-13 cm long and exceeds the leaves. Its 5-12 bractlets are entire, about equaling the flower length, and are thinly marginad. The flowers are yellow (fading pale) and the carpophore is bilobed. The fruit is broadly ovoid (3-4 mm long) dull to somewhat lustrous, prominent, corky, and winged. The seeds are slightly compressed dorsally. It flowers from mid-June to late July. It fruits from July to August.

Habitat: Occurs on alpine and sub-alpine ridges, slopes, and on moraines, colluvium, and outwash found in adjacent cirques. It occurs on all aspects and all slope declivities. It is most commonly found at elevations between 9,000- 10,500 feet, but has been found as high as 10,850 feet and as low as 8,000 ft. Location sites are largely devoid of trees. If trees are present, it is as widely scattered individuals or krumholz. Habitat substrate is normally gravelly to rocky soil, consisting of frost-shattered fragments of carbonate. Sites where it is found are constantly subject to disturbance of the soil surface, either by wind erosion, water erosion, frost-heaving, or downslope soil movement. It occurs only in sparsely vegetated areas that have considerable amounts of bare ground. At the Sheep Mountain Proposed Research Natural Area in the Lemhi Mountain Range, on Leadore District, it occupies the highest, driest, and most exposed sites, and is the highest elevation plant collected. It is restricted to dolomite substrates, and is a minor, but consistent, component of the alpine Carex rupestris community. Most of the Sheep Mountain site was sparsely vegetated (35%), with most of the area being exposed mineral soil. In the Lost River Mountain Range, to the west of Leadore District, site locations have been characterized as alpine fellfield, talus (including scree), and spike-fescue (Leucopoa kingii) grassland.

Management Implications: Mining claims on limestone portions of high elevation (9000-10,500 ft elevation) alpine and subalpine fellfields, scree and talus slopes with an alpine Carex rupestris community could be a concern. There is virtually no livestock grazing of any population, and wild ungulate herbivory appears minimal.

Proposed Project Area: No occurrence of Douglas' biscuitroot has been formally documented within the proposed project area. Suitable habitat for Douglas' biscuitroot does not occur within the proposed project area.

Based on the knowledge that:

1) The absence of Douglas' biscuitroot within the project area has not been verified by field survey.
2) Suitable habitat for Douglas' biscuitroot does not exist within the project area.
3) The proposed project will not impact any known Douglas' biscuitroot sites.
4) The proposed project will not impact any suitable Douglas' biscuitroot habitat.
5) Long term or cumulative impacts on Douglas' biscuitroot are not expected to occur.

This project **will not impact** the viability of the species, or result in a trend of Douglas' biscuitroot towards federal listing

Salmon twin bladderpod:

Description: A perennial member of the mustard family. It grows from a branching rootstock with 1 to several stems. Its basal leaves are numerous, 2-8 cm long, and varying in shape from toothed to (usually) lyrate. The stem leaves are reduced, mostly oblanceolate to entire. The sepals are green and the petals are yellow (9-12 mm long). It flowers from June to August, and produces a much inflated silicle (15-22 mm long).

Habitat: Elevation 4500-6800 ft. Rocky, sparsely vegetated, gentle to steep southerly slopes, only on stable substrates in Big Sagebrush (Artemisia tridentate) habitat. Vegetation cover is low and bare ground and rock coverage high. The substrate is dominated by rocks 1-3 inches in diameter, and can be loose, or more often fairly stable. It can be found in roadcuts, scabland, shale banks, talus slopes, and other sites subject to disturbance.

Management Implications: Frequent movement of the substrate is a hazard. Mining, ORV use, erosion, removal of gravel, roadside weed spraying, or major animal traffic could threaten the population. Steep slopes likely preclude significant livestock use at most sites. All populations of Salmon twin bladderpod in Lemhi Valley occur in drainages that have their headwaters on Salmon-Challis N.F. land. Suitable habitat generally occurs below the national forest boundary.

Proposed Project area: No occurrence of Salmon twin bladderpod has been documented within the proposed project area. Suitable habitat for Salmon twin bladderpod does occur within the project evaluation area, but not within the project site itself.

Based on the knowledge that:

1) The absence of Salmon twin bladderpod within the project area has not been verified by field survey.
2) Suitable habitat for salmon twin bladderpod does exist within the project area.
3) The proposed project will not impact any known Salmon twin bladderpod sites.
4) The proposed project may impact suitable Salmon twin bladderpod habitat.
5) Long term or cumulative impacts on Salmon twin bladderpod are not expected to occur.

This project **may impact but is not likely to adversely impact** Salmon twin bladderpod. But, this project will not impact the viability of the species, or result in a trend of Salmon twin bladderpod towards federal listing

Marsh's bluegrass:

Description: Perennial grass. Culms 5-15 cm tall, slender, from small dense tufts with narrow bases, shoots intravaginal. Upper culm leaf sheath margins fused 1/10- ¼ the length; ligules 1-3 mm long, smooth; blades 1.0-1.5 mm side, folded and inrolled, lacking papillae, abaxially smooth, adaxially scabrous on and between the veins. Panicles 2-5 cm long, lanceolate, the branches scabrous angled. Spikelets with 2-4 florets, 5-6 mm long; glumes subequal, 1-3 veined, the first slightly shorter, second frequently slightly exceeding the lower lemma; calluses of the lower lemmas webbed (sometimes minutely); lemmas 3.5-4.0 mm long, glabrous, smooth, palea keels scabrous; rachillas smooth. Flowers perfect; anthers 0.6-1.0 mm long. Subspecies marshii is distinguished from all other Poa abbreviata only in having entirely smooth, glabrous lemmas.

Habitat: High alpine rocky slopes, alpine fell-fields, and granite talus with strong cold winds, intense solar illumination, a growing season of 4-6 weeks, and killing frosts that are possible at any time. Idaho populations found in Butte county, Lemhi Range; Custer county, Lost River Mountains in Leatherman Pass; and in Blaine county, Sawtooth Mountains, 10,000 ft elevation on granite talus at head of Boulder Creek Canyon. California population found at 3840 m (12,600 ft) elevation in steep, northfacing cirque drainage near top of mountain.

Management Implications: The defense of the plant is its remote, steep location and high altitude.

Proposed Project Area: No occurrence of Marsh's bluegrass has been documented within the proposed project area. Suitable habitat for Marsh's bluegrass does not occur within the proposed project area.

Based on the knowledge that:

1) The absence of Marsh's bluegrass within the project area has not been verified by field survey.
2) Suitable habitat for Marsh's bluegrass does not exist within the project area, since the project area is at an elevation below the range of this species.
3) The proposed project will not affect any known Marsh's bluegrass sites.
4) The proposed project will not impact any suitable Marsh's bluegrass habitat.
5) Long term or cumulative impacts on Marsh's bluegrass are not expected to occur.

This project **will not impact** the viability of the species, or result in a trend of Marsh's bluegrass towards federal listing

Idaho range lichen:

Description:

Habitat: Heavy, bentonite clay-based, lake sediment soils.

Management Implications:

Proposed Project Area: No occurrence of Idaho range lichen has been documented within the proposed project area. Suitable habitat for this species does not occur within the proposed project area.

Based on the knowledge that:

1) The absence of Idaho range lichen within the project area has not been verified by field survey.
2) Suitable habitat for Idaho range lichen does not exist within the project area.
3) The proposed project will not affect any known Idaho range lichen sites.
4) The proposed project will not impact any suitable Idaho range lichen habitat.
5) Long term or cumulative impacts on Idaho range lichen are not expected to occur.

This project **will not impact** the viability of the species, or result in a trend of Idaho range lichen towards federal listing

Project Mitigation Measures Needed to achieve No Impact status: **Mitigation measures include: 1) the incorporation of watertrough ingress/egress and escape ladders so that sagegrouse, songbirds, and small mammals may safely utilize watertroughs as watering sites**, and 2) **The troughs within each pipeline system will be floated to create a "closed pipeline" water system, where water is retained at the spring source until a drop in water level at a trough opens the pipeline to refill the trough. The troughs will be equipped with drain systems to empty the pipelines during winter to prevent damage to the water system from freezing. The trough drains will be closed during warm weather seasons in order to retain as much water as possible at the pipeline spring source. These measures will benefit sage grouse, Columbia Spotted frog, and pink agoseris**

C. Criteria For Reaching a Determination of ``No Effect''

Issue	Criteria	Yes/No
1.	Does the activity likely involve the 'direct taking' of species (including the capture, collection, harassment, or harm to individuals)?	No
2.	Does the activity fail to comply with Forest Plan direction for management of federally listed or regionally sensitive species or their habitats?	No
3.	Does the activity fail to comply with or violate any provisions of the Endangered Species Act?	No
4.	Does the activity preclude or influence implementation of any current or foreseeable management strategies associated with recovery of any listed species or their habitats?	No

NOTE: If all responses to the above criteria are "NO", the determination of effects of the described activity on Federally listed species (bald eagle,gray wolf, grizzly bear, Canada lynx, and Ute ladies'-tresses) is "NO EFFECT". **For FS sensitive species, if all responses are "No", the determination is "No Impact" and the described activity will not cause a trend towards Federal listing for any of the species analyzed.**

D. Comments Regarding Activity Or Responses

1. Any and all proposed projects subsequent to this decision will require separate and specific analyses for all applicable Federally listed or FS Sensitive species and will include completion of Biological Assessments and/or Biological Evaluations, as dictated by the proposed action(s).

2. Clauses will be added to the permit addressing refuse disposal (D-1), water pollution (D-2), removal and planting of vegetation and other resources (D-5), revegetation and surface restoration of ground cover (D-9), pollution (D-15), and pesticide use (D-23).

E. Signature

Prepared By: Michael Steck Signature: _____

Title: Leadore District Wildlife Biologist Date: _____

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