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Ketchum Land Exchange (IDI-35331)

Applicant: Blue Canyon Corporation (Land Exchange IDI-35331)

Prepared for the Bureau of Land Management by
ERO Resources Corporation

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1 PURPOSE AND NEED

1.1 INTRODUCTION

The Shoshone Field Office (SFO) of the Bureau of Land Management (BLM) has received a land tenure adjustment proposal for a land exchange between the United States, by and through the BLM, and the Blue Canyon Corporation (Blue Canyon) pursuant to Sections 205 and 206 of the Federal Land Policy and Management Act of 1976 (FLPMA), as amended (43 U.S.C. 1716). All parcels associated with the land exchange proposal are located in Blaine County, Idaho.

The proposed land exchange would be between the BLM and the Blue Canyon, an Idaho corporation, in which Mr. Ali Fayed is the sole shareholder and president. The BLM and the Blue Canyon have been discussing a potential exchange for several years as a way to resolve an inadvertent trespass (trespass case #IDI-33066) on the Federal land adjacent to Mr. Fayed's non-Federal property in Ketchum, Idaho. The trespass consists of improvements associated with Mr. Fayed's private residence and includes storage structures, a sprinkler house, air conditioning units, a split rail fence, a basketball hoop, and extensive landscaping including a buried irrigation system. The Federal land is also encumbered with multiple authorized uses (rights-of-way), several of which are associated with the adjacent private residence. These rights-of-way include an access road, water pipelines, a septic drainfield, a highway, and various utilities (e.g., power, natural gas, TV cable, and communications).

Following discussions, the Blue Canyon and the BLM agreed that a land exchange would be an appropriate means of resolving the trespass and meeting the SFO land tenure management objectives. Specifically, the BLM Shoshone Field Office (SFO) was looking to acquire lands within the BLM SFO land tenure Zone 5 to provide a net gain of BLM-administered Federal lands within the zone. The BLM SFO had also had communications with the Wood River Land Trust (WRLT), a local, nonprofit conservation organization regarding properties that they had acquired with the intent to eventually transfer them into Federal ownership. The Blue Canyon subsequently contacted the WRLT for assistance in locating properties with sufficient resource diversity to be considered suitable for conveyance to the BLM as part of a land exchange. Blue Canyon also chose to contract with Western Land Group to facilitate the land exchange process with the BLM. A facilitator is an entity involved in a Federal land tenure adjustment action that 1) is not the current owner of the non-Federal land and/or will not be the "end owner" of the Federal land, 2) is involved in the lands included in the action and/or involved in the processing of the action in a project management / coordination role, and 3) is not a Federal contractor retained to perform services for processing the action. Discussions between all of the parties resulted in the identification of lands owned by the WRLT that they agreed to allow to be considered for inclusion within the land exchange proposal. The properties are currently under an option for purchase by the Blue Canyon, with the intent that they would eventually be transferred to Federal ownership. Along with resource considerations, the proposed land exchange would also need to be an equal value exchange or equalized. In accordance with 43 Code of Federal Regulations (CFR) Part 2201.6, land exchanges can be equalized by: 1) adding or excluding lands, or 2) use of an equalization payment not to exceed 25 percent of the value of the Federal land to be conveyed. The value of the lands would be based on fair market value as determined by the BLM through appraisal(s) administered by the Department of the Interior, Office of Valuation Services.

Preliminary resource investigations and value estimates anticipated the exchange would involve one parcel of Federal land totaling about 20 acres (Blue Canyon parcel) and three parcels of non-Federal land totaling about 1,299 acres (Square Lake parcel – 320 acres, Cowcatcher Ridge parcel – 672 acres, and Sheep Bridge parcel – 307 acres). Updated and more intensive environmental and valuation information conducted in 2011 resulted in the elimination of one of the parcels (Cowcatcher Ridge parcel) from consideration and an acreage reduction of a second parcel (Square Lake parcel). The resultant, equalized land exchange proposal includes the BLM conveying one parcel of Federal land totaling approximately 20 acres (Blue Canyon parcel) to the Blue Canyon, in exchange for the BLM acquiring two parcels of non-Federal land totaling an estimated 547 acres (Square Lake parcel – 240 acres and Sheep Bridge parcel – 307 acres).

During the discussions regarding the final land exchange proposal, the Blue Canyon, with WRLT's support, expressed their intent to pursue a separate donation (IDI-37260) to the BLM for the remaining 80 acres of the original Square Lake parcel (referred throughout this document as the "80-acre retained parcel"). The locations of all the parcels are shown on Figure 1.

1.1.1 Federal Parcel

1.1.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel is located directly north of the City of Ketchum on the east side of State Highway (SH) 75 and contains about 20 acres. The parcel is bounded on the south by Block 16 of the Big Wood Subdivision as well as the City of Ketchum corporate limits; on the east by Block 9 of the Big Wood Subdivision (Mr. Fayed's non-Federal property); on the north by Federal land; and on the west by the centerline of the State Highway (SH) 75 right-of-way. The parcel is encumbered with both authorized and unauthorized uses.

Conveyance of the parcel to the Blue Canyon would formally resolve the trespass including the allowance of the unauthorized improvements associated with the private residence to remain, as well as eliminating the BLM's administration of the multiple rights-of-way associated with the parcel.

1.1.2 Non-Federal Parcels

1.1.2.1 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The Square Lake parcels are located in the southern portion of Blaine County, about five miles south of the junction of U.S. Highway 20 (Highway 20) and SH 75. Both parcels together contain 320 acres; 240 acres for the land exchange parcel with the remaining being encompassed by the 80-acre retained parcel. The entire 320 acres is owned by the WRLT. The parcels are about 1,100 feet to the east of SH 75. The parcels are a non-Federal inholding surrounded by BLM-administrated Federal lands. The parcels contain about 29 acres of wetlands as well as wildlife habitat associated with the wetlands and sagebrush communities. Numerous wildlife and plant species are found within the parcels. The most notable wildlife occurrence is a greater sage-grouse (*Centrocercus urophasianus*) lek in the southern half of the land exchange parcel. According to the Idaho Department of Fish and Game Fish and Wildlife Information System (IFWIS), the parcels also have a documented presence of pygmy rabbits (*Brachylagus idahoensis*) (IFWIS 2011). The parcels contain identified habitat for several BLM Sensitive Species, including the greater sage-grouse, pygmy rabbit, loggerhead shrike, Brewer's sparrow, Mourning milkvetch, sage thrasher, short-eared owl, and Brewer's blackbird. The Square Lake parcels are within preliminary priority habitat (PPH) for the greater sage-grouse; key habitat for

pygmy rabbit; and crucial mule deer winter range. The parcels contain some minor improvements including access roads, fences, a corral, and an interpretive sign.

1.1.2.2 *Sheep Bridge Parcel*

This parcel is located south of Highway 20 and north of Magic Reservoir, about four miles west of the junction of Highway 20 and SH 75, and contains about 307 acres. The Sheep Bridge parcel is bordered on one side by Federal land and on two sides by Idaho Department of Fish and Game (IDFG) managed land. The parcel is undeveloped and is covered predominately by sagebrush steppe habitat and includes one mile of the Big Wood River; which flows between basalt cliffs within the Sheep Bridge canyon. Rock Creek, a perennial stream, flows along the parcel's western boundary. The parcel contains about 27 acres of wetland habitat as well as wildlife habitat associated with the wetlands and sagebrush communities. The parcel contains a 1-mile reach of unaltered riverine and riparian habitat along the Big Wood River and a ½ mile reach of riparian habitat along Rock Creek. The parcel also contains identified habitat for several BLM Sensitive Species, including the loggerhead shrike, willow flycatcher, and Brewer's sparrow. The Sheep Bridge parcel is within preliminary priority habitat for the greater sage-grouse, and mule deer, pronghorn and elk migration routes. The United States currently owns the mineral estate; which is managed by the BLM and included within a geothermal lease.

1.2 PURPOSE AND NEED FOR ACTION

The need for an action is to resolve the inadvertent trespass (trespass case #IDI-33066) on the Federal land adjacent to Mr. Fayed's non-Federal property in Ketchum, Idaho. The BLM has authority to address trespasses in various ways. Sections 205 and 206 of the FLPMA provides authority to the Secretary of the Interior to dispose of Federal land or interests in land by exchange when a determination is made that the public interest would be well served. When considering the public interest, the authorized BLM officer shall give full consideration to: 1) the opportunity to achieve better management of Federal lands; 2) the needs of the state and local residents and their economies; and 3) securing important resource management objectives including, but not limited to, protection of fish and wildlife habitat, riparian habitat, enhancement of recreational opportunities and public access, accommodation of land use authorizations, and fulfillment of public needs.

The purpose for the proposed land exchange is to: 1) address BLM's need to resolve a long-standing inadvertent trespass; 2) consolidate land ownership patterns for more effective and efficient management; 3) acquire wildlife habitat, including preliminary priority habitat for the greater sage-grouse, prime habitat for pygmy rabbit, crucial mule deer winter range, and mule deer, pronghorn and elk migration routes; 4) acquire wetland and riparian habitat; and 5) provide a net gain of BLM-administered Federal lands within the BLM SFO land tenure Zone 5. This proposal is consistent with the provisions of the FLPMA.

1.3 DECISION TO BE MADE

The BLM SFO Manager will determine the method to resolve the trespass that is in the best interests of the public's land and resources.

1.4 CONFORMANCE WITH APPLICABLE LAND USE PLANS

The proposed action and alternatives are in conformance with the Sun Valley (1982) and Magic (1975) Management Framework Plans (MFPs), as amended. The two MFPs were amended

collectively in 2003 by the *Amendments to Shoshone Field Office Land Use Plans for Land Tenure Adjustment and Areas of Critical Environmental Concern* (“2003 Amendment”) to identify land management strategies and land ownership adjustment criteria for land tenure adjustment proposals (BLM 2003a). The 2003 Amendment identifies five zones (Zones 1 through 5), each with different management strategies where BLM-administered Federal lands are emphasized for retention or can be considered for disposal. The land tenure adjustment management direction for the BLM SFO states that each land tenure adjustment proposal would be reviewed on a case-by-case basis and evaluated to see if it meets the intent of the FLPMA, the guidelines for the relevant land tenure and management zone(s), and the criteria for land ownership adjustment (BLM 2003a). Depending on the merits of each proposal, disposal of Federal lands would be a priority if the disposal provides the opportunity to consolidate Federal lands, accommodate the need for community expansion, improve management in areas of high resource values, and/or resolve long-standing unauthorized uses. Valid existing rights and access needs would be considered in all land tenure adjustment actions.

The parcels involved with the proposed action and alternatives are located within two land management zones – Zone 2 (Square Lake parcel, inclusive of the 80-acre retained parcel) and Zone 5 (Blue Canyon and Sheep Bridge parcels). The priorities for Zone 2 are to retain the existing large blocks of high-value public lands within the zone, consolidate public land ownership within high-priority watersheds by seeking to acquire non-Federal and state inholdings in those watersheds, and to acquire additional high resource value lands within lower priority watersheds. Acquired lands also have to improve efficiencies in public lands management. The general land tenure management strategy of Zone 5 is to consolidate ownership; maintain the total amount of public land within the zone; and to “acquire, primarily through exchange, additional high resource value lands that improve the manageability of public lands” which “would result in disposal of lower resource value and difficult to manage tracts of Zone 5 public lands” (BLM 2003a, p. 10).

The Blue Canyon parcel is also located within the North Ketchum Special Recreation Management Area (SRMA). The approved Sun Valley (1982) and Magic (1975) MFPs, as amended offer no affirmative direction regarding land adjustments that would expand or reduce the acres of public land within the boundaries of SRMAs within the respective planning areas. A slight reduction in acreage within the North Ketchum SRMA would occur with implementation of the proposed action or Alternative A.

Disposal of the Federal lands provides an opportunity to consolidate Federal ownership; accommodate the need for community expansion; improve management in areas of high resource values; resolve long-standing unauthorized uses; and is otherwise in the public interest. Federal acquisition of the non-Federal lands will consolidate land ownership patterns for more effective and efficient management; increase the amount of Federally owned wildlife habitat, including preliminary priority habitat for the greater sage-grouse, habitat for pygmy rabbits, crucial mule deer winter range, and mule deer, pronghorn and elk migration routes; increase the amount of Federally owned wetland and riparian habitat; and provide a net gain of BLM-administered Federal lands within the BLM SFO land tenure Zones 2 & 5. The proposed action and Alternative A therefore, meet the objectives outlined in the Sun Valley and Magic MFPs, as amended, to resolve long-standing unauthorized uses, consolidate Federal lands, and to improve management in areas of high resource values. The no action meets the objectives outlined in the MFPs, as amended, to resolve a long-standing unauthorized use.

1.5 RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

1.5.1 Federal

1.5.1.1 *Federal Land Policy and Management Act of 1973 (FLPMA)*

Disposal of Federal lands as well as the acquisition of non-Federal lands is allowable by the BLM per Title II of the FLPMA (BLM/OS 2001). Section 205 allows the BLM to acquire lands or interests in lands by purchase, exchange, donation or eminent domain. Section 206 allows for the BLM to dispose of Federal lands by exchange. The BLM regulations at 43 CFR Part 2200.0-6 allow for the completion of an exchange only after a determination by the authorized officer is made that the public interest would be well served. This consideration must include the opportunities to achieve better management of Federal lands; to meet the needs of state and local residents and their economies; to secure important objectives including fish and wildlife habitats, cultural resources, watersheds, wilderness, and aesthetic values; to enhance recreational opportunities and public access; and to consolidate lands for increased management efficiency. In any exchange, the authorized office shall reserve such rights or retain such interests as are needed to protect the public interest or shall otherwise restrict the use of the Federal lands to be exchanged, as appropriate.

Domestic livestock grazing is allowable on the BLM-administered Federal lands per Title IV, Section 402 of the FLPMA. Under the BLM regulations at 43 CFR Part 4180 – *Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration*, the BLM is required to assess resource conditions of grazing allotments in conjunction with Technical Reference 1734-6 – *Interpreting Indicators of Rangeland Health* (2000), and the *Final Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management* (BLM 1997b). Rangeland Health Standards and Guidelines are used as management goals by the BLM for the betterment of the environment, protection of cultural resources, and sustained productivity of the range. The Federal and non-Federal parcels are within or adjacent to existing grazing allotments.

Rights-of-way are allowable on BLM-administered Federal lands per Title V of the FLPMA and the BLM regulations at 43 CFR Part 2800, at the discretion of the Secretary of the Interior or their delegated officer. Pursuant to the BLM regulations at 43 CFR Part 2807.15 if the BLM is considering a proposal to transfer Federal land that is encumbered by a right-of-way the BLM will provide reasonable notice to the holder and provide an opportunity for the holder to apply to either change the terms and conditions of the right-of-way or convert to an easement. Valid existing rights and access needs would be considered in all land tenure adjustment actions.

1.5.1.2 *Endangered Species Act of 1973 (ESA)*

The parcels have been surveyed to determine the potential of the proposed action or alternatives to affect species or designated critical habitats as listed within the Endangered Species Act (ESA) of 1973, as amended. No ESA-listed threatened or endangered species or their proposed or designated critical habitats were found to occur within the project area (ERO/POWER 2012). The BLM determined that suitable habitat for ESA-listed threatened or endangered species is not present within the project area. The proposed action or alternatives would have no effect on ESA-listed threatened or endangered species or their habitat, therefore no ESA Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) is necessary.

1.5.1.3 *Clean Water Act of 1972 (CWA)*

The Clean Water Act (CWA) (33 U.S.C. §1251 et seq. (1972)) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Sections 305(b) and 303(d) of the CWA require states to establish water quality standards and list the current conditions of all state waters (required by §305(b)) and those waters that are impaired and needing a total maximum daily load (TMDL) (required by §303(d)). The proposed action and alternatives were assessed in this environmental assessment (EA) as to the potential to impact water quality within the corresponding stream reaches.

The CWA Section 404 establishes a program to regulate the discharge of dredge and fill material into waters of the United States, including wetlands. Responsibility for administering and enforcing Section 404 is shared by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). The parcels were mapped at a reconnaissance level with respect to suspected waters of the United States (ERO 2012b, 2012e). There are no actions associated with the proposed action or alternatives that would require Section 404 permitting.

1.5.1.4 *Resources Conservation and Recovery Act (RCRA) of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)*

The Resources Conservation and Recovery Act (RCRA) of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) contain implications for land transfers including Federal land exchanges. In accordance with these laws and their implementing regulations, the Federal agency is required to evaluate all property proposed for transfer (Federal and non-Federal) for the presence of hazardous substances and to include a notice in the contract for property transfer that identifies the type and quantity of any hazardous substance that has been stored, released, or disposed of on the property and when the storage, release, or disposal occurred. Under current BLM policy (BLM 2011a), the Phase I Environmental Site Assessment for the non-Federal lands must conform to the Standards and Practices for All Appropriate Inquiry (40 CFR 312). In addition, a Phase I Environmental Site Assessment conducted on Federal lands prior to disposal must conform to the Standards and Practices for All Appropriate Inquiry (40 CFR 312) (BLM 2011b). Environmental Site Assessments for both the Federal and non-Federal parcels have been performed, and would be updated prior to acquisition/disposal (ERO 2012c, 2012d). These assessments allow the BLM to establish the innocent landowner defense, bona fide prospective purchaser liability protection, and contiguous property owner liability protection under CERCLA regulation. In addition, the assessments conform to the BLM policy and identify physical hazards, solid waste, and non-scope issues that may be on a property. No hazardous materials, physical hazards, solid waste or non-scope issues were identified on the parcels.

1.5.1.5 *National Historic Preservation Act (NHPA) of 1966*

To ensure compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, an intensive cultural resource survey was completed on the Federal parcel (Walsworth and Associates 2008). The report was submitted to the State Historic Preservation Office and they concurred there would be no effect to historic properties.

1.5.1.6 *Executive Orders, Regulations and Policies*

Several Executive Orders (EOs) are applicable. These consist of EO 11988, *Floodplain Management*; EO 11990, *Protection of Wetlands*; and EO 13443, *Facilitation of Hunting*

Heritage and Wildlife Conservation. In accordance with EO 11988 - *Floodplain Management* and EO 11990 - *Protection of Wetlands*, floodplains and wetland areas were mapped using the USFWS National Wetland Inventory (NWI) mapping data for parcels to quantify areas of the resources within each of the parcels. Areas were calculated with Geographic Information Systems (GIS) ArcView and resource areas were used to quantify the resource gain or loss within this EA. Consistent with the BLM multiple use directive, comments were solicited from the IDFG during the scoping process to gather input regarding hunting heritage and wildlife habitat conservation.

The 2004 BLM National Sage-Grouse Conservation Strategy emphasizes partnership in conserving sage-grouse habitat through consultation, cooperation, and communication with the Western Association of Fish and Wildlife Agencies, the USFWS, the U.S. Department of the Agriculture Forest Service (USFS), the U.S. Geological Survey (USGS), state wildlife agencies, local sage-grouse working groups, and various other public and private partners (BLM 2004a). The 2011 *National Greater Sage-Grouse Planning Strategy* (BLM 2011d) outlines a planning strategy effort for greater sage-grouse conservation that emphasizes partnership in conserving greater sage-grouse habitat through new or revised regulatory mechanisms within the management of BLM lands. The planning strategy is in the process of developing procedures. BLM's Washington Office Instructional Memorandum (IM) 2012-043 provides interim conservation policies and procedures to be applied to ongoing and proposed authorizations and activities that affect the sage-grouse and its habitat. BLM IM 2012-044 provides direction to the BLM for considering sage-grouse conservation measures during the land use planning process in accordance the developing National Sage-Grouse Planning Strategy. Biological inventories were conducted on the parcels that identified suitable habitat for the greater sage-grouse in several locations on the non-Federal parcels. In 2012, the BLM identified areas of preliminary priority habitat (PPH) in conformance with IM 2012-043 (BLM 2012b). These are areas designated by BLM that have the highest conservation value to maintaining sustainable greater sage-grouse populations. Both non-Federal parcels are designated as PPH. The non-Federal parcels with PPH would be incorporated into existing and developing land management strategies to meet the goals of the conservation strategy.

1.5.2 State

The non-Federal parcels (Square Lake, Sheep Bridge, and 80-acre retained) contain habitat for the greater sage-grouse. As part of a 2006 Memorandum of Understanding (MOU), the BLM has committed to implement the *Conservation Plan for the Sage-grouse in Idaho* (ISAC 2006). The purpose of the conservation plan is “to effectively conserve Idaho sage-grouse populations and sagebrush communities through support of individual and collective efforts of local working groups, nongovernmental organizations, local governments, State and Federal agencies, Tribes, and members of the public.” Acquired lands administered by the BLM would be managed in conjunction with this MOU, existing land management plans, the BLM 2004 National Sage-grouse Conservation Strategy, the 2011 National Greater Sage-Grouse Planning Strategy described above, and the Northern Magic Valley Local Working Group Grouse Conservation Plan (currently in draft form).

The Idaho Department of Water Resources (IDWR) is responsible for the allocation of surface and groundwater within the state under Idaho Code, Title 42. The IDWR is also responsible for assisting the courts in the adjudication of water rights, processing change applications, and enforcing the state's water laws. One water right is located on the Federal Blue Canyon parcel

and would be transferred as part of the proposed exchange; two water right interests on the Sheep Bridge parcel would be transferred to the BLM under the proposed exchange. A third water right interest on the Sheep Bridge parcel is a claim that has been recommended by IDWR for disallowance and is currently in the administrative process to disallow the claim. A review of existing water rights with respect to existing conditions and anticipated uses within the proposed action and alternatives identified statutory and administrative procedures that would have to be followed and adhered to upon to implementation of the proposed action or alternatives.

1.6 SCOPING, PUBLIC INVOLVEMENT, AND ISSUES

1.6.1 Scoping and Public Involvement

The BLM was originally presented with two land tenure adjustment proposals – the proposed land exchange described herein (IDI-35331) and a proposal to dispose of lands under the Recreation and Public Purposes Act (R&PPA) (43 USC 869) to the City of Ketchum (IDI-36276). Because of the proximity of the parcels involved in both proposals, the similarity of the resources on or associated with all parcels involved, the need to assess the public benefit of the land tenure adjustment proposals, and the desire by all parties to the proposals for efficiency of efforts, the BLM originally chose to evaluate both proposals in one EA. Scoping and public involvement included and described each land tenure adjustment proposal independently, but resource surveys, inventories, and technical reporting were combined for efficiencies. For this reason, scoping documents include comments and issues identified for both the land exchange and R&PPA proposals. Scoping issues attributed specifically to the land exchange were identified and are analyzed in this EA. Issues specifically pertaining to the R&PPA proposal are not considered in this EA. Issues identified, but with insufficient clarity to be directly attributed to one proposal or the other, were considered during the preparation of this EA.

Prior to public scoping, the BLM conducted internal scoping to identify preliminary issues and resources of concern. Internal scoping identified 15 resources potentially affected by actions within the combined land exchange and R&PPA proposal. These resources were identified in a December 28, 2010 Scoping Information Packet that was provided as part of the public scoping process (BLM 2010b).

The external scoping period was from December 28, 2010 through February 14, 2011. On December 28, 2010, notification letters (including the Notice of Exchange Proposal and Notice of Recreation and Public Purposes Act Proposal) were mailed to the IDFG, IDWR, Idaho Department of Lands, and various other state and local agencies, as well as 144 interested individuals and businesses. Chapter 5 lists the interested parties who received a scoping notification letter. The letter referenced the complete scoping package, posted on the BLM National Environmental Policy Act (NEPA) website as of December 30, 2010. Additional hard copies of the scoping packets were mailed upon request.

As part of tribal consultation, the Shoshone-Bannock and Shoshone-Paiute Tribes were presented with information regarding the land tenure adjustment proposals to solicit comments. The Shoshone-Bannock Tribes were sent a scoping notification letter on December 28, 2010, and information was presented at a meeting on January 20, 2011 and November 8, 2011. No formal comments have been received from the Shoshone-Bannock Tribes. The project was presented to the Tribal Business Council on April 30, 2012 and they stated their support for the proposals at the time due to the fact that there is a net increase of approximately 600 acres. The BLM SFO regularly meets with the Shoshone-Paiute Tribes on projects throughout the field office.

Information on the proposed land tenure adjustment proposed exchange was initially presented to the Tribes on December 2, 2010, with multiple periodic updates. In general, The Tribes have historically initially expressed their opposition to any Federal land disposals; however, recent discussions have resulted in a request by the Tribes for a visit to the parcels to be acquired to discuss their potential benefits. As a result of the site visit the Tribes noted their support of the BLM's acquisition of the non-Federal higher resource valued lands. None of the Tribes provided information about, or expressed interest in, any particular historic properties of religious and cultural significance on the Federal lands.

A combined Notice of Exchange Proposal and Notice of Recreation and Public Purpose Act Proposal was published weekly in the *Idaho Mountain Express* and *Twin Falls Times-News* for four consecutive weeks beginning on December 29, 2010. This notice provided information on the land exchange and R&PPA proposals, as well as notice of the public open house.

A public open house was held on January 10, 2011 at Atkinson Park in Ketchum to provide information to the public, answer questions, and solicit public comments on the land exchange and R&PPA proposals. Maps of the project area, land exchange and R&PPA proposal parcels, R&PPA proposed management, and a diagram of the NEPA and EA processes were displayed at the open house. Representatives from the WRLT displayed posters showing land trust-owned parcels throughout the Wood River Valley. The City of Ketchum displayed a poster that showed general areas identified for improvements for the North R&PPA parcel identified within their R&PPA proposal. An information packet consisting of the scoping packet, a pre-addressed comment form, and the City of Ketchum's Proposed Recreation and Public Purpose Act Development, Improvement and Management Plan (City of Ketchum 2010) were available for all attendees. Approximately 31 people attended the meeting.

Public comments were received from 11 individuals, 1 utility, 2 state agencies (IDFG and IDWR), and the BLM Resource Advisory Council. The BLM also received six phone calls from the public with questions and comments about the land exchange and R&PPA proposals. Comments were summarized in a Scoping Report prepared for the project and kept in the project file.

1.6.2 Issues Identified

The BLM summarized the comments received during the Notice of Exchange Proposal comment period and scoping process, and identified the following issues associated with the land exchange proposal (Table 1). These issues were addressed during preparation of the EA. Issues identified as specifically pertaining to the City of Ketchum's R&PPA proposal are not included in Table 1 or this EA.

Table 1. Issues identified during scoping.

Resource	Issue	Land Exchange Reference Section
Geology / Mineral Resources/Energy Production	Would the proposed action or alternatives affect the availability of mineral resources and energy production?	3.1
Hazardous and Solid Wastes	Are there solid or hazardous wastes on the parcels that would incur liability to the property owner(s)?	3.2
Access	Would the proposed action or alternatives result in restricted access or changes in historical access to the parcels?	3.3
Recreation	Would the proposed action or alternatives change the recreational opportunities available to the public?	3.4
Visual Resources	Would the proposed action or alternatives change the visual character of the parcels?	3.5
Socioeconomics	How would the proposed action or alternatives affect the socioeconomics of Blaine County?	3.7
Water Rights	Would the proposed action or alternatives affect water rights?	3.3
Vegetation including Special Status Plant Species	Would the proposed action or alternatives affect vegetation communities and the BLM special status plants?	3.9
Invasive Plants and Noxious Weeds	Would the proposed action or alternatives increase invasive plant and noxious weed populations?	3.9
Floodplains	What, if any, resources would be acquired or disposed?	3.10
Wetlands/Riparian Zones	What, if any, resources would be acquired or disposed?	3.10
Livestock Grazing/ Idaho Standards for Rangeland Health	Would the proposed action or alternatives affect existing grazing allotments and trailing routes on or adjacent to the parcels?	3.11
Wildlife Including Threatened or Endangered and Special Status Species	Would the proposed action or alternatives impact the BLM special status species? Would the proposed action or alternatives displace wildlife?	3.12 and 3.13
Migratory Birds	Would the proposed action or alternatives impact migratory birds and habitat?	3.12
Fisheries	What, if any habitat would be acquired or disposed?	3.12

Project-specific comment letters were received from the IDFG and the BLM Twin Falls District Resource Advisory Council (TFD RAC). Both agencies indicated support of the proposed land exchange. IDFG stated their support for the land exchange proposal, noting that their interpretation of the proposed land exchange presented during scoping appeared to meet the stated objectives, particularly with respect to protecting and enhancing wildlife values and the BLM sensitive species habitat (IDFG 2011). IDFG comments noted that the WRLT currently has the Sheep Bridge parcel identified for participation in the “Access Yes!” program, restricted to foot-access only and encouraged the BLM to continue to manage access to the parcel in this manner.

The TFD RAC indicated that, based on information presented during scoping, wildlife habitat on the offered non-Federal parcels “appeared to be more significant” (BLM 2011c) and that the proposed land exchange would resolve trespass and increase the number of public land acres in Blaine County. The TFD RAC noted that the Square Lake parcels contained habitat for mule deer winter range, a greater sage-grouse lek, and big sagebrush habitat for pygmy rabbit and Brewer’s sparrow. The Sheep Bridge parcel was noted to contain critical mule deer, pronghorn, and elk migration corridor routes, in addition to big sagebrush and pygmy rabbit habitat.

2 PROPOSED ACTION AND ALTERNATIVE(S)

2.1 PROPOSED ACTION

In accordance with Sections 205 and 206 of the FLPMA, as amended (43 U.S.C. 1716), the BLM would resolve a long-standing inadvertent trespass; consolidate land ownership patterns for more effective and efficient management; acquire wildlife habitat, including preliminary priority habitat for the greater sage-grouse, habitat for pygmy rabbit, crucial mule deer winter range, and deer migration routes; acquire wetland and riparian habitat; and provide a net gain of BLM-administered Federal lands for land tenure Zone 5 within the SFO by exchanging approximately 20 acres of Federal land for about 547 acres of non-Federal land with the Blue Canyon.

Under the proposed land exchange, the BLM would convey one parcel of Federal land totaling approximately 20 acres in exchange for two parcels of non-Federal land totaling about 547 acres. The exchange proposal is a single-phase assembled exchange. An assembled exchange is defined in 43 CFR Part 2201.1-1 as “. . . the consolidation of multiple parcels of Federal and/or Non-Federal land for purposes of one or more exchange transactions over a period of time.” Based on fair market value appraisals and in accordance with 43 CFR Part 2201.6, the exchange has been equalized with the reduction of acres.

Conveyance of the Federal parcel would be via a patent, and the non-Federal parcels via warranty deed(s). All conveyances would be subject to valid existing rights and encumbrances of record and any other terms and conditions the BLM authorized officer deems appropriate. The parcels and surrounding land ownership are shown on Figure 2 and Figure 3.

2.1.1 Federal Parcel

2.1.1.1 *Blue Canyon Parcel*

Township 4 North, Range 17 East, Boise Meridian, Idaho;
Section: 1 Lot 7 (19.92 acres);
containing 20 acres, more or less.

Conveyance of the Blue Canyon parcel would include both the surface and mineral estates, together with appurtenant water right No. 37-17314. Upon conveyance, the parcel would be subject to existing rights-of-way and applicable Blaine County ordinances and jurisdiction. The BLM is in receipt of Relinquishment of Application, Entry, or Grant forms regarding right-of-way grants IDI-22091, IDI-27018, and IDI-27119 held by Mr. Ali Fayed. Formal relinquishment of these rights-of-way would be accepted with the issuance of the patent for the Blue Canyon Parcel to the Blue Canyon. The existing livestock access across the Blue Canyon parcel would be retained by the BLM through a right-of-way grant, identified as IDI-37310, issued pursuant to Title V, Section 507 of the FLPMA of October 21, 1976 (43 U.S.C. 1767). This right-of-way would reserve public and livestock access from SH 75 across a portion of the parcel to the adjacent BLM-administered Federal lands. All unauthorized improvements (BLM trespass case IDI-33066) on the Federal parcel would be allowed to remain on the parcel. The unauthorized improvements are identified in Table 2. The parcel is shown on Figure 1 and Figure 4.

Table 2. Unauthorized improvements to Blue Canyon parcel.

Feature	Description	Age
Split Rail Fence	50 linear feet	18 years
Enclosure	8' x 3.5' Enclosure housing sprinkler timing clock and booster pump	18 years
Enclosure	8' x 5.5' Enclosure housing driveway boiler	11 years
Enclosure	11' x 8' Enclosure housing garbage cans and storage	11 years
Sprinkler System	28 zones	18 years
Air-conditioning units	2-ICP Corporation Model TCA236 30" x 30"	Unknown
Landscaping	Maximum 2.6 acres	Varied in age and maturity
Basketball Hoop	Basketball Hoop	Unknown

2.1.2 Non-Federal Parcels

Management of the non-Federal parcels (Square Lake and Sheep Bridge), once acquired, would be according to applicable Federal laws and regulations, including the FLPMA; the ESA of 1973; and in conformance with decisions in the Magic MFP. Management under multiple-use principles would apply, pursuant to guidance in the approved MFP. Because the Square Lake, Sheep Bridge, and 80-acre retained parcels include habitat for the greater sage-grouse, future management actions would also be consistent with the BLM's Washington Office Instruction Memorandums 2012-043 and 2012-044, the BLM's 2004 *National Sage-Grouse Conservation Strategy*, BLM's 2011 *National Greater Sage-Grouse Planning Strategy*, and the *Conservation Plan for the Greater Sage-grouse in Idaho* (ISAC 2006).

All land acquired by the BLM through the land exchange would remain closed to the operation of the public land and mineral laws for a period of 90 days after acceptance of title by the BLM (43 CFR 2091.3-2(c)). Following this period, and subject to valid existing rights, the lands would be automatically opened to operation under the public land and mineral laws.

2.1.2.1 Square Lake Parcel

Township 2 South, Range 18 East, Boise Meridian, Idaho;

Section: 9 SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ (80.00 acres);

Section: 10 W $\frac{1}{2}$ W $\frac{1}{2}$ (160.00 acres);

containing 240 acres, more or less.

Conveyance of the Square Lake parcel would include both the surface and mineral estates. The parcel is currently within the Square Lake and Timmerman Hills Allotments and subject to grazing permit restrictions and access agreements with the WRLT. When the lands are opened to operation under the public land laws and mineral laws, this parcel would be available for grazing and exploration, and would be included in grazing and rangeland health evaluation. The parcel is shown on Figure 3 and Figure 5.

2.1.2.2 Sheep Bridge Parcel

Township 1 South, Range 17 East, Boise Meridian, Idaho;

Section: 13 Portion of the SE $\frac{1}{4}$ (55.00 acres);

Section: 24 NE $\frac{1}{4}$ NE $\frac{1}{4}$ (40.00 acres), Portion of the NW $\frac{1}{4}$ NE $\frac{1}{4}$ (22.00 acres);

Township 1 South, Range 18 East, Boise Meridian, Idaho;
Section: 18 Portion of the SE $\frac{1}{4}$ SW $\frac{1}{4}$, Portion of the SW $\frac{1}{4}$ SE $\frac{1}{4}$, Portion of Lot 4 (75.41 acres);
Section: 19 NW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, Lot 1 (114.47 acres);
containing 307 acres, more or less.

Conveyance of the Sheep Bridge parcel would include the surface estate, together with an interest in water rights 37-26 and 37-27. The portion of the Sheep Bridge parcel south of the Big Wood River is currently within the Swinging Bridge Allotment and subject to grazing; with the remaining area not within any identified allotment. When the lands are opened to operation under the public land and mineral laws, only that portion within the Swinging Bridge Allotment would be available for grazing and would be included in grazing and rangeland health evaluation. The remaining area would be unavailable for grazing until a land use plan decision is made regarding the use. The parcel is shown on Figure 3 and Figure 6.

2.2 NO ACTION ALTERNATIVE

Under this alternative, the BLM would resolve a long-standing inadvertent trespass with the required removal of the unauthorized improvements; however, the land exchange would not be approved. Subsequently, the offered donation of the 80-acre retained parcel would be withdrawn as the WRLT would retain ownership of the entire Square Lake parcel. The BLM SFO would not acquire additional lands within the BLM SFO land tenure Zone 5 to provide a net gain of BLM-administered Federal lands within the zone.

2.2.1 Federal Parcel

2.2.1.1 *Blue Canyon Parcel*

Existing management and use of the Federal Blue Canyon parcel would continue subject to applicable statutes, regulations, policies, and land use plans. All unauthorized improvements (BLM trespass case IDI-33066) on the Federal parcel would be removed from Federal property and the area of unauthorized improvements rehabilitated.

2.2.2 Non-Federal Parcels

2.2.2.1 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The non-Federal Square Lake parcels would not be transferred to the United States and would remain in non-Federal (WRLT) ownership, subject to the WRLT's land use and management plans. The property-specific management plan for the Square Lake parcels has yet to be fully completed by the WRLT, but the management of the parcel would continue with respect to the original conservation values for which the property was acquired. The Square Lake parcels were originally purchased to protect wildlife habitat and migration corridors. Continued management of the parcels would focus on maintaining and improving those conservation purposes. The Square Lake parcels would continue to be managed for recreational and limited hunting uses including a rest rotational grazing system, dependent on the vegetative health of the property. Existing grazing improvements (corrals) would remain on the property. Annual monitoring for rangeland health, habitat, and noxious or invasive weeds by the WRLT on the Square Lake parcels would continue. Should annual monitoring show a decrease in habitat quality due to grazing, the rotation schedule would be adjusted to allow vegetation to recover in accordance with management agreements entered into by the parties apart from the Federal permits. Should annual surveys indicate an increase in invasive or noxious weeds, annual weed management

activities would be adjusted. Access to the parcels is open or through fenced gates with recreational hunting permitted and off-highway vehicle (OHV) use permitted on existing roads.

2.2.2.2 Sheep Bridge Parcel

As with the Square Lake parcels, the Sheep Bridge parcel would not be transferred to the United States and would remain in non-Federal (WRLT) ownership subject to the WRLT's land use and management plans. The property-specific management plan for the Sheep Bridge parcel has yet to be fully completed by the WRLT, but the management of the parcel would continue with respect to the original conservation values for which the property was acquired, wildlife habitat and migration corridor protection. The parcel would continue to be managed for recreational use of the Big Wood River, hiking, and limited hunting. The sheepherder's cabin would remain on the property. Should an increase in invasive or noxious weeds be noted during the annual monitoring events, weed spraying programs for the parcel would be adjusted accordingly. Access to the parcel is through wire gates with recreational uses permitted except for OHV use, overnight camping, and sage-grouse hunting.

2.3 ALTERNATIVE A

Alternative A consists of the proposed action as described, but with a concurrently processed donation of the Square Lake 80-acre retained parcel to the BLM in accordance with Section 206 of the FLPMA, as amended (43 U.S.C. 1716). This alternative would result in the BLM's acquisition of the Square Lake parcels, in their entirety (320 acres). The 80-acre retained parcel is contiguous with the Square Lake parcel described in the proposed action and is described as follows:

Square Lake 80-Acre Retained Parcel

Township 2 South, Range 18 East, Boise Meridian, Idaho;

Section: 4 SE $\frac{1}{4}$ SE $\frac{1}{4}$ (40.00 acres);

Section: 9 NE $\frac{1}{4}$ NE $\frac{1}{4}$ (40.00 acres)

containing 80 acres, more or less.

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Additional alternatives to the proposed action were not considered in greater detail because the 2003 Amendment prohibits new permits, leases, or agreements authorized to validate unauthorized use. In addition, the 2003 Amendment prioritizes resolution of long-term unauthorized uses through land tenure adjustments at an equal priority with retaining or acquisition of high resource value lands. No additional alternatives were identified that meet the purpose and need of the action within the confines of the existing BLM SFO land use plans.

2.4.1 Cowcatcher Parcel Inclusion

As part of the original land exchange proposal (IDI-35331), three non-Federal parcels were proposed for conveyance to the BLM. The selection of the parcels was determined based on preliminary environmental and valuation studies conducted in 2008. During more intensive environmental studies conducted in 2011, environmental concerns with the Cowcatcher parcel were identified that would reduce the parcel's ability to be considered for inclusion in the land exchange. Upon completion of property valuations by the Department of the Interior, Office of Valuation Services, land values of the Cowcatcher parcel were deemed not necessary to obtain

an equal value exchange. For these reasons, further study of the Cowcatcher parcel was not conducted and analysis of the parcel was eliminated from this EA.

2.4.2 Direct Sale of Federal Parcel

This alternative would dispose of the Federal Blue Canyon parcel pursuant to Sections 203 and 209 of the FLPMA via a direct sale to the Blue Canyon. This alternative would resolve the inadvertent trespass and allow for the unauthorized improvements to remain; however it would not allow the SFO to meet the land tenure objectives by acquiring lands with higher resource values as well as providing a net gain of BLM-administered Federal lands within the BLM SFO land tenure Zone 5.

2.4.3 Lease of Federal Blue Canyon Parcel

An alternative lease arrangement by which the BLM would lease the Federal Blue Canyon parcel to the Blue Canyon could not be considered because no permitting mechanism is available that would allow the existing unauthorized improvements constructed on Federal land.

3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

This chapter describes the affected environment and environmental impacts for the proposed action, the no action alternative, and the action alternative. For each resource topic, the impact analysis follows the same general approach. Effects were based on a review of relevant scientific literature, resource field studies, and the best professional judgment of the respective resource specialists.

Information on the affected environment and potential environmental consequences is derived from technical reports prepared by the third-party consulting team of independent specialists, approved by the BLM, from 2008 to 2011. The alternatives were evaluated using the best available information for each resource area.

Effects are described as direct or indirect. Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are caused by an action and occur later in time or farther removed from the area, but are reasonably foreseeable. Cumulative effects of the proposed action, the no action alternative, and the action alternative are presented within each resource topic. Cumulative impacts result from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions. Reasonably foreseeable actions vary by resource and analysis area and are described within each section.

The project file contains the complete list of resources and supplemental authorities that were considered and the reasons why certain resources or authorities were not analyzed further. The resources and supplemental authorities analyzed within this EA are:

- Mineral Resources/Energy Production
- Wastes (Hazardous or Solid)
- Land Use
- Recreation and Access
- Visual Resources
- Cultural Resources
- Socioeconomic Resources
- Water Quantity and Quality
- Vegetation, including BLM Sensitive Species, Noxious Weeds & Invasive Plants
- Wetlands and Floodplains
- Grazing
- Wildlife BLM Special Status Species, including Threatened, Endangered, and Candidate Species
- Wildlife (Other than Threatened, Endangered, Candidate and Sensitive)

3.1 MINERAL RESOURCES/ENERGY PRODUCTION

The parcels are in the Big Wood River area of Blaine County, an area of geologic transition between Cretaceous and Tertiary intrusive rocks of the Idaho batholiths, the Paleozoic thrust belt of the northern Rocky Mountains, and the Cenozoic volcanics of the Snake River Plain.

The Blue Canyon parcel is within the Wood River Valley, with the Pioneer Mountains to the east, Boulder Mountains to the north, and Smoky Mountains to the west. The Wood River Valley consists of folded and faulted Paleozoic sedimentary rocks partly covered by the Eocene Challis volcanic field on the east side. The Cretaceous Idaho batholith is to the west. The present topography in the Big Wood River drainage is controlled by northwest-trending basin and range extension faults. The larger, more dominant faults are associated with the trans-Challis fault system, north of the project area. These faults contain hot springs and precious-metal bearing hot-springs deposits. The extension faulting has resulted in the down-dropped Big Wood River Graben, within which flows the Big Wood River. Quaternary alluvial deposits are generally located throughout the Wood River Valley bottom (Worl and Johnson 1995).

The non-Federal parcels (Square Lake, Sheep Bridge, and the 80-acre retained) are at the transition between the southern Wood River Valley and at the northern extent of the Snake River Plain. The area is characterized by Tertiary and Quaternary volcanic rocks. The hills and buttes south of Highway 20 are comprised of Eocene Challis Volcanics and Miocene Idavada Volcanics. Pleistocene alluvial terrace and gravel glacial outwash deposits are deposited atop the volcanic rock. The hills to the north of Highway 20 are primarily intrusive rock of the Idaho batholith (Foley and Street 1988).

3.1.1 Affected Environment

3.1.1.1 *Blue Canyon Parcel*

The parcel geology consists of ash flow tuffs and lava flows of the Eocene-age Challis volcanic field as well as colluvial and rockfall deposits of the Devonian Milligan Formation. The lower elevations have Quaternary alluvium deposits. No known faults have been mapped across the Blue Canyon parcel. Northwest-trending extensional faulting, associated with the Wood River Graben, is about 1 mile east and 3 miles west of the parcel. The Idaho Geological Survey (IGS) does not identify any known or mapped historical mines or prospects on the parcel (IGS 2011).

A Mineral Potential Report was prepared for the Blue Canyon parcel in conformance with the BLM Manual 3031 – Energy and Mineral Assessment to assess mineral potential on the Federal parcel (Maley 2011). Despite intensive mineral exploration in the Wood River Valley for more than 100 years, no mineral deposits have been discovered in the vicinity of the Blue Canyon parcel. Because of numerous igneous intrusions in the area, the geologic environment would have been so hot that any possible oil and gas resources that existed at the time of the igneous intrusions would have been destroyed or driven away. No sand and gravel or other salable mineral resources exist on the surface of the property. The parcel is also within an area designated as a Special Resource Management Area (SRMAs) in the Sun Valley MFP. As such, material sites are identified specifically as non-compatible uses to be phased out. Authorization of future resource extraction within these SRMAs would not likely occur under existing land use plans. For these reasons, the mineral potential of the Blue Canyon parcel is classified as having no known mineral values for all mineral resources.

3.1.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The surface geology of the parcels consists of alluvial silts, sands, and clays in the central portion of the parcel, within the area generally mapped as the “Rye Grass Flats” (USGS 1986). Bluffs of Miocene Picabo welded tuff ash flow deposits are located on and near the parcels. Colluvial

material associated with the volcanic rocks on and adjacent to the parcels are scattered on the hill slopes (Kauffman and Othberg 2007).

The surface and mineral estates for the Square Lake parcels are currently owned by the WRLT. The IGS does not identify any known or mapped historical mines or prospects on the parcel (IGS 2011).

3.1.1.3 *Sheep Bridge Parcel*

The surface geology of the parcel consists of Pleistocene alluvial terrace gravel deposits from pre-Pinedale glaciation outwash. Outwash deposits are over Cretaceous granodiorites of the Idaho batholith north of the Big Wood River. Gravels are deposited on Pleistocene basalt in the southern portion of the parcel, with the basalts forming the cliffs on either side of the Big Wood River (Kauffman and Othberg 2007).

The United States currently owns, with the BLM administering, the mineral estate for the Sheep Bridge parcel for which there are no known existing patent applications. The IGS does not identify any known or mapped historical mines or prospects on the parcel (IGS 2011). The mineral estate for the Sheep Bridge parcel is included within two BLM geothermal leases (IDI-35435, Section 24 and IDI-35434, Section 13) issued to the Ormat Nevada, Inc. (Ormat). The existing geothermal leases contain stipulations and requirements for any development on the parcel under the lease. Prior to any ground-disturbing activities, the Ormat must submit a separate application for drilling and a plan of operations for development to the BLM for review, analysis, and separate approval. In addition, the Ormat must certify to the BLM that good faith efforts have been made to reach a surface access/use agreement with the surface owner.

3.1.2 Environmental Impacts

3.1.2.1 *No Action Alternative*

3.1.2.1.1 *Blue Canyon Parcel*

Under the no action alternative, all mineral estates would remain under current ownership and management. Although the Blue Canyon parcel was determined to have “no mineral value”, the parcel would remain subject to mineral exploration and development under existing applicable regulations and land use plans. For these reasons, the no action alternative would have no impact on mineral resources.

3.1.2.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The WRLT would retain ownership of the surface and mineral estates for the Square Lake parcels and continue the management of the parcels for wildlife habitat and migration corridor conservation purposes. Long term management of the non-Federal lands does not include exploration or development of mineral resources, thereby continuing the removal of lands within the Square Lake parcels from potential development.

3.1.2.1.3 *Sheep Bridge Parcel*

Because the mineral estate for the Sheep Bridge parcel is currently administered by the BLM and available for exploration and development, the no action alternative would have no impact on mineral resources for the Sheep Bridge parcel.

3.1.2.2 Proposed Action

3.1.2.2.1 Blue Canyon Parcel

Under the proposed action, the BLM would dispose the mineral estate for the Blue Canyon parcel together with the surface estate. Because the parcel was determined to have “no known mineral value”, the proposed action would have no impact on mineral resources.

3.1.2.2.2 Square Lake Parcel

The BLM would acquire both the mineral and surface estates together for the Square Lake parcel. The acquisition of the Square Lake mineral and surface estates would result in an increase in Federal lands available for exploration and development under applicable regulations and land use plans. Overall, the proposed action would have a beneficial impact on mineral resources by increasing management efficiencies through split estate consolidation, acquisition of combined surface and mineral estate lands, and disposal of lands with no mineral value.

3.1.2.2.3 Sheep Bridge Parcel

Under the proposed action, the BLM would acquire the surface estate for the Sheep Bridge parcel where the mineral estate is already in Federal ownership; thus uniting the ownership of the estates. In addition, acquisition of the surface estate within the Ormat Geothermal Leases would consolidate both surface and mineral ownership, thereby increasing efficiencies in management and administration of the surface and mineral estates.

3.1.2.3 Alternative A

Under Alternative A, the impact to mineral resources would be similar to those described in the proposed action with the exception of the added lands of the Square Lake 80-acre retained parcel. The conveyance of the Square Lake parcels, in their entirety, would increase management efficiencies for the mineral and surface estates by providing the BLM ownership of surface and mineral estates that is contiguous with all adjacent parcels. Overall, by increasing the management efficiencies, the Alternative A would have a beneficial impact similar to or negligibly greater than the proposed action.

3.1.3 Cumulative Impacts

The geographic scope of the cumulative impacts analysis would be Blaine, Jerome, Lincoln and Camas Counties because of the historical hard rock mineral exploration and development within the mountains and the geothermal resource potential that has been documented in the southern portions of this region. Past actions within the region have consisted of mineral exploration and production throughout the Wood River Valley for more than 100 years. As early as 1883, four smelting plants and between 20 and 30 mines were operating in the Wood River Valley. Because of fluctuations in metal commodities, the interest and mineral prospecting activity varies. In addition to historical interests in silver, carbonate and galena ore, increasing interests in rock, gravel and topsoil mining have been reported (Wutz 2011).

Increases in energy prices, focus on domestic energy production and identified geothermal energy resources have also driven the exploration and development of geothermal resources, albeit primarily for domestic and small scale use to date in the region. Increasing demand for economical domestic energy production and renewable resource initiatives such as the IDWR Idaho Geothermal Energy Development Strategic Plan, that outlines a strategic plan for the development of geothermal resources in Idaho (IDWR 2002), seek to promote geothermal

development in the state. Aside from the existing Ormat geothermal lease, no applications for mineral or geothermal exploration or production are known to exist for the Blue Canyon or Sheep Bridge parcels. The City of Ketchum has submitted a proposal for the conveyance of lands adjacent to the Blue Canyon parcel to the City under an R&PPA patent. This anticipated or reasonably foreseeable future use of an area directly west and north of the Blue Canyon parcel identified as the North R&PPA parcel, would not have a cumulative impact on mineral resources because mineral rights under such a patent would be reserved to the United States.

3.1.3.1 *No Action Alternative*

Because there would be no direct or indirect impact on mineral resources on the Federal Blue Canyon parcel from the no action alternative, there would be no cumulative impact.

The WRLT has no stated plans to develop mineral or surface resources on the Square Lake, Sheep Bridge, or 80-acre retained parcels. Because resource availability would remain the same as they currently are, the cumulative impact of this alternative would be the continuation of fragmented resource administration of surface and mineral rights in the region. Overall there would be no cumulative impact to mineral resources under the implementation of the no action alternative.

3.1.3.2 *Proposed Action*

Under the proposed action, the public would realize a net benefit of 527 acres of additional lands available for potential mineral exploration and development in exchange for those of less value. In addition, increased management efficiencies with contiguous land areas available for such potential exploration would decrease costs for private entities interested in development potential of the resources. The BLM would continue progress toward the 2003 Amendment to land use plans by realizing a net public benefit in exchange for disposing of lower resource value lands. For these reasons, proposed action would have a negligible beneficial cumulative impact on mineral resources and energy development.

3.1.3.3 *Alternative A*

Under Alternative A, there would a continued negligible beneficial cumulative impact to mineral and geothermal resources from the consolidation of ownership and management under one entity that would improve permitting and management coordination. The anticipated cumulative impact would be similar to or negligibly greater than that described under the proposed action due to the increased land area and contiguous Federal ownership.

3.2 WASTES (HAZARDOUS OR SOLID)

3.2.1 Affected Environment

A Phase I Environmental Site Assessment (Phase I) was conducted for each of the parcels to determine if any recognized environmental conditions exist that may preclude the acquisition or disposal of the parcels. The Phase I assessment evaluated the presence or potential presence of any hazardous substances or petroleum products that could have caused contamination to the ground, groundwater, or surface water of the parcels. In addition, the Phase I assessments included non-scope issues including solid waste, physical hazards, and petroleum contamination issues. The studies conformed to the ASTM E1572-05 “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM 2005) as well as the BLM Manual Handbook H-2000-02, *Environmental Site Assessments for Disposal of Real Property* (BLM 2011a) for the Blue Canyon parcel, and the BLM Manual Handbook H-2000-01, *Pre-Acquisition Environmental Site Assessments* (BLM 2011b) for the Square Lake, Sheep Bridge, and 80-acre retained parcels.

3.2.1.1.1 Blue Canyon Parcel

The Phase I assessment identified a historical solid waste disposal site on and immediately adjacent to the Blue Canyon parcel. According to records cited in the Phase I assessment, the disposal site was an informal area locally referred to as the “Ketchum Dump” and operated prior to the 1960s if not prior to the 1940s. Subsequent residential development of the adjacent non-Federal parcel in the late 1980s and early 1990s and the associated construction of driveway and septic drain field on the Blue Canyon parcel (under permit IDI-22091), reportedly removed the waste and refuse from both the non-Federal land and the Federal Blue Canyon parcel (ERO 2012d). No evidence of any hazardous substance releases, past environmental contamination, or existing solid waste dumping were identified on the parcel.

3.2.1.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

The Phase I ESA did not identify evidence of any hazardous substance releases, past environmental contamination, or existing solid waste dumping on the parcels (ERO 2012c).

3.2.1.1.3 Sheep Bridge Parcel

The Phase I ESA did not identify evidence of any hazardous substance releases, past environmental contamination, or existing solid waste dumping on the parcel (ERO 2012c).

3.2.2 Environmental Impacts

3.2.2.1 No Action Alternative

3.2.2.1.1 Blue Canyon Parcel

Under the no action alternative, the authorized improvements to the Blue Canyon parcel would remain, even those in the locations of identified historical solid waste disposal. The unauthorized improvements would be removed and the area rehabilitated. This would have a short-term direct impact on solid waste resources with the generation of construction and landscaping debris associated with the removal of structures, landscaping and unauthorized infrastructure. All materials would be either recycled or disposed at a permitted solid waste disposal facility, anticipated to be the Blaine County Ohio Gulch Landfill. There is no reason to believe that existing solid waste resources in Blaine County are not able to accept, or would be

stressed by, the addition of solid waste from the removal of the improvements. Because no indications of recognized environmental conditions were identified, no indications of solid waste disposal on the parcel or physical hazards were noted, there would be a negligible direct impact to solid waste resources from the no action alternative from the removal of existing trespass structures and landscaping.

3.2.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Because there was no solid or hazardous waste identified on the parcels, the no action alternative would have no direct or indirect impact on solid or hazardous wastes.

3.2.2.1.3 Sheep Bridge Parcel

Because there was no solid or hazardous waste identified on the parcel, the proposed action would have no direct or indirect impact on solid or hazardous wastes.

3.2.2.2 Proposed Action

3.2.2.2.1 Blue Canyon Parcel

Any patent issued for the Federal parcel would include a notice and indemnification statement under the CERCLA, indemnifying, and holding the BLM harmless from any release of hazardous materials that may have occurred. This indemnification would relieve the BLM of any further potential solid or hazardous waste obligations associated with the parcel for the historical use as a solid waste disposal site. The existing authorized and unauthorized improvements would remain on the parcel. Overall the proposed action would result in no impact to solid or hazardous waste resources because there are no known remaining impacts from historical waste disposal that may pose a potential contamination concern.

3.2.2.2.2 Square Lake Parcel

Because there was no solid or hazardous waste identified on the parcel, the proposed action would have no direct or indirect impacts on solid or hazardous wastes.

3.2.2.2.3 Sheep Bridge Parcel

Because there was no solid or hazardous waste identified on the parcel, the proposed action would have no direct or indirect impacts on solid or hazardous wastes.

3.2.2.3 Alternative A

3.2.2.3.1 Blue Canyon Parcel

Because the Blue Canyon parcel would be disposed in its entirety under Alternative A, the impact on solid and hazardous wastes would be the same as the proposed action.

3.2.2.3.2 Square Lake Parcel

Because there was no solid or hazardous waste identified on the parcel in its entirety, Alternative A would have no direct or indirect impact on solid or hazardous wastes.

3.2.2.3.3 Sheep Bridge Parcel

Because there was no solid or hazardous waste identified on the parcel, Alternative A would have no direct or indirect impact on solid or hazardous wastes.

3.2.3 Cumulative Impacts

The geographic scope of the cumulative impact area for solid and hazardous waste resources is defined as Blaine County because the county is the regionally permitted solid waste disposal entity that would manage wastes generated on any of the parcels.

3.2.3.1 *No Action Alternative*

Direct impacts from the removal of the unauthorized improvements is anticipated to have negligible short-term direct or indirect effects to solid or hazardous waste resources in Blaine County under this alternative. Because there is no reason to suspect that the incremental increase in wastes associated with the no action alternative would place an added burden on or contribute to long-term waste management resources in Blaine County, there is no anticipated cumulative impact on solid or hazardous waste resources.

3.2.3.2 *Proposed Action*

Because there would be no direct or indirect effects to solid or hazardous waste resources on any of the parcels under this alternative, there would be no cumulative impact on solid or hazardous waste resources.

3.2.3.3 *Alternative A*

Because there would be no direct or indirect impacts to solid or hazardous waste resources on the parcels under this alternative, there would be no cumulative impact on solid or hazardous waste resources.

3.3 LAND USE

3.3.1 Affected Environment

The 2003 Amendment states that, in order to improve efficiencies in public lands management, land tenure adjustments within the BLM SFO would seek to facilitate a watershed approach to natural resource management. The BLM would also seek to acquire high resource value lands made available by willing landowners (BLM 2003a). Disposal of Federal lands would be a priority if the disposal provides the opportunity to consolidate Federal lands, accommodate the need for community expansion, improve management in areas of high resource values, and/or resolve long-standing unauthorized uses. In consideration of land tenure proposals it is the preference of the BLM SFO to use land exchanges rather than land sales as a way to acquire lands with higher resource values. Valid existing rights and access needs would be considered in all land tenure adjustment actions.

Figure 7 shows the 2003 Amendment land management zones with respect to the parcel locations. In addition to fitting within the relevant zone's management strategy, the land proposals must also meet criteria for the particular adjustment of land ownership proposed. The parcels involved with the land exchange proposal are within two land management zones – Zone 2 and Zone 5. The priorities for Zone 2 are to retain the existing large blocks of high-value public lands within the zone; consolidate public lands ownership within high-priority watersheds by seeking to acquire non-Federal and state inholdings in those watersheds; and acquire additional high resource value lands within lower priority watersheds. Acquired lands also have to improve efficiencies in public lands management. The general land tenure management strategy of Zone 5 is to consolidate ownership; maintain the total amount of public land within the zone; and to “acquire, primarily through exchange, additional high resource value lands that improve the manageability of public lands” which “would result in disposal of lower resource value and difficult to manage tracts of Zone 5 public lands” (2003 Amendment, p. 10). In any exchange, the authorized office shall reserve such rights or retain such interests as are needed to protect the public interest or shall otherwise restrict the use of the Federal lands to be exchanged, as appropriate.

3.3.1.1 *Blue Canyon Parcel*

This parcel is located directly north of the City of Ketchum on the east side of SH 75 and contains about 20 acres. The parcel is bounded on the south by Block 16 of the Big Wood Subdivision as well as the City of Ketchum corporate limits; on the east by Block 9 of the Big Wood Subdivision (Mr. Fayed's non-Federal property); on the north by Federal land; and on the west by the centerline of the SH 75 right-of-way. The Blue Canyon parcel is located within BLM SFO land tenure Zone 5. The parcel is encumbered with both authorized and unauthorized uses. The unauthorized improvements are associated with Mr. Fayed's private residence located on the adjacent non-Federal property and include storage structures, a sprinkler house, air conditioning units, a split rail fence, a basketball hoop, and extensive landscaping including a buried irrigation system. The authorized uses permitted with rights-of-way and grazing permits (discussed in Section 3.11) include an access road, water pipelines, a septic drainfield, a highway, various utilities (e.g., power, natural gas, TV cable, and communications), and livestock grazing and crossing (discussed in Section 3.11).

Each of the following holders of a valid existing right was notified in writing (scoping notification letter dated December 28, 2010) of the proposed land exchange with a copy of the

Notice of Exchange Proposal. The holders, subject to limitations prescribed by law and regulation, were given the opportunity to apply for an amendment of their existing right within the Federal parcel in regards to the terms and conditions or to convert to an easement. No applications for amendment were received. Table 3 shows the valid existing rights that encumber the parcel.

Table 3. Valid Existing Rights for the Blue Canyon Parcel.

Reference	Valid Existing Right
IDBL-0-50218	A right-of-way for Federal Highway purposes issued to the Idaho Department of Transportation, its successors or assigns, by right-of-way IDBL-0-50218, pursuant to the Act of August 27, 1958, as amended (23 U.S.C. 317).
IDI-4693	A right-of-way for buried natural gas distribution purposes granted to the Intermountain Gas Company, its successors and assigns, by right-of-way IDI-4693, pursuant to Section 28 of the Mineral Leasing Act (30 U.S.C. 185).
IDI-20192	A right-of-way for buried telephone distribution purposes granted to the Qwest Corporation, its successors and assigns, by right-of-way IDI-20192, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-21139	A right-of-way for buried natural gas distribution purposes granted to the Intermountain Gas Company, its successors and assigns, by right-of-way IDI-21139, pursuant to Section 28 of the Mineral Leasing Act (30 U.S.C. 185).
IDI-22091	A right-of-way for access purposes granted to Ali Fayed, its successors and assigns, by right-of-way IDI-22091, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-23532	A right-of-way for buried television cable distribution purposes granted to the Cox Communications, its successors and assigns, by right-of-way IDI-23532, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-27018	A right-of-way for buried water distribution purposes granted to Ali Fayed, its successors and assigns, by right-of-way IDI-27018, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-27046	A right-of-way for electrical distribution purposes granted to the Idaho Power Company, its successors and assigns, by right-of-way IDI-27046, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-27056	A right-of-way for buried natural gas distribution purposes granted to the Intermountain Gas Company, its successors and assigns, by right-of-way IDI-27056, pursuant to Section 28 of the Mineral Leasing Act (30 U.S.C. 185).
IDI-27119	A right-of-way for buried television cable distribution purposes granted to Ali Fayed, its successors and assigns, by right-of-way IDI-27119, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-27470	A right-of-way for buried water distribution purposes granted to the City of Ketchum, its successors and assigns, by right-of-way IDI-27470, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-32433	A right-of-way for water storage and buried distribution purposes granted to the City of Ketchum, its successors and assigns, by right-of-way IDI-32433, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).
IDI-33859	A right-of-way for buried fiber optic purposes granted to the Syringa Networks, LLC, its successors and assigns, by right-of-way IDI-33859, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761).

According to the IDWR, there is one water right appurtenant with the Blue Canyon parcel. Table 4 shows the ownership and water right information that are appurtenant to the parcel.

Table 4. Water Rights for the Blue Canyon Parcel.

Water Right Number	Holder	Beneficial Use	Amount
37-17314	United States of America, BLM	Stockwater	0.02 cfs ¹

¹cfs = cubic feet per second

3.3.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

The Square Lake parcels are located in the southern portion of Blaine County, about five miles south of the junction of Highway 20 and SH 75. Both parcels together contain 320 acres; 240 acres for the land exchange parcel with the remaining being encompassed by the 80-acre retained parcel. The entire 320 acres is owned by the WRLT. The parcels are about 1,100 feet to the east of SH 75 and are a non-Federal inholding surrounded by BLM-administered Federal lands. The parcels are located within BLM SFO land tenure Zone 2. The parcels are zoned Rural Remote (RR-40) by Blaine County, which permits timber production, grazing, agriculture, open space recreation, wildlife preserves, and single-family residences (Blaine County 2011). The parcels contain some minor improvements including access roads, fences, corrals, and an informal parking area with an interpretive sign. Table 5 shows the reservations and existing rights that encumber the parcels.

Table 5. Reservations and Valid Existing Rights for the Square Lake Parcels.

Reservation or Valid Existing Right
Reservations and Rights-of-Way contained in that certain United States of America Patent, recorded May 23, 1919, as Instrument No. 42653, records of Blaine County, Idaho. Subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws, and decisions of courts; and there is reserved from the lands here granted, a right-of-way thereon for ditches or canals constructed by the authority of the United States.
Terms and Conditions contained in that certain right-of-way for the Magic Reservoir and Canal System, recorded June 9, 1906, as Instrument No. 4954, records of Blaine County, Idaho.
Terms and Conditions in that certain Agreement for Easement and Right-of-Way in favor of the United States of America, recorded as Instrument No. 89791, records of Blaine County, Idaho. Right-of-Way on any lands owned by John Brown, Grantee, in Sections 4, 9, and 10 of T. 2 S., R. 18 E., B.M., and in Sections 20 and 29 in T. 1 S., R. 18 E., B.M., for construction of a truck trail not wider than 30 feet ditch line to ditch line. The said easement and right-of-way hereby granted is for the full, free, unrestricted, and quiet use and enjoyment by the Grantee of the land of the Grantor, occupied by the said improvements, for any and all purposes deemed necessary or beneficial for, or in connection with, the control, administration, or use of the public land surrounding or adjacent to the land herein described, which may be properly grazed from, serviced by, or used in connection with the said land improvements, including the right of ingress and egress to, from, and over the land of the said Grantor by the Grantee, its officers, agents, permittees, allottees, and licensees for the purpose of repairing, renewing, or using the said improvements, or for other business pertaining to the use and maintenance thereof, and shall be appurtenant to said public land.
Grant of Easement and Right-of-Way in favor of the United States of America, recorded April 26, 1962, as Instrument No. 116829, records of Blaine County, Idaho. Right-of-way for construction of approximately 200 rods of 4-wire fence with posts a rod apart. The said easement and right-of-way hereby granted is for the full, free, unrestricted, and quiet use and enjoyment by the Grantee of the land of the Grantor, occupied by the said improvements, for any and all purposes deemed necessary or beneficial for, or in connection with, the control, administration, or use of the public land surrounding or adjacent to the land herein described, which may be properly grazed from, serviced by, or used in connection with the said land improvements, including the right of ingress and egress to, from, and over the land of the said Grantor by the Grantee, its officers, agents, permittees, allottees, and licensees for the purpose of repairing, renewing, or using the said improvements, or for other business pertaining to

Reservation or Valid Existing Right
the use and maintenance thereof, and shall be appurtenant to said public land.
Access Road Easement in favor of the United States of America, recorded as Instrument No. 133789, records of Blaine County, Idaho. A perpetual easement and right-of-way, including but not limited to, the right and privilege to locate, construct, relocate, maintain, control, and repair a roadway within a strip of land 50 feet on each side of the centerline.

According to the IDWR, there are no water rights associated with the Square Lake parcels.

3.3.1.3 *Sheep Bridge Parcel*

This parcel is located south of Highway 20 and north of Magic Reservoir, about four miles west of the junction of Highway 20 and SH 75, and contains about 307 acres. The parcel is bordered on the south by BLM-administered Federal lands, on the east and west sides by IDFG-managed lands and on the north by the right-of-way for Highway 20. The parcel is located within the BLM SFO land tenure Zone 5. The parcel is zoned Rural Remote (RR-40) (Blaine County 2011). The portion of the Big Wood River that flows through this parcel is currently included within a Federal Energy Regulatory Commission withdrawal for power development at Magic Reservoir, as well as the right-of-way for Magic Reservoir itself. The parcel is fenced with a shepherd cabin located upon it. Table 6 shows the reservations and existing rights that encumber the parcel.

Table 6. Reservations and Valid Existing Rights for the Sheep Bridge Parcel.

Reservation or Valid Existing Right
Reservations and Rights-of-Way contained in that certain United States of America Patent, recorded July 8, 1925, as Instrument No. 57614, records of Blaine County, Idaho. Subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws, and decisions of courts; and there is reserved from the lands here granted, a right-of-way thereon for ditches or canals constructed by the authority of the United States. Excepting and reserving, however, to the United States all the coal and other minerals in the lands so entered and patented, together with the right to prospect for, mine, and remove the same pursuant to the provisions and limitations of the Act of December 29, 1916 (39 Stat., 862).
Reservations contained in that certain Warranty Deed in favor of the State of Idaho, recorded October 14, 1955, as Instrument No. 106824, records of Blaine County, Idaho. A strip of land 120.0 feet wide, being 60.0 feet on each side of the center line as surveyed and shown on the official plat of State Highway No. 68 – Project No. S-2809(2) Highway Survey; also an additional irregular strip of land contiguous to and on each side of the aforementioned right-of-way being 140.0 feet wide between the west line and east line of the NWSE of Section 13 of T. 1 S., R. 17 E., B.M., and tapering to 0.0 feet at Station 1101.00 and an additional triangular piece of land contiguous to and on each side of the aforementioned right-of-way widening from 0.0 feet at Station 1150-00 to 140.0 feet at the east line of the SWSE of Section 18 of T. 1 S., R. 18 E., B.M.
Terms and Conditions contained in that certain Affidavit Affecting Title to Property and Correction Warranty Deed, recorded April 13, 2009, as Instrument No. 566559, records of Blaine County, Idaho.
Right, Title and Interest of the State of Idaho within the natural bed of the Wood River below the ordinary high water line, and also excepting any artificial accretions waterward of said ordinary high water line.

According to the IDWR, there are three water rights associated with the Sheep Bridge parcel. Two of the water rights (37-26 and 37-27) were partially decreed on September 24, 2010, and according to a February 17, 2011 letter from IDWR, currently reside in the Idaho Water Supply Bank for leasing (which protects them from forfeiture due to non-use). The two water rights provide a total of 6.50 cfs for irrigation and mitigation purposes. The mitigation water is not usable water as it was carved out of the underlying water rights to leave water in the river to

mitigate a past transfer. The total amount of water allowed to be diverted at the point of diversion (Big Wood River) is 5.85 cfs (4.05 cfs (37-26) + 1.80 cfs (37-27) =5.85 cfs) for irrigation purposes. If these water rights were sold in the future, 5.85 cfs could be sold, but the 0.65 for mitigation would have to remain behind in the river. The entirety of water rights, 37-26 and 37-27, have been placed in the Idaho Water Supply Bank for renting by others in order to protect them from forfeiture due to non-use.

The third water right (37-20945) is a claim to saved water that was created with the construction of the extension bypass canal and provides a total of 1.50 cfs for irrigation and mitigation purposes. The claim has been recommended for disallowance by the IDWR Director (Report dated 4/30/12) to the Snake River Basin Adjudication (SRBA) Court. The deadline for objecting to IDWR’s recommendation of disallowance was June 29, 2012; no objections were received. The SRBA Court will hold a hearing on the uncontested recommendations on September 18, 2012. If there is no opposition at the September hearing, then the SRBA Court would issue a final order disallowing the claim soon thereafter. The WRLT, current owner of the Sheep Bridge parcel, has no ownership or interests in water right 37-20945.

The current place of use (POU) is listed for each water right as the Sheep Bridge parcel. Since a number of people hold interests in these water rights, they’re considered stacked rights. Stacked rights are two or more water rights that are used together for the same use and overlie the same place of use. Stacked rights generally come into play when more than one diversion and/or priorities are utilized in order to get enough water to irrigate the same area. Table 7 shows the ownership and water right information that are associated with the parcel.

Table 7. Water Rights for the Sheep Bridge Parcel.

Water Right Number	Holder	Beneficial Use	Priority Date	Amount
37-26	WRLT (0.111 cfs) Jeanie Sligar (3.072 cfs) Mathew Thornton (1.317 cfs)	Irrigation	5/23/1885	4.50 cfs total
37-27	WRLT (0.111 cfs) Jeanie Sligar (1.322 cfs) Mathew Thornton (0.567 cfs)	Irrigation	6/15/1886	2.00 cfs total
37-20945	Jeanie Sligar (1.05 cfs or 70% percent) Mathew Thornton (0.45 cfs or 30% percent)	Irrigation	7/24/1924	1.5 cfs total

3.3.2 Environmental Impacts

3.3.2.1 No Action Alternative

Under the no action alternative the inadvertent trespass would be resolved with no change in the current land tenure, authorized uses, and water rights associated with both the Federal and non-Federal parcels.

3.3.2.1.1 Blue Canyon Parcel

The unauthorized improvements would be removed from the Federal parcel and the area of unauthorized use rehabilitated as resolution of the inadvertent trespass. Additional monitoring and/or signage of BLM-administered Federal land may be necessary to ensure that future encroachments do not occur. The BLM would resolve the inadvertent trespass; however, the SFO would not acquire the non-Federal parcels with higher resource values through the

exchange of the lower resource valued Federal parcel. Under this alternative, a temporary impact to land use would occur during the removal of the existing unauthorized improvements. Longer-term impacts of this alternative would be the continued expenditures of resources for the administration and monitoring of the existing rights-of-ways that are permitted across the parcel.

3.3.2.1.2 Square Lake (both the land exchange and 80-acre retained) and Sheep Bridge Parcels

Ownership and management of the non-Federal parcels would remain with the WRLT and subject to their land use and management plans. Management of the parcels would continue for wildlife habitat and migration corridor with respect to the original conservation purposes values for which the parcels were acquired. The WRLT has no plan to convert the Sheep Bridge parcel to irrigated agricultural land, thereby providing a POU for the existing stacked water rights. Therefore, existing water rights would likely remain within the Idaho Water Supply Bank under this alternative and reservations listed in Table 5 and in Table 6 would remain as currently written. However, if the water rights were withdrawn from the Idaho Water Supply Bank they would need to be utilized for irrigation purposes on the POU of record, be transferred to a new POU, or potentially face forfeiture. For these reasons, there would be no impacts from this alternative to land use on the Square Lake, Sheep Bridge, and 80-acre retained parcels.

3.3.2.2 Proposed Action

The proposed action would result in a direct beneficial impact by allowing for the BLM to formally resolve an inadvertent trespass; by disposing of a parcel of land that is heavily encumbered with existing land uses, including both authorized and unauthorized; by acquiring the non-Federal parcels of land which contain higher resource values; and would provide a net gain of Federal lands within the BLM SFO land tenure Zone 5. Indirect beneficial impacts would include increased land management efficiencies with the consolidation of both Federal and non-Federal lands ownership while recognizing existing land uses, as well as promoting multiple-use values.

3.3.2.2.1 Blue Canyon Parcel

The proposed action would allow the BLM to fulfill land tenure adjustment objectives within the management strategies of the land use plan (BLM 2003a). Specifically, the disposal of the Blue Canyon parcel in Zone 5 would have the following beneficial impacts and meet the following objectives for the zone:

- Resolve an inadvertent trespass.
- Dispose of a lower resource valued parcel.
- Improve the manageability of BLM-administered Federal lands by removing Federal administrative costs and time associated with management of the multiple rights-of-way.

Ownership of the parcel would transfer to the Blue Canyon with future management of the parcel being under the jurisdiction of Blaine County. The parcel would be within the Rural Residential District R-10 (UIB) as well as within the Mountain Overlay and Scenic Highway Overlay Districts identified under Blaine County planning and zoning ordinances (Blaine County 2011).

Any patent issued for the parcel would contain the following terms, conditions and reservations:

- A reservation of right-of-way to the United States for ditches canals constructed by the authority of the United States under the Act of August 30, 1890, 43 U.S.C. 945.

- A right-of-way for livestock access purposes, including the right of access for the people of the United States, as identified by Right-of-Way IDI-37310, pursuant to Title V of the FLPMA of October 21, 1976 (43 U.S.C. 1767), and the right to enforce all or any of the terms and conditions of the right-of-way
- A condition that the conveyance be “subject to” all valid existing rights of record (i.e. those contained in Table 3).
- A notice and indemnification statement under the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9620(W)), indemnifying, and holding the BLM harmless from any release of hazardous materials that may have occurred.
- Additional terms and conditions that the authorized officer deems appropriate.

“Subject to” means that the rights-of-way would continue to be administered under their current terms and conditions through their current expiration dates; however, the Blue Canyon would succeed to the interest of the BLM in the administration of the rights-of-way, including the ability to collect future rent. The rights-of-way held by Mr. Fayed would be relinquished upon issuance of the patent for the Blue Canyon parcel.

The BLM would realize a time savings associated with the reduction in administration of the existing rights-of-way. All unauthorized improvements associated with Mr. Fayed’s residence would be allowed to remain on the parcel.

With regards to the transfer of the appurtenant water right, the Blue Canyon would be responsible for ensuring that all appropriate paperwork is filed with the IDWR regarding the transfer in ownership upon issuance of any patent for the Blue Canyon parcel.

3.3.2.2.2 Square Lake Parcel

Ownership of the parcel would transfer to the BLM and future management of the parcel would be according to applicable Federal laws and regulations, including the FLPMA; the ESA of 1973; and in conformance with decisions in the Magic MFP, as amended. The action would result in the 80-acre retained parcel remaining an inholding of non-Federal lands that would continue under the WRLT’s ownership and management.

The proposed action would allow the BLM to fulfill land tenure adjustment goals within the management strategies of the land use plan. Specifically, the acquisition of the Square Lake parcel in Zone 2 would have the following direct beneficial impacts and meet the following objectives for the zone:

- Expand the existing large block of high-value BLM-administered Federal lands and consolidate Federal lands ownership in the area.
- Reduce the size of a non-Federal inholding, surrounded by BLM-administered Federal lands.
- Obtain high resource value lands with identified habitat for BLM Sensitive Species. The follow species: greater sage-grouse (Type 1 Sensitive), pygmy rabbit (Type 2 Sensitive); loggerhead shrike, Brewer’s sparrow, and Mourning milkvetch (Type 3 Sensitive); and sage thrasher, short-eared owl, and Brewer’s blackbird (Type 5 Watchlist) were documented to occur on the Square Lake parcel. Both the greater sage-grouse and

pygmy rabbit are listed on the BLM Sensitive Species List and as an IDFG Species of Conservation Need. The greater sage-grouse is also listed by the USFWS as a candidate for listing under the ESA. The Square Lake parcel is within preliminary priority habitat for the greater sage-grouse.

- Obtain high resource value lands with identified crucial mule deer winter range.
- Obtain lands that contain riparian areas and wetlands (28.6 acres).
- Increase the amount of BLM-administered Federal lands available for recreational uses.

Any warranty deed issued for the parcel would contain the reservations and valid existing rights noted in Table 5. Under the proposed action, those reservation and valid existing rights would be required to be modified to reflect the boundaries of the 240 acres within the exchange, allowing the reservations and rights to remain on the 80-acre retained parcel. Several of the identified encumbrances are uses granted to the United States across the non-Federal parcels. All improvements located on the property would remain and come under the management/administration of the BLM. The BLM would be required to expend minor resources for maintenance of the existing corrals on the parcel and append the Square Lake Grazing Allotment to revise the land ownership status and incorporate the existing rangeland improvements.

3.3.2.2.3 Sheep Bridge Parcel

Ownership of the parcel would transfer to the BLM and future management of the parcel would be according to applicable Federal laws and regulations, including the FLPMA; the ESA of 1973; and in conformance with decisions in the Magic MFP, as amended. In addition, the proposed action would allow the BLM to fulfill land tenure adjustment goals within the management strategies of the land use plan. Specifically, the acquisition of the Sheep Bridge parcel in Zone 5 would have the following direct beneficial impacts and meet the following objectives for the zone:

- Provide a net gain of BLM-administered Federal lands within Zone 5.
- Create a contiguous parcel with adjacent BLM-administered Federal lands to the south.
- Obtain a 1-mile reach of unaltered riverine and riparian habitat along the Big Wood River and a ½ mile reach of riparian habitat along Rock Creek.
- Obtain lands that provide public access to both the Big Wood River and Rock Creek.
- Obtain high resource value lands with identified habitat for BLM Wildlife Sensitive Species. The follow species: loggerhead shrike, willow flycatcher, and Brewer's sparrow (Type 3 Sensitive) were documented to occur on the Sheep Bridge parcel. The Sheep Bridge parcel is within preliminary priority habitat for the greater sage-grouse.
- Obtain high resource value lands with identified mule deer, pronghorn and elk migration routes.
- Obtain lands that contain riparian areas and wetlands (26.6 acres).
- Increase the amount of BLM-administered Federal lands available for recreational uses, including special recreation permits for commercial outfitters on the Big Wood River.

- Unify the ownership of the surface and mineral estates.

Any warranty deed issued for the parcel would contain the reservations and valid existing rights noted in Table 6.

With regard to the transfer of the associated water right interests, the BLM would request that IDWR split water rights 37-26 and 37-27 into separate rights for each successor. The BLM would be responsible for ensuring that all appropriate paperwork is filed with the IDWR regarding the transfer in ownership for the acquired water right interests upon issuance of any deed for the Sheep Bridge parcel. The BLM will leave the newly acquired water right interests in the Idaho Water Supply Bank for the time being. The remaining holders of interests in water rights, 37-26 and 37-27, have informed the BLM of their intent to execute an agreement, acceptable to the United States, that: 1) the holders will not apply their interest in the water rights on the appurtenant property in regards to the stated POU; and, 2) the holders will transfer their interests in the water rights to other “non-Federal” property to establish a new POU. The stated POU associated with the stacked water rights is not currently, and is not planned to be used for irrigated agriculture under the no action alternative, therefore contractual removal of the POU or transfer of the POU under this alternative would not result in a direct impact to existing water rights. An indirect effect of removing the POU from the existing water right would be the increased value of the remaining water right priority date for potential mitigation measures for withdrawals upstream. Because these rights currently reside in the Idaho Water Supply Bank, this impact is likely negligible because the rights are currently available for such uses, if needed.

3.3.2.3 Alternative A

3.3.2.3.1 Blue Canyon Parcel

Because the Blue Canyon parcel would be disposed in its entirety under this alternative, similar to the proposed action, impacts of Alternative A would be the same as the proposed action described above.

3.3.2.3.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Alternative A would result in the BLM acquisition of the entire 320 acres of the Square Lake parcel (inclusive of the 80-acre retained parcel). Ownership of the two parcels would transfer to the BLM and future management of the parcel would be according to applicable Federal laws and regulations, including the FLPMA; the ESA of 1973; and in conformance with decisions in the Magic MFP, as amended. Impacts associated with this alternative would be similar to those described for the proposed action with a negligible increase in management efficiencies due to contiguous land ownership

3.3.2.3.3 Sheep Bridge Parcel

Because the Sheep Bridge parcel would be acquired in its entirety under the proposed action alternative, the impacts would be the same as those described under the proposed action above.

3.3.3 Cumulative Impacts

The cumulative effects area for land use is defined as Blaine County because the management plans and strategies for the county encompass similar land uses on and near the parcels analyzed in this EA. The BLM SFO land tenure adjustment actions for Blaine County since 1980 (excluding State exchanges) have totaled of more than 4,315 acres acquired by the BLM for

public use and the BLM has conveyed to non-Federal ownership about 922 acres. The difference is 3,393 acres on the Federal side (BLM 2012a).

During the processing of the 2003 Amendment, scoping comments requested for the BLM to identify a goal for a no-net-loss of public acres within the Wood River Valley region of Blaine County (Zone 5). Since implementation of the 2003 Amendment, the BLM SFO has completed the disposal of about 261 acres of land within Zone 5 without any acquisitions (BLM 2012a). These figures do not include the pending Point of Rocks Land sale of 3.4 acres, or the proposed acreage for disposal under the R&PPA proposal totaling up to 409 acres. Both reasonably foreseeable future actions for land disposal are located in Zone 5. Future land exchanges, as with this proposed land exchange, would be compared to the same criteria in the 2003 Amendment to determine if they are in the public interest and comply with the approved land use management plans. Therefore future exchanges, while not affected by this exchange, would be expected to lead to further enhanced protection for important resource values in the cumulative impacts analysis area.

3.3.3.1 *No Action*

Under this alternative, the trespass would be resolved, however future land exchange proponents may use the comparable resource evaluations set forth during this analysis as a benchmark of an unsuccessful effort to implement stated goals of the 2003 Amendment to the land use plans.

3.3.3.2 *Proposed Action*

Implementation of the proposed action would encourage and strengthen the resourced-based approach toward land management described in the 2003. Overall the public would receive cumulative benefit from the proposed action with the implementation of the 2003 Amendment and increasingly efficient land management actions. The proposed action would put more land into Federal ownership (547 acres) in comparison to land which would become non-Federal (20 acres). Zone 5 would see a net increase of 287 acres of land transferred into Federal ownership under the proposal. The net gain of lands in Zone 5 under the proposed action will have the cumulative benefit of compensating for the disposal of Federal lands in prior, separate land tenure actions.

With regard to the water right interests, if the BLM keeps them in the Idaho Water Supply Bank they would be protected from potential forfeiture due to non-use. However, the BLM could determine a future use for the water and remove them from the Idaho Water Supply Bank.

3.3.3.3 *Alternative A*

The cumulative impacts of Alternative A would be similar to those of the proposed action, differing negligibly by the additional long-term impacts from increased land management efficiencies.

3.4 RECREATION AND ACCESS

3.4.1 Affected Environment

The BLM-administered recreation on Federal land in the study area is managed either as a SRMA or an Extensive Recreation Management Area (ERMA). SRMAs are those Federal lands that the BLM intensively manages where outdoor recreation is a high priority. ERMAs are those Federal lands that the BLM manages for traditional dispersed recreational use. The Federal Blue Canyon parcel is located within an SRMA. The non-Federal parcels (Square Lake, Sheep Bridge, 80-acre retained) are adjacent to BLM-administered Federal lands that are designated as ERMAs.

3.4.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel is within the North Ketchum SRMA¹, shown on Figure 2. This SRMA consists of 272 acres north of Ketchum and was designated in 1982 because the lands provided access to the Big Wood River for recreation and open space in a growing population center (BLM 1982). The SRMA was also classified as a Roded Natural Area consistent with the Recreation Opportunity Spectrum (ROS). The nearby Sun Peak day use area and Lake Creek recreation site are intensively managed for recreational use in a natural setting (BLM 1982). Since 1982, the areas within and surrounding the SRMA have been modified by development, specifically the SH 75 realignment and river restoration projects in the 1990s. The BLM describes the recreation setting characteristics of the area as follows:

- Remoteness: Within ½ mile of paved/primary roads and highways.
- Naturalness: Character of the landscape partially modified but none overpower the natural landscape.
- Visitor Facilities: Simple/basic recreation development, restrooms, picnic site, paved non-motorized trail and social trails.
- Contacts: Visitors can encounter a seasonal average of up to 60 contacts per day.
- Group size: Visitors encounter a seasonal average of up to 6 people per group.
- Evidence of Use: Sounds of other people are occasionally heard. Vegetation shows wear along with soil compaction around high use areas (Sun Peak day use area, Hulen Meadows pond).
- Access: Ordinary highway auto and truck traffic is characteristic.
- Visitor Services: Basic maps. Staff is rarely present to provide on-site assistance.
- Management Controls: Some regulatory and ethics signing along with moderate use restrictions, no overnight camping.

¹ Township 4 North, Range 17 East, Boise Meridian, Idaho, Section 1, Lots 2, 3, and W¼NE¼ Township 5 North, Range 17 East, Boise Meridian, Section 36, NW¼ NW¼, SE¼NW¼, and E½SW¼

Aside from records of the historical livestock grazing trail (discussed in Section 3.11), there are no trails, amenities, or current public recreational land use on the Blue Canyon parcel. The configuration of the existing (unauthorized fence and landscaping) improvements and (authorized) driveway present the visual impression from SH 75 that the parcel is non-Federal lands, which discourages public use. However, access to and/or public use of the parcel is not restricted. The parcel does not provide access to the Big Wood River and is bounded by non-Federal lands on the south and east. No developed recreational resources are located on the adjacent BLM-administered Federal lands to the north of the parcel.

3.4.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The Square Lake parcels are undeveloped open space with improvements related to grazing (livestock corrals and wire fencing) and wildlife viewing (interpretive sign). The parcels have gated access from SH 75 on the southeast corner and by non-gated primitive two-track roads from the north, south, and west that cross the parcels. The access roads lead to adjacent BLM-administered Federal lands and Magic Reservoir (1.5 miles west). OHV use on the Square Lake parcels is restricted to existing roads.

Recreational activities that occur on the parcels consist of wildlife watching, hunting, hiking, and OHV use. On the Square Lake parcels, the WRLT participates in the IDFG “*Access Yes!*” a program that is designed to improve sportsmen's access to non-Federal lands or through non-Federal lands to Federal lands by compensating willing landowners who provide access. Posted signage indicates that the parcels are open for hunting.

3.4.1.3 *Sheep Bridge Parcel*

The Sheep Bridge parcel is undeveloped open space. An unimproved road leading from the IDFG Sheep Bridge fishing access (about 300 feet east of the east parcel boundary) provides access to the parcel. An unimproved vehicle turnaround is located at the east gate on the parcel. A single informal parking place is also available at a fenced access entrance along Highway 20, on the north side of the parcel. South of the Big Wood River, access to the parcel is possible by crossing the suspension foot bridge at the IDFG Sheep Bridge fishing access point (east of parcel) or by using existing primitive two-track roads from the south.

Recreational uses on the parcel consist of hiking, wildlife viewing, fishing, and hunting (except for sage-grouse). The parcel is crossed by about 3.3 miles of interconnected primitive two-track roads with additional side spurs north of the Big Wood River and about 0.8 mile of primitive road on the south side of the Big Wood River. The Big Wood River flows through the parcel in a 35-foot deep canyon, and is accessible during lower flows from the Rock Creek confluence or from upstream of the parcel at the IDFG Sheep Bridge fishing access point. Access to the river during high flows is difficult. Posted signage on Highway 20 identifies the IDFG Sheep Bridge fishing access point, with fishing regulations also posted on the sign post. Hunting on foot or by horseback is permitted. The WRLT participates in the IDFG “*Access Yes!*” program on the Sheep Bridge parcel. Posted signage by the WRLT specifically indicates sage-grouse hunting and OHV use is prohibited on the parcel.

3.4.2 Environmental Impacts

3.4.2.1 No Action Alternative

Under the no action alternative, there would be no change in the ownership of the parcels. The Blue Canyon parcel would remain accessible for recreational use. The non-Federal parcels would continue to be accessible for dispersed recreation under the WRLT management plans. As described below, the no action alternative would have negligible long-term impacts to recreation resources in Blaine County.

3.4.2.1.1 Blue Canyon

Under this alternative, the BLM management of the parcel would continue. There are no known plans for development of any recreational amenities on the parcel. The removal of the unauthorized improvements from the parcel may incrementally increase available open space on the parcel; however the existing authorized improvements to the property would remain and continue to provide the impression of non-Federal lands. Removal of the unauthorized improvements under this alternative are not likely to result in an improvement or increase in recreational use of the parcel or adjacent BLM-administered Federal lands to the north because the impression of non-Federal lands with the authorized driveway and adjacent private residence would remain. In addition, the parcel is bounded on two sides by non-Federal lands and on a third by SH 75, reducing the potential for the parcel to be used as a gateway to adjacent BLM-administered Federal lands that have similar access from the highway. This alternative would have negligible impacts to recreation resources as existing recreational opportunities would continue under the no action alternative.

3.4.2.1.2 Square Lake (both the land exchange and 80-acre retained) and Sheep Bridge Parcels

Under this alternative, management priorities established by the WRLT would continue to be for wildlife habitat and migration corridor preservation. Existing recreational activities would continue to be permitted on the parcels, provided these activities do not conflict with the management goals of the WRLT. There would be no change in the availability of the area to recreation uses, subject to the WRLT management priorities. This alternative would have negligible impacts to recreation resources as existing recreation opportunities would continue under the no action alternative.

3.4.2.2 Proposed Action

3.4.2.2.1 Blue Canyon Parcel

The proposed action would result in the removal of the Blue Canyon parcel from the North Ketchum SRMA reducing the SRMA by less than 8 percent, from 272 acres to 252 acres. The parcel does not provide access to the Big Wood River and does not contain existing recreation features consistent with the SRMA aside from open space. The proposed disposal would therefore have a negligible long-term impact to recreation resources within the SRMA. Under the proposed action, the disposal of the 20-acre parcel would result in the acquisition of 547 acres of land in the southern portion of the Blaine County that would be open to BLM-administrated recreation. The net increase in available recreational lands would be a long-term, direct beneficial impact to recreation resources.

3.4.2.2.2 *Square Lake Parcel*

The proposed action would not affect the ability of individuals to participate in hunting, and wildlife viewing activities that currently occur on the Square Lake parcel. Recreational use on the parcel would be managed according to the existing Magic MFP, which allows for traditional dispersed recreational use. This change in management would likely result in similar recreation opportunities as those currently available on the parcel. Therefore, the proposed action would not adversely impact recreation resources on the parcel. Overall, the acquisition would result in a beneficial impact to recreation resources by increasing BLM-administered Federal lands available for recreational activities within Blaine County.

3.4.2.2.3 *Sheep Bridge Parcel*

The proposed action would not affect the ability of individuals to participate in fishing, hunting, and wildlife viewing activities that currently occur on the Sheep Bridge parcel. Recreational use on the parcel would be managed according to the existing Magic MFP, which allows for traditional dispersed recreational use. The direct impact of this change in management would be the removal of the current OHV restrictions from the parcel and managed OHV use consistent with the Magic MFP. This would potentially increase OHV use on the parcel since use is currently restricted; however, existing trails on the parcel indicate that historical usage on the parcel has occurred. In addition, requirements for special recreation permits (e.g. commercial outfitters) under BLM policy, would apply to uses on the Sheep Bridge parcel. The BLM currently administers special recreation permits for four commercial fishing outfitters on adjacent BLM-administered Federal lands. Overall, the acquisition would result in a beneficial impact to recreation resources by increasing BLM-administered Federal lands available for recreational activities within Blaine County.

3.4.2.3 *Alternative A*

3.4.2.3.1 *Blue Canyon Parcel*

Alternative A would result in the same impact to the Blue Canyon parcel as the proposed action. Therefore impacts from Alternative A would be similar to the proposed action with the exception that the Federal disposal would result in the acquisition of 627 acres, or about 15 percent more land, in the southern portion of Blaine County, compared with the proposed action.

3.4.2.3.2 *Square Lake (both the land exchange and 80-acre retained) and Sheep Bridge Parcels*

Under Alternative A, the BLM would realize an increase in recreation opportunities and management efficiencies by acquiring the entire 320 acres, including the Square Lake parcel and the 80-acre retained parcel. This would result in an increase in available public lands open for recreation compared to those under the proposed action. Alternative A would result in a negligible beneficial impact on recreation resources by increasing BLM-administered Federal lands available for recreation activities within the BLM SFO.

3.4.3 *Cumulative Impacts*

The cumulative effects area for access and recreation is defined as Blaine County because the management plans and strategies for the county encompass similar land use and recreational activities on and near the parcels analyzed in this EA. BLM-administered Federal lands within Blaine County have historically been used for a variety of recreational uses including, but not limited to, hunting, fishing, OHV, skiing, and wildlife viewing. Historical recreational activities

have resulted in footpaths, camping areas, and double track roads and access points, both formal and informal, across Federal lands. Increasing population and development pressures adjacent to public lands within the Wood River Valley has resulted in increasingly fragmented access points to Federal lands, increasing the importance for addressing and managing recreational opportunities.

The North Ketchum SRMA was designated in 1982 because the lands provided access to the Big Wood River for recreation and open space in a growing population center (BLM 1982). Since 1982, the areas within and surrounding the SRMA have been modified by development, specifically the SH 75 realignment and river restoration projects in the 1990s. The approved Sun Valley (1982) and Magic (1975) MFPs, as amended offer no affirmative direction regarding land adjustments that would expand or reduce the acres of public land within the boundaries of SRMAs within the respective planning areas.

The BLM is currently developing a travel management plan (North Highway 20 Travel Management Plan - TMP) for all the BLM-administered Federal land administered by the SFO north of Highway 20. Development of the proposed plan that would amend the 1982 Sun Valley MFP is in the preliminary stages, and expands on the 2007 Blaine County Cooperative Conservation and Travel Plan. Development of the City of Ketchum's proposed North R&PPA parcel for recreational use is a reasonably foreseeable future action within Blaine County. Anticipated uses for the parcel may include a water supply well, river channel and pond restoration, a wheelchair-accessible fishing pier, a dog agility course, a nature trail, a whitewater skills park, and/or recreation support facilities. The City of Ketchum is currently undertaking a master planning effort to further refine the proposed development of the North R&PPA parcel.

3.4.3.1 *No Action Alternative*

Under this alternative, the Blue Canyon parcel would remain under the BLM's ownership and management, and incorporated into the North Highway 20 TMP. The Blue Canyon parcel is proposed for closure to OHV use under the preliminary scoping plans for the TMP. Similar closure would occur under non-Federal ownership, therefore there would be a negligible cumulative impact from the proposed action.

Current recreational access on the non-Federal parcels would remain to be managed under the WRLT's management plans that currently allow limited motorized access to the Square Lake parcel and restricted OHV access on the Sheep Bridge parcel. Because of the limited current and likely future recreational opportunities on the Blue Canyon parcel and isolation with respect to access to adjacent Federal lands, the overall cumulative adverse impact on recreation resources alternative is anticipated to be negligible.

3.4.3.2 *Proposed Action*

Under the proposed action, available BLM-administered recreational resources would have a net increase of 527 acres of BLM-administered Federal lands available in Blaine County. Management efficiencies realized with contiguous, Federally-owned parcels would likely offset additional administrative management tasks associated with the acquired lands. A slight reduction in acreage within the North Ketchum SRMA would occur with implementation of the proposed action. No recreational use is anticipated on the Blue Canyon parcel under the North Highway 20 TMP, therefore the impact of removing the parcel from lands impacted by the proposed TMP amendment would be negligible.

Disposal of Federal lands reasonably foreseeable under the North R&PPA project would transfer ownership to the City of Ketchum for recreation and public utility development. The anticipated development would be west of SH 75 and focused on the Big Wood River and riparian corridor resources, similar to the existing recreational development of the Sun Peak Day Use Area. Because of the difference in recreation resources between proposed action and R&PPA project, the proposed action is likely to have negligible cumulative effect on recreation resources when viewed in context of current and reasonably foreseeable future actions.

Overall, the proposed action would result in a beneficial long-term cumulative impact on recreation resources within Blaine County.

3.4.3.3 *Alternative A*

Increases in contiguous BLM-administered Federal lands available for recreation would be realized under Alternative A. For this reason, the cumulative impact of this alternative would be similar to that described under the proposed action with the added benefit to the public, of increased management efficiencies realized from contiguous parcels of BLM-administered Federal lands.

3.5 VISUAL RESOURCES

All lands administered by the BLM are managed to achieve or maintain a defined level of visual or scenic quality. The BLM's Visual Resources Management (VRM) system provides a method to identify and evaluate scenic values to determine the appropriate levels of management. Determination of the four visual resource inventory classifications is explained in the BLM Handbook H-8410-1, *Visual Resource Inventory and Handbook* (BLM 2012d) and H-8431-1, *Visual Resource Contrast Rating* (BLM 2012c).

3.5.1 Affected Environment

3.5.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel is in a BLM VRM Class II area. The Class II Visual Resource Objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. The parcel includes two west-facing hillsides covered with native grasses and rocks, and a paved private road between the two hills. The Blue Canyon parcel is highly visible from SH 75.

3.5.1.2 *Square Land (both the land exchange and 80-acre retained) and Sheep Bridge Parcels*

The non-Federal parcels are adjacent to BLM VRM Class II areas and are visible from the closest state or U.S. highways (SH 75 or Highway 20). The non-Federal parcels (Square Lake, Sheep Bridge, and 80-acre retained) are similar in visual character to the adjacent or nearby BLM-administered Federal lands, but are not currently subject to VRM classifications.

3.5.2 Environmental Impacts

3.5.2.1 *No Action Alternative*

3.5.2.1.1 *Blue Canyon Parcel*

Under the no action alternative, the existing visual resources on the Blue Canyon parcel would not change, aside from minor and temporary construction and/or disturbances to the Blue Canyon parcel during removal of the unauthorized improvements and subsequent rehabilitation. Removal of unauthorized, non-native vegetation and landscaping would occur under this alternative. Some of this landscaping currently provides a natural, although non-native, visual barrier between the SH 75 corridor and the adjacent private residence, which is located on non-Federal lands and not subject to VRM analysis. Although non-native in origin, the removal of the obscuring vegetation under this alternative may have a long-term minor adverse impact on the visual resource by permitting the private residence to be visible from common vantage points (SH 75) until sufficient native vegetation has matured.

3.5.2.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

Under this alternative, there would be no impact to visual resources on the Square Lake parcels because the parcels are not subject to VRM evaluation and no development is planned by the WRLT for the parcels.

3.5.2.1.3 *Sheep Bridge Parcel*

Under this alternative, there would be no impact to visual resources on the Sheep Bridge parcel because the parcel is not subject to VRM evaluation and no development is planned by the WRLT for the parcel.

3.5.2.2 *Proposed Action*

3.5.2.2.1 *Blue Canyon Parcel*

Under the proposed action, some land development changes may occur on the Blue Canyon parcel, thereby changing the appearance of the parcel viewed from the surrounding hills and SH 75. However, the parcel would be held in non-Federal ownership and would not be subject to the BLM VRM evaluation. Although not subject to the BLM VRM evaluation, proposed changes to the property would be subject to Blaine County Mountain Overlay and Scenic Highway Overlay District ordinances (Blaine County 2011). These ordinances define aesthetic and development standards to preserve the visual resources in recognition of them as vital to the residents of the county as well as to the recreational economy. For these reasons, and because no development is anticipated on the parcel, the proposed action would result in negligible to minor impacts to the visual resources on the parcel.

3.5.2.2.2 *Square Lake Parcel*

Under the proposed action, the parcel would be acquired by the BLM and become subject to the BLM VRM evaluation. No development is planned for the parcel. The retained parcel, remaining in non-Federal ownership, would not be subject to BLM VRM, but no development is planned for this parcel either. For these reasons, there would be no effects to visual resources.

3.5.2.2.3 *Sheep Bridge Parcel*

Under this alternative, the existing shepherd cabin would be removed by the WRLT prior to the BLM's acquisition. This would remove the man-made feature visible from Highway 20 and result in minor ground disturbances within the historical footprint of the structure until vegetation could be re-established. The parcel, upon acquisition by the BLM would become subject to the BLM VRM evaluation, but no development is planned. Because of the minor change in visual resource from Highway 20 caused by the cabin removal, there would be a negligible effect on visual resources.

3.5.2.3 *Alternative A*

Under Alternative A, no development is planned for the Square Lake parcels, in their entirety. For this reason, impacts would be the same as those described for the proposed action for all parcels.

3.5.3 *Cumulative Impacts*

The cumulative impact area for visual impacts is defined as the viewshed of each of the parcels, either from the nearest public roadways (Highway 20/SH 75) or from adjacent BLM-administered Federal lands. Past and present land uses and actions within these areas that have altered or impacted the visual environment vary between the northern Blue Canyon parcel and the southern exchange parcels. Within the northern Blue Canyon parcel viewshed (SH 75 and adjacent Federal lands), historical livestock trails, mineral prospecting, day use recreational development, roadway and utility corridor improvements, and residential/urban development

along the SH 75 corridor have all contributed to changes in the natural landscape. Past and current grazing activities, including rangeland improvements, access roads, and recreational land uses have altered the natural landscape in the southern portions of the viewshed impact area for the non-Federal parcels. These actions have resulted in construction of fencelines, livestock trails and corralling structures, gravel or double-track OHV roads and paths, and parking areas.

SH 75 from Stanley to Shoshone was designated an Idaho State Scenic Byway in 1977, renamed the Sawtooth Scenic Byway in 1991. A Corridor Management Plan (CMP) developed to characterize the byway's resources and to prepare a strategy to conserve and protect those valuable intrinsic qualities (ITD 2001). Consistent with the CMP, Blaine County has adopted a Mountain Overlay District ordinance with Scenic Corridor and Mountain Overlay District Buffer designations designed to recognize the importance of the visual corridors and regulate development within the overlay through Blaine County.

Reasonably foreseeable future actions consist of proposed development of the City of Ketchum's North R&PPA parcel near the Blue Canyon parcel. Recreational development of the area, although yet to be planned, would be subject to VRM criteria as well as applicable Blaine County ordinances.

3.5.3.1 *No Action*

Direct and indirect impacts identified under this alternative would be temporary and related to the re-establishment of native vegetation. The cumulative impacts of this alternative on the visual environment would be negligible, but would likely result in a minor long-term impairment of the overall visual resource by contributing to the visibility of development on the non-Federal lands adjacent to the Blue Canyon parcel.

3.5.3.2 *Proposed Action*

Because current and future development plans within the impact areas would be subject to either Blaine County ordinance and/or the BLM VRM evaluation and the proposed action does not include any known or proposed development, the proposed action would have negligible cumulative impacts on the visual resource.

3.5.3.3 *Alternative A*

Because the visual resource impact area for Alternative A is the same as the proposed action, cumulative impacts to the visual resources under this alternative would be similar to those described in the proposed action.

3.6 CULTURAL RESOURCES

3.6.1 Affected Environment

In November 2008, Walsworth and Associates conducted a NHPA Section 106-compliant cultural resources inventory of the Federal parcels included in the land exchange proposal (IDI-35331) and the R&PPA proposal (IDI-36276) (Walsworth and Associates 2008). Only those aspects of the report associated with the land exchange proposal are discussed below.

The BLM SFO contains a wide variety of cultural resources. Several Native American Tribes used this region continually for at least the last 12,000 years. Euro-American trappers and explorers first entered the region in the early 1800's, followed by thousands of immigrants on the Oregon Trail. Between 1845 and 1865, thousands of emigrants passed through Idaho on the way to Oregon and California. A few pristine segments of the Goodale's Cutoff and the North Alternate of the Oregon Trail are still present in the field office area.

The discovery of gold and other valuable minerals brought many people to Idaho, including Chinese immigrants in the 1880's. The resulting conflict between Native Americans and the newcomers precipitated the removal of Native Americans to reservations at Fort Hall and Duck Valley. Several key events in the Bannock War over Camas Prairie took place within the BLM SFO boundaries. Railroads, such as the Oregon Short Line, were built and towns were founded across the area. After the mining boom faded in the early 1900's, agricultural projects were built, such as Magic Dam, Milner Dam and many associated irrigation canals, and livestock grazing became more prevalent. Numerous Basque immigrated to Idaho to work in the sheep industry and settled in Idaho. Traces of all these activities still remain on the landscape.

3.6.1.1 *Blue Canyon Parcel*

Two known sites and one newly recorded site were identified within or close to the area of potential effect (APE) defined for the Blue Canyon parcel. The sites consist of the historic Galena Toll Road, or Sawtooth Park Highway, which is a segment of the current SH 75 and the historic Ketchum to Stanley Stock Driveway, which is within or adjacent to SH 75. The new site was identified as the Old Ketchum Dump, identified as near the Hulen Meadows subdivision in the report, but subsequently identified on and adjacent to the Blue Canyon parcel in the subsequent Phase I assessment for the parcel (ERO 2012d). The Idaho State Historical Preservation Office (SHPO) concurred with the determination that none of the sites were eligible for listing on the National Register of Historic Places (NRHP) (BLM 2009a).

3.6.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

Given the location and topography of the parcel (both land exchange and 80-acre retained), there is a high likelihood of prehistoric and historic cultural resources being present. The Square Lake parcels have not been inventoried for cultural resources, but the distribution of other known sites on public lands in the region would suggest previously unrecorded sites are present on the offered parcels as well.

3.6.1.3 *Sheep Bridge Parcel*

A shepherd's cabin is located on the Sheep Bridge parcel. Historical aerial photographs indicate the cabin has been on the parcel since at least 1943. Records indicate the cabin may have been used by a recluse, who passed away in the 1960s (Boettger, pers. comm. 2011).

The Sheep Bridge parcel has been identified by the Shoshone-Bannock and Shoshone-Paiute Tribes as being located in a general area that has special importance for treaty or traditional uses and values. The Sheep Bridge canyon is located within the designated area for both tribes to exercise treaty rights and maintain traditional cultures and cultural uses.

Given the location and topography of the parcel, there is a high likelihood of prehistoric and historic cultural resources being present. The Sheep Bridge parcel has not been inventoried for cultural resources, but the distribution of other known sites on public lands in the region would suggest previously unrecorded sites are present on the parcels as well.

3.6.2 Environmental Impacts

3.6.2.1 *No Action Alternative*

Because no listed or eligible cultural resources were identified on the Federal parcel, the no action alternative, proposed action, and Alternative A would have no adverse impacts to cultural resources.

3.6.2.2 *Proposed Action*

The proposed action and Alternative A would result in the transfer from non-Federal to Federal ownership lands located in an area of identified importance to the Shoshone-Bannock and Shoshone-Paiute Tribes and incorporation of the lands into tribal treaty rights. Cultural resources and any actions on the non-Federal parcels would also be subject to NHPA Section 106 review and compliance. This incorporation would have the direct long term benefit of increasing the total Federal ownership of lands with potential cultural resources within the BLM SFO boundaries.

3.6.2.3 *Alternative A*

Impacts from the implementation of Alternative A would be similar to those described for the proposed action and result in the transfer from non-Federal to Federal ownership lands located in an area of identified importance to the Shoshone-Bannock and Shoshone-Paiute Tribes and incorporation of the lands into tribal treaty rights. Cultural resources and any actions on the non-Federal parcels would also be subject to NHPA Section 106 review and compliance. This incorporation would have the direct long term benefit of increasing the total Federal ownership of lands with potential cultural resources within the BLM SFO boundaries.

3.6.3 Cumulative Impacts

3.6.3.1 *No Action Alternative*

Because no adverse direct or indirect impacts were identified under the no action alternative, there would be no adverse cumulative impacts from this alternative.

3.6.3.2 *Proposed Action*

The cumulative impact of the proposed action will have the cumulative benefit of increased resource availability and preservation on Federal lands.

3.6.3.3 *Alternative A*

As with the proposed action, the cumulative impact of Alternative A will have the cumulative benefit of increased resource availability and preservation on Federal lands.

3.7 SOCIOECONOMIC RESOURCES

3.7.1 Affected Environment

Socioeconomic resources include factors such as population and housing, employment and fiscal impacts such as loss of income or community tax base. Potential impacts to these resources are discussed in this section.

The project area is almost entirely within unincorporated Blaine County, Idaho. Blaine County is about 2,645 square miles in land area, of which about 78 percent is under Federal ownership (Blaine County 2004) and is not subject to property taxes. In lieu of property taxes on Federal lands, Blaine County receives a Federal Payment In Lieu of Taxes (PILT) from the Federal government proportionate to the land area under Federal ownership.

Between 2000 and 2010, Blaine County experienced strong, steady population growth from 18,991 to 21,376 (IDL 2011a). This represents a population increase of 13 percent, making Blaine County one of the fastest growing counties in south-central Idaho during that period (IDL 2011b). Recent population increases within the county are somewhat slower due to congestion in traffic and a lack of affordable housing (IDL 2011b).

Recreational visitation accounts for a major component of the Blaine County economic base, primarily due to the national and international notoriety of the Sun Valley Ski Resort in Ketchum. In 2000, prior to the recent recession, visitor spending accounted for 37 percent of all employment and 29 percent of all earnings in the county (Dean Runyan 2001). Although the recession has impacted construction and development projects, leisure and hospitality jobs still account for up to 25 percent of all nonfarm payroll jobs in Blaine County (IDL 2012). As of 2009 (the latest year with available data), almost 69 percent of the Blaine County workforce lived within the county, with 9 percent residing in Jerome, Twin Falls, and Lincoln counties (U.S. Census 2012). The remainder of the workforce originated from more distant counties (e.g. Ada, Canyon, Gooding, Bonneville Bannock and Elmore Counties) and/or other locations (e.g. outside Idaho).

3.7.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel is within unincorporated Blaine County, adjacent to non-Federal lands that are within the City of Ketchum corporate limits. Because the land is currently Federally-owned, the unauthorized improvements to the parcel are not included in local governmental valuations. Approximate annual Federal revenue generated from privately-held rights-of-way on the parcel is \$4,690 in 2012 (BLM 2012a). The Blue Canyon parcel and surrounding area is within an area dominated by residences and resort-oriented businesses that are primarily dependent on the tourist and visitor economy of the recreation amenities in Ketchum.

3.7.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The Square Lake parcels are located in the southern portion of Blaine County, in an area dominated by dispersed recreation. The southern portion of Blaine County has a greater agricultural-influenced economic base compared with the Ketchum-area Blue Canyon parcel. Agricultural and dispersed recreational opportunities and services increase in importance to the socioeconomic base further south in the county relative to ski resort-related economies in the northern portion of the county.

The Square Lake parcels are currently assessed by the Blaine County Assessor's Office as farmland with no commercial, residential, or other market sector values assessed. Based on Blaine County assessed values, the parcels contributed \$51.92 in property taxes to Blaine County in 2011 (Blaine County 2012). The WRLT currently has a Conservation Program Contract with the USDA Natural Resources Conservation Service (NRCS) to implement and maintain specific conservation practices under the Sage-Grouse Initiative (USDA 2010). In return, the WRLT receives payments under the program, estimated to total \$7,329 for the contract obligations through 2012 (values are currently under revision, York, pers. comm. 2012). Under the contract terms, the WRLT would forfeit all rights to further payments should the parcels be transferred to another party. The NRCS is aware of the proposed land exchange and donation (York, pers. comm. 2012). For participation in the IDFG "Access Yes!" program, the WRLT received a one-time payment of \$160 in 2010 from the IDFG. No additional funds associated with the program have been received by the WRLT. Additional funds have been received by the WRLT associated with lease agreements with grazing permittees. These funds, only available during grazing periods (June-August), amount to minor sources of annual income to the WRLT. Although not able to be quantified, the parcels are accessible for dispersed recreation within the management guidelines of the WRLT.

3.7.1.3 Sheep Bridge Parcel

The Sheep Bridge parcel is currently assessed by the Blaine County Assessor's Office as farmland with no commercial, residential, or other market sector values. Based on Blaine County assessed values, the parcel contributed \$58.12 in property taxes to Blaine County in 2011 (Blaine County 2012). For participation in the IDFG "Access Yes!" program, the WRLT received a one-time payment of \$360 in 2010 from the IDFG. No additional funds associated with the program have been received by the WRLT (York pers. comm. 2012). Although not able to be quantified, the parcel is accessible for recreational use of the Big Wood River, hiking, and limited hunting.

3.7.2 Environmental Impacts

3.7.2.1 No Action Alternative

The no action alternative would not result in changes to existing land ownership of the parcels involved in the proposed land exchange. There are no anticipated changes in employment, housing, business, or infrastructure requirements that would be anticipated under this alternative. Overall, the socioeconomic impact of the no action alternative would be negligible.

3.7.2.1.1 Blue Canyon Parcel

The parcel would remain in Federal ownership with the BLM continuing the administration of existing rights-of-ways. The BLM would realize a minor short term increase in administration costs associated with the removal of the unauthorized improvements on the parcel. Annual revenue generated from the existing rights-of-ways would continue, but actual amounts realized would be minor (less than \$5,000/year), and subject to annual per acre rent schedule updates found in 43 CFR 2806.20.

3.7.2.1.2 Square Lakes (both the land exchange and 80-acre retained)

Blaine County would continue to collect property taxes on the non-Federal lands, and the WRLT would realize the remainder of any existing NRCS payments through the end of the existing

contract period (September 30, 2013). It is unknown if the contract would be renewed beyond 2013. The WRLT would continue to manage the parcels subject to their land use and management plans emphasizing wildlife habitat and migration corridor protection, as well as recreation and lease agreements with any grazing permittees as needed.

3.7.2.1.3 Sheep Bridge Parcel

Blaine County would continue to collect property taxes on the non-Federal lands, which would continue to be subject the WRLT's land use and management plans emphasizing on wildlife habitat and migration corridor protection, including recreational uses.

3.7.2.2 Proposed Action

The proposed action would result in the transfer of 547 acres of non-Federal lands into Federal ownership. No changes in employment, housing, business, or infrastructure are anticipated as a direct impact of the proposed action. The lands would be available for recreational uses that provide a social and fiscal benefit for Blaine County. Formal incorporation of the lands into recreation management plans, maps, and travel plans would benefit residents of Blaine County through net increases in property tax revenue and the marketing and promoting a variety of recreational resources on the parcels to the public. Overall the proposed action would result in minor long term beneficial impacts. It is anticipated the small loss of revenue to the BLM and Blaine County from the removal and administration of the rights-of-way and property taxes would be offset by the addition of high resource value lands that contain recreational resources known to indirectly contribute to the strong tourism and recreation-based local economy.

3.7.2.2.1 Blue Canyon Parcel

The removal of the Blue Canyon parcel would have a negligible impact on PILT payments paid to Blaine County. The conversion of the Blue Canyon parcel to non-Federal lands would subject the parcel to annual Blaine County private property valuations and a subsequent long-term property tax revenue stream for the county. Although indeterminable, it is anticipated that the net increase of property tax revenue from the conversion would likely offset the incremental reduction in PILT payments received.

3.7.2.2.2 Square Lake and Sheep Bridge Parcels

The conversion of non-Federal lands into Federal ownership would represent less than a 0.1 percent increase in Federal ownership in Blaine County. The loss of private property tax revenue on these lands (\$110.04 in 2011, which included the 80-acre parcel) would be offset by PILT payments (indeterminable) and by new private property taxes assessed on the Blue Canyon parcel within the land exchange proposal. Blaine County would continue to collect property tax revenues on the Square Lake retained parcel, likely to be proportionately less than those collected for the entire parcel. Because of the offsetting changes in tax revenues, the proposed action would result in negligible to minor beneficial direct impacts to Blaine County revenues. Impacts associated with increased recreational opportunities described for the non-Federal parcels would provide an indirect public benefit through increased tourism and hospitality revenues within Blaine County.

3.7.2.3 Alternative A

3.7.2.3.1 Blue Canyon Parcel

Because there is no difference between the proposed action and the action alternative for the Blue Canyon parcel, impacts under the action alternative are anticipated to be the same as those described under the proposed action.

3.7.2.3.2 Square Lake (both the land exchange and 80-acre retained) and Sheep Bridge Parcels

Under Alternative A, impacts are likely to be similar to those described under the proposed action with the exception of the removal of the 80-acre retained parcel from lands subject to Blaine County property taxes and valuations. Although property tax and PILT payment impacts/offsets and comparisons are indeterminable, the public would realize a negligible long term impact from the administration efficiencies within Blaine County and the BLM from consolidation of property ownership. In addition, similar long-term indirect impacts described under the proposed action would likely be realized from increased tourism and visitation from recreational opportunities.

3.7.3 Cumulative Impacts

The geographic scope of the cumulative impacts analysis is defined as Blaine County because of the direct and indirect impacts identified have the greatest potential cumulative impact to those socioeconomic resources within the county. As one moves outside of Blaine County toward the population centers of Shoshone, Jerome, and Twin Falls, cumulative socioeconomic impacts of the proposed action or alternatives would be muted by an increasing reliance on food processing and manufacturing industries and recreational opportunities that focus on the Snake River Canyon to the south.

Sustain Blaine is a strategic economic plan prepared by Blaine County for the long-term economic sustainability of Blaine County (Sustain Blaine and Blaine County 2009). Key aspects of the plan identify the need to extend economic value beyond the Ketchum-Sun Valley area to include recreation areas such as the mid and lower Wood River Valley. Development of the City of Ketchum's proposed North R&PPA parcel for recreational use is a reasonably foreseeable future action within Blaine County. Anticipated uses for the parcel may include a water supply well, river channel and pond restoration, a wheelchair-accessible fishing pier, a dog agility course, a nature trail, a whitewater skills park, and/or recreation support facilities. The City of Ketchum is currently undertaking a master planning effort to further refine the proposed development of the North R&PPA parcel.

3.7.3.1 No Action

Under the no action alternative, anticipated cumulative economic impacts are anticipated to be negligible and associated with the incremental increases in administrative costs of maintaining property rolls, rights-of-way and agreements on the parcels.

3.7.3.2 Proposed Action

Under the proposed action, there are no anticipated adverse direct or indirect socioeconomic impacts; therefore there would be no adverse cumulative impacts.

A focused goal of the Sustain Blaine program is to increase visitation and recreational opportunities in the mid and lower Wood River Valley. As elements of the plan are

implemented and economic stability is increased, the proposed actions would contribute incrementally to the cumulative beneficial impacts on social and economic resources in Blaine County. Because of the limited recreational opportunities on the Blue Canyon parcel, removal of the parcel is not likely to have an adverse cumulative impact toward reaching this goal, particularly with the potential development of the R&PP North parcel. Overall, the proposed action would result in a cumulative movement toward the goals of the Sustain Blaine and provide a long term cumulative beneficial impact to the socioeconomic resources of Blaine County.

3.7.3.3 *Alternative A*

Under Alternative A, there are no anticipated adverse direct or indirect socioeconomic impacts; therefore there would be no adverse cumulative impacts.

As with the proposed action, increased land management efficiencies and focused recreation opportunities would provide a cumulative long term benefit to the socioeconomic resources within Blaine County. For these reasons, the anticipated cumulative impact of Alternative A would be similar to that described in the proposed action.

3.8 WATER QUANTITY AND QUALITY

The project area is within the Big Wood River drainage basin, which includes the Big Wood River above and below Magic Reservoir, as well as Rock Creek, a tributary to the Big Wood River. The Big Wood River originates north of the project area in the Boulder Mountains. Tributaries from the Smoky and Pioneer mountains join the Big Wood River prior to entering the Snake River Plain. The Big Wood River discharges to the Snake River near Hagerman, Idaho. Surface and ground water in the drainage are used for a variety of uses including wildlife habitat, agricultural irrigation, recreation, and domestic and municipal water supplies.

Surface water quality is regulated under various provisions of the CWA and administered by various Federal and state programs including the U.S. EPA and the IDEQ. Sections 305(b) and 303(d) of the CWA require states to establish water quality standards and list the current conditions of all state waters (required by §305(b)) and those waters that are impaired and needing a TMDL (required by §303(d)).

Surface and ground water rights allocation is the responsibility of the IDWR by Idaho statute. The IDWR is also responsible for assisting the state court in the adjudication of water rights, processing change applications, and enforcing the state's water laws. IDWR authorizes local management of the surface and ground water resources to water districts. The BLM does not administer ground water rights or resources in Idaho.

Because the proposed action has the potential for direct, indirect, or cumulative impacts to water quality within the Big Wood River drainage basin, analysis of potential impacts to water quality is presented in the following sections.

3.8.1 Affected Environment

3.8.1.1 *Blue Canyon Parcel*

One unnamed ephemeral stream is located on the Blue Canyon parcel. The BLM currently holds a stockwater water right (37-17314) within the unnamed stream for 0.02 cfs. The stream originates from and drains non-Federal lands east of the parcel. The stream is channeled beneath SH 75 and the Wood River Trail through culverts. The stream daylight in the Sun Peak day use area with a culvert discharge to a lowland area within the picnic area bounded by access roads. The unnamed stream has no perennial surface water channel, defined or inferred, that provides direct connection to the Big Wood River. Discharge from the unnamed stream reaches the Big Wood River through seasonal infiltration within the lowland area in the Sun Peak day use area or overland sheet flow during flood events.

The Blue Canyon parcel is within the Big Wood River Ground Water Management Area (GWMA) (IDWR 1991). The Big Wood River GWMA was designated by Order of the Director on June 28, 1991 and recognizes the demands placed on the resource and dictates area-specific management policies and restrictions on ground water rights administration and development. No ground water wells are located on the Blue Canyon parcel. The septic drainfield associated with the adjacent private residence is located on the parcel and authorized under BLM right-of-way (IDI-22091).

3.8.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

Square Lake is the largest surface water feature on the Square Lake parcels. There are no physical access restrictions to the lake, riparian or wetland areas. The lake is fed by an unnamed

ephemeral stream that drains the northern portion of the parcels, with minor tributary and wetland areas within the 80-acre retained parcel. Drainage from the lake is to the southwest via a culvert that allows flow to continue to the south-southwest within the ephemeral drainage. Square Lake is the first in a series of at least three ponds along the unnamed drainage. The confluence of the drainage with the Big Wood River is about 5.25 miles south of Square Lake. The unnamed drainage crosses the Big Wood Canal Company's Richfield Canal (about 4.5 miles south of Square Lake), which itself originates from Magic Reservoir. Two winter spillway structures are located at the intersection of the drainage with the Richfield Canal. The spillways allow spring runoff to pass through the canal during periods when the canal is dry. The gates are typically closed unless such runoff flow is necessary or in a rare case when the canal requires a flood release (Harman pers. comm. 2012).

No water rights or ground water wells are located on the Square Lake parcels.

3.8.1.3 *Sheep Bridge Parcel*

The Sheep Bridge parcel contains about 1 mile of the Big Wood River and about ½ mile of the Rock Creek perennial stream on the west boundary. Access to the Big Wood River is limited due to the basalt cliffs of the Sheep Bridge canyon along the river channel over most of the parcel. Access to the river is from the west and Rock Creek, or from the east at the Sheep Bridge IDFG fishing access. The WRLT currently holds interest in two stacked irrigation water rights associated with the Sheep Bridge parcel (37-26 and 37-27) as noted in Section 3.3.1.3. The water rights allow for 5.85 cfs total diversion from the Big Wood River for the irrigation of 171 acres. Both water rights are currently active and reside in the IDWR Water Supply Bank. There is a third water right (37-20945), which is a claim to saved water that was created with the construction of the extension bypass canal and provides a total of 1.50 cfs for irrigation and mitigation purposes. The claim has been recommended for disallowance by the IDWR Director (Report dated 4/30/12) to the Snake River Basin Adjudication (SRBA) Court (see Section 3.3.1.3). The WRLT, current owner of the Sheep Bridge parcel, has no ownership or interests in water right 37-20945.

The Big Wood River is in the Big Wood River subbasin, Hydrologic Unit Code (HUC) 17040219. The parcel is within the Seamans Creek to Magic Reservoir Unit (US-4) of the Big Wood River subbasin. The reach has IDEQ beneficial use designations for cold water aquatic life (COLD), salmonid spawning (SS), primary contact recreation (PCR), special resource water (SRW), and drinking water supply (DWS). Point source discharges are restricted for waters designated as "special resource waters" and their tributaries.

The Big Wood River is not listed as a 303(d) impaired water body (IDEQ 2011). The river has a TMDL completed and approved for sedimentation/siltation and total phosphorous for the reach Seamans Creek to Magic Reservoir (IDEQ 2011).

Rock Creek from the headwaters to Magic Reservoir/Big Wood River (39.41 miles) is listed as a 303(d) impaired water body for temperature. Rock Creek does have a completed and approved TMDL for the reduction of E. coli, sediment, and total phosphorus (IDEQ 2011).

The Sheep Bridge parcel is within the Big Wood River GWMA (IDWR 1991), however no ground water wells are on or planned for the Sheep Bridge parcel and no ground water rights are appurtenant to the parcel.

3.8.2 Environmental Impacts

3.8.2.1 No Action Alternative

3.8.2.1.1 Blue Canyon Parcel

Under this alternative, the trespass would be resolved and the existing unauthorized improvements would be removed from the parcel; however the authorized improvements, including the septic field, would remain. Impacts from the removal would likely result in areas of temporary ground disturbance during removal and rehabilitated, including revegetation of areas. These areas would require sediment and stormwater controls required to prevent runoff from entering the unnamed stream on the parcel. With stormwater controls and revegetation, impacts to water quality would be negligible to absent. There would be no changes to water right 37-17314 under this alternative.

Overall, there would be no changes to water right 37-17314 under and negligible impacts to water quality under this alternative.

3.8.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under this alternative, the WRLT would retain ownership and management of the parcels under the stated goals of the parcel management plan. The parcels are inspected annually, at a minimum, and up to weekly during grazing periods for uses or activities that may result in adverse impacts to water quality. If it appears that misuse of the parcels is occurring, the WRLT would take appropriate measures to correct the situation.

No planned improvements or changes to the parcels or the current management strategy are known that would impact surface or ground water quality on the parcels.

Under the existing management of the parcels, there are no proposed changes or uses that would result in changes to water flow or availability of water through the unnamed drainage.

Overall, there would be no adverse impacts to water quantity under this alternative.

3.8.2.1.3 Sheep Bridge Parcel

Under this alternative, the WRLT would retain ownership and management of the parcel under the stated goals of the parcel management plan, currently in draft form. The parcel is inspected annually, at a minimum, for uses or activities that may result in adverse impacts to water quality. If it appears that misuse of the parcel is occurring, WRLT would take appropriate measures to correct the situation.

No planned improvements or changes to the parcel or the current management strategy are known that would impact surface or ground water quantity or quality on the parcel or within the Big Wood River or Rock Creek.

Under this alternative, the existing irrigation water rights (37-26 and 37-27) would not change. Because there is no future planned use for the Sheep Bridge parcel that would require irrigation by the current water right holders, any future use of the water rights would result in a diversion from the Big Wood River from a location other than the Sheep Bridge parcel.

Overall, there would be no adverse impacts to water quantity under this alternative.

3.8.2.2 Proposed Action

3.8.2.2.1 Blue Canyon Parcel

Under the proposed action, the existing improvements (authorized and unauthorized) on the parcel would remain. There are no known planned improvements to the parcel that would impact surface or ground water quality under the proposed action.

The ownership of water right 37-17314 would be conveyed from the BLM to the Blue Canyon. Under this right, water from the ephemeral stream can only be used for stockwatering. Because of the ephemeral nature of the stream, small associated water right (0.02 cfs), and lack of direct surface connection to the Big Wood River, development of the water right would only be available on a seasonal basis during runoff and therefore would likely to have negligible impacts on water quality or availability in the Big Wood River.

3.8.2.2.2 Square Lake Parcel

Under the proposed action, there are no planned improvements or substantive changes to the property that are likely to effect to surface water quantity or quality in the unnamed drainage or Square Lake on the parcel. Existing recreational, hunting and grazing activities would continue, albeit under the BLM ownership and management across the parcel, resulting in negligible impacts to water quality. Overall, the proposed action would have negligible impacts on water quality or quantity in the project area.

3.8.2.2.3 Sheep Bridge Parcel

Under the proposed action, an incremental increase in recreational activity or other surface land use on the parcel may be realized. Physical accessibility would limit the majority of recreational activities to the upland areas of the parcel, outside of the Big Wood River canyon and above the Rock Creek drainage. Localized and minor disturbances from the removal of the shepherd's cabin would expose surface soils to precipitation, however given the distance between the feature and surface water bodies on the parcel; it is unlikely that any runoff would reach any surface water body prior to revegetation. No improvements or changes are planned for the parcel that would impact surface or ground water quantity or quality on the parcel or in the Big Wood River or Rock Creek.

With regard to the transfer of the associated water right interests, the BLM would request that IDWR split water rights 37-26 and 37-27 into separate rights for each successor. The BLM is currently working with the other holders of interests in the water rights for the parcel on an agreement that would contractually remove the parcel as the POU associated with the water rights. The agreement would be executed prior to the transfer of the parcel and associated water right interests. Because the rights are currently unused and held within the Idaho Water Supply Bank, such an agreement or transfer of the POU under this alternative would not have a direct impact to existing water quantity within the Big Wood River. The indirect impact of the agreement would be the relocation of the diversion and/or the place of use for water from the Big Wood River (subject to rights transferred to the BLM) should the available remaining rights within the stacked rights be withdrawn from the Idaho Water Supply Bank. The impact of the relocation of the point of diversion is similar to the impact under the no action alternative because the current surface land owner (WRLT) does not have any plans for altering land use that would allow for a beneficial irrigation use of the water on the parcel. Unlike the no action alternative, the amount available for relocation would be less because the BLM would acquire

0.2 cfs of total water right currently held by the WRLT. For these reasons, the impacts of the proposed action would have negligible impacts to water quality and available water quantity over the no action alternative.

3.8.2.2.4 Alternative A

Under Alternative A, the direct and indirect effects would be the same as those identified under the proposed action because the additional area of the 80-acre retained parcel that would be acquired by the BLM through the concurrent donation does not have any surface water features or connection to the Big Wood River. The proposed actions on the remaining parcels would remain the same, with the same impacts as described in the proposed action.

3.8.3 Cumulative Impacts

The geographic scope of the cumulative action impacts analysis is the Big Wood River drainage basin because of the wide separation of the parcels within the basin. The Big Wood River has historically been controlled, altered and modified for bank stabilization.

Water quality in the Big Wood River has been and would continue to be directly and adversely effected by development. Historical channel alterations have included: channel relocation, diking, channel clearance, and riprapping. Concurrent with channel alterations there has been loss of riparian habitat. Most activities have been associated with attempts to control flooding, development of floodplain areas, and road construction (BLM 1990, Thurow 1988). Development increases the area of impervious surfaces such as parking lots, roads, and rooftops, which increases the amount of surface flows reaching the river. Surface flows from developments convey a variety of pollutants, such as winter road sand, petroleum products, and fertilizers to down gradient water bodies.

State and local programs, initiatives, and legislation have been enacted to increase water quality and to manage water resources within the Wood River Valley. The IDEQ has established and received EPA approval for TMDLs for the Big Wood River such that the river is not listed as an impaired 303(d) water body. The IDWR has recognized the importance of strains on ground water resources with the establishment of the Big Wood GWMA to manage groundwater resources within the Wood River Valley. Blaine County has recognized the importance of wetland and riparian ecology by passing county ordinances restricting development within floodplains and requiring concurrence with Federal wetland and floodplain regulations and permits. In addition, local groups have spearheaded efforts to improve water quality, restore instream flows and rehabilitate riparian areas within the drainage. Such projects include the Wood River Legacy Bill (SB 1136) passed by the Idaho Legislature in 2007 to support an increase in Big Wood River in-stream flows south of Bellevue and riparian restoration projects by the WRLT at the Howard Preserve in Bellevue and the Church Farm Preserve, both upstream from the non-Federal parcels. In addition, the water quality improvements at the Heart Rock Ranch, upstream from the Sheep Bridge parcel, have included more than one mile of stream channel improvements, construction of at least ten oxbows and thirteen wetland cells within and adjacent to the Big Wood River to improve water quality in the river.

The proposed development of the R&PPA North parcel by the City of Ketchum is a reasonably foreseeable action near the Blue Canyon parcel. Associated with the project is the potential for a long-term water supply well in the northern Wood River Valley to augment municipal supply and to comply with IDEQ municipal supply requirements. Because the Big Wood River is

within a GWMA, water rights associated with such a well would have to be acquired and transferred within the boundaries of the GWMA under IDWR rules. Such a well would increase water supply pressures in the upper Big Wood River. In addition, although construction has decreased recently with the economic downturn, overall increasing population growth continues within the Big Wood River watershed, increasing the stresses on water quality and quantity.

3.8.3.1 *No Action Alternative*

Under the no action alternative, existing water quality controls and water rights would remain unchanged. For this reason, the continued management of the parcels by the BLM and the WRLT would result in a negligible cumulative impact on existing surface or ground water quality in the Big Wood River or drainage area.

3.8.3.2 *Proposed Action*

Under the proposed action, because water flow on the Blue Canyon parcel is ephemeral and the continued use of the existing stockwater right has a negligible direct or indirect impact to water resources, the action is not likely to result in a measurable cumulative impact on water resources within the Big Wood River or drainage basin, when combined with existing, proposed or planned developments within the region. The removal of the Blue Canyon parcel from Federal lands would have the cumulative impact of limiting potential municipal water well locations; however because of the remaining Federal lands to the north and west of the parcel, the cumulative impact on these future actions is anticipated to be negligible.

The proposed action would remove the place of use of existing water rights associated with the Sheep Bridge parcel. This would result in the transfer of the water rights to an alternative place of use and withdrawal point, likely upstream from the Sheep Bridge parcel, closer to needs and populations. The size of the water rights is small, relative to the stated needs of those within the reasonably foreseeable and future action (e.g. water supply well), and so the cumulative effect is likely to be negligible. Overall the proposed action would result in a negligible cumulative impact on water quality and quantity within the analysis area.

3.8.3.3 *Alternative A*

Because the direct and indirect impacts of the alternative to the proposed action are anticipated to be the same as those described for the proposed action, the cumulative impacts of this alternative are anticipated to be the same as well.

3.9 VEGETATION, INCLUDING BLM SENSITIVE SPECIES, NOXIOUS WEEDS & INVASIVE PLANTS

The project area is within areas of the BLM SFO dominated by sagebrush-steppe vegetation cover with small areas of wetland and riparian areas unique to the parcels. Vegetation cover determination was based on aerial photographs and local experience within the project area. Project biologists consulted BLM SFO special status plant list (BLM 2010a), Idaho State Department of Agriculture Noxious Weed List (IDOA 2011), regional botanical literature, and BLM personnel to identify likely vegetation communities, BLM Sensitive Species, and noxious weeds that may occur in the area of the project parcels. Finally site conditions were verified and described in detail based upon field surveys conducted in 2008 and 2011 by project biologists. This section describes the vegetation communities, the BLM Special Status Species occurrences, and noxious weeds/invasive plants identified on each parcel and evaluates the impacts of the alternatives on the vegetation resources.

3.9.1 Affected Environment

3.9.1.1 Vegetation Communities

The project area covers three main vegetation communities: sagebrush-steppe/mountain big sagebrush, wetland/riparian, and landscaped/ornamental. Disturbed areas and planted non-native landscape/ornamental trees are also found on various parcels. Parcel-specific field inventories were conducted during June and July 2011 to inventory plant communities, identify and locate BLM special status plant species, and to identify areas of noxious weeds (ERO 2012a). A summary of parcel vegetation communities, mapped using aerial photography, ground truthing, and available NWI-mapping, is shown in Table 8. Parcel-specific vegetation descriptions are provided in the following sections.

Table 8. Summary of vegetation community acreage on project parcels (acres).

Parcel	Vegetation Community		
	SS	W/R	LS
Blue Canyon	17.3	-	2.6
Square Lake	213 (291 ¹)	27.4 (28.6 ¹)	-
Sheep Bridge	278	26.6	-

SS = Sagebrush-steppe/Big mountain sagebrush; W/R = Wetland/Riparian; LS = Landscaped.
¹Total area including retained parcel (ERO 2012b, 2012e).

3.9.1.1.1 Blue Canyon Parcel

South-facing slopes comprise the majority of the parcel and support a mountain big sagebrush/Idaho fescue plant community, bisected by the driveway and associated landscaped vegetation. A few scattered Douglas-fir (*Pseudotsuga menziesii*) trees also occur and a seep zone on the hillside supports a population of quaking aspen (*Populus tremuloides*). The quaking aspen near the driveway has an understory dominated by introduced grass species such as Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), and an intermediate wheatgrass cultivar (*Thinopyrum intermedium*). A small area of black cottonwood (*Populus trichocarpa*) in the bottom of a draw near the south end of the parcel has a mix of several native and nonnative species in the understory. Introduced grasses occur on the lower slopes. About 2.6 acres of ornamental and landscaping vegetation (mapped by aerial photography) is located on the parcel.

3.9.1.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Sagebrush-steppe vegetation dominates the Square Lake parcels except the meadow surrounding Square Lake. Upland shrub vegetation on the parcels contains a mix of Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), basin big sagebrush (*Artemisia tridentata tridentata*), and threetip sagebrush (*Artemisia tripartite*), in varying combinations. Many stands of basin big sagebrush shrubs are more than 7 to 8 feet tall and may represent old growth. Widespread shrub-steppe communities within the parcels include Wyoming big sagebrush/Sandberg bluegrass (*Poa secunda* ssp. *Secunda*), threetip sagebrush/Sandberg bluegrass, and basin big sagebrush/Sandberg bluegrass. The understory consists of cheatgrass (*Bromus tectorum*), Sandberg bluegrass, and Japanese brome (*Bromus japonicas*). Plant communities with a restricted distribution on the parcels include low sagebrush/Sandberg bluegrass and Nuttall's saltbrush (*Atriplex nuttallii*) (a woody subshrub that dominates several small playas within the parcel). Vegetation within the Square Lake meadow is dominated by an inland saltgrass (*Distichlis spicata*) plant community with alkali bluegrass (*Poa secunda* ssp. *juncifolia*).

3.9.1.1.3 Sheep Bridge Parcel

Sagebrush-steppe vegetation dominates the Sheep Bridge parcel. Wyoming big sagebrush, threetip sagebrush, and low sagebrush were the main sagebrush species on the parcel. Sandberg bluegrass, bluebunch wheatgrass (*Pseudoroegneria spicata*), and Thurber's needlegrass (*Achnatherum thurbarianum*) were the most common and widespread native bunchgrass species. Widespread plant communities observed on the parcel included low sagebrush/Sandberg bluegrass, low sagebrush/bluebunch wheatgrass, Wyoming big sagebrush/bluebunch wheatgrass, Wyoming big sagebrush/Sandberg bluegrass, and threetip sagebrush/bluebunch wheatgrass. Plant communities with a more limited distribution included low sagebrush/Idaho fescue (*Festuca idahoensis*), threetip sagebrush/Idaho fescue, and thyme buckwheat (*Eriogonum thymoides*)/Sandberg bluegrass.

3.9.1.2 Special Status Plant Species

The 2010 BLM Special Status Plant Species list (BLM 2010a) was reviewed for species most likely to occur on the parcels based on geographic location, elevation, and habitat attributes. In addition, a query of the Idaho Natural Heritage Program's rare plant database was conducted to identify any previously known occurrences on the parcels. The parcels were assessed for potential habitat for any of the identified species with potential to occur on or near any of the parcels. Parcel-specific field inventories were conducted during June and July 2011 to survey for special status plant species and inventory plant communities.

Based on coordination with the BLM and local area botanists, the BLM special status species targeted during the field surveys included mourning milkvetch (*Astragalus atratus* var. *inceptus*), bugleg goldenweed (*Pyrrocoma insecticruris*), Picabo milkvetch (*Astragalus oniciformis*), least phacelia (*Phacelia minutissima*), obscure phacelia (*Phacelia inconspicua*), and Malheur prince's plume (*Stanleya confertiflora*).

3.9.1.2.1 Blue Canyon Parcel

The Blue Canyon parcel lacks potential habitat for any special status plant species. No special status plant species were identified during 2011 inventories (ERO 2012a) or are anticipated to occur based on elevation and climate zone.

3.9.1.2.2 Square Lake Parcels (both the land exchange and 80-acre retained)

The Square Lake parcels lack potential habitat for most special status plant species with the exception of a few localized areas suitable for mourning milkvetch. Three areas of mourning milkvetch were documented on the Square Lake parcels in 2011: two in the southern portion of the parcels – to the south and to the northeast of Square Lake, respectively; and one small patch of 55 plants within a 0.2-acre area in the northern portion of the 80-acre retained parcel (ERO 2012a). Mourning milkvetch was not observed across the bulk of the parcel between these two discontinuous areas. Several small dry, rocky, watercourse sections north and south of Square Lake are potential bugleg goldenweed habitat, but this species was not found on the parcels. Drying mud habitats in the vicinity of Square Lake were potentially suitable for Bacigalupi's downingia (*Downingia bacigalupii*), a special status plant species not expected to occur in the area; however, only a few small patches of the congener (belonging to the same genus) Great Basin calicoflower (*Downingia laeta*) were observed (ERO 2012a).

3.9.1.2.3 Sheep Bridge Parcel

The Sheep Bridge parcel lacks suitable habitat for most special status plant species with the exception of mourning milkvetch and bugleg goldenweed. The parcel contains a large occurrence of mourning milkvetch and an isolated population of bugleg goldenweed (13 plants inventoried in 2011) (ERO 2012a). The mourning milkvetch occurrence follows a dry, minor watercourse, with bugleg goldenweed being much more extensive and abundant north of the highway and off the Sheep Bridge parcel. Mourning milkvetch occurrences consist of a series of sporadic but widespread patches mainly near the southern and western margins with a few patches in the northeastern portion of the parcel. The overall population on the Sheep Bridge parcel was estimated to be 1,000 to 3,000 plants over an approximately 100-acre area, representing a contiguous population. Various size mourning milkvetch plants were observed, suggesting a range of age classes and ongoing recruitment.

3.9.1.3 Noxious Weeds

During parcel-specific field inventories, the parcels were surveyed for noxious weeds and invasive plant species. Six noxious weed species (Idaho State Department of Agriculture (IDOA) 2011) were documented on one or more of the land exchange parcels (Table 9). All parcels support at least one noxious weed species, and Square Lake has the most at four species.

Table 9. Noxious weed species observed during 2011 inventories.

Species	Blue Canyon	Square Lake	Sheep Bridge
Canada thistle (<i>Cirsium arvense</i>)	Yes	Yes	No ¹
Dalmatian toadflax (<i>Linaria dalmatica</i>)	No	No ¹	No
Diffuse knapweed (<i>Centaurea diffusa</i>)	No	Yes	Yes
Field bindweed (<i>Convolvulus arvensis</i>)	No	Yes	No
Hoary whitetop (<i>Cardaria draba</i>)	No	Yes	No
Spotted knapweed (<i>Centaurea maculate</i>)	Yes	No	No

¹Occurrences identified in 2008 reconnaissance surveys (ERO 2008a, 2008b).

3.9.1.3.1 Blue Canyon Parcel

Two noxious weed species were recorded on the Blue Canyon parcel (Table 9). Spotted knapweed is widespread and abundant on the lower to mid-slope portions, decreasing to sparse and widely scattered locations on the upper slopes. Canada thistle occurs within the band of aspen trees along the driveway leading to a private residence and in the draw bottom immediately south of the driveway.

3.9.1.3.2 Square Lake Parcels (both the land exchange and 80-acre retained parcel)

Four noxious weed species were recorded on the Square Lake parcels in 2011 (Table 9). Canada thistle is widespread in the meadow complex extending northward from Square Lake. Scattered patches of hoary whitetop occurs in the meadow system surrounding Square Lake, extending southward within and along the margins of the sagebrush vegetation. Scattered diffuse knapweed plants were observed in and along the dirt road leading to Square Lake from the east, off SH 75, and in the roadbed of the track that runs along the south margin of the lake. One patch of field bindweed was documented from near the north margin of Square Lake, with additional patches likely in the general area. Dalmatian toadflax was also noted on the parcels, north of Square Lake in 2008, during reconnaissance-level inventories (ERO 2008a). Although not a designated noxious weed, a few rosettes of bull thistle (*Cirsium vulgare*) were also observed in the meadow complex north of Square Lake.

The WRLT conducts annual springtime weed inspections of the parcels to assess weed control efforts. The Square Lake parcels was last sprayed in 2010 by WRLT for Canada thistle near Square Lake and knapweed along and near the roads that cross the parcel; in 2009 for Canada thistle around Square Lake and for knapweed southwest of Square Lake; and in 2008 for Canada thistle, Bull thistle, knapweed, and Russian knapweed, all primarily in the southern portion of the parcels around Square Lake and the lowland meadows (WRLT 2011). The parcels were not sprayed for weed control in 2011.

3.9.1.3.3 Sheep Bridge Parcel

Diffuse knapweed was the only noxious weed species recorded on the Sheep Bridge parcel during 2011 plant inventories (Table 9). Scattered plants occur near the eastern end of the parcel in and along the dirt road that parallels the north side of the Big Wood River and/or near the dirt double track that traverses the parcel. Diffuse knapweed was also observed in the vicinity of the IDFG Sheep Bridge fishing access point and around trails leading to and from the bridge. A few diffuse knapweed plants were observed in the vicinity of the sheepherders' cabin in the center of the parcel. The plants are associated with disturbed ground and dirt piles. Earlier reconnaissance-level surveys conducted in 2008 also identified Canada thistle on the parcel.

The WRLT conducts annual springtime weed inspections of the parcel to assess weed control efforts. The Sheep Bridge parcel was last sprayed in 2009 for Canada thistle along Rock Creek, for Dalmatian toadflax along the banks of Rock Creek, and for knapweed near the sheepherder's cabin and along a historical unimproved double track road in the northwest portion of the parcel. During 2008, larger areas of the east banks of Rock Creek and northeast road were sprayed for Canada thistle; and the access roads in the east and central portions of the parcel were sprayed for knapweed (York pers. comm. 2011). The parcel was not sprayed for weed control in 2010 or 2011.

3.9.2 Environmental Impacts

3.9.2.1 No Action Alternative

Under this alternative, all parcels would remain under current ownership and management. No transfer of lands or resources would occur. Existing trespasses would be removed from the Blue Canyon parcel and the land rehabilitated. The non-Federal parcels would continue their existing management. The BLM would not fulfill its purpose and need of acquiring the non-Federal parcels with higher resource values through the exchange of the lower resource value of the Federal parcel.

3.9.2.1.1 Blue Canyon Parcel

Under this alternative, the unauthorized improvements would be removed from the parcel. Much of the landscaped areas, up to an estimated maximum of 2.6 acres, are impacted by the unauthorized improvements on the parcel. The landscaped areas, and other features associated with the trespass (a sprinkler system, a sprinkler shed, storage sheds, a fence, a basketball hoop, and air conditioning units) would be required to be removed and the area rehabilitated with native vegetation similar to the surrounding natural areas. The fact that some areas within the landscaped areas include native vegetation common to ephemeral riparian areas (e.g. aspens, and cottonwoods), they may not require removal and revegetation. Additional surveys of current plants to further evaluate areas requiring removal would be needed prior to implementation of the action. Disturbance of the existing non-native vegetation would impact current, non-native vegetation communities, however with rehabilitation, no long-term impacts would occur to native vegetation communities under this alternative.

No special status plant species were identified on the Blue Canyon parcel. For this reason, there would be no impacts to the special status plant resources under this alternative.

An increase in the potential for noxious weeds on the parcel may occur under this alternative because of the limited vegetation cover during the re-establishment of native ground cover and the multiple growing seasons likely needed to re-establish native plants and sufficient understory to outcompete weeds.

Overall, the no action alternative would result in a short term impact to existing vegetation communities with the removal of vegetation until native vegetation can be established and localized increase in weeds and/or invasive plants without active management. These short-term impacts are likely to span several growing seasons because of the short growing season. The alternative would result in a long term beneficial impact of the re-establishment of native vegetation on the parcel.

3.9.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under this alternative, the WRLT would continue to manage the parcels under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses and permitted grazing based on the vegetative health. Current management practices include annual monitoring for general vegetation health; therefore implementation of the no action alternative would have negligible impacts to vegetation communities.

Under the no action alternative, the parcel would remain in non-Federal ownership with differing priorities for management than for BLM special status plant species. Regardless of priority, the presence of special status plant species on the parcel indicates that current strategies may

indirectly benefit special status plant species growth. Therefore, impacts to special status plant species are likely to be negligible under the no action alternative.

Under this alternative, the WRLT would continue to manage the parcels under their land use and management plans, including annual evaluation of noxious weed growth and prioritizing weed management activities among the lands owned by the WRLT. Based on the current management practices that would continue under the no action alternative, implementation of the no action would have negligible impacts on weed and invasive species management.

3.9.2.1.3 Sheep Bridge Parcel

Under this alternative, the WRLT would continue to manage the parcels under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses. Current management practices include annual monitoring for general vegetation health, therefore implementation of the no action would have negligible impacts to vegetation communities.

Under the no action alternative, the parcel would remain in non-Federal ownership with differing priorities than management for BLM special status plant species. Regardless of priority, the extent and strength of the existing special status plant species community on the parcel indicates that current strategies may indirectly benefit special status plant species growth. Therefore, impacts to special status plant species are likely to be negligible under the no action alternative.

Under this alternative, the WRLT would continue to manage the parcels under their land use and management plans, including annual evaluation of noxious weed growth and prioritizing weed management activities among the lands owned by the WRLT. Based on the current management practices that would continue under the no action alternative, implementation of the no action would have negligible impacts on weed and invasive species management.

3.9.2.2 Proposed Action

Under the proposed action, the BLM would acquire a total of 54 acres of riparian, riverine and wetland habitat and about 491 acres of shrub steppe habitat contiguous with adjacent BLM-administered Federal lands in exchange for about 17.4 acres of shrub steppe habitat that is bisected by improvements and bounded on two sides by non-Federal lands. WRLT would retain ownership of about 1.2 acres of wetland habitat and 76.8 acres of shrub steppe habitat within the 80-acre retained parcel. Parcels with identified communities of BLM special status plant species would be acquired in exchange for a parcel (Blue Canyon) with no identified communities. Future recreational uses on the Sheep Bridge parcel may contribute and/or exacerbate existing noxious weed conditions on the parcel, whereas uses on the remaining parcels are not likely to contribute or exacerbate existing conditions. Completing the exchange would fulfill the BLM's purpose and need of acquiring the non-Federal parcels with higher resource values through the exchange of the lower resource valued Federal parcel.

3.9.2.2.1 Blue Canyon Parcel

Under the proposed action, the parcel would be transferred to the Blue Canyon, who would assume management of the parcel. Although non-native vegetation communities are located on the parcel, the communities are limited to the vicinity of the permitted driveway and serve aesthetic purposes for the adjacent residence. Although there are no plans for vegetation modification, the non-native landscaping would remain and result in no impacts to vegetation communities.

No special status plant species were identified on the Blue Canyon parcel, therefore there would be no impacts to special status species plants.

The removal and eradication of noxious weeds and invasive plants occurring on the parcel would become the Blue Canyon's responsibility under the jurisdiction the Blaine County Weed Control Department. The proposed action would not exacerbate or promote introduction of noxious weeds or invasive species.

Overall, the proposed action would have no impacts to special status species plants or vegetation resources, with negligible impacts to noxious weeds and invasive plants.

3.9.2.2.2 *Square Lake Parcel*

Under the proposed action, the BLM would acquire lands with 27.4 acres of NWI-mapped wetland resources and 213 acres of shrub steppe contiguous with communities on adjacent, BLM-administered Federal land. Management of the parcel would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP. Because many existing land uses currently occur on the parcel, incorporating the multiple-use doctrines of the BLM management would likely result in negligible adverse impacts to vegetation communities.

Under the proposed action, the BLM would acquire lands containing all or portions of identified communities of mourning milkvetch, a BLM special status plant species. Because the parcel is currently managed wildlife habitat and migration corridor protection – including recreational uses and permitted grazing – the change in management and land use policies is not likely to result in an adverse impact on special status plant species on the parcel.

Under this alternative, the BLM would obtain non-Federal lands with documented areas of noxious weeds that have been subject to the weed management controls of the WRLT in 2008, 2009, and 2010 (York, pers. comm., 2011). Continued management of noxious weeds on the parcel would be spot treated with approved herbicides as described in the Shoshone District Noxious Weed Control Environmental Assessment (#ID050-EA-92031) and the 2007 Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS Vegetation Treatments EIS (BLM 2007). Overall, the proposed action would have a negligible impact on weed management resources from the increase in land area of responsibility for weed management within the overall SFO, but is not likely to result in activities on that would exacerbate or result in a greater impact from noxious weeds than currently occurring on the parcel.

3.9.2.2.3 *Sheep Bridge Parcel*

Under the proposed action, the BLM would acquire lands with 26.6 acres of NWI-mapped wetland and riparian habitat and 278 acres of shrub-steppe contiguous with communities on adjacent, BLM and IDFG-administered lands. Management of the parcel would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP.

The parcel has about 3.3 miles of historical or primitive vehicle trails crossing the parcel that have varying stages of revegetated growth on them. Re-introduction of OHV usage under the proposed action would have the direct impact to vegetation communities within areas of vehicle travel. Assuming an 8-foot wide impact area, the maximum potential impact of OHV use on the existing historical trails would be about 3.2 acres. The total adverse impact, should all vehicle paths be disturbed with an assumed 8-foot wide vehicle impact width, would be about 2.5 acres,

or 1% of the land area for the parcel. Not all trails would likely be used because the heights of sagebrush on the various trails included in these calculations would likely prohibit usage of the trails by all but extremely high clearance vehicles.

Impacts to vegetation communities from OHV use would likely be similar to those that currently exist on the adjacent parcels of state and BLM-administered Federal lands that are open to OHV use within the same shrub steppe vegetation communities. Localized minor to moderate short term adverse impacts to vegetation communities within historical vehicle trails may occur on the parcel and consist of vegetation packing, trampling and/or soil disturbance. Long term adverse impacts of continued usage could consist of compacted dirt, increased rutting of trails and expansion of the width of the trails – all dependent on the level of usage. The existing fencing and gates would remain on the parcel and would indirectly manage OHV usage by inhibiting direct access from Highway 20 and the adjacent IDFG fishing access point.

Under the proposed action, the BLM would acquire a large community of mourning milkvetch and a small grouping of bugleg goldenweed, both BLM special status plant species. The communities are estimated to occur on up to one-third of the parcel and acquisition by the BLM would have a direct benefit of increasing the lands with high value resources under Federal ownership.

Of the 3.3 miles of historical or primitive vehicle trails that cross the property, about 1.9 miles occur in areas of mapped milkvetch communities (based on mapping of species occurrences in ERO 2012a). Reintroduction of OHV use could adversely impact special status species on the parcel. Impacts would be similar to those noted above for the overall vegetation community and consist of general trampling or localized packing of plants and dirt within vehicle tracks, and be localized to areas of vehicle use.

Under this alternative, the BLM would obtain non-Federal lands with documented areas of noxious weeds that have been subject to the weed management controls of the WRLT in 2008 and 2009 (York, pers. comm., 2011). The removal of the sheepherder's cabin prior to the BLM's acquisition would create a small area (<500 square feet) of bare soil. This would be an area that noxious weeds or invasive species could expand into due to the reduced competition from local vegetation. OHV use on the parcel may also increase noxious weeds and invasive species on the parcel. Increases in weed occurrences would likely be along existing historical trails and primitive roads that have been subject to historical weed treatment actions. Management of noxious weeds on the parcel would be spot treated with approved herbicides as described in the Shoshone Noxious Weed Control Environmental Assessment and the 2007 Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS (BLM 2007). Overall, the proposed action would have a minor adverse impact to noxious weed management on the parcel and increase land area responsibilities for weed management within the overall SFO.

3.9.2.3 *Alternative A*

Under Alternative A, the full Square Lake parcel would be acquired through the land exchange and concurrently processed donation. Impacts to the Blue Canyon and Sheep Bridge parcels would be the same as those described under the proposed action. Completing the land exchange and donation would fulfill the BLM's purpose and need of acquiring the non-Federal parcels with higher resource values through the exchange of the lower resource valued Federal parcel.

3.9.2.3.1 Blue Canyon Parcel

Impacts under Alternative A would be the same as under the proposed action.

3.9.2.3.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under Alternative A, the BLM would acquire the full 320 acres of the Square Lake parcels. Contiguous shrub steppe vegetation communities would provide long-term habitat benefits to wildlife species that use sagebrush steppe habitats and result in the acquisition of a 0.2-acre area containing up to 55 mourning milkvetch plants, a BLM special status plant species (ERO 2012a). The additional land area would increase the land area requiring potential weed management activities. Because the parcels are currently used for many of the same recreational uses as would be permitted under either the proposed action or Alternative A, the impacts to weed management would be negligibly greater than described under the proposed action. Overall Alternative A would result in beneficial impact of increasing lands with habitat and special status species resources under Federal ownership with negligible increases in weed management responsibility.

3.9.2.3.3 Sheep Bridge Parcel

Impacts under Alternative A would be the same as under the proposed action.

3.9.3 Cumulative Impacts

The cumulative effects area for vegetation communities is defined as the shrub-steppe habitat in Blaine County, which influences other, primarily wildlife resources in Blaine County. Past actions on and near the Blue Canyon parcel have included historical livestock trailing across the parcel, the use of the parcel as a solid waste disposal site (“Ketchum City Dump”), and development in the northern portions of the City of Ketchum, including the authorized construction of the Big Wood Reservoir by the City of Ketchum on BLM-administered Federal lands under a right-of-way. Use of the parcel and adjacent non-Federal lands resulted in disturbances and removal of native vegetation within the approximate footprint of the existing driveway, landscaped areas, and adjacent private residence (ERO 2012d). The platting and resultant residential development to the east of the Blue Canyon parcel necessitated the authorizing of rights-of-way to permit access and utility corridors across the parcel. Current uses near the Blue Canyon parcel consist of the recreational use of the Big Wood River and ongoing development of non-Federal lands within the Wood River Valley, increasing the fragmentation of natural habitat and vegetation communities. Development associated with the City of Ketchum R&PPA proposal for the area west of the Blue Canyon parcel is a reasonably foreseeable future action that would alter the existing vegetation resources in the area.

Past and present uses of the non-Federal parcels (Square Lake, Sheep Bridge, and 80-acre retained parcels) have included historical grazing activities, primarily on the Square Lake parcels, and recreational use of the parcels. These have resulted in historical trails and OHV roads that cross the parcels as well as adjacent BLM-administrated Federal lands. These roads and recreational uses have introduced non-native and noxious weeds, primarily along the access corridors and parking areas.

The Conservation Plan for the Greater Sage-grouse in Idaho (ISAC 2006) identifies habitat conservation objectives to maintain, enhance, or restore sage-grouse habitat, and continuity of habitats, at multiple spatial scales. In addition, one of the plan objectives is to foster a dynamic

sagebrush ecosystem for diverse vegetation communities that promote rangeland health. Under the 2006 MOU, the BLM is committed to incorporating the Conservation Plan into the BLM National Sage-Grouse Conservation Strategy (BLM 2004a) that emphasizes habitat conservation through communication and coordination with Federal, state, and local agencies, and public and private citizens and groups.

3.9.3.1 *No Action*

Under the no action alternative, the removal of the unauthorized improvements from the Blue Canyon parcel would have a negligible cumulative impact to vegetation resources within the analysis area. Removal of the existing, unauthorized improvements would not likely result in a cumulative impact on vegetation communities because the current unauthorized improvements are in an area of historical disturbances for the Ketchum city dump and subsequent residential development and the area of direct impacts would be small relative to the shrub-steppe land area in Blaine County.

The cumulative impact of the continued management of vegetation resources on the non-Federal parcels (Square Lake, Sheep Bridge, and 80-acre retained parcels) is anticipated to be negligible within the overall context of resources within Blaine County. The WRLT currently has no plans to change the existing management or monitoring practices for the parcels.

3.9.3.2 *Proposed Action*

The proposed land exchange would have a beneficial cumulative effect on land management strategies and conservation plans by increasing the Federal ownership of vegetation communities that support sage-grouse habitat and sagebrush obligate wildlife species. Increases in Federal ownership of special status species resources within the analysis area would have a cumulative benefit of offsetting or mitigating historical damage or destruction of habitat from development, unmanaged land use, and conversion to agriculture.

3.9.3.3 *Alternative A*

Implementation of Alternative A would have a similar cumulative impact on vegetation resources as the proposed action cumulative impacts described above. The cumulative impact of the contiguous land ownership around the Square Lake parcels would increase management efficiencies and increase the economies for the SFO resource personnel and equipment use over those likely under the proposed action.

3.10 WETLANDS AND FLOODPLAINS

The wetland areas were mapped using the USFWS NWI to quantify areas of the resources within each of the parcels (USFWS 2008). Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) were reviewed for each parcel to determine floodplain area on each parcel. Reconnaissance site visits to evaluate and describe wetland conditions and general vegetation characteristics were conducted in 2008 and verified in 2011 (ERO 2012b, 2012e).

3.10.1 Affected Environment

3.10.1.1 Blue Canyon Parcel

The NWI does not identify any wetlands on the Blue Canyon parcel. The parcel does not contain any FEMA mapped floodplains.

3.10.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

The NWI identifies 28.6 acres of total wetlands on the Square Lake parcels – 27.4 acres of wetlands on the parcel included in the proposed action and 1.2 acres on the retained parcel considered under Alternative A (summarized in Table 10). The majority of the wetlands are located in the southeastern part of the property with several small patches of wetlands are mapped in the northern and western portion of the parcels, within the retained parcel.

NWI data uses the Cowardin classification system. According to this system, wetlands on the parcels are primarily freshwater pond wetlands that are seasonally or temporarily flooded. A summary of existing wetlands mapped by the NWI is shown in Table 10. Square Lake consists of a pond and wetland area in the center of the parcels with typical wetland vegetation including coyote willow (*Salix exigua*), cattails (*Typha* sp.), rush (*Juncus* sp.), bulrush (*Scirpus* sp.), common cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*). To the north and northwest of the Square Lake, vegetation transitions to increased grass species and dominance, and invasive species including thistle (*Cirsium* sp.), and Dalmatian toadflax (*Linaria dalmatica*). Indications of grazing (i.e. cowpies, tracks, and browse lines) were generally observed around Square Lake proper (ERO 2012b).

Table 10. NWI-mapped wetlands on the Square Lake Parcels.

Wetland Location	Description	NWI Class	Acreage ¹
Grass flats and meadows	Palustrine Emergent, Temporary Flooded – freshwater wetlands, emergent, temporarily flooded	PEMA	Proposed Action = 26.2 Retained Parcel = 1.2 Total 27.4
Square Lake	Palustrine Emergent, Seasonally Flooded – freshwater pond, emergent, seasonally flooded, diked	PEMCh	1.2

¹NWI mapped area (ERO 2012b).

The Square Lake parcel does not contain a FEMA mapped floodplain area.

3.10.1.3 Sheep Bridge Parcel

The NWI identifies 26.6 acres of wetlands on the Sheep Bridge parcel along the Big Wood River and Rock Creek. The wetlands on the parcel are either freshwater ponding, riparian, or riverine and are summarized in Table 11. The Big Wood River riverine area is confined to the canyon

that crosses the southern portion of the parcel. During spring flood events, the entire canyon is inundated. Riparian areas occur closer to Rock Creek, although the riparian fringe also becomes inundated during flood events.

The riverine area along the Big Wood River consists of mostly coyote willow, yellow willow (*Salix lasiandra*), reed canarygrass (*Phalaris arundinacea*), and curly dock. The riverine area is confined to the canyon, with areas 10-20 feet above the late summer water levels inundated during flood events. During 2008, water depth in the Big Wood River was approximately 1-2 feet at the IDFG Sheep Bridge fishing access over the canyon with a mean flow at the USGS Stanton Crossing gauge, 1.5 miles east and upstream of the parcel, of 27.7 cfs; whereas during June 2011, the entire canyon was inundated to depths of greater than 10 to 20 feet at the same location with a mean flow at the USGS Stanton Crossing gauge of 1,381 cfs (USGS 2012). The NWI-mapped riparian area is on Rock Creek and at the confluence with the Big Wood River. During 2008, the channel width of Rock Creek proper was approximately 5 to 15 feet, depth less than 1 foot, and obvious wetland fringes of approximately 2 to 6 feet. During June 2011, Rock Creek was inundated to the extent limits of wetland and grassy vegetation (about 500 feet across and greater than 10-20 feet deep. Dominant vegetation includes reed canarygrass, coyote willow and curly dock. Closer to the highway there is more coyote willow and reed canarygrass. East of Rock Creek is a broad flat area with sparse vegetation, also marked as wetland by the NWI. Vegetation in this area includes cheatgrass (*Bromus tectorum*) and other grasses, Great Basin wild rye, reed canarygrass, and willows (ERO 2012b). This flat area was observed to be inundated during 2011 (POWER 2012).

Table 11. NWI-mapped wetlands on the Sheep Bridge parcel.

Wetland Location	Description	NWI Class	Acreage ¹
Big Wood River	Riverine Upper Perennial Unconsolidated Bottom - Permanently Flooded	R3UBH	15.8
Big Wood River	Palustrine Scrub-shrub - Seasonally Flooded	PSSC	1.1
Big Wood River	Palustrine Forested - Temporary Flooded	PFOA	2.5
Big Wood River/Rock Creek confluence	Palustrine Scrub-shrub - Seasonally Flooded Dike/Impounded	PSSCh	1.7
Rock Creek	Palustrine Emergent - Temporary Flooded Dike/Impounded	PEMAh	2.4
Magic Reservoir	Lacustrine Littoral Unconsolidated Shore - Seasonally Flooded Dike/Impounded	L2USCh	2.4
Magic Reservoir	Lacustrine Limnetic Unconsolidated Bottom - Permanently Flooded Dike/Impounded	L1UBHh	0.7

¹NWI mapped area (ERO 2012b).

The Sheep Bridge parcel contains about 51.7 acres within the FEMA mapped floodplain.

3.10.2 Environmental Impacts

3.10.2.1 No Action Alternative

3.10.2.1.1 Blue Canyon Parcel

Because there are no mapped wetlands or floodplains on this parcel, there would be no impacts to the wetland or floodplain resources.

3.10.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under the no action alternative, existing land uses, such as dispersed recreation and permitted grazing, would continue on the parcels. These actions may have negligible impacts to the wetlands on the parcels. The WRLT would continue to monitor activities on the parcels annually, assess resources, and make adjustments, such as signage or alteration of grazing permits, as needed to protect and preserve the wetland resource on the parcel. Because there are no planned or proposed improvements for the parcels by the WRLT, there are not anticipated to be any actions that would degrade or impact the wetlands on the parcels under this alternative. Current management practices include annual monitoring for general vegetation and habitat health, therefore implementation of the no action would have negligible impacts on wetland resources.

Because there are no FEMA mapped floodplains on the parcels, this alternative would have no impact to the floodplain resources in Blaine County.

3.10.2.1.3 Sheep Bridge Parcel

Under the no action alternative, existing land uses, such as dispersed recreation, would continue. These actions would have negligible impacts to the wetlands on the parcel because the Sheep Bridge canyon restricts access to the Big Wood River from the upland areas on the parcel to those areas along the west confluence with Rock Creek. The WRLT would continue to monitor activities on the parcel annually, assess resources, and make adjustments, such as signage, as needed to protect and preserve the wetland resource on the parcel. Because there are no planned or proposed improvements for the parcel by the WRLT under this alternative, there are not anticipated to be any actions that would degrade or impact the wetlands on the parcel. Current management practices include annual monitoring for general vegetation and habitat health, therefore implementation of the no action would have negligible impacts on wetland resources.

Because there are no proposed or planned activities within the floodplain area mapped by FEMA on the parcel, this alternative would have no impact to the floodplain resources in Blaine County.

3.10.2.2 Proposed Action

The proposed action would result in the Federal acquisition of the non-Federal parcels, with the exception of the 80-acre retained parcel. The United States would acquire 54 acres of mapped wetlands and 51.7 acres of FEMA mapped floodplain and disposal of the Federal parcel which has no mapped wetlands or floodplains. The wetland and floodplain resources acquired by the BLM would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP.

3.10.2.2.1 Blue Canyon Parcel

Because there are no mapped wetlands or floodplains on this parcel, there would be no direct impacts to the resources. Disposal of the parcel would enable the BLM to acquire the wetland and floodplain resources on the two non-Federal parcels.

3.10.2.2.2 Square Lake Parcel

Under the proposed action, the BLM would acquire lands with 27.4 acres of NWI-mapped wetland resources. Management of the parcel would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP. None of the anticipated uses would result in the destruction, occupancy, or modification of the wetlands or

floodplains. No development is planned or proposed as part of the proposed action. The acquisition of the wetland resources would provide a long-term public benefit because the increase in wetland resources under Federal ownership would fulfill the purpose and need of the 2003 Amendment through the acquisition of non-Federal lands with higher resource values in exchange for Federal lands of lesser resource value.

Because there is no FEMA mapped floodplain on the parcel, the proposed action would have no impact to floodplain resources.

3.10.2.2.3 Sheep Bridge Parcel

Under the proposed action, the BLM would acquire lands with 26.6 acres of NWI-mapped wetland resources and 51.7 acres of FEMA mapped floodplain resources. Management of the parcels would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP. None of the anticipated uses would result in the destruction, occupancy, or modification of the wetlands or floodplains. No development is planned or proposed as part of the proposed action. The proposed action would result in a long term public benefit because the increase in wetland resources under Federal ownership would fulfill the purpose and need of the 2003 Amendment through the acquisition of non-Federal lands with higher resource values in exchange for Federal lands of lesser resource value. Because there is no planned development planned or proposed as part of the proposed action, there will be no impact to floodplains.

3.10.2.3 Alternative A

Implementation of Alternative A would result in the acquisition of the entire 320 acres of the Square Lake and 80-acre retained parcels, resulting in a total non-Federal wetland area acquired of 55.4 acres, an increase of 1.2 acres of wetlands to be acquired over the proposed action.

3.10.2.3.1 Blue Canyon Parcel

Because there are no mapped wetlands or floodplains on this parcel, there would be no direct impacts to the resources. Disposal of the parcel would enable the BLM to acquire existing wetland and floodplain resources on the three non-Federal parcels.

3.10.2.3.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under the proposed action, the BLM would acquire the entire 320 acres of the Square Lake parcels, with 1.2 additional wetland acres (28.6 acres total of NWI-mapped wetland resources). Other than the acreage difference, the impact would be the same as discussed in Section 3.10.2.2.2.

3.10.2.3.3 Sheep Bridge Parcel

Impacts to wetland and floodplain resources on the Sheep Bridge parcel under this alternative would be the same as those described under the proposed action.

3.10.3 Cumulative Impacts

The geographic scope of the cumulative action impacts analysis is the lower Big Wood River drainage basin, below Seamans Creek, to the confluence of the unnamed creek that crosses the Square Lake parcel and the Big Wood River because of the location of the identified wetlands on the non-Federal parcels, and lack of wetland and floodplain resources on the Blue Canyon parcel.

Historical land use activities including hard rock mining, agriculture, and development within the Wood River Valley have altered the natural state of the Big Wood River and riparian areas within the analysis area through stream channelization, surface water diversions, dewatering, field conversion, and ground water withdrawals. In addition, the Magic Reservoir, completed in 1910 for irrigation water storage, seasonally inundates portions of the Big Wood River and Rock Creek on the Sheep Bridge parcel. The Big Wood Canal Company's Richfield Canal, originating at Magic Reservoir, has resulted in the conversion of lands to irrigated farmland and altered the natural flows within the Big Wood River and tributary drainages below Magic Dam. The wetland restoration projects near the project area have restored or enhanced wetland resources in recent years. Such projects have included the WRLT riparian and wetland restorations on the Big Wood River at the Howard Preserve in Bellevue and the Church Farm Preserve, both upstream of the Sheep Bridge parcel. In addition, the WRLT is working with the Big Wood Canal Co. to restore riparian areas within the Big Wood River below Magic Reservoir (WRLT 2012). In addition, the water quality improvements at the Heart Rock Ranch, upstream from the Sheep Bridge parcel, have included more than one mile of stream channel improvements, construction of at least ten oxbows and thirteen wetland cells within and adjacent to the Big Wood River to increase wetland and riparian habitat within the Big Wood River.

Blaine County has recognized the importance of the wetland and riparian ecology by passing county ordinances restricting development within the floodplains and requiring concurrence with Federal wetland and floodplain regulations and permits. No reasonably foreseeable planned or future actions were identified within the analysis area that would likely contribute to the incremental impact of the no action, proposed action or alternative to the proposed action.

3.10.3.1 *No Action*

Direct or indirect impacts to wetland and floodplain resources were identified to be negligible under this alternative. There are no cumulative impacts to wetland or floodplain resources anticipated under this alternative.

3.10.3.2 *Proposed Action*

The proposed action would result in a net increase in wetland and floodplain resources under Federal management. Overall, this would result in a long-term cumulative benefit to the public through an increase in Federal ownership of and consistent management of wetland and floodplain resources within the lower Big Wood River drainage area, above and below Magic Dam.

3.10.3.3 *Alternative A*

The Alternative A would result in an acquisition of additional wetland resources over the proposed action. This would increase similar overall beneficial cumulative impacts described under the proposed action.

3.11 GRAZING

The BLM SFO administers livestock use under the regulations at 43 CFR 4120 – 4190, the FLPMA, the 1934 Taylor Grazing Act, the Shoshone Grazing Environmental Statement (BLM 1979) as implemented within the SFO land use plans for lands within or near the proposed land exchange parcels. Under the grazing regulations, Idaho BLM developed the *Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management* (BLM 1997b) that established eight Rangeland Health Standards (“Standards”) to be achieved on BLM-administered Federal rangelands in Idaho. Not all of the Standards of Rangeland Health are applicable to each grazing allotment. If current livestock grazing practices are a factor in an allotment not meeting these objectives, grazing permit renewals will include specific guidelines for livestock grazing management. Guidelines direct the selection of grazing management practices, and where appropriate, livestock management facilities to promote significant progress toward, or the attainment and maintenance of, the Standards.

The BLM SFO also issues livestock crossing (trailing) permits in accordance with 43 CFR Parts 4130 and 4160 and pursuant to the provisions of the Taylor Grazing Act and the FLPMA. In many instances, livestock producers must move their livestock across BLM-administered Federal lands to facilitate proper grazing management of BLM grazing allotments; as well as to facilitate movements of livestock to and from private, state, or other Federally-administered lands.

Pursuant to regulations at 43 CFR 4110.4-2(b) when Federal lands are being considered for disposal out of Federal ownership of devotion to a public purpose which precludes livestock grazing, the permittees shall be given a two year prior notification except in cases of emergency (national defense requirements in time of war, natural disaster, national emergency needs, etc.) before their grazing permit and/or preference may be canceled. A permittee may unconditionally waive the two-year prior notification.

3.11.1 Affected Environment

3.11.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel is within the Lake Creek Allotment (BLM Grazing Allotment No. 80223; BLM 1997a); however, most of the parcel is not grazed due to the proximity to SH75 as well as both the authorized and unauthorized improvements. The allotment encompasses approximately 1,825 acres, of which 1,797 acres are BLM-administered Federal land and 28 acres are non-Federal. The allotment is currently permitted for the use of 174 sheep animal unit months (AUMs) of active preference with 43 suspended AUMs. An AUM is the amount of forage needed to support 1 cow/calf pair or 5 ewe/lamb pairs for one month. There is currently one permittee for the Lake Creek Allotment - Flat Top Grazing Association (Permit #1105005). Livestock use has also included the trailing of sheep to and from the USFS-administered Federal lands to the north of the allotment. The SFO has issued trailing authorizations to many different sheep operators who have trailed through the Lake Creek Allotment 27 times since 1975. Each occurrence of trailing lasted two days or less.

Active livestock grazing occurs in most of the allotment but sheep trailing is mostly limited to the northwest or the northeast portions of the allotment. One trailing corridor for the Lake Creek Allotment has been identified in the northwest corner of the Blue Canyon parcel. The trail extends from SH 75, north of the existing driveway improvements on the Blue Canyon parcel, to the northeast and into the allotment. The allotment is typically used either in spring or fall for

trailing, or is not used at all in favor of quicker and easier trailing routes to USFS-administrated Federal lands (BLM 2008).

In 2008, the allotment was determined by the BLM to be meeting all applicable Standards for Rangeland Health and is in conformance with guidelines for livestock grazing management (BLM 2008). The applicable Standards are: Standard 1 (Watersheds), Standard 2 (Riparian Areas and Wetlands), Standard 3 (Stream Channel/Floodplain), Standard 4 (Native Plant), and Standard 8 (Threatened and Endangered Plants and Animals) for rangeland health. Monitoring has shown that the Lake Creek Allotment provides healthy, productive and diverse native plants and their populations are currently being maintained or promoted.

The allotment includes the Sun Peak Area of Critical Environmental Concern (ACEC), which is approximately 1 mile from the Blue Canyon parcel's eastern boundary. The Sun Peak ACEC was created due to the high-quality sagebrush steppe habitat.

3.11.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

The Square Lake parcels are located within two grazing allotments – the Square Lake Allotment in the southern portion of the parcels and the Timmerman Hills Allotment in the northern portion.

Square Lake Allotment. The southern portion of the Square Lake parcel, approximately 129 acres generally south of the existing northwest-trending fenceline on the parcel, is within the Square Lake Allotment (BLM Grazing Allotment No. 80505, BLM 2009c). Within the 80-acre retained parcel, approximately 8 acres south of the same northwest-trending fenceline is also within the Square Lake Allotment. The overall allotment consists of 4,331 acres, of which 3,555 acres are BLM-administered Federal lands, 640 acres are State lands, and 136 acres are non-Federal lands. About 129 acres of the 136 non-Federal land acres are encompassed by the Square Lake parcels (including the 80-acre retained parcel). The allotment has 744 preference AUMs and 132 suspended AUMs. However, the current grazing permit only authorizes the active use of 568 of the 744 cattle AUMs of preference; 176 AUMs are in temporary suspension. There is a single operator for the allotment, permitted under a management plan implemented October 21, 1985 (BLM 2009c) – Heartrock Ranch LLC (permit #1102184). Aside from the fencing demarcating the allotment boundary, the parcels are unfenced. There are corrals used for gathering and loading purposes as well as the access road, located on the exchange parcel. The allotment is currently meeting all eight rangeland health standards.

Timmerman Hills Allotment. The remaining acreage of the Square Lake parcels falls within the larger Timmerman Hills Allotment (BLM Grazing Allotment No. 80605, BLM 2009b), which totals 43,629 acres. Of these acres 40,976 acres are BLM-administered Federal lands, 1,476 acres are State lands, and 1,177 acres are non-Federal lands. The Square Lake parcels makes up about 191 acres of the non-Federal lands. The allotment is currently permitted for the use of 1,522 cattle AUMs of active preference with 104 suspended AUMs, 1,124 sheep AUMs of active preference for spring use, and 1,967 sheep AUMs of active preference for fall use with 69 suspended AUMs. Five permit holders on the allotment are currently active under a grazing management plan implemented on February 27, 1981 (BLM 2009b). These permittees include Lava Lake Land & Livestock LLC (permit #1100010/1105001); Heart Rock Ranch LLC (permit #1104111); Timmerman Grazing Association (permit #1102917); Picabo Livestock Company (permit #1105110); and Denis and Laurie Kowitz (permit # 1105330).

There is no fencing to separate the Square Lake parcels from the remainder of the allotment. On September 30, 2004, a notice of the Shoshone Field Manager's Proposed and Final Decision to renew grazing permits, based on an EA for the permit (EA No. ID-076-2004-0015) was mailed. The grazing decision designated four use areas: West Use Area (sheep and cattle), Wedge Butte Use Area (sheep only), Mid-Timmerman Use Area (sheep and cattle) and the East Use Area (sheep and cattle). The Square Lake parcel lies within the West Use Area where grazing is managed according to a rest-rotation system. The Timmerman Hills Permit Renewal EA identified two of the eight standards of rangeland health that were not being met within the allotment:

- Standard 4 (Native Plant Communities), was not being met, but significant progress was noted toward achieving the standard; and
- Standard 8 (Threatened and Endangered Species) was not being met, but the SFO Manager indicated that livestock grazing management practices are not significant factors and current livestock grazing management conforms with the Guidelines for Livestock Grazing Management (BLM 2000a).

3.11.1.3 *Sheep Bridge Parcel*

The portion of the Sheep Bridge parcel south of the Big Wood River is within the BLM Swinging Bridge Allotment (BLM Grazing Allotment No. 80504, BLM 2009d). However, the land south of the river was not historically owned by the permittee at the time the allotment was established (1950), and therefore was not counted with the original allotment boundaries. This land has historically been included and managed with the Swinging Bridge Allotment, Clay Bank pasture, and was identified as such in the Shoshone Grazing Environmental Statement (1979) and subsequent allotment renewal documents (EA No. ID-055-99001) (BLM 1999).

The Swinging Bridge Allotment encompasses approximately 2,939 acres, of which 2,255 acres are BLM-administered Federal lands and 684 acres are non-Federal lands. Of the 684 non-Federal land acres about 42 acres are encompassed by the Sheep Bridge parcel (south of the Big Wood River). The allotment is currently permitted for the use of 340 sheep AUMs of active preference with no suspended AUMs. There is currently one permittee for the Swinging Bridge allotment – Heart Rock Ranch LLC (permit #1104111).

In October 1998, the Swinging Bridge Allotment was determined to be meeting all applicable standards for rangeland health and livestock grazing practices were in conformance with all applicable Guidelines for Livestock Grazing Management. One permit holder on the allotment had a permit that was renewed following the BLM SFO Manager Decision to Renew based on an EA (EA No. ID-055-99001; BLM 1999). On September 30, 2004, a notice of the Shoshone Field Manager's Proposed and Final Decision to renew grazing permits in the Timmerman Hills Allotment (EA No. ID-076-2004-0015, BLM 2004b) also included the Clay Bank pasture of the Swinging Bridge Allotment. The grazing decision included the Clay Bank pasture as part of the West Use Area (sheep and cattle); grazing is managed according to a rest-rotation system. Current grazing use is in conformance with this Field Manager's decision document.

3.11.2 Environmental Impacts

3.11.2.1 No Action Alternative

3.11.2.1.1 Blue Canyon Parcel

Under the no action alternative, there would be no changes to grazing resources. Livestock trailing would continue either under existing or new crossing permits. Because historical livestock trails are north of the parcel improvements, both authorized and unauthorized, there would be no direct or indirect effects to grazing resources from the removal of the unauthorized improvements if removals are conducted outside of the authorized trailing times.

3.11.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under the no action alternative, the existing grazing permits for the grazing allotments would continue to be authorized, subject to their existing, respective, grazing allotment management plans. Grazing actions on the Square Lake parcels would also be subject to lease agreements with the WRLT. Current management practices include annual monitoring for general vegetation and habitat health on the parcels with adjustments made as needed, therefore implementation of the no action would have negligible impacts to grazing resources.

3.11.2.1.3 Sheep Bridge Parcel

Under the no action alternative, continued grazing within the existing Swinging Bridge Allotment would occur on the portion of the parcel located south of the Big Wood River. Grazing would be subject to the current Swinging Bridge Allotment EA (EA No. ID-055-99001; BLM 1999). No grazing activities would occur on the portion of the parcel north of the Big Wood River. Therefore implementation of the no action would have negligible impact to grazing resources.

3.11.2.2 Proposed Action

3.11.2.2.1 Blue Canyon Parcel

Under the proposed action, the existing livestock access across the Blue Canyon parcel would be reserved to the United States by a right-of-way reservation IDI-37310 under Title V, Section 507 of the FLPMA of October 21, 1976 (43 U.S.C. 1767). This right-of-way would reserve public and livestock access from SH 75 across a portion of the parcel to access the adjacent BLM-administered Federal lands. The reserved access would be designated across the northwest corner of the Blue Canyon parcel following the current livestock trailing routes. Because the Lake Creek Allotment is primarily used for livestock trailing to USFS-administered Federal lands and allotments to the north, the reserved access is anticipated to mitigate impacts from the disposal of the parcel from Federal ownership. Use of the reserved access for livestock trailing would be managed with the BLM's issuance of a crossing permit.

The Lake Creek Allotment grazing management plan would require amending to reflect the change in the non-Federal/Federal acreages from the proposed action. The current livestock grazing permit would be updated to exclude the area that would no longer be managed by BLM. However, the preference for the allotment would not be affected as the proposed action would result in less than 1% reduction in acres (meaning that there would be no change in AUMs). The livestock grazing permittee was notified in writing (scoping notification letter dated December 28, 2010) of the proposed land exchange with a copy of the Notice of Exchange Proposal. Under

the proposed action, this letter initiated the two-year notification period as required by regulations at 43 CFR 4110.4-2(b).

Overall, with the reservation of the trailing right-of-way easement, the proposed action would have negligible direct impacts to grazing resources. The BLM would also realize minor impacts from direct administrative costs associated with administering the reservation and allotment changes.

3.11.2.2.2 Square Lake Parcel

Under the proposed action, the permitted grazing activities would continue under the existing permits and within the respective grazing allotments, subject to current grazing allotment conditions and restrictions. The allotment grazing management plans would require appending to reflect the change in the non-Federal/Federal acreages from the proposed action. Future grazing activities on the parcel would not require lease agreements between the permittee(s) and the WRLT for the portions of the Square Lake parcel included within the proposed action. Separate lease agreements would be required for the portions of the remaining 80-acre retained parcel that would remain under the WRLT's ownership and unfenced within the respective allotments. The livestock grazing permittees were notified in writing (scoping notification letter dated December 28, 2010) of the proposed land exchange with a copy of the Notice of Exchange Proposal. Under the proposed action, this letter initiated the two-year notification period as required by regulations at 43 CFR 4110.4-2(b).

The corrals located at the north end of the Square Lake Allotment (T.2S, R. 18E, Section 10, NW¹/₄, SW¹/₄, see also Figure 5) would continue to be used in order to manage/facilitate the movement, holding and care of livestock on the allotment and if need be, the adjacent allotment. This facility has historically been used to facilitate the hauling of cattle in and out of the Square Lake and adjacent allotments; as well as sorting and vaccinating. The corrals are old and in need of maintenance. The maintenance of the corrals would occur within the same footprint as the existing corrals and initially include replacing the existing wooden and wire fencing (Pease pers. comm., 2012).

Prior to retaining the facility on the parcel, the current permittee (or permittees should both allotment permittees desire usage) would need to agree to the continued maintenance of the corrals as the BLM would only be responsible for the initial maintenance. Preliminary discussions with the Heart Rock Ranch, LLC have indicated their desire to have the corrals remain for future use (Pease pers. comm., 2012). Maintenance of the facilities under the proposed action would be considered a range improvement and ultimately become the property of the BLM. A Cooperative Range Improvement Agreement between the BLM and the grazing permittee(s) would be required regarding the use and future maintenance of the corrals. The BLM would incur the initial maintenance costs of the corrals while the continued maintenance responsibility would be assigned to the Square Lake Allotment permittee(s) in accordance with 43 CFR 4120.3-1(a)(b)(c)(e), 4120.3-2 (a)(d), and 4120.3-4.

Overall, the proposed action would have negligible direct impacts to grazing resources with other direct impacts related to minor costs incurred associated with initial maintenance of the facilities on the parcel and administering the allotment changes and Cooperative Range Improvement Agreement.

3.11.2.2.3 Sheep Bridge Parcel

Under the proposed action, the acquisition of the parcel would not increase or change current grazing management on or near the parcel. The portion of the parcel south of the Big Wood River would be retained within the existing Swinging Bridge allotment, subject to the existing grazing permit conditions and restrictions. The portion of the parcel north of the Big Wood River is not within any existing allotments and there are no plans to open this portion to grazing prior to evaluation under an amendment or revision to the Magic MFP. A plan amendment for the inclusion of the portion north of the Big Wood River is not proposed as part of this EA. The livestock grazing permittee was notified in writing (scoping notification letter dated December 28, 2010) of the proposed land exchange with a copy of the Notice of Exchange Proposal. Under the proposed action, this letter initiated the two-year notification period as required by regulations at 43 CFR 4110.4-2(b).

3.11.2.3 Alternative A

3.11.2.3.1 Blue Canyon Parcel

Impacts under Alternative A would be the same as under the proposed action for the Blue Canyon parcel.

3.11.2.3.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Under Alternative A, impacts to grazing resources would be similar to those described under the proposed action except for the increased public benefit associated with the BLM acquisition of the entire 320 acres of the Square Lake parcels. Acquisition of the entire 320 acres would increase administrative and rangeland management efficiencies through the elimination of non-Federal inholdings that fall across allotment boundaries. Allotment permittees would also receive a direct benefit from this alternative because they would not need to obtain separate lease agreements with a non-Federal landowner.

3.11.2.3.3 Sheep Bridge Parcel

Impacts to grazing resources under Alternative A would be the same as the proposed action.

3.11.3 Cumulative Impacts

The area of cumulative effects analysis is defined as Blaine County, which includes the BLM-administered Federal grazing allotments and livestock trails within the BLM SFO. Livestock grazing has occurred in Blaine County and the Wood River Valley since the late 1800s. Lands had unregulated grazing until the implementation of the Taylor Grazing Act of 1934. In 1946, the Department of the Interior formed the BLM and grazing on Federal lands was formalized and divided into grazing allotments. Grazing activities for the area have since been managed in conjunction with the regulations at 43 CFR 4120 – 4190, the FLPMA, the 1934 Taylor Grazing Act, the Shoshone Grazing Environmental Statement (BLM 1979) as implemented within the Magic or Sun Valley MFPs; Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Administration; and specific grazing allotment rangeland management standards and evaluations.

The BLM SFO is currently analyzing effects of a proposed action to issue BLM crossing permits (trailing permits) to livestock operators who have submitted applications for trailing livestock across BLM-administered Federal land within the Shoshone Field Office for multiple grazing years beginning in May 2012 (IDT-030). The action includes the development of terms and

conditions associated with the crossing permits that would be issued. Proposed trailing applications are located across the Blue Canyon, Square Lake, and 80-acre retained parcels.

3.11.3.1 *No Action*

Because direct or indirect impacts to grazing resources under the no action alternative would be negligible, there are not anticipated to be cumulative impacts to grazing resources.

3.11.3.2 *Proposed Action*

The reserved public and livestock access across the Blue Canyon parcel implemented as part of the proposed action would mitigate the cumulative impact of the general trend of decreased trailing route access in the Wood River Valley brought on by increased development. The cumulative impact of the proposed land exchange would preserve historical access to grazing areas and provide a long-term public benefit to the resource. Overall, the proposed action would have no cumulative adverse impact on grazing resources.

3.11.3.3 *Alternative A*

In addition to those cumulative impacts described under the proposed action, the cumulative impacts under Alternative A would provide an additional 80-acre incremental increase of historical grazing areas on BLM-administered Federal lands and efficiencies for both the BLM and grazing permittees. Overall, Alternative A would not result in adverse cumulative impacts to grazing resources.

3.12 WILDLIFE BLM SPECIAL STATUS SPECIES, INCLUDING THREATENED, ENDANGERED, AND CANDIDATE SPECIES

3.12.1 Affected Environment

The BLM policy instructs State Directors to designate sensitive species in cooperation with state fish and wildlife agencies (BLM 2001). The Idaho State BLM Office updated these designations in 2003 (BLM 2003). Special status species include species listed or proposed for listing under the ESA and species designated as sensitive by the BLM State Director. The USFWS current listed species list (USFWS 2011), the Idaho State BLM special status species specific to the SFO (BLM 2003b), the IDFG, and the IFWIS database were reviewed for the project area to identify potential species occurrences of Federal threatened, endangered, and candidate species; species proposed for Federal listing; and BLM special status species. Potential for occurrence determination is based on the presence of suitable habitat and/or documented occurrences.

Current assessments and existing data maintained by the BLM, the IDFG, the WRLT, the Idaho Bird Observatory (IBO), or other entities and scientific literature were reviewed to broaden the information base. Federal and state biologists were also contacted for additional information on species, species distribution, and occurrence, when appropriate and available for the range of habitats that are present on the parcels included in the proposal.

Project biologists reviewed species lists and available data and identified areas of data gaps in the wildlife inventory data. Parcel-specific field inventories were conducted in 2008 and 2011 to supplement data gaps (ERO 2008c; ERO/Power 2012). No Federally-listed threatened or endangered species (BLM Type 1) are known to occur or have potential habitat within the non-Federal parcels (Square Lake, Sheep Bridge, and the 80-acre retained). The greater sage-grouse is an ESA-candidate and BLM Type 1 species that is known to occur on the Square Lake parcel. The yellow-billed cuckoo is also an ESA-candidate species and BLM Type 1 species with potential habitat on, and occurrences near, the non-Federal parcels. There is no designated or proposed critical habitat for any Federally-listed threatened or endangered species under the ESA within the parcels (ERO/Power 2012); however both non-Federal parcels contain Preliminary Priority Habitat (PPH) for greater sage-grouse, and ESA candidate species and BLM Type 1 species. The BLM special status species with potential occurrence on the parcels are listed in Table 12.

Table 12. BLM special status species with potential habitat on the parcels.

Common Name	Parcels with Potential Habitat ¹	Status	
		Federal ²	BLM Special Status Species ³
Type 1 – Threatened (T), Endangered (E) & Candidate (C) Species			
Canada lynx (<i>Lynx canadensis</i>)	BC	FT	1
Wolverine (<i>Gulo gulo luscus</i>)	BC	FC	1
Greater sage-grouse (<i>Centrocercus urophasianus</i>)	SL, SB	C	1
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	SB	C	1

Common Name	Parcels with Potential Habitat ¹	Status	
		Federal ²	BLM Special Status Species ³
Type 2 - Rangewide/ Globally Imperiled Species			
Gray wolf (<i>Canis lupus</i>)	BC	N/A	2
Pygmy rabbit (<i>Brachylagus idahoensis</i>)	SL, SB	N/A	2
Northern leopard frog (<i>Lithobates pipiens</i>)	SL, SB	N/A	2
Bald eagle (<i>Haliaeetus leucocephalus</i>)	SB	N/A	2
Redband trout (<i>Oncorhynchus mykiss gibbsi</i>)	SB	N/A	2
Wood River sculpin (<i>Cottus leiopomus</i>)	SB	N/A	2
Type 3 -Regional / State Imperiled Species			
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SL, SB, BC	N/A	3
Brewer's sparrow (<i>Spizella breweri</i>)	SL, SB, BC	N/A	3
Calliope hummingbird (<i>Stellula calliope</i>)	BC	N/A	3
Ferruginous hawk (<i>Buteo regalis</i>)	SL, SB	N/A	3
Loggerhead shrike (<i>Lanias ludovicianus</i>)	SL, SB	N/A	3
Prairie falcon (<i>Falco mexicanus</i>)	BC	N/A	3
Sage sparrow (<i>Amphispiza belli</i>)	SL, SB	N/A	3
Willow flycatcher (<i>Empidonax traillii</i>)	SL, SB	N/A	3
Common garter snake (<i>Thamnophis sirtalis</i>)	All	N/A	3
Western toad (<i>Anaxyrus Bufo borea</i>)	SL, SB	N/A	3
Type 4 -Peripheral Species			
White-faced ibis (<i>Plegadis chihi</i>)	SL	N/A	4
¹ BC=Blue Canyon Parcel, SB=Sheep Bridge Parcel, SL=Square Lake Parcels (both the land exchange and 80-acre retained). ² T=Threatened; E=Endangered; C=Candidate; N/A = not applicable ³ BLM Special Status Species Type: Type 1-Threatened, Endangered, and Proposed Species - These species are listed by the USFWS or the National Marine Fisheries Service as threatened or endangered, or they are proposed for listing under the ESA. Type 2-Range-wide/Globally Imperiled Species - These are species designated as USFWS candidate or are ranked by the Natural Heritage program network as globally rare to critically imperiled. Type 3-Regional/State Imperiled Species - These are species that are in danger of becoming extirpated from Idaho in the foreseeable future if factors contributing to their decline, or habitat degradation or loss, continue. Type 4-Peripheral Species - These are species that are in danger of becoming extirpated from Idaho and (a)			

Common Name	Parcels with Potential Habitat ¹	Status	
		Federal ²	BLM Special Status Species ³
may be local endemics with currently low threat levels or (b) peripheral, rare species in Idaho.			

3.12.1.1 *Threatened, Endangered, Candidate and BLM Sensitive Species – Excluding Avian Species*

The following section presents descriptions of species background and occurrences for those with potential to occur within the project area. Those species that are threatened, endangered, or candidate species under the ESA and BLM sensitive species, and that are *not* birds are discussed below. A parcel-specific discussion follows and presents the results of literature research and field survey conducted in 2008 and 2011 for those species (as identified in Table 12). Only species with known or potential habitat are discussed in parcel-specific section.

Canada lynx (BLM Type 1). Potential habitat for the Canada lynx (lynx) is located near Ketchum. The lynx is a Federally-threatened species listed on March 24, 2000 (65 Fed. Reg. 16051). No critical habitat for the lynx has been designated in Idaho outside of Boundary County. Lynx occur primarily in boreal and sub-boreal northern forests and western montane forests in North America. Few historical accounts exist that identify lynx occurring near any of the land exchange parcels. Historical records from the Idaho Conservation Data Center (ICDC 2008) are from 1950 in the Trail Creek area, approximately 15 miles northeast of Ketchum, and an illegal kill from Bellevue in 1984. In addition, the Ketchum/Sun Valley area is 10 to 20 miles from any linkage or secondary habitat identified by the USFS (2007).

Wolverine (BLM Type 1). Based on the range contraction and threats to the wolverine, the USFWS determined that listing the wolverine as a distinct vertebrate population segment in the contiguous United States was warranted, but precluded the listing due to higher priority listing actions (75 Fed. Reg. 78030 (December 14, 2010)). At this time, the wolverine is a Federal candidate species for listing and a BLM Type 1 special status species. Wolverines have been documented in the Wood River Valley and surrounding areas as recently as 2008 (ERO/POWER 2012).

Gray wolf (BLM Type 2). Gray wolves occur in the Big Wood River Valley and adjoining forestland. Idaho wolves were removed from the endangered species list in 2009 and are now managed as a Type 2 BLM special status species. Wolf sightings have been reported from the Big Wood River Valley, including near Hailey, Bellevue, and at the intersection of SH 75 and Highway 20. A pack is suspected to occupy areas east of the Blue Canyon parcel within the Little Wood River Valley (Holyan et al. 2011).

Pygmy rabbit (BLM Type 2). Pygmy rabbits are a sagebrush obligate species, or one that is restricted to sagebrush habitats during the breeding season or year-round. To date, little is known on survival, movements, and habitat requirements of the species, nor is much known on the status of Idaho's populations. Habitat loss, fragmentation, and degradation are all threats to the pygmy rabbit populations. Pygmy rabbits occur in the Magic Valley and observations have been recorded at and/or near the Square Lake and Sheep Bridge parcels (IFWIS 2011). Both of these parcels are dominated by big sagebrush and low sage. No sightings have been reported from the Sheep Bridge parcel itself, but it is not clear whether parcel-specific surveys have been conducted.

Northern leopard frog (BLM Type 2). The northern leopard frog is widely distributed and occurs from southern Canada, south to Kentucky and New Mexico (Groves et al. 1997). It has declined due to habitat loss and degradation, water quality, non-native species, such as American bullfrogs (*Rana catesbeiana*), and disease (NatureServe 2008). It is listed as a species of conservation concern in Idaho (IDFG 2005) and a BLM Type 2 special status species (BLM 2003b). In Idaho, the northern leopard frog occurs south of the central Mountains. In the central part of the state, the City of Ketchum is the approximate northern extent of its distribution. Emergent vegetation with potential habitat only occurs in isolated patches on the Square Lake and Sheep Bridge (along Rock Creek) parcels. There are no known records of northern leopard frogs on or near any of the parcels (ICDC 2008). In addition, no northern leopard frogs were detected during herpetological surveys for any of the parcels (POWER 2012).

Redband trout (BLM Type 2). Redband trout is the inland form of the rainbow trout (*Onchorhynchus mykiss*). It is found in the Snake River Basin as far upstream as Shoshone Falls (a geological barrier) and thus is native to the Wood River drainage (Meyer et al. 2010). In Idaho, redband trout occur in desert and montane streams. Redband trout can persist in desert streams even when flows are low and with water temperatures as high as 26-28°C (Zoellick 1999). Redband trout require clear, cool water and clean gravels to complete their life cycle. Threats to redband trout are similar to those of other native fishes: habitat fragmentation resulting from irrigation projects and reservoirs, habitat degradation due to agriculture, grazing, and the introduction of non-native fish, including non-native strains of rainbow trout (Thurow et al. 1997; Meyer et al 2010). Redband trout in the Snake River Basin was petitioned for listing under the ESA but was found to be unwarranted (60 Fed. Reg. 49819 (September 20, 1995)). It is listed as a species of conservation concern in Idaho (IDFG 2005) and a BLM Type 2 special status species (BLM 2003b).

Wood River sculpin (BLM Type2). The Wood River sculpin has a limited distribution, restricted to the Wood River basin and its three subbasins: Big Wood River, Little Wood River, and Camas Creek (Meyer et al. 2007). It is commonly found in areas with native redband trout (Meyer et al. 2008). Along the Big Wood River, it occurs between the City of Ketchum and Magic Reservoir where appropriate habitat exists. Threats to the Wood River sculpin include habitat loss and fragmentation resulting from irrigation projects and reservoirs, habitat degradation due to agriculture, development, and transportation, as well as the introduction of nonnative fish (ERO/POWER 2012). It is listed as a species of conservation concern in Idaho (IDFG 2005) and a BLM Type 2 special status species (BLM 2003b).

Townsend's big-eared bat (BLM Type 3). Townsend's big-eared bats occur predominantly on the Snake River Plain. Townsend's big-eared bats are known to roost in caves, abandoned mines, buildings, bridges, rock crevices, and hollow trees. In Idaho, the distribution is significantly correlated with the availability of caves and mines for roosting habitat. The Idaho Bat Working Group, Idaho Bat Conservation Plan (Gillies 2004) states that this species is extremely sensitive to anthropogenic disturbance and has been documented to abandon roost sites after disturbance. The primary issue facing this species is disturbance and destruction of roost sites through mine closures, renewed mining, recreational caving, and other roost-disturbing activities (Pierson et al. 1999). Only four maternity colonies have been confirmed in Idaho, with three sites found in the Craters of the Moon National Monument (NPS 2012).

Common garter snake (BLM Type 3). Common garter snakes are found throughout Idaho, typically near water but also in open meadows, desert riparian areas, mountain lakes and

meadows, and evergreen forests. Logs, rocks and woody debris provide common shelter (UIE 2012).

Western toad (BLM Type 3). Western toads are widely distributed in Idaho with habitat consisting of springs, streams, meadows, and woodlands. Occurrences are usually near water, but they hibernate in burrows for the winter months (BLM 2012e).

3.12.1.1.1 Blue Canyon Parcel

Canada lynx. No occurrences of lynx have been reported on or near the Blue Canyon parcel and no critical habitats are located in Blaine County.

Wolverine. Wolverines have been recorded approximately 12 miles (20 km) from the City of Ketchum (Copeland 1996) and in proximity to the Blue Canyon parcel. From the 1990s, and as recently as 2008, there are reports of wolverines one to five miles outside of the City of Ketchum and near the Blue Canyon parcel (ICDC 2011). There are no known instances of wolverines on this or any of the project parcels.

Gray wolf. Data from 2009 and 2010 indicate the territory of the Phantom Hill wolf pack overlapped the Blue Canyon parcel, but no known occurrences have been reported on the parcel.

Townsend's big-eared bat. No known or identified bat colonies have been identified on the Blue Canyon parcel. Likely potential habitat for foraging and roost sites is low because of the improvements on the parcel.

Common garter snake. The dry drainage and surrounding trees to the north has potential to provide cover and/or foraging habitat for garter snakes. No garter snakes were identified during biological surveys (POWER 2012).

No fisheries habitat exists on the Blue Canyon parcel.

3.12.1.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Pygmy rabbit. Pygmy rabbits occur in the Magic Valley and observations have been recorded on and adjacent to the Square Lake parcels. The parcels are dominated by big sagebrush and low sage. The parcels experience some level of occasional vehicle or recreational use of the primitive double-track roads that cross the parcels.

Northern leopard frog. No northern leopard frogs were identified during biological surveys of the parcels (POWER 2012).

Townsend's big-eared bat. No known bat colonies have been identified on the Square Lake parcels. There is little potential for roost sites to occur on the parcel due to the lack of suitable roosting topography and features. The parcels may provide forage habitat because of its proximity to known maternity colonies in the Craters of the Moon National Monument.

Common garter snake. No garter snakes were identified during biological surveys of the parcels (POWER 2012).

Western toad. The wetland area around Square Lake north has potential to provide cover and/or foraging habitat for western toads as do isolated patches of wetlands on the parcels. A single young adult Western toad was detected on the 80-acre retained parcel during 2011 inventories. In addition, Great Basin spadefoots (*Spea intermontana*) and long-toed salamanders (*Ambystoma macrodactylum*) were identified (POWER 2012).

Because Square Lake is not connected to the Big Wood River, there is no fisheries habitat for BLM sensitive fish species on the parcels.

3.12.1.1.3 Sheep Bridge Parcel

Pygmy rabbit. Pygmy rabbits have been recorded on land adjacent to the Sheep Bridge parcel, but no observations directly from the parcel have been recorded. It is not clear if parcel-specific surveys for pygmy rabbits have been conducted on the parcel. This parcel is dominated by big sagebrush and low sage and is similar to the Square Lake parcel, on which sightings have been recorded.

Northern leopard frog. No northern leopard frogs were identified during biological surveys of the parcel (POWER 2012). The parcel has potential riparian habitat for the species.

Redband trout. The Sheep Bridge parcel contains one mile of unaltered Big Wood River habitat, one-half mile of habitat within Rock Creek and portions of the drainages are within the Magic Reservoir flood area. Although species-specific surveys have not documented Redband trout on the parcel, it is likely to occur in similar habitats as the Wood River sculpin. In addition, studies within the Big Wood River have documented trout densities eight to ten times greater in unaltered reaches of the river than in altered reaches (Thurow 1988).

Wood River sculpin. The Sheep Bridge parcel contains one mile of unaltered Big Wood River habitat with known occurrences of Wood River sculpin documented adjacent to the east parcel boundary and two monitoring locations within 2 miles upstream from the parcel (Zaroban 2011). Rock Creek provides additional fisheries habitat along the western parcel boundary, however no known occurrences have been documented within the reaches on the parcel (Zaroban 2011).

Townsend's big-eared bat. No known or identified bat colonies have been identified on the Sheep Bridge parcel. The basalt cliffs of the Big Wood River canyon may provide roost habitat. The parcel may provide forage habitat because of its proximity to known maternity colonies in the Craters of the Moon National Monument.

Common garter snake. No garter snakes were identified in areas of potential habitat during site inventories on the parcel, however two wandering garter snakes (*Thamnophis elegans*) were identified in 2011 (POWER 2012). The parcel has potential riparian habitat for the species.

Western toad. No western toads were documented on the parcel; however two adult Pacific treefrogs (*Pseudacris regilla*) were identified within the riparian areas along Rock Creek (POWER 2012). The parcel has potential riparian habitat for the species.

3.12.1.2 Migratory Birds – Including Threatened, Endangered and Candidate Species

Executive Order 13186, signed January 10, 2001, lists several responsibilities of Federal agencies for the conservation of migratory birds and their habitats. An MOU between the BLM and USFWS (WO-230-2010-04) defines the BLM's responsibilities under the Migratory Bird Treaty Act. The purpose of the MOU is to strengthen migratory bird conservation by identifying and implementing strategies that promote conservation and avoid or minimize adverse impacts on migratory birds. The BLM is required to evaluate the effects of project level actions and identify where a "take" that is a measurable negative effect on migratory bird populations can be reasonably attributable to the agency's actions. The BLM is directed to focus first on species of concern, habitats and risk factors in their evaluations.

The parcels contain a variety of avian habitat capable of supporting numerous migratory bird species. In addition to the sagebrush obligates, localized riparian areas and/or wetland areas provide an abundance of habitat. The wetland and riparian areas often contain stands of larger willows, aspens, and cottonwoods. All of the parcels, except for the Blue Canyon parcel have open water and wetland habitat used by waterfowl.

During the 2011 breeding bird and nesting raptors surveys on the parcels, 90 bird species were documented including 10 raptor species (POWER 2012). None of the BLM Type 1 or 2 special status species – greater sage-grouse, yellow-billed cuckoo, or bald eagle – were detected on any of the parcels in 2011. Because of the potential breeding, foraging, roosting, and nesting habitat, these species are either historically known to be on or near the parcels, or are likely to use areas on or near the parcels during certain times of the year. Because of the number of species identified during breeding bird surveys on the parcels, only the BLM Type 1- 4 special status species are discussed within this EA. Avian diversity is generalized by species count in this document; detailed listings of identified species are included in the project file (POWER 2012).

3.12.1.2.1 Migratory Species – Sagebrush Obligates

Sagebrush steppe communities comprise much of the habitat within the parcels. Many BLM sensitive species are considered sagebrush obligates; species that are restricted to sagebrush habitats during the breeding season or year-round. Sagebrush obligate species that are known or are likely to occur on the parcels include greater sage-grouse, Brewer’s sparrow, loggerhead shrike, and sage sparrow.

Greater sage-grouse (BLM Type 1). Due to population declines and habitat fragmentation, the USFWS determined that Federal listing of the greater sage-grouse range wide was warranted, but precluded the listing due to higher priority listing actions (75 Fed. Reg. 13910 (March 23, 2010)). As a result, the greater sage-grouse was placed on the list of candidate species for protection under the ESA. The greater sage-grouse is listed as a Type 1 BLM special status species (BLM 2003b) and a species of conservation concern in Idaho (IDFG 2005).

The greater sage-grouse breed in early spring in open areas within sagebrush habitats (called “leks”) where males display and females select mates. Females then build nests in nearby areas with dense vegetation cover, typically dominated by big sagebrush. Grasses in the understory provide additional cover for nests and may lower the risk of predation. During the fall, the greater sage-grouse migrate to winter habitats, usually with varying topography and sagebrush height. The population of greater sage-grouse in the North Magic Valley region has fluctuated annually from 1976 to 2004. The average number of males counted on lek routes has ranged from 4 to 26 males per lek. Leks have been documented on and around the Square Lake and 80-acre retained parcels. Greater sage-grouse habitat consists of leks, nesting, brood-rearing, and winter habitats. The North Magic Valley Local Working Group (NMV LWG) Planning Area (previously West Magic Valley Sage-grouse Planning Area) contains preliminary priority habitat (PPH) and “key habitat for sage-grouse,” and includes the Sheep Bridge and Square Lake parcels. **Brewer’s sparrow (BLM Type 3).** The Brewer’s sparrow is a shrub steppe obligate species closely associated with big sagebrush. The presence and abundance of Brewer’s sparrows is directly related to total shrub cover, bare ground, taller shrubs, patch size, and habitat heterogeneity. Threats to sparrow populations include habitat degradation and destruction (IFWIS 2012b).

Loggerhead shrike (BLM Type 3). The loggerhead shrike is found in open vegetation cover with scattered trees and shrubs, in savannas, desert scrub and, occasionally, in open juniper woodlands. Hunting perches are an important component of the habitat. A study in southeastern Idaho located nests in sagebrush, bitterbrush, and greasewood. Loggerheads are one of three shrub-steppe neotropical migrants declining in Idaho (Groves et al. 1997).

Sage sparrow (BLM Type 3). The sage sparrow is a sagebrush obligate associated with sagebrush shrublands dominated by big sagebrush, saltbush brushlands, and chaparral. Nesting occurs in areas where sagebrush coverage is typically sparse but clumped. A southwestern Idaho study concluded that distribution of sage sparrows was influenced by both local vegetation cover and landscape features such as patch size (Groves et al. 1997).

3.12.1.2.2 Migratory Birds – Raptors and Breeding Birds

Yellow-billed cuckoo (BLM Type 1). On July 25, 2001, the USFWS determined that listing the yellow-billed cuckoo as a distinct vertebrate population segment west of the Continental Divide was warranted, but precluded the listing due to higher priority listing actions (66 Fed. Reg. 38611 (July 25, 2001)). There are documented occurrences of yellow-billed cuckoo at Stanton Crossing on the Big Wood River, about two miles east of the eastern edge of the Sheep Bridge parcel, in suitable habitat within a wide riparian area dominated by mature cottonwoods and willows. Cuckoos were not detected at Stanton Crossing in 2009 or 2010 (ERO/POWER 2012). A third sighting of yellow-billed cuckoo was reported in 2009 about 1 mile west of SH 75 on West Magic Road, but the amount of suitable riparian habitat in the observed area is low and may not be sufficient to support a sizable breeding population (IBO 2010b). The Sheep Bridge parcel, the closest parcel to documented nest sites, does not contain suitable habitat because the riparian area is narrow due to the canyon. Other stretches of wide riparian forests exist along the Big Wood River between Stanton Crossing and the City of Ketchum; however, none of the patches is as large as the one at Stanton Crossing and all of these patches are in proximity to the airport, highway, and residences.

Bald eagle (BLM Type 2). Bald eagles were removed from the USFWS threatened and endangered species list on July 9, 2007 (Fed. Reg., Volume 72, Number 130). Bald eagles are a Type 2 BLM Sensitive Species and are subject to protections under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. In coordination with the Federal delisting of the bald eagle, the USFWS provided guidelines for the continued protection of bald eagles from human-induced disturbances (USFWS 2007). The guidelines concentrate on impacts to nesting sites, although disturbances to foraging activities were also addressed.

The only known breeding territory near the parcels is a nest at Stanton Crossing. The nest was occupied in 2006 and successfully fledged one young. The nest was also occupied in 2009 but was unsuccessful in producing young (IBO 2010a). The other nest sites in Blaine County are more than 15 miles from any parcel. Besides the Stanton Crossing nest, no known or identified bald eagle nests were documented in the Wood River Valley in 2011. No bald eagle nests were documented in 2011 within 1 mile of the Blue Canyon parcel (POWER 2012). Bald eagles use the riparian forest along the Big Wood River during the winter for roosting. Mid-winter surveys between 1980 and 1995 documented up to 12 bald eagles along the Big Wood River from Magic Reservoir to the City of Hailey (including Silver Creek), with 7 birds detected during the most recent bald eagle survey (ICDC 2008).

Calliope hummingbird (BLM Type 3). The Calliope hummingbird occurs in mountainous regions throughout Idaho during the breeding season, except for non-forested and extreme arid portions in the southern part of the state. The Calliope hummingbird is associated with open coniferous forests, montane meadow, shrublands, riparian thickets of willows and brushy areas. It nests in riparian areas and open forests at the edge of meadows (Groves et al. 1997).

Ferruginous hawk (BLM Type 3). Ferruginous hawks are found in shrub steppe at the periphery of pinyon/juniper or other woodlands (Groves et al. 1997). They show a strong preference for elevated nest sites to build large stick nests, but will nest on the ground when these are absent. The species uses trees, bushes, cliff ledges, rock/dirt outcrops, power poles, artificial platforms and other man-made structures. Threats include habitat loss to agriculture development and urbanization, livestock grazing, reduction in prey populations either due to habitat loss or poisoning/controlling small mammals, illegal shooting, and human disturbance (BLM SRBP NCA Raptor Information Sheet n.d. – Ferruginous hawk).

Prairie falcon (BLM Type 3). Prairie falcons are found in open vegetation in mountainous shrub-steppe, or grasslands areas. In Idaho, this falcon breeds in shrub-steppe and dry mountainous habitat and winters at lower elevations (Groves et al. 1997). The prairie falcon nests primarily on cliff ledges, crevices or cavities that typically have a protective overhang. Rather than build a nest structure, the falcon scrapes together loose debris to form a small depression to hold eggs. Prairie falcons also use abandoned nests of eagles, hawks or ravens. The population is characterized as stable, but local declines have been recorded in areas of southwest Idaho (BLM SRBP NCA Raptor Information Sheet – Prairie falcon).

Willow flycatcher (BLM Type 3). Willow flycatchers are found in thickets, scrubby and brushy areas, open second growth forests, swamps, and open woodlands. Flycatchers catch prey in air or take food from foliage. Willow flycatchers build cup-shaped nests in shrubs or deciduous trees. Although willow flycatchers are declining in the Pacific Northwest, their numbers in Idaho appear stable (Groves et al. 1997).

White-faced ibis (BLM Type 4). White-faced ibis are found mostly in freshwater areas, on marshes, swamps, ponds and rivers. In Idaho, they prefer shallow-water areas. Nest platforms are constructed within the bulrush, using bent-over bulrush stalks and adjacent upright stalks. This species forages for aquatic and moist soil invertebrates in shallowly flooded wetlands and irrigated croplands. After the nesting season, this species congregates by the thousands to feed on the extensive mudflats of the American Falls Reservoir (IDFG 2005).

3.12.1.2.3 Blue Canyon Parcel

As noted in Table 12, the Blue Canyon parcel contains suitable habitat for Brewer's sparrow, Calliope hummingbird, and prairie falcon. A total of 19 bird species were identified within the Blue Canyon parcel during the 2011 point count as well as an additional 13 species observed adjacent to the parcel (POWER 2012). The five most abundant species in and immediately adjacent to the Blue Canyon parcel were yellow-rumped warbler (*Dendroica coronate*), yellow warbler (*Dendroica petechial*), American robin (*Turdus migratorius*), Brewer's blackbird (*Euphagus cyanocephalus*), and song sparrow (*Melospiza melodia*). The Brewer's sparrow and the prairie falcon were the only Type 1-4 BLM special status species identified on the parcel during 2011 surveys.

During raptor surveys of the parcel conducted in 2011, a pair of red-tailed hawks was observed on two occasions over or adjacent to the parcel. No stick nests were found on the parcel. A red-tailed hawk (*Buteo jamaicensis*) was seen perched on a large rock outcrop approximately 0.3 miles northeast of the parcel. Other raptors observed north of the parcel included one prairie falcon and American kestrel (*Falco sparverius*) approximately 0.2 miles to the north (POWER 2012).

3.12.1.2.4 Square Lake Parcels (both the land exchange and 80-acre retained)

As noted in Table 12, the Square Lake parcels contains habitat for more than half of the species with potential for occurrence. A total of 41 bird species were identified on or within 1 mile of the Square Lake parcels. Because of the level of historical inventories on and near the Square Lake parcels, parcel-specific point count inventories were not conducted the Square Lake parcels in 2011 (POWER 2012). Of the 41 bird species with historical occurrences, 28 species were observed incidentally during raptor inventories conducted during 2011 (POWER 2012). The five most abundant species detected on or adjacent to the parcels were violet-green swallow (*Tachycineta thalassina*), western meadowlark (*Sturnella neglecta*), Brewer's sparrow, cliff swallow (*Petrochelidon pyrrhonota*), and sage thrasher (IBO 2010b). Five BLM special status species have been documented during previous studies on the Square Lake parcels and one species adjacent to the parcels: greater sage-grouse (Type 1); loggerhead shrike and Brewer's sparrow (Type 3); and sage thrasher, short-eared owl (*Aegolius acadicus*), and Brewer's blackbird (Type 5-Watchlist). At least nine known leks occur within a few miles' radius of the Square Lake parcels. More recent counts in 2008 and 2009 did not detect any males at the lek on the Square Lake parcels and south of Square Lake (POWER 2012).

An American kestrel was the only raptor documented on the Square Lake parcels during two visits at or adjacent to the Square Lake parcels during 2011 raptor inventories (POWER 2012).

3.12.1.2.5 Sheep Bridge Parcel

As listed in Table 12, the Sheep Bridge parcel contains habitat for eight of the eleven species lists with potential occurrence. A total of 54 species have been identified on and adjacent to the Sheep Bridge parcel. Because of the level of historical inventories on and near the Sheep Bridge parcel, a parcel-specific inventory was not conducted for the Sheep Bridge parcel in 2011. Forty of the 54 species documented on the Sheep Bridge parcel were observed incidentally during raptor inventories in 2011 (POWER 2012). An additional 13 species were detected during surveys for yellow-billed cuckoos just upstream of the Sheep Bridge parcel (IBO 2010b), and one species detected during site visits in 2008 (POWER 2012).

Three BLM special status species have been documented on the Sheep Bridge parcel: loggerhead shrike, willow flycatcher, and Brewer's sparrow (Type 3). At least nine known sage-grouse leks occur within a few miles' radius of the Sheep Bridge parcel. Although no leks have been documented on the parcel, the most recent lek counts around the Sheep Bridge parcel were nine males to the north of the parcel in 2009 and three males to the southwest in 2007 (IFWIS 2011).

Four species of raptors were documented on the Sheep Bridge parcel during 2011 field surveys: osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), great horned owl (*Bubo virginianus*), and red-tailed hawk. In addition, two active raptor nests and three abandoned nests were observed on the Sheep Bridge parcel (POWER 2012).

3.12.2 Environmental Impacts

3.12.2.1 No Action Alternative

3.12.2.1.1 Blue Canyon Parcel

There are no Federally listed threatened or endangered or candidate species or critical habitat identified on the Blue Canyon parcel, therefore the no action alternative would have no effect on threatened, endangered or candidate species. There is no fish habitat on the parcel; therefore the no action alternative would have no impact on fisheries resources.

Implementation of the no action alternative would include the removal of the unauthorized improvements on the parcel and rehabilitation of the area. Although this may result in localized short-term loss of up to 2.6 acres of potential nesting habitat and loss of canopy cover from larger trees identified as non-native, the re-introduction of native vegetation would provide additional habitat for sagebrush obligate species native to the area. Although re-establishment of the native vegetation would provide additional habitat for sagebrush obligate species, the proximity of SH 75, the adjacent private residence, and the remaining permitted uses on the parcel (e.g. vehicle traffic on the driveway) would be disturbances that would lessen the beneficial impact of the additional habitat. Overall, the no action alternative would have a short term, minor impact on avian species from the removal of existing, non-native vegetation until such time that restoration and rehabilitation has been implemented.

3.12.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained)

There are no Federally-listed threatened or endangered species or critical habitat identified on the parcels, therefore the no action alternative would have no effect on Federally-listed threatened or endangered or their critical habitat. The greater sage-grouse, an ESA candidate and BLM Type 1 species, has been documented on and near the Square Lake parcel. There is no fish habitat on the parcels, therefore the no action alternative would have no impact on fisheries resources.

Under the no action alternative, the WRLT would continue to manage the parcels under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses and permitted grazing based on the vegetative health. Part of this management includes the Conservation Program Contract with the USDA NRCS to implement and maintain specific conservation practices under the Sage-Grouse Initiative (USDA NRCS 2010). Current management practices include annual monitoring for general vegetation and wildlife habitat health. Anticipated continued management would also include habitat improvements under the NRCS contract to improve greater sage-grouse habitat. Under the no action alternative, wildlife and habitat may have minor localized, temporary adverse impacts from habitat improvement projects that may last a few growing seasons until improvements take hold. Habitat enhancements conducted under the Sage-Grouse Initiative are anticipated to provide a long term benefit to greater sage-grouse and similar wildlife by increasing the quality of the PPH on the parcel. Overall the no action alternative would result in a negligible short term adverse impact with a long term beneficial impacts to wildlife habitat on the parcel.

3.12.2.1.3 Sheep Bridge Parcel

There are no Federally-listed threatened or endangered or critical habitat identified on the parcel, therefore the no action alternative would have no effect on threatened or endangered species. The parcel is within PPH for greater sage-grouse (ESA candidate and BLM Type 1 species).

Under the no action alternative, the WRLT would continue to manage the parcels under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses. Current management practices include annual monitoring for general vegetation and wildlife habitat health, therefore implementation of the no action would have negligible impact on these habitat resources.

There are no proposed improvements or plans by the WRLT that would modify, alter, or otherwise likely contribute to a degradation of water quality or fish habitat within the Big Wood River or fish habitat on the parcel. Therefore the no action alternative would not change the existing condition of fish habitat in the Big Wood River and have no impact to the resource.

3.12.2.2 Proposed Action

The proposed action would result in the BLM's acquisition of 547 acres of sagebrush, shrub steppe, and riparian habitats on the Square Lake and Sheep Bridge parcels in exchange for the disposal of 20 acres of similar habitat, but that with less documented resource diversity.

3.12.2.2.1 Blue Canyon Parcel

The proposed action would remove the 20 acres of sagebrush and modified, landscaped habitat of the Blue Canyon parcel from Federal ownership and wildlife management to non-Federal ownership. Although limited avian habitat is found on the Blue Canyon parcel, the proposed action would result in a net increase of avian habitat under Federal ownership and management.

There are no threatened, endangered or candidate species or critical habitat identified on the parcel, therefore the proposed action would have no impact on threatened, endangered or candidate species on the Blue Canyon parcel. There is no fish habitat on the parcel; therefore the proposed action would have no impact on fisheries resources.

3.12.2.2.2 Square Lake Parcel

The proposed action would result in the BLM's acquisition of 240 acres of high value shrub-steppe, open water and riparian habitat. The Square Lake parcel has the greatest documented avian diversity of the three parcels within the proposed action. The acquisition parcel would include areas identified as PPH for greater sage-grouse as well as documented locations of a greater sage-grouse lek. The proposed action would increase Federal ownership of known habitat for Type 1-4 BLM special status species including lands with documented occurrences of pygmy rabbit, Brewer's sparrow, sage sparrow, and sage thrasher.

There are no Federally-listed threatened or endangered species or critical habitat identified on the parcel, therefore the proposed action would have no impact on Federally-listed threatened or endangered species or critical habitat. There is no BLM special status species fish habitat on the parcel; therefore the proposed action would have no impact on fisheries resources.

Management of the parcel would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP and recent greater sage-grouse habitat conservation memoranda. The proposed action would result in a long term beneficial impacts by acquiring lands of high wildlife resource value in exchange for lands of documented lower wildlife resource value.

3.12.2.2.3 Sheep Bridge Parcel

The proposed action would result in the BLM's acquisition of 307 acres of high value shrub-steppe, riverine and riparian habitat. There are no Federally-listed threatened or endangered species or critical habitat identified on the parcel, therefore the proposed action would have no impact on Federally-listed threatened or endangered or critical habitat. The action would increase Federal ownership of greater sage-grouse habitat near documented leks and habitat identified as PPH. The proposed action would increase Federal ownership of known habitat for Type 1-4 BLM special status species including lands with documented occurrences of loggerhead shrike, willow flycatcher, and Brewer's sparrow. In addition, the BLM would acquire unaltered riverine habitat suitable for and contiguous with known Wood River sculpin and Redband trout habitat in the Big Wood River.

Management of the parcel would be subject to applicable statutes, regulations, and the management policies and guidelines of the Magic MFP and greater sage-grouse recovery strategies. Short term impacts of the shift in management would result in the reintroduction of OHV use on the parcel. Although historically used on the parcel, OHV reintroduction could adversely impact sagebrush obligate species on the upland portions of the parcel from vehicle noise, vegetation trampling or destruction from vehicles, and increased human presence. Impacts would likely be isolated to the existing, historical vehicle trails because the size of the shrub-steppe vegetation would likely discourage new trails from being formed. Areas along the canyon rim could experience an increased level of disturbance from increased accessibility via OHV. Potential impacts would be mitigated by retaining the existing fencing around the parcel and the three-wire gates across the two parcel access points for vehicles at Highway 20 and the IDFG fishing access. Although the gates would not prohibit OHV access, their presence would likely lessen the magnitude of OHV use on the parcel.

Although short term adverse impacts may occur from the lifting of OHV restrictions on the parcel, the proposed action would result in a long term benefit by the acquiring lands of high wildlife resource value in exchange for lands of documented lower wildlife resource value. Overall, the acquisition of the parcel and associated riverine, riparian and sagebrush habitat would provide a long term benefit by increasing the amount of habitat on BLM-administered Federal lands within the SFO management area.

3.12.2.3 Alternative A

The proposed alternative action would result in the acquisition of the full 320 acres of the Square Lake parcels, compared to the 240 acres under the proposed action. This would be combined with the acquisition acreage of the Sheep Bridge parcel (307) in exchange for the 20 acre Blue Canyon parcel, as described under the proposed action.

3.12.2.3.1 Blue Canyon Parcel

Impacts under Alternative A would be the same as those described under the proposed action because the full parcel would be disposed under both alternatives.

3.12.2.3.2 Square Lake Parcels (both the land exchange and 80-acre retained)

Alternative A would result in the acquisition of the full 320 acres of high value shrub-steppe and riparian habitat with high documented bio-diversity. This would provide an incremental benefit to wildlife habitat management from the net increase in lands acquired by the BLM over the proposed action as well as eliminate the resultant non-Federal inholding under the proposed

action. The alternative would result in a benefit to the public by the net increase in special status species habitat acres under Federal ownership, management, and protection. Habitat species recovery actions would realize negligibly greater beneficial impacts from added regional approaches and consistency across contiguous habitat areas under Alternative A.

3.12.2.3.3 Sheep Bridge Parcel

Impacts under the alternative to the proposed action would be the same as those described under the proposed action because the full parcel would be acquired under both alternatives.

3.12.3 Cumulative Impacts

The area of cumulative effects analysis is the BLM SFO management area because of the areal extent of existing land use and management plans that have the potential to impact special status species wildlife resources.

Many of the past and present uses on and near the Blue Canyon parcel described in the Vegetation and Grazing Sections (Sections 3.9 and 3.11, respectively) have also contributed to the current status of special status species wildlife habitat within the developed areas of Blaine County and the SFO. Past actions – including livestock trailing, grazing, solid waste disposal, recreational use, residential and commercial development, and conversion of lands from riparian or shrub-steppe habitat to landscaped ornamental or agricultural lands – have all impacted the native habitat for the BLM special status species. Ongoing development of non-Federal lands within the Wood River Valley increases the fragmentation of natural habitat and migration or foraging corridors, increasing public-wildlife conflicts or driving animals to increasingly remote habitats. The Big Wood River riparian corridor west of the parcel is currently, and plans to continue to be used for recreational use. The proposed City of Ketchum North R&PPA recreational development use is a reasonably foreseeable future action within Blaine County that would be located within riparian and wildlife corridors adjacent to the Blue Canyon parcel, increasing the human presence in a riparian area near the Blue Canyon parcel. Potential habitat changes associated with the North R&PPA project may include stream channel modifications (channel relocation, diking, channel clearance, and riprapping), upland, riparian and wetland construction, flood control development and road construction. Past studies conducted in 1967 and 1968 indicated more than 13.5 miles of stream (22% of the area surveyed) has been altered on the main stem Big Wood River (Thurow 1988).

Past and present uses near the non-Federal parcels have included historical grazing activities, primarily on the Square Lake parcels, and recreational use of the parcels. These have resulted in historical trails and OHV roads that cross the parcels and adjacent BLM-administered Federal lands, increasing human presence and often trampling localized areas of understory or sagebrush habitats. As discussed previously, the SFO is conducting a travel management plan for all BLM-administered Federal lands north of Highway 20. The plan would address OHV designations such as open, limited to designated roads and trails, or closed for those roads and trails north of Highway 20; those south of Highway 20 would remain managed under the existing land use plans. Habitat improvement and restorations projects, such as the Heart Rock Ranch project adjacent to the Sheep Bridge parcel, have resulted in more than one mile of stream channel improvements, construction of at least ten oxbows and thirteen wetland cells within and adjacent to the Big Wood River.

3.12.3.1 *No Action*

Under the no action alternative, the conversion of up to 2.6 acres of non-native to native habitat would have a negligible impact on special status species wildlife resources because of the habitat's proximity to existing and permitted disturbances. The cumulative impact of the continued management of the Square Lake, Sheep Bridge, and 80-acre retained parcels by the WRLT is anticipated to be negligible.

3.12.3.2 *Proposed Action*

The proposed land exchange would have a beneficial cumulative impact on land management strategies and conservation plans by increasing the Federal ownership of lands with documented special status species wildlife diversity and be contiguous with adjacent BLM-administered Federal lands with valuable wildlife habitat. Wildlife resources would realize a cumulative long-term benefit from increases in efficiencies and regional habitat approaches to land use and wildlife habitat management. Overall the public would receive a cumulative benefit from the increase in Federally-owned land and wildlife habitat under the proposed action.

3.12.3.3 *Alternative A*

Alternative A would have a similar cumulative impact on wildlife resources as the proposed action cumulative impacts described above. The cumulative impact of the contiguous land ownership around the Square Lake parcel would have an increase in cumulative benefit in wildlife and habitat management strategies by eliminating a non-Federal inholding parcel.

3.13 WILDLIFE (OTHER THAN THREATENED, ENDANGERED, CANDIDATE AND SENSITIVE)

3.13.1 Affected Environment

Based on the habitat observed on the parcels, six species of large mammals are likely to inhabit the project area: mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), moose (*Alces alces*), pronghorn (*Antilocapra americana*), mountain lion (*Puma concolor*), and black bear (*Ursus americanus*). Most of these species are widespread throughout the Snake River Plain and Pioneer and Smoky mountains.

Most of the best winter habitat within the Wood River Valley exists on non-Federal lands in drainage bottoms near residential areas. Loss of winter range to residential development has occurred in the northern Wood River Valley near the City of Ketchum. The sage-steppe habitat in the southern part of the Wood River Valley winters nearly all of the mule deer from areas to the north. The elk population is relatively small and static, and there is little known overlap in winter use areas between deer and elk. A small population of pronghorn also occurs in the Bennett Hills IDFG management zone (IDFG 1999).

3.13.1.1 *Blue Canyon Parcel*

The Blue Canyon parcel contains shrub-steppe winter habitat as well as forage on west-facing slopes with less seasonal snow cover than east-facing slopes on the opposite side of the valley. The Blue Canyon parcel is adjacent to the west of mapped elk winter range (Blaine County 2011). No big game animals were observed on the Blue Canyon parcel during 2008 or 2011 wildlife inventories, however, approximately ½ mile north of the parcel, an elk cow with a newborn calf and a mule deer doe (likely with fawn) were observed during 2011 field surveys (POWER 2012).

3.13.1.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

The sage-steppe habitat on the parcels provides winter habitat for mule deer and elk from areas to the north. The Square Lake parcels are within identified mule deer winter range (Blaine County 2011). No big game animals were seen on the Square Lake parcel during 2011 (POWER 2012).

3.13.1.3 *Sheep Bridge Parcel*

The sage-steppe habitat on the parcel provides winter habitat for mule deer and elk from areas to the north. The Sheep Bridge parcel also lies in a critical migration corridor for mule deer, pronghorn, and elk (BLM 2010b). No big game animals were seen on the Sheep Bridge parcel during 2011 surveys (POWER 2012).

3.13.2 Environmental Impacts

3.13.2.1 *No Action Alternative*

3.13.2.1.1 *Blue Canyon Parcel*

Implementation of the no action alternative would include the removal of unauthorized landscaping on the parcel. The short term impact would be the temporary removal of winter forage from wintering elk and deer habitat. Over several growing seasons, native vegetation would be re-established in the disturbed areas, increasing available wildlife forage: however, the

proximity of human disturbance associated with SH 75, the private residence, and existing access driveway is likely to provide enough disturbance as to offset the negligible increase in wildlife forage availability. Overall, implementation of the no action alternative is likely to provide a negligible long-term benefit to game species forage on the Blue Canyon parcel.

3.13.2.1.2 Square Lake Parcels (both the land exchange and 80-acre retained parcel)

Under the no action alternative, the WRLT would continue to manage the parcels under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses and permitted grazing based on the vegetative health. Current management practices include annual monitoring for general vegetation and wildlife habitat health. Therefore, implementation of the no action would have negligible impact on wildlife habitat.

3.13.2.1.3 Sheep Bridge Parcel

Under the no action alternative, the WRLT would continue to manage the parcel under their land use and management plans for wildlife habitat and migration corridor protection, including recreational uses. Current management practices include annual monitoring for general vegetation and wildlife habitat health. Therefore, implementation of the no action would have negligible impact on wildlife resources.

3.13.2.2 Proposed Action

3.13.2.2.1 Blue Canyon Parcel

No known changes to the Blue Canyon parcel are proposed under the proposed action. The parcel would be removed from Federal ownership and management, increasing the potential for habitat modification and creating barriers to wildlife movements. However, existing easements along the SH 75 right-of-way and northwest corner for livestock trailing (discussed in Section 3.11.2.2) would have the indirect benefit of limiting future changes to existing habitat. No impacts from the proposed action on big game wildlife and habitat on the Blue Canyon parcel are anticipated under the proposed action.

3.13.2.2.2 Square Lake Parcel

The proposed action would have a negligible long term benefit to big game resources by facilitating wildlife and habitat management efficiencies under contiguous Federal ownership with adjacent lands. The acquisition would result in a net gain of Federal lands within mule deer and elk migration corridors or wintering habitat. Big game corridor connectivity with existing BLM-administered Federal lands exists under current management of the parcel. Therefore, the action would result in no adverse impacts to big game habitat.

3.13.2.2.3 Sheep Bridge Parcel

The proposed action would have a negligible long-term benefit to big game resources by facilitating wildlife and habitat management efficiencies under contiguous public ownership with adjacent parcels. The acquisition would result in a net gain in Federal lands within mule deer, pronghorn, and elk migration corridors and/or wintering habitat.

Potential adverse impacts to wildlife habitat from OHV use on the parcel would be negligible because of the proximity to Highway 20 and associated vehicle disturbance. Adverse impacts are not expected to be greater than those on adjacent BLM-administered Federal lands with similar OHV recreational use. Overall, the proposed action would provide a public benefit by

the increase in Federal ownership of big game habitat with negligible adverse impacts to big game habitat.

3.13.2.3 *Alternative A*

Implementation of Alternative A would result in a negligible benefit to big game resources from facilitating wildlife and habitat management efficiencies under contiguous public ownership with adjacent parcels.

3.13.2.3.1 *Blue Canyon Parcel*

Impacts under Alternative A would be the same as those described under the proposed action because the full parcel would be disposed in each case.

3.13.2.3.2 *Square Lake Parcels (both the land exchange and 80-acre retained)*

Alternative A would result in the acquisition of the full 320 acres of high value big game wintering areas of the Square Lake parcels. The alternative would result in an additional, likely negligible, benefit to the public over the proposed action by increasing administration and management efficiencies of contiguous habitat ownership in the area.

3.13.2.3.3 *Sheep Bridge Parcel*

Impacts under the alternative to the proposed action would be the same as those described under the proposed action because the full parcel would be acquired in each case.

3.13.3 Cumulative Impacts

The area of cumulative effects analysis is the BLM SFO management area because of the similar land use and management plans and strategies that have the potential to impact wildlife resources within the collective management area.

Many of the past and present uses on and near the Blue Canyon parcel described in the Vegetation (Section 3.9) and Grazing (Section 3.11) have also contributed to the current status of big game habitat within the analysis area. Past actions have included livestock trailing, grazing, solid waste disposal, recreational use, residential and commercial development, and conversion of lands from riparian or shrub-steppe habitat to landscaped ornamental or agricultural land. These past actions have all altered big game migration corridors, fragmented wintering grounds and impacted the native habitat for big game species. Ongoing development of non-Federal lands within the Wood River Valley and Blaine County increases these impacts by increasing the reach of human disturbance into big game habitat. The City of Ketchum's proposed development of the North R&PPA parcel is likely to result in the increased use of the Big Wood River riparian corridor west of the parcel for recreational use, increasing human presence in a riparian area near the Blue Canyon parcel, with potential habitat changes including stream channel modifications, upland and wetland construction and construction within the riparian areas.

Past and present uses near the parcels have included historical grazing activities, primarily on the Square Lake parcels, and recreational use of the parcels for multiple land uses. These have resulted in historical trails and OHV roads that cross the parcels and adjacent BLM-administered Federal lands, fencing of parcels, increasing human presence, and decreasing forage opportunities.

3.13.3.1 *No Action*

Under the no action alternative, the reintroduction of up to 2.6 acres of native habitat on the Blue Canyon parcel would have negligible cumulative impact on big game habitat and resources because of the parcel's proximity to existing and permitted disturbances and development within winter foraging areas. The cumulative impact of the continued management of the non-Federal parcels (Square Lake, Sheep Bridge, and 80-acre retained) is anticipated to be negligible within the overall context of resources within the BLM SFO.

3.13.3.2 *Proposed Action*

The proposed land exchange would have a beneficial cumulative impact on land management strategies and conservation plans by increasing management efficiencies and continuity of regional habitat approaches to wildlife management. The action would provide a cumulative benefit by offsetting past and expected future human encroachment into habitat in the analysis area. Cumulative adverse impacts associated with potential development of the North R&PPA parcel near the Blue Canyon parcel are likely to be negligible because proposed development areas would be within riparian and upland areas, across SH 75 and different in character than that found on the Blue Canyon parcel. Overall the public would receive a cumulative benefit from the increase in Federally-owned wildlife habitat and increased management efficiencies under the proposed action.

3.13.3.3 *Alternative A*

Implementation of Alternative A would have a similar cumulative impact on big game resources as the proposed action cumulative impacts described above. The cumulative impact of the contiguous land ownership around the Square Lake parcels would result in an increase, albeit negligible, cumulative benefit in big game habitat and management strategies by eliminating a non-Federal inholding.

4 CONSULTATION AND COORDINATION

In addition to the information contained in the Scoping, Public Involvement, and Issues section of Chapter 1, the Shoshone-Bannock and Shoshone-Paiute Tribes were presented with information regarding the land exchange proposal to solicit comments. The Shoshone-Bannock Tribes were sent a scoping notification letter on December 28, 2010, and information was presented at a meeting on January 20, 2011 and November 8, 2011. The project was also presented to the Tribal Business Council on April 30, 2012. The BLM SFO regularly meets with the Shoshone-Paiute Tribes on projects throughout the field office. Information on the land exchange proposal was initially presented to the Tribes on December 2, 2010, with periodic updates that will continue throughout the processing of the proposal.

The following entities were directly notified and received scoping letters soliciting direct input regarding the project. Public comments were received from 11 individuals, 1 utility, 2 state agencies (IDFG and IDWR), and the BLM Resource Advisory Council.

Shoshone-Bannock Tribes	Magic Reservoir Hydroelectric Inc.
The Honorable Mike Simpson	Flat Top Grazing Association
The Honorable Mike Crapo	Goodtime Association Plateau Farms, LLC
The Honorable James Risch	Spring Creek Idaho Ranch LLC
The Honorable Butch Otter	Denis Kowitz
The Honorable Michelle Stennett	Lava Lake Land & Livestock LLC
The Honorable Wendy Jaquet	Picabo Livestock Co
The Honorable Donna Pence	Timmerman Grazing Association
Idaho Department of Fish & Game	Harry & Diane Rinker Trust
Idaho Department of Lands	Helios Development LLC
Idaho Department of Water Resources	Honest Ed Properties LLC
Blaine County Commissioners	Steve & Diane Wingard
City of Ketchum	Peggy Hollitz
City of Bellevue	Linda Woodcock
City of Hailey	Adam Koffler
City of Sun Valley	Legacy Residential
Idaho Department of Transportation	Rusty Turner
Union Pacific Railroad Company	Michael & Kristin Owens
Idaho Power Company	Willard Shillington & Karin Davies
Intermountain Gas Company	Nikka LLC
Blaine County Recreation District	DuBois Revocable 1988 Trust
Sun Valley Ski Education Foundation	Craig Johnson & Shawn Underwood
Qwest	Brian Barsotti
Ali Fayed	Cameron & Margie Cooper
David Goodman	Charles Meyer
Blaine County Planning & Zoning	James Glenn Living Trust
Hulen Meadows Water	Weidner Properties LLC
Huf-n-Put Trust	Sun Valley Resorts
Dan Gorham	Big Wood Golf Course LLC
Syringa Networks LLC	Michael & Sandra Revocable Trust
Big Wood Canal Company	Teresa Heinz
Federal Energy Regulatory Commission	Stanley & Alta Barber Trustees

USDI BLM

Ketchum Land Exchange

Alan & Melinda Blinken
James Johnson & Maxine Isaacs
John & Rita Simpson Trustees
Elaine Wynn
Robert Beyer
Flowers Bench LLC
Manookian Family Trust
Morgan Brown & Rebecca Bundy
James Geir Trustee
Gregg & Janet Falcone
Richard St. Claire Trust
Betty Swanson
Ketchum Fire Protection District
Ronold Von Hagen 2007 Rev. Trust
Fred & Renata Beguin
Sheridan Propst
Robert & Linda Kahn
Thomas & Patrine Shadick Trustees
Jane Pinsky
John Mickelson
Terry Friedlander & Robin Leavitt
Larry Parker
Hulen Way LLC
BNY Mellon Trust
Douglas & Ann Taylor Trustees
Lee Trust #567
Carsten Harvey Living Trust
Geraldine Herbert Co. Trust
Christopher Palmer
Jane Ross
Lyman Drake III Trust
Robert Smania
Philip & Joann Gerhart
Michael & Nancy Penrose
Wood River Land Trust
Steve Berry Revocable Trust
Leon & Patsy Harris
Jefrie Brown
Hogue & Dunlap LLP
Marc Reinemann

David Anderson Deer Creek Fund
Croul Family Foundation
Bonnie & Peter Curran
Farese Family Foundation
Sue & Daniel Guggenheim
Heart of Gold Fund in the Idaho Community
Foundation
Willard Shillington Estate
Richard K. & Shirley S. Hemingway
Foundation
Ron Lane
Jananne Lassetter & Mike Mead
The Lennox Foundation
Mark A. Levin
The Lightfoot Foundation
Silver Creek Outfitters
Sturtevants Mountain Outfitters
Macauley Whiting Jr.
Lynn Whittelsey
Wildflower Fund
John Seiller
Jack Kueneman
TU Hemingway Chapter
Ketchum on the Fly
Ed Cutter
Andy Munter
Bruce Tidwell
James Bourret
Jeff Smull
Jima Rice
Kathy Noble
Mike Homza
Muffy Ritz
Peter Pressley
Steve Fisher
Terry Palmer
That Farnum
Western Land Group
Western Lands Project

5 LIST OF PREPARERS

The following are persons who prepared or supported the preparation of the EA.

Table 13. BLM Reviewers.

Name	Title	Initials	Date
Tara Hagen	Realty Specialist/Project Lead	TH	3/27/12
Tom Askew	Physical Scientist	TEA	3/24/12
Tara Barrier	Wildlife Biologist	TAB	4/9/2012
Lisa Cresswell	Archeologist/NEPA Coordinator	LC	3/20/12
Bonnie Claridge	Wildlife Biologist	BC	9/19/11
Darek Elverud	Fisheries Biologist	DSE	3/26/12
Katherine Farrell	Planning & Environmental Coordinator		
Katharine Forster	Fisheries Biologist	KAF	3/26/12
David Freiberg	Outdoor Recreation Planner	DF	3/21/12
John Garth	Geologist	JSG	2/22/12
Holly Hampton	Monument Manager	HH	3/23/12
John Kurtz	Outdoor Recreation Planner	JK	3/20/12
Ruth Miller	Field Manager	RAM	3/30/12
Danelle Nance	Natural Resource Specialist	DN	3/23/12
Ray Pease	Rangeland Management Specialist	RP	3/16/12
Joanna Tjaden	Rangeland Management Specialist	JPT	4/12/12

Table 14. Non-BLM Preparers.

Name	Title	Resources Represented
Jack Denman	Environmental Scientist/Project Manager	Geologic Resource, Solid/Hazardous Wastes, Recreation, Grazing, Land Use
Aleta Powers	Senior NEPA Specialist	NEPA Compliance, Biological Resources
Sylvia Copeland (POWER)	Wildlife Biologist	Wildlife, Wetlands, Floodplains, T&E
Michael Mancuso	Botanist	Vegetation
Mark Holdeman	Landscape Architect	Visual Resources
Andrew Cole	Natural Resource Planner	Recreation, Land Use
William Mangle	Environmental Planner	Socioeconomics
Steven Hannula	Water Resource Engineer	Water Rights, Quality and Quantity
Ronald Beane	Senior Wildlife Biologist	Wildlife, T&E
Wendy Hodges	GIS/Mapping Specialist	Resource Mapping

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Figure 1. Property Locations.

Figure 2. Federal Parcel Property Location and Ownership.

Figure 3. Non-Federal Parcels Property Locations and Ownership.

Figure 4. Federal Blue Canyon Parcel Details.

Figure 5. Non-Federal Square Lake Parcel Details.

Figure 6. Non-Federal Sheep Bridge Parcel Details.

Figure 7. BLM Land Tenure Management Zones Project Parcels.