

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment ID-230-2008-EA-389
January 2009**

PRE-DECISIONAL

Sun Valley Water & Sewer Right-of-Way

Location: City of Sun Valley, Blaine County, Idaho

*Applicant/Address: Sun Valley Water & Sewer District
PO Box 2410
Sun Valley, ID 83353*

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CHAPTER 1

PURPOSE AND NEED FOR THE PROPOSED ACTION

INTRODUCTION

The Sun Valley Water and Sewer District (SVWSD) has applied to the Bureau of Land Management (BLM) for a right-of-way (ROW) grant to access and locate a water storage facility of not more than 500,000 gallons and associated water pipeline on public land located near Sun Valley in Blaine County, Idaho. This application is in response to SVWSD's master planning process; which revealed the need for a large water storage reservoir in the Trail Creek drainage. The SVWSD is a special use district with a Public Water System that provides water for fire flow, sanitary, culinary, and metered landscape irrigation primarily to the City of Sun Valley (Sun Valley). Design and research of the proposed project indicate that an elevation of at least 6,300 feet above sea level is needed; which, would allow for service to be provided to the future development in the area, as well as, increasing fire flows by circulating the Fairway road and Trail Creek Cabin water lines. The SVWSD has identified this water storage facility as a critical addition to the infrastructure necessary to support current and future development within its service area. Three potential locations on public land have been identified. Site 1 is located partially on public land and partially on adjacent private property owned by Sun Valley Company; Sites 2 and 3 are located wholly on public land. Site 2 has been identified as SVWSD's preferred location. Site 3 will not be included within the analysis as it's partially located within the Sun Peak Area of Critical Environmental Concern (ACEC). See attached project location map (Figure 1)

PURPOSE AND NEED FOR THE PROPOSED ACTION

SVWSD has filed an application for a ROW grant to construct, operate, and maintain an access road, water storage facility of not more than 500,000 gallons, and associated water pipeline on public land described as follows:

T. 4N, R. 18E, B.M. (portions of)
Sec. 6: S2NE

The underlying need for the proposed action is for BLM to work with the local government to aid in the management of community expansion and to help SVWSD to continue to provide necessary water services to the expanding densities and improvements in the northeast portion of its service area (Trail Creek drainage). Sun Valley has received a proposed development plan from the Sun Valley Company for the adjacent private property known as the White Clouds Development within the Gun Club Land Use Planning Area (LUPA) that would include a mix of uses including golf, skiing, hiking, and residential housing. See attached Sun Valley Zoning and Parcel Map (2004, Figure 2). The preliminary plat application includes a new neighborhood of 30 single-family residential lots (1-2 acres each), 24.34 acres for multi-family housing, and 40 acres of recreation open space on the west side of Trail Creek Road. The preliminary plat application also includes a Nordic ski trail, bike and hiking trail, golf clubhouse/Nordic center and the addition of a new 9-hole golf course, practice range, and golf maintenance and storage facilities. It's also noted Sun Valley Company has also requested the rezoning of an area on the east side of Trail Creek Road to allow for the future subdivision request of about 27.8 acres for multi-family housing. Per the 2005 Sun Valley Comprehensive Plan Update, 210 units of multi-family housing are planned for the west side of Trail Creek Road and 155 units for the east side. These development plans incorporate the last private land in the project area; thus SVWSD does not currently anticipate future plans for expansion of the proposed water storage facility. The

most suitable location for the reservoir was determined by the SVWSD, Sun Valley, and Sun Valley Company (adjacent landowner) to be on BLM administered public land.

BLM is considering approval of a ROW for a water storage facility with associated access road and water pipeline across public land because the activity is an allowable use of public land within BLM's ROW program under authority of Title V of the Federal Land Policy and Management Act of 1976 (FLPMA) and the regulations at 43 CFR 2800. Additionally, granting ROW's to support local government needs is recognized as an appropriate use of public lands in the Sun Valley MFP that provides management direction for the project area. BLM will consider approval of the ROW application in a manner that avoids or reduces impacts on resources and activities as identified in the Sun Valley MFP, Sun Valley Analysis Unit, and prevents unnecessary or undue degradation of the public lands.

CONFORMANCE WITH BLM LAND USE PLAN(S)

The Alternatives described in Chapter 2 are in conformance with the Sun Valley MFP approved in December 1981. They conform to Sun Valley Analysis Unit Lands Decisions #2 and #3 (p. SV-2), which states:

Decision #2: Utility rights-of-way will be allowed if consistent with county planning and zoning ordinances. All construction will be designed to be as unobtrusive as practical (i.e. buried utility lines, placement of structures, color, design, etc.).

Decision #3: Road and trail rights-of-way, both private and public may be allowed when consistent with local planning and zoning ordinances and consistent with the general management criteria within this area and environmental impacts are minimal.

Rationale for the aforementioned decisions states that the Sun Valley area has a rapidly growing population, which brings the requirement for additional utilities, roads and trails. The general management philosophy for this area, as stated in the Sun Valley MFP (p. SV-1), is that the area will be managed for recreation, local government needs, and open space. Other uses include intensive recreation development, watershed protection, and livestock grazing.

RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

ROW's are allowable on BLM managed lands per Title V of FLPMA and the BLM regulations at 43 CFR 2800, at the discretion of the Secretary of the Interior or their delegated officer.

The Blaine County Comprehensive Plan identifies the following as part of their goals: protect the health and lifestyles of Blaine County's residents and visitors; protect the natural, environmental and scenic qualities in Blaine County; preserve and enhance the recreational opportunities available for residents and visitors of Blaine County; cooperate with the Blaine County Recreation District and other local, state and federal agencies to ensure recreation, parks and open space needs of residents are met. Blaine County uses the word "aesthetic" within the Blaine County Code to define the perception or awareness of one's environment. It pertains to the sensations of sight, sound, taste, smell, and touch. The importance placed on aesthetics varies according to individual attitude and sensitivity. There is, however, a longstanding consensus, among experts as well as laymen, that visual scenic quality, clean air, high water quality, absence of noise pollution, and other aspects of the natural environment represent invaluable County resources.

Included as one of Blaine County's primary areas of consideration in regards to visual quality is the following:

- Hillside areas provide the back drop for most of the scenic vistas and have a high degree of visibility. The scars created by roads, vegetation clearing, and building construction can have a major impact on scenic quality.

It has been county policy to prohibit any structures above the twenty-five percent (25%) slope line or any structures or roads that would impair the natural line of sight of hillside areas. In some cases structures and roads could meet the twenty-five percent (25%) slope requirement but still have a visual impact. There are designated scenic or view corridors and sensitive areas, i.e., floodplains, hillsides, and non-conforming lots, where inappropriate structures and improvements would reduce the visual quality of the corridor. The location and alignment of roadways can preserve or enhance specific scenic qualities, which should be considered in future alignment planning. Location of necessary, but often unsightly, public utilities should be placed out of the view corridors whenever possible.

It is the intent of Sun Valley to protect and promote the health, safety and general welfare of the community by implementing the goals and objectives of the comprehensive plan for Sun Valley. Included among these objectives are preservation of the unique character of the Sun Valley area, and managing growth and development. Identified within the Sun Valley Comprehensive Plan are action items associated with the aforementioned objectives. These action items include:

- Preserve and protect natural and scenic resources, the environment, and open spaces;
- Promote sustainability of the resort economy;
- Maintain social and economic diversity and protect the vitality and cultural heritage of the city;
- Promote development that is context sensitive and complementary to adjacent property;
- Provide for necessary and appropriate public facilities and services to serve existing population and new growth; and

The SVWSD was created in 1966 as a special use district that provides water for fire flow, sanitary, culinary, and metered landscape irrigation to Sun Valley. The SVWSD is a Public Drinking Water System that is governed by the State of Idaho, Department of Environmental Quality (DEQ). The DEQ issued an administrative directive in April 2007, requiring water systems to submit a master plan prior to significant modifications. SVWSD is in the final stages of the master planning process; which has revealed the need for a large storage reservoir in the Trail Creek drainage. In May 2007, the SVWSD's electorate passed a General Obligation Bond for the purpose of providing for the acquisition, construction, installation, and financing of their costs of improved water and sewer facilities, generally consisting of additional wells, reservoirs, and ponds. The SVWSD currently operates a complex system of nine reservoirs at seven locations throughout Sun Valley; these reservoirs are equipped for monitoring through the central control system with solar powered radios. The alternatives described in Chapter 2 are in conformance with BLM's regulations; however, only alternative 1, the Proposed Action, is in conformance with the Blaine County Comprehensive Plan, and the Sun Valley Comprehensive Plan, by proposing a water storage facility and associated access road and pipeline right-of-way that is allowable by regulation and aids in meeting the public service requirements of the SVWSD and falls within their goals and objectives for visual quality.

CHAPTER 2

DESCRIPTION OF ALTERNATIVES

ALTERNATIVE 1: PROPOSED ACTION, SITE 2

The BLM would issue a ROW grant authorizing SVWSD to construct, operate, and maintain, a water storage facility of not more than 500,000 gallons with associated access road and water pipeline on public lands. The project would include a 200 foot by 200 foot right-of-way site area that would include a reservoir pad, a storage facility of a maximum of 500,000 gallons, an equipment cabinet, a 3 foot by 3 foot solar panel, and an antenna with line of sight to Dollar Mountain; additional components to the right-of-way would include an access road, and a buried water pipeline. Design and research of the proposed project indicate that an elevation of at least 6,300 feet above sea level is needed; which, would allow for service to be provided to the future development in the area, as well as, increasing fire flows by circulating the Fairway road and Trail Creek Cabin water lines.

The water storage facility would be a partially buried reinforced concrete structure, with no sky- lining proposed. Actual dimensions of the storage facility would be subject to future geotechnical testing and design; however, a height of 20 feet is anticipated. All system improvements would be constructed to Idaho State Drinking Water regulations, with oversight by DEQ.

The access road would be about 2030 feet in length and have a surface width of 15 feet. There would need to be additional width on both sides of the road to allow for adequate construction and maintenance activities. It's estimated that the total width of the road ROW would need to be about 90 feet to incorporate the needed hillside cuts. The road grades would vary between 7.77% and 15%. About 10 inches of aggregate materials would be brought in for the driving surface of the road.

A 12 inch diameter water pipeline will be buried within the access road at a minimum depth of 6 feet. The total ROW area would be 5.11 acres, more or less with a total disturbance area of about 2.51 acres. It's anticipated that construction would take about 210 days depending on weather and site conditions utilizing heavy equipment. Once construction is complete, the areas that were disturbed and not covered with aggregate would be revegetated with a seed mix appropriate to the area using a broadcast method.

Motorized access to the site would be minimal and would be limited to SVWSD and BLM personnel for routine inspection and maintenance of the system. A locked gate would be installed on the road just north of where the bicycle and pedestrian trail is proposed to parallel the road. No maintenance activities would occur on the road during times when equipment would cause ruts in excess of 4 inches. Access during winter months would be by snow cat, snowmobile, or foot.

ALTERNATIVE 2: SITE 1

BLM would issue a ROW grant authorizing SVWSD to construct, operate, and maintain, a water storage facility of not more than 500,000 gallons with associated access road and water pipeline partially located on public lands and partially located on Sun Valley Company's private property. The project would include the same components as described in Alternative 1; however, the attributes of the access road and pipeline would differ.

The length of the access road and pipeline would be about 2285 feet with a 2:1 cut slope ratio. The surface width of the road would also be 15 feet; however, the additional width to allow for adequate

construction and maintenance of the road would be about 300 feet. The total ROW area would be 16.66 acres, with a total disturbance area of about 6.57 acres.

ALTERNATIVE 3: NO ACTION

Under the No Action alternative the ROW application would be denied and a grant would not be issued to SVWSD. SVWSD would then need to determine an alternate location on private property that would meet the required elevation of at least 6,300 feet above sea level, as well as, comply with the Blaine County and Sun Valley Comprehensive Plans.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

Site 3: In this alternative BLM would issue a ROW grant authorizing SVWSD to construct, operate, and maintain, a water storage facility of not more than 500,000 gallons with associated access road and water pipeline located wholly on public lands and partially located within the Sun Peak ACEC. This alternative was dropped from further analysis due to the fact that it was partially located within the Sun Peak ACEC.

CHAPTER 3 AFFECTED ENVIRONMENT

The affected environment of the project area was described by an interdisciplinary team as documented in the Interdisciplinary Team Analysis Record Checklist (Checklist). A copy of this document is located in the project file. The Checklist indicates which resources are either not present in the project area or would not be impacted to a degree that requires detailed analysis. Supplemental Authorities are those elements that are subject to the requirements specified in statute, regulation, or executive order, and may be considered in EAs (BLM H-1790-1, Appendix 1). Supplemental Authorities are included in the checklist. Resources affected are described in Chapter 3 and impacts on these resources are analyzed in Chapter 4.

GENERAL SETTING

The project area is located north of the Gun Club LUPA and proposed White Clouds Development on the northern edge of Sun Valley approximately ½ - ¾ of a mile northwest of Trail Creek Road. The project location is within two unnamed gulches southwest of Sun Peak. See Figure 1 – Location Map. The project area falls within the area of impact for Sun Valley.

In 1936, Sun Valley was established as the first ski resort in the United States; in 1947, it was incorporated as a city. The Sun Valley Company's limited expansion over the last ten years and the development of high income, second home construction and housing redevelopment on private lands not owned by them has resulted in an economic change in Sun Valley. Once a destination resort community with a diverse resident and moderate income second home population, Sun Valley is now composed of more part-time residents and significantly fewer moderate-income residents with a first class resort in its midst. This transition is occurring in resorts nationwide as the accumulation of wealth accelerates the demand for vacation homes in easily accessible locations. This trend is particularly noticeable in areas such as Sun Valley that offer a respite from omnipresent concerns about personal safety, traffic congestion, and the hurried urban lifestyle.

In recognition of these factors, Sun Valley finds itself at a challenging juncture in its evolution. As an industry leader in an international environment, the Sun Valley Company must continually enhance its tourist offerings and provide additional housing for new guests and seasonal residents. As a successful community, Sun Valley must ensure the continuing vibrancy of the residential community, provide high-quality municipal services that satisfy the discerning needs of its full- and part-time residents, and meet the seasonal needs of Sun Valley Company's guests and visitors.

Large tracts of land are a characterizing feature of the landscape in Blaine County, including both steep slopes and river washed plains; these areas are located on lands both in public and private ownership. The amount of open space in Blaine County is being threatened due to the influx of private development on tracts of privately owned lands. BLM administered public lands in Blaine County make an important contribution to the open country and expansive vistas valued by many residents and visitors. Public lands are available to one form of recreation or another, including but not limited to hiking, hunting, fishing, mountain biking, motorized trail biking, four-wheeling, photography, cross country skiing, snowmobiling, paragliding, hang gliding, spelunking, boating and sightseeing.

Of the 2,655 square miles, or 1,192,736 acres, comprising Blaine County's land area, 82% of the total is federal or state public lands. Millions of visitors travel to Idaho because of scenic and recreational opportunities in the mountains within Blaine County and Blaine County's recreation-based economy generates over \$35 million in sales tax revenue for the State of Idaho.

RESOURCES/ISSUES BROUGHT FORWARD FOR ANALYSIS

During the analysis process, the interdisciplinary team considered several resources and supplemental authorities. The interdisciplinary team has determined that the following resources are not present in the project area and would not be affected: Cultural Resources; Environmental Justice; Farmlands (prime or unique); Floodplains; Native American Religious Concerns; Threatened, Endangered or Candidate Plant Species; Hazardous or Solid Wastes; Wild and Scenic Rivers; Wilderness; Woodland/Forestry; Geology/Mineral Resources/Energy Production; Paleontology; Water Rights; and Wilderness Characteristics.

Several resources were determined to be present in or near the project area but identified as not being affected to a degree that requires detailed analysis. Air Quality - The air quality in the project area would only be impacted temporarily during construction and is not anticipated to reach a level that would require further analysis. ACEC - The Sun Peak ACEC is adjacent to the project area, however, with the rejection of site 3 and the locations of sites 1 and 2 it's not anticipated that the ACEC would be impacted. Water Quality - The intermittent stream in the area does not run into a water body, but rather seeps into the ground. Wetland/Riparian Zones - There are no wetland/riparian areas located within the project area. Rangeland Health Standards and Guidelines - Currently, the Lake Creek Allotment is meeting all Standards for Rangeland Health. The proposed water storage facility should not affect the ability for the Lake Creek Allotment to meet Rangeland Health Standards in the future. Fuels/Fire Management - The proposed action would have no affect on the fire/fuels management of the area. Therefore, these resources are not discussed further in the following analysis.

The following resources have been brought forward for detailed analysis: Invasive, Non-Native Species and Vegetation including Special Status Plant Species other than Fish and Wildlife Service (FWS) Candidate or Listed Species; Threatened, Endangered or Candidate Animal Species and Fish and Wildlife including Special Status Species other than FWS Candidate or Listed Species; Livestock Grazing; Soils; Recreation; Visual Resources; Lands and Access; and Socio-Economic. These resource issues are discussed in the following sections.

INVASIVE, NON-NATIVE SPECIES AND VEGETATION INCLUDING SPECIAL STATUS PLANT SPECIES OTHER THAN FISH AND WILDLIFE SERVICE (FWS) CANDIDATE OR LISTED SPECIES:

The project area is located on slopes dominated by mid-elevation sagebrush steppe and mountain shrub communities. Cheatgrass is common on west and south facing slopes within the area. A variety of invasive, non-native species including diffuse knapweed, spotted knapweed, Dalmation toadflax and Canada thistle are common in the general area. Excluding cheatgrass, the other species are noxious weeds that are prevalent in the Wood River Valley. Cheatgrass is widely adaptive and invades heavily grazed rangeland, roadsides, waste places, burned areas, and disturbed areas. Most of the weeds are concentrated in the bottoms of the drainages and gulches and around the boundaries between the adjacent private property and public lands.

The project area is also within known range for the BLM sensitive species bugleg goldenweed (*Haplopappus insecticuriis*). Bugleg goldenweed is a plant that grows in gravelly to heavy clay soil in sagebrush-grass meadows, rolling sagebrush hills, and dry flats. However, the gravelly, granitic substrate and topography of the proposed project does not contain suitable habitat for bugleg goldenweed.

The Shoshone Field Office has an active weed control program that annually updates the locations of noxious weeds and treats known weed infestations utilizing chemical, mechanical, and biological control techniques. Also, the Field Office has developed partnerships with state, county, and private organizations to cooperatively combat noxious weed infestations across ownership boundaries. Blaine County is one of these partners. Infestations of noxious weeds are treated contingent upon the BLM's annual weed budget, employee availability, and noxious weed priority.

Sun Valley is currently working to establish an aggressive city-wide plan in cooperation with the Blaine County Cooperative Weed Management Area (CWMA) to eradicate and control invasive, non-native species. All of Blaine County is included within the CWMA. The Blaine County CWMA was developed to facilitate effective treatment and coordinate control efforts over the long-term. The goals of the Blaine County CWMA are to: prevent the introduction, reproduction and spread of invasive, non-native species; reduce the extent and density of established invasive, non-native species to levels that are acceptable; implement the most economical and effective control methods for target weeds; implement an integrated management system using appropriate methods of treatment and control; educate the public as to the importance of proper weed management and get the needed media coverage to show what is being accomplished.

THREATENED, ENDANGERED OR CANDIDATE ANIMAL SPECIES AND FISH AND WILDLIFE INCLUDING SPECIAL STATUS SPECIES OTHER THAN FWS CANDIDATE OR LISTED SPECIES:

The U.S. Fish and Wildlife Service's Semi-annual Species List Update 1002.0000, 14420-2009-SL 0027 (dated December 1, 2008) identifies federally listed Threatened or Endangered Species known or suspected to occur in the Shoshone Field Office and Appendix A contains the Federally Listed and BLM Sensitive Animal Species. These documents were reviewed to determine which of these species are potentially affected by this proposal. Gray wolves in Idaho south of Interstate 90 (which runs east-west through Coeur d'Alene) will be managed under the Act's 2005 and 2008 experimental nonessential population regulations. The gray wolf has potential to occur in the proposed project area most likely during the winter months.

Greater Sage-grouse, Pygmy Rabbit, Bald Eagle, and Canada Lynx are all BLM Sensitive Species (Type 2) that could potentially utilize the project area. The project area has not been classified as sage-grouse habitat. The majority of the area is too steep for breeding and brood-rearing activities and there are no recorded leks within the project area. A 2003 study (Rachlow and Svancara) prioritized Pygmy Rabbit habitat potential within the project area as being categorized to have a mid-high potential. However, the Conservation Data Center currently does not report any active burrow systems in the project area and it is likely too steep to attract rabbits. Bald Eagles pass over and through the area and are likely to spend time along the major drainages. However, if Bald Eagles were to be found on or around the project area it would be during the winter when they would be foraging on rodents and carrion. There is no nesting habitat on or visible from within the project area. It's unlikely that Canada Lynx will occur in the area due to the proximity of residential and commercial development, and the lack of suitable forested habitat.

Three species of Passerine songbirds (Brewer's sparrow, sage sparrow, and loggerhead shrike) are shrubsteppe obligates species that rely on relatively large and continuous areas of sagebrush with native perennial grass/forb understory for successful breeding. All three of these songbirds' utilize habitat types present in and around the project area.

LIVESTOCK GRAZING:

The project area is within the Lake Creek grazing allotment which allows for sheep use during the period from May 20 through October 31. The Lake Creek Allotment encompasses approximately a total of 1,825 acres of land. The following table summarizes the current grazing use authorizations for this allotment.

Table 3.1 - Current Grazing Authorizations

Current Permittee	Type of Livestock	Active AUMs	Suspended AUMs	Total AUMs
Flat Top Grazing Association	Sheep	174	43	217

AUMs = Animal Unit Months, the equivalent of forage consumed by one cow and one half calf or five sheep for one month.

Flat Top Grazing Association has held the grazing permit for the Lake Creek Allotment since 1975; which allows for 1200 head of sheep to graze. Typically, the permittee uses the Lake Creek Allotment as a trailing route to and from the US Forest Service Lake Creek Allotment located north of the BLM lands.

SOILS:

According to the Soil Survey of Blaine County, the soils in the project area are comprised primarily of a Friedman-Elksel-Winridge complex with 30-60 percent slopes. These soils are formed in colluvium and residuum derived from andesite, latite, welded tuff and basalt. These soils occur on mountainsides at elevations between 5,000 to 7,500 feet. They are generally very cobbled and gravelly, moderately deep to deep loams that are well drained. They have slow to very slow permeability, moderate to low available water capacity and very rapid runoff. These soils tend to have a high erosion hazard when not covered or compacted; however, they also have high infiltration rates and drain well under normal conditions.

RECREATION:

The project area falls within the Monument Extensive Recreation Management Area (ERMA). Within ERMA's BLM recreation management actions are limited to only those of a custodial nature allowing for recreational activities to take place while reacting to visitor health and safety, use, user conflicts and resource protection. Activities that occur or may occur within the area primarily include mountain biking and hiking. With the increased population of the Wood River Valley demand for recreation opportunities has also increased. As a result, the public lands as well as private lands are experiencing user-created trails and unauthorized trail construction. A trail system currently exists that would circumnavigate the proposed White Clouds Development and acts as a connector trail from Sun Valley to the City of Ketchum. The trail system is open to non-motorized use and was designed for beginning level mountain bikers and hikers. The eastern access point to the trail system is located at the base of a prominent ridgeline. Along the spine of this ridge is a user-created fall line trail that accesses Sun Peak; which starts on Sun Valley Company property before crossing onto BLM managed public lands. This user-created trail has received a voluntary closure with the support of Sun Valley Company. The voluntary closure was established to try and protect the management objective of the Sun Peak ACEC by reducing soil and vegetation damage along with the spread of invasive, non-native species.

The Recreation and Travel Plan has identified the area in and around the project area to be within the Undeveloped Hillside zone. The niche of this zone is to provide an unspoiled connection to wide open spaces/landscapes for residents and visitors to the Wood River Valley.

VISUAL RESOURCES:

The visual resource inventory process provides BLM managers with a means for determining visual values. The inventory consists of a scenic quality evaluation, sensitivity level analysis, and a delineation of distance zones. Based on these three factors, public lands are placed into one of four visual resource inventory classes. These inventory classes represent the relative value of the visual resources. Classes I and II being the most valued, Class III representing a moderate value, and Class IV being of least value. The inventory classes provide the basis for considering visual values in the resource management planning (RMP) process. Visual Resource Management (VRM) classes are established through the RMP process for all public lands. During the RMP process, the class boundaries are adjusted as necessary to reflect the resource allocation decisions made in RMP's. Visual management objectives are established for each class. The project area falls within VRM Inventory Class III. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The project area is located on the northern edge of Sun Valley, Idaho directly adjacent to private property that was historically used as a shooting range and has recently been redesigned as a residential and recreational development area (White Clouds Development). The proposed development includes a mix of uses such as golf, Nordic skiing, hiking, and residential housing. Aesthetic standards, and the maintenance of high quality aesthetic values, are important to the recreation industry which is the main support of the economy of Blaine County and Sun Valley.

LANDS/ACCESS:

The area of public land within the project area is contiguous to a larger portion of public land. Use of the public land in the project area is primarily recreational. The public land in the project area has had dispersed access, however, not legal via an existing trail located on the adjacent private property. Prior use of the adjacent private property as a shooting range limited the use of and access to the public land within the project area. However, with the proposed White Clouds Development on the adjacent private property it is anticipated that the recreational use of the area will increase. The White Clouds Development preliminary plat application states that there will be two access points into the proposed residential area off Trail Creek road. The internal roads have been designed as public roads and the improved bicycle and pedestrian trails included within the development would be tied to the bus terminus at the Village Core. Access to and through public lands is critical to the continued recreational opportunities and experiences being demanded by residents and visitors of Sun Valley.

SOCIO-ECONOMIC:

According to the 2000 United States census the population of Sun Valley was 1,427. Population estimates from Idaho Power project the population of Blaine County to increase fewer than 10% between 2005 and 2010 and again between 2010 and 2015. Since the 2000 Census, it is estimated that Blaine County has added about 2,587 persons, 1,270 households and roughly 1,989 housing units.¹

Table 3.2 - Population Estimates for Blaine County: 2000 through 2015

	2000 (Census)	2005	2006	2010	2015
Population	18,991	21,166	21,578	23,226	25,445
Population in households	18,638	20,773	21,177	22,794	24,972
Average household size	2.40	2.34	2.34	2.34	2.34
Households	7,780	8,877	9,050	9,741	10,672
Housing Units	12,186	13,905	14,175	15,258	16,715

Sources: 2000 US Census; US Census population projections for 2005; Idaho Power 2010 and 2015 estimates for Blaine County correlated with US Census 2005 population; 2006 Household Survey (for year 2005 household size estimates). Assumed consistent average household size and percent occupied units through 2015.

From 1990-2000, Sun Valley's resident population grew from 938 to 1,427 persons, a 52 percent increase (Table I, below). That rate of population growth over the same ten-year period was higher than Blaine County's 40 percent gain, Idaho's 30 percent increase, and the national annual increase of about 1 percent.

Table 4.1 - 1990 To 2000 Population Change in Blaine County

Area	1990 Population	2000 Population	Number Change	Percent Change
Sun Valley	938	1,427	489	52%
Bellevue	1,275	1,876	601	47%
Carey	427	513	86	20%
Hailey	3,575	6,200	2,625	73%
Ketchum	2,523	3,003	480	19%
Unincorporated Blaine Co.	4,814	5,972	1,158	24%
Total Blaine Co.	13,552	18,991	5,439	40%

Sources: 2000 US Census

¹ 2006 Blaine County Needs Assessment (Rees Consulting, Inc. / RRC Associates, Inc.)

The construction of new homes directly affects the demand for local infrastructure and service needs. New residential units also impact a variety of economic and livability conditions for the County. Per the 2005 Sun Valley Comprehensive Plan Update, 210 units of multi-family housing are planned for the west side of Trail Creek Road and 155 units for the east side.

The SVWSD's customer base is primarily made up of residential single and multi family customers coupled with the core commercial components of the resort community in Sun Valley. The incorporated area of the City of Sun Valley accounts for 99.9 percent of the SVWSD's water supply for domestic water usage; the remaining fraction of the SVWSD's water supply is used by residential units outside of the City's incorporated area. SVWSD currently utilizes groundwater as its sole source of water; which is supplied by ten wells located throughout their service area. Total pumping capacity of the 10 wells is estimated at 12.53 million gallons per day (gpd). Current customer base is approximately 2500 Equivalent Connections (EC) with 5-year and 20-year projected EC's at 3,318 for the year 2013 and 3,874 for the year 2028. EC's is a unit of measure used to equate non-residential or multi-family residential water usage to a specific number of single family residences.

SVWSD's historical Average Daily Demand (ADD) for the years 2002-2007 averaged 1,250 gpd per EC (gpd/EC). The Maximum Daily Demand (MDD) for the same period averaged 2,931 gpd/EC. SVWSD's ADD water use for 2008 is estimated at 3.69 million gpd, with a MDD of 8.67 million gpd and a Peak Hour Demand (PHD) of 13 million gpd. Water demand projections for the 5-year and 20-year time periods are 4.16 million gpd for ADD, 9.77 million gpd for MDD, and 14.60 million gpd for PHD for 2013; 4.85 million gpd for ADD, 11.4 million gpd for MDD and 17.11 million gpd for PHD for 2028.

SVWSD's water system has storage with a nominal capacity of 2.885 million gallons. SVWSD will need to construct one additional storage reservoir with a minimum of 0.4 million gallon capacity to serve the northeastern area of Sun Valley before 2010 in order to meet storage requirements for peak demand and firefighting. In May 2007, the SVWSD's electorate passed a General Obligation Bond for the purpose of providing for the acquisition, construction, installation, and financing of the SVWSD's costs of improved water and sewer facilities, generally consisting of additional wells, reservoirs, and ponds. This bond was issued in the amount of \$4,350,000.00.

CHAPTER 4

ENVIRONMENTAL IMPACTS

The potential impacts or effects of the alternatives are discussed in this section. The intent is to provide the scientific and analytical basis for comparison of the effects of each alternative. It is assumed that the changes in levels of use on other resources would continue at current rates. This section will mirror the resources presented in Chapter 3.

DIRECT AND INDIRECT IMPACTS

ALTERNATIVE 1 - PROPOSED ACTION, SITE 2

INVASIVE, NON-NATIVE SPECIES AND VEGETATION INCLUDING SPECIAL STATUS PLANT SPECIES OTHER THAN FISH AND WILDLIFE SERVICE (FWS) CANDIDATE OR LISTED SPECIES:

The clearing of a 200 foot by 200 foot site and construction of an access road with a 15 foot wide driving surface, as well as, digging a trench a minimum of 6 feet deep to bury a 12 inch diameter pipeline would result in an anticipated maximum surface disturbance of about 2.51 acres. To construct the access road and prepare the water storage facility site the existing vegetation would be removed through mechanical clearing and excavation. The water pipeline would be buried in a trench approximately 6 feet deep and between 2-3 feet wide within the road driving surface. The water storage facility would be buried within the cleared 200 foot by 200 foot area; however, specific designs for the tank have not been completed it is anticipated to have a height of 20 feet. It would depend on the site-specific design of the water storage facility as to how much of the storage tank would be buried. The disturbed area provides an opportunity for the establishment of invasive, non-native species. A dense population of spotted knapweed was noted in the drainage; diffuse knapweed also occurs sporadically within the area.

Construction and installation activities (creating disturbed areas conducive to the establishment of invasive, non-native species), and use of the road after construction (creating a vector for migration of seeds), has potential to spread these invasive, non-native species to the entire road corridor and adjacent areas, as well as introduce new species. Approximately 10 inches of surface aggregate material would be brought in for the road; which would help protect the road bed from the spread of invasive, non-native species. Rock backfill with positive drainage features will be installed around the water storage facility to buttress the slope above the facility and provide adequate soil stability. The fill material used in these areas would be required to be invasive, non-native species (weed) free. Undercarriages of construction equipment would also be required to be free of all soil and plant material prior to entering and exiting the project area to reduce the establishment of new invasive, non-native species or the spread of existing species to new areas.

Invasive, non-native species would be controlled during construction through manual removal and manual application of an approved herbicide, as needed. Once construction is complete, the areas that were disturbed and are not covered with aggregate would be revegetated with a seed mix appropriate for the area specified by the BLM Shoshone Field Office. Once established, the vegetation would provide long-term erosion and invasive, non-native species control.

Stipulations attached to the ROW, would require SVWSD to monitor the road and water storage facility area and be responsible for the control of invasive, non-native species that result or would result from the authorized improvements, during and after construction activities are complete. This would include the use of approved noxious weed control methods as identified in the *Final Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (BLM, June 2007); which include mechanical, manual, biological, and chemical controls. However, it's recommended that the spot-treatment method be utilized for the invasive, non-native species found within the ROW area following construction and installation activities.

The site of the proposed water storage facility associated with alternative 1 (Proposed Action) has an intact vegetation community along the bottom of the gulch and accessing this site is likely to result in increased soil erosion and degradation of upland plant communities. To reduce impacts to the vegetation it's required that the access road be sited a minimum of 50 feet above the intermittent stream area located in the bottom of the gulch.

THREATENED, ENDANGERED OR CANDIDATE ANIMAL SPECIES AND FISH AND WILDLIFE INCLUDING SPECIAL STATUS SPECIES OTHER THAN FWS CANDIDATE OR LISTED SPECIES:

Implementation of Alternative 1 would result in the removal of existing habitat for the construction of the road and installation of the buried water pipeline and water storage facility. However, once the construction is completed, potential habitat would remain adjacent to the ROW area. Disturbance from activity on the road or at the water storage facility would have an increased effect on wildlife during the construction and maintenance periods over just the physical presence of the improvements. This effect could be heightened during bird nesting seasons for the sagebrush obligate species such as Sage Sparrow, Brewer's Sparrow and Loggerhead Shrike, should they be found in the area. This would include disturbance both during construction activity (from removal of vegetation resulting in habitat loss and potential harm to nests, noise from heavy equipment, and presence of human activity) and use of the road following construction (due to noise from vehicle traffic and presence of human activity).

The antenna associated with the water storage facility would be required to have raptor perch deterrents; however, it would not be of a height that would require lighting. It's suggested that a self-supporting lattice type structure be used rather than one that requires guy wires. As the guy wires may increase the risk of bird collision in the project area. If a structure with guy wires is used then bird diverters for the guy wires would be required.

The federally listed Gray wolf has potential to occur in the proposed project area most likely during the winter months. The successful translocation of wolves in central Idaho coupled with recent sightings of gray wolves in the Wood River Valley area makes it likely that wolves may begin to make incidental use of public lands around the project area. The suspected low, incidental use level of the project area by gray wolf is expected to result in "No Effect" to individuals or populations of the gray wolf.

LIVESTOCK GRAZING

Alternative 1 is not anticipated to have an impact to livestock grazing in the area as a stipulation would be included with the ROW grant that would allow the permittees to retain access to the area. However, the access road would be gated and locked and would not be available for motorized use by the permittees.

SOILS:

The clearing of a 200 foot by 200 foot site and construction of an access road with a 15 foot wide driving surface, as well as, digging a trench a minimum of 6 feet deep to bury a 12 inch diameter pipeline would result in a maximum surface disturbance of about 2.51 acres. To construct the access road and prepare the water storage facility site the existing vegetation would be removed from the soils through mechanical clearing and excavation. The water pipeline would be buried in a trench a minimum of 6 feet deep and between 2-3 feet wide within the road driving surface. The water storage facility would be buried within the cleared 200 foot by 200 foot area; however, specific designs for the facility have not been completed so it is uncertain how deep the facility will be buried at this time.

The types of soils in the project area have a "severe" erosion hazard; indicating that significant erosion is expected, that the roads or trails may require frequent maintenance, or that costly erosion-control measures are needed. However, the road associated with Alternative 1 will have approximately 10 inches of aggregate material brought in for the surface. The bottom 6 inches of the surface material

will be comprised of sub-base coarse aggregate with the top 4 inches being $\frac{3}{4}$ inch base coarse. The road surface would have a 2 percent slope from the inside closest to the hillside to the outer edge; allowing for proper runoff of the road surface. The removal of vegetation from the soils would also increase the chance of soil erosion within the project area. This effect is expected to be reduced or eliminated once the access road is covered with aggregate; within the estimated 210 day construction period. Rock backfill with positive drainage features will be installed around the water storage facility to buttress the slope above the facility and provide adequate soil stability. Once construction is complete, the areas that were disturbed and are not covered with aggregate would be revegetated with a seed mix specified by the BLM Shoshone Field Office. Once established (1-2 years), the vegetation would provide long-term erosion and invasive, non-native species control. Other erosion control methods (i.e. water bars) would be constructed as needed based upon evidence of any problem areas observed during construction and continued monitoring of the ROW area.

An anticipated impact of Alternative 1 is erosion during the construction phase and cut slopes associated with the proposed access road. Old head-cuts associated with side drainages were observed during examination of the area and likely resulted from an old two-track road in the bottom of the gulch. The proposed access road begins at the bottom of the gulch near the intermittent stream drainage and crosses several seep areas during the progression up the gulch; siting the road in this location could result in degradation of the area due to sedimentation, potential destabilization of both the road and seeps, and the spread of invasive, non-native species. To reduce impacts it's required that the access road be sited a minimum of 50 feet above the intermittent stream area located in the bottom of the gulch. Design of the access road would require adequate cuts within the hillside.

RECREATION:

There is no change in access associated with Alternative 1 as it would continue to allow hikers and bikers to use the trail system that is located on the adjacent private property and it would still allow hikers to hike cross country on public land in and around the project area. Recreational use of the access road would be limited to foot traffic as the road would be gated just north of where the existing trail system is proposed to parallel the access road. It can be anticipated that non-motorized users would hike or may even push their bikes around the gate to the access road to the water storage facility. This would be done to increase the length of their hike or ride and to gain elevation for a better view. The access road would come within two-thirds of a mile and approximately 280 vertical feet of the saddle that separates the proposed water storage facility site from the Lake Creek drainage. Therefore increasing the number of cross country hikers that would access the Lake Creek drainage resulting over time in user created and/or constructed routes into Lake Creek. This analysis is based on professional knowledge, expressed demand from individuals that attend Big Wood Backcountry Trail meetings (local trail advocacy group), Blaine County Commissioner hearings and monitoring use patterns surrounding a similar situation approximately 18 miles south where the City of Bellevue's water tank and associated user-created trail system exists.

VISUAL RESOURCES:

The water storage facility would be partially buried with no sky lining proposed and would be primarily hidden from view of Trail Creek road and the adjacent development by being placed somewhat behind a hill with a higher elevation. Actual dimensions of the storage facility are subject to geotechnical testing and site topography considerations; yet, a height of 20 feet is anticipated. The water storage facility, equipment cabinet, solar panel and antenna would need to be a standard environmental color of two shades darker than the surrounding landscape that would allow them to blend with the surrounding environment or powder coated to reduce the potential for glare and

reflection. The road would be constructed following the natural contour of the hillside, which would hide a good portion of the road from view. The main disturbance and disruption will occur during the installation of the water storage facility, buried pipeline and construction of the access road (estimated at 210 days); however, this will only be temporary. Once construction is complete, the areas that were disturbed and are not covered with aggregate would be smoothed to blend with the existing contours and revegetated with a seed mix specified by the BLM Shoshone Field Office. Removed or excess material associated with road and other construction would be removed from the site and not wasted downhill or left onsite. Native vegetation would be planted where possible to disguise this project in order to help maintain the existing character of the landscape.

The antenna would remain visible as it would require a line of sight to Dollar Mountain, in order for the water storage facilities to be incorporated with SVWSD's current radio monitoring system. These improvements may attract attention but once the construction and installation activities are complete they would not dominate the view of the casual observer.

LANDS/ACCESS:

Alternative 1 would create a road and allow motorized travel associated with the construction, installation and maintenance of the proposed water storage facility in an area that has not previously had a high demand for motorized access. There are the remains of an old two-track road located in the bottom of the gulch. However, with the previous use of the adjacent private property being a shooting range access to the public land was limited. The access road would have a locked gate installed on the southern portion of the road where the existing trail system is proposed to parallel with the road. It's anticipated that this locked gate would inhibit the public from using the road for motorized recreational activities; however, the public would still be able to use the road for non-motorized activities such as hiking, snowshoeing, and cross country skiing.

Motorized access to the site would be minimal and would be limited to SVWSD and BLM personnel for routine inspection and maintenance of the system. Access during winter months would be by snow cat, snowmobile, or foot.

SOCIO-ECONOMIC:

Implementation of Alternative 1 would allow the SVWSD, BLM, Sun Valley, and adjacent private property owner, Sun Valley Company, to work together to design a development with adequate public services within the Gun Club LUPA, while also increasing fire flows by circulating the Fairway road and Trail Creek Cabin water lines. The proposed water storage facility would also allow for the SVWSD to be able to meet the estimated water demand projections for both the 5-year and 20-year periods. The adjacent private property is the last private property around the project area and its proposed White Clouds Development has been taken into consideration and there should be no need to expand the proposed water storage facility.

The costs associated with the construction, operation, and maintenance of Alternative 1 are estimated to be about \$850,000 for construction, \$2,500 annual operation, and \$3,500 annual maintenance. These costs would be partially covered by the General Obligation Bond passed in May 2007, and also by the associated developers.

ALTERNATIVE 2 - SITE 1

INVASIVE, NON-NATIVE SPECIES AND VEGETATION INCLUDING SPECIAL STATUS PLANT SPECIES OTHER THAN FISH AND WILDLIFE SERVICE (FWS) CANDIDATE OR LISTED SPECIES:

Since Alternative 2 would have the same components as Alternative 1 it can be expected that the anticipated impacts would be the same. However, due to the fact that the length of the access road and buried pipeline would be longer the maximum anticipated surface disturbance for alternative 2 would be 6.57 acres. With the increased disturbance area there would also be an increased opportunity for the spread or establishment of invasive, non-native species, as well as, a higher level of vegetation removal during construction. There is no intermittent stream within the area of Alternative 2.

THREATENED, ENDANGERED OR CANDIDATE ANIMAL SPECIES AND FISH AND WILDLIFE INCLUDING SPECIAL STATUS SPECIES OTHER THAN FWS CANDIDATE OR LISTED SPECIES:

Alternative 2 can be expected to have the same general effects as Alternative 1 to the wildlife species within the area; however, more habitat would be removed due to the increased amount of cut sloping that would be required for the access road for site 1.

LIVESTOCK GRAZING:

The effects to livestock grazing of Alternative 2 are anticipated to be the same as Alternative 1.

SOILS:

The soils in the project area are the same for Alternative 2 as Alternative 1. Due to the fact that the length of the access road and buried pipeline would be longer the maximum anticipated surface disturbance for alternative 2 would be 6.57 acres, an increase from the 2.51 acres associated with Alternative 1. Subsequently, this is caused by the fact that Alternative 2 requires more hillsides cutting to allow for the adequate construction and maintenance of the access road. This increased surface disturbance would increase the amount of erosion in the project area.

RECREATION:

With the implementation of Alternative 2 recreationists would continue to use the area; thus impacts are expected to be similar impacts to Alternative 1.

VISUAL RESOURCES:

Implementation of Alternative 2 can be expected to have the same general impact to visual resources as Alternative 1. However, Alternative 2 is in a location that would require more extensive cut slopes associated with the construction of the access road and would be more visible from Trail Creek road and the adjacent development, as well as, the Village Center of Sun Valley. The proposed water storage facility site would be directly adjacent to the proposed subdivision; thus dominating their view of the hillside. Even with the use of natural colors to aid in blending the improvements the casual observers view will be drawn to the improvements.

LANDS/ACCESS:

The effects for Alternative 2 are anticipated to be the same as Alternative 1 in regards to land use and access within the project area. However, there are currently no signs of previous motorized access with the area of Alternative 2.

SOCIO-ECONOMIC:

Implementation of Alternative 2 can be expected to meet the demand for public services just as Alternative 1. However, it can be expected that the cost associated with Alternative 2 would be higher than Alternative 1 due to the increased construction requirements associated with the road and pipeline.

ALTERNATIVE 3: NO ACTION

INVASIVE, NON-NATIVE SPECIES AND VEGETATION INCLUDING SPECIAL STATUS PLANT SPECIES OTHER THAN FISH AND WILDLIFE SERVICE (FWS) CANDIDATE OR LISTED SPECIES:

Alternative 3 would not allow any surface disturbance or removal of vegetation on public lands; thus not increasing the effects to invasive, non-native species and vegetation beyond that which currently exists.

THREATENED, ENDANGERED OR CANDIDATE ANIMAL SPECIES AND FISH AND WILDLIFE INCLUDING SPECIAL STATUS SPECIES OTHER THAN FWS CANDIDATE OR LISTED SPECIES:

Alternative 3, the No Action alternative is not anticipated to increase the level of effects to wildlife beyond that which currently exists. The current effects result primarily from disturbance, and displacement of native wildlife species resulting from adjacent residential or commercial development. However, dispersed recreational activities also cause disturbance, harassment, and displacement of resident and migratory wildlife species, such as the Sage Sparrow, Brewer's Sparrow and Loggerhead Shrike, should they be found in the area. The suspected low, incidental use within the project area by the gray wolf would not be impeded or create any affect upon the species.

LIVESTOCK GRAZING

Livestock grazing would not be impacted by implementation of Alternative 3.

SOILS:

Alternative 3 is not expected to impact to the soils in the project area.

RECREATION:

By not installing the water storage facility and buried pipeline and not constructing the access road there would not be additional roads created within the project area. Without the access road there is a less likelihood of user-created trails in the project area.

VISUAL RESOURCES:

There would be no impacts to visual resource management on the public lands in the project area associated with the implementation of Alternative 3.

LANDS/ACCESS:

There would be no impacts regarding land use and access on the public lands in the project area associated with Alternative 3.

SOCIO-ECONOMIC:

Implementation of Alternative 3 would not allow SVWSD and Sun Valley to meet the demand for services and would require them determine an alternate location for the needed water storage facility.

CUMULATIVE IMPACTS

The effects analyzed in the cumulative effects section apply to all of the alternatives. Cumulative impacts of all the alternatives will be the same unless otherwise stated. “Cumulative impacts” are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions. These impacts can result from individually minor but collectively important actions taking place over a period of time.

This section analyzes resource management and development actions planned to occur.

The Blaine County area, including Sun Valley, has experienced considerable population growth and community expansion over the past several decades. These trends continue today and are expected to continue for the foreseeable future. Growth and development has resulted in an increase in the number of commercial facilities and residential homes present. Land parcels that are currently undeveloped retain an open space character, however, continued growth and demand for land will likely result in diminished open space values. Pressures for both open space and developable land are expected to increase in the future.

Sun Valley Company is currently the largest landowner and main developer within Sun Valley. Their White Clouds Development is currently the only major development being presented to Sun Valley at this time, other than single family housing unit requests and tear-down and rebuild requests. The last major development was about three years ago with the Elkhorn Springs Development. The majority of the new development within Blaine County is occurring within the neighboring communities of Ketchum and Hailey.

The prior use of Sun Valley’s adjacent private property was historically a shooting range until 2007 when the range was moved further north up the Trail Creek drainage to allow for the proposed White Clouds Development. Per the 2005 Sun Valley Comprehensive Plan Update, 210 units of multi-family housing are planned for the west side of Trail Creek Road and 155 units for the east side. These development plans incorporate the last private land in the project area. The BLM has also received a ROW application from Sun Valley Company in association with their proposed White Clouds Development to relocate two portions of the existing bike and hiking trail onto public land to increase the sustainability of the trail. This application is being processed concurrently with SVWSD’s application.

INVASIVE, NON-NATIVE SPECIES AND VEGETATION INCLUDING SPECIAL STATUS PLANT SPECIES OTHER THAN FISH AND WILDLIFE SERVICE (FWS) CANDIDATE OR LISTED SPECIES:

Based on the past and present development of Sun Valley and its expectation to continue the demand for access trails and recreational use will increase. With the increase in development and use in the area, it's anticipated that the opportunity for invasive, non-native species to spread will increase. However, with the increased awareness and improved control methods it can also be anticipated that the spread could be held at current levels or even to lower levels. The proposed development of the adjacent private property would convert it from open land to a residential setting around a golf course. This development would take away the majority of the adjacent private property for the invasive, non-native species to seed in. Alternatives 1 and 2 would have stipulations attached to the ROW grant that would require SVWSD to be responsible for the control of invasive, non-native species within the ROW grant area that would include the total disturbance area on public land. As the residential development is completed much of the adjacent area on private property would be used for building development and landscaping purposes.

THREATENED, ENDANGERED OR CANDIDATE ANIMAL SPECIES AND FISH AND WILDLIFE INCLUDING SPECIAL STATUS SPECIES OTHER THAN FWS CANDIDATE OR LISTED SPECIES:

The urban sprawl of development in the general area is expected to continue, thus putting pressures on wildlife and habitat. Wildlife habitat fragmentation is becoming more apparent as development on patented historic mining claims increases, and as development expands up gullies and gulches. Development activities on the adjacent private lands will likely result in increased human activity in or adjacent to wildlife habitat located within the general area, especially since access to the area was previously hindered by the shooting range. Over time, this increased human activity may reduce the suitability of the area to wildlife.

LIVESTOCK GRAZING:

The livestock grazing within the area will continue to occur as it has; however, some of the accustomed access points may become inaccessible as development increases. Stipulations would need to be attached to all land use authorizations on public lands to aid in retaining access for the grazing permittees since BLM operates under the multiple use mandates.

SOILS:

The soils within the area have not had a whole lot of previous disturbance due to the prior use of the adjacent private property being a shooting range and restricting access to the area. Future disturbance would primarily be caused by the development and construction activities associated with the proposed White Clouds Development within the area. The development and loss of open space may result in outdoor enthusiasts to create inappropriate trails on adjacent hillsides; thus increasing the potential for erosion and watershed impacts. The building envelopes within the White Clouds Development have been created to promote sensitively-scaled structures, providing the least impact upon the land as possible, siting the building on the most developable portion of each lot and maximizing views. These envelopes are also intended to minimize vegetation removal, potential erosion outside of the envelopes and impacts of neighboring properties on each other. Sun Valley Company's proposed trail relocation permit would include measures to minimize erosion and rehabilitation of existing sections of the trail that are currently eroding resulting in a net decrease of erosion in the project area.

RECREATION:

The White Clouds Development around the project area is expected to take about 20 years for full build-out. This ongoing construction and development would facilitate growth of the area; thus, increasing the demand for recreation opportunities and if unmanaged will increase environmental impacts on surrounding undeveloped hillsides. Open space will continue to be reduced as a result of these actions; however, the proposed White Clouds Development has identified about 256 acres to be preserved as open space/recreation allowing for golf, hiking, Nordic skiing and snowshoeing. Also with the internal roads in the development area being designed as public roads and tied to the bus terminus at the Village Core recreational activities will be more accessible.

The Blaine County Cooperative Conservation Recreation and Travel Plan has identified the project area to within the Undeveloped Hillside zone. The niche of this zone is to provide an unspoiled connection to wide open spaces/landscapes for residents and visitors to the Wood River Valley.

VISUAL RESOURCES:

The planned development of the adjacent private property will be the primary cause of a change to the visual character of the project area by converting the view from an area previously used for a shooting range with minimal improvements to a developed residential and recreational area including a 9-hole golf course. The changes caused by the construction of the water storage facility and access road along with the relocation of two portions of the existing bicycle and pedestrian trail would be comparatively small.

The White Clouds Development proposal has included design guidelines that will allow for the structures to establish an architectural standard that is unique to the development area and one that is in harmony with the natural surroundings, exhibits a high level of quality, and character that is natural, unimposing, and rural. Some of these guidelines are as follows:

- Exterior color schemes shall reflect the natural earth tone of the surrounding landscape.
- Colors shall complement or blend with surrounding landscape and shall not contrast in any way.
- Buildings shall not appear perched on site.
- No slopes over 25% shall be graded or manipulated.

LANDS/ACCESS:

The following actions are likely to occur within and around the project area: recreational activities, recreational/commercial and residential development on adjacent private property. These are likely to occur with or without implementation of the alternatives. However, the level of residential development will be limited until a decision is made on the location of the needed water storage facility. There has been an exponential increase in development experienced in the recent past that has increased the demand for recreational activities, especially within close proximity to Sun Valley. The White Clouds Development preliminary plat application states that there will be two access points into the proposed residential area off Trail Creek road and that the internal roads have been designed as public roads and the improved bicycle and pedestrian trails included within the development would be tied to the bus terminus at the Village Core. With this increased accessibility it can be anticipated that the recreational use of the area will increase.

SOCIO-ECONOMIC:

The area has experienced considerable population growth and community expansion over the past several decades. These trends continue today and are expected to continue for the foreseeable future. Growth and development would result in an increase in the number of commercial recreational facilities and residential homes present in the general area. This growth is expected to continue with or without implementation of the alternatives. However, how SVWSD and Sun Valley determine to respond to the demand for improved infrastructure is.

SVWSD's master planning process has determined the need for a large water storage reservoir in the Trail Creek drainage and that this facility is a critical addition to the infrastructure necessary to support future development within its service area.

Alternatives 1 and 2 would allow for SVWSD to offer adequate services, including fire flow, sanitary, culinary, and landscape irrigation within the project area. Alternative 3 could also allow for this however, it may become more time consuming and costly to determine a location within the Trail Creek Drainage that would meet the 6300' elevation requirement and also comply with the Blaine County and Sun Valley Comprehensive Plans.

CHAPTER 5 CONSULTATION AND PREPARATION

PERSONS, GROUPS, AND AGENCIES CONSULTED

During preparation of the EA, the public was notified of the proposed action by posting on the Idaho BLM Internet on August 6, 2008. No one has contacted the BLM in response to the notice. The process used to involve the interested parties included sending a letter notifying them that BLM was in receipt of a ROW application and was requesting comment. BLM received verbal comments from the Sun Valley that they were only in support of Alternative 1 as Alternative 2 in their views caused too much visual disturbance in the project area and that Alternative 3 would cause them concern in attempting to determine a different location on private property. Sun Valley Company, submitted similar comments both verbally and written. Mr. Huffman, Sun Valley Company, stated that due to the intense visual aspects of the water storage facility and the location of the access road of Alternative 2 it's unlikely that the City of Sun Valley would approve it. In a meeting with Tara Hagen, BLM Realty Specialist, on November 13, 2008, David L. Cole, Civil Engineer/Principal with Benchmark Associates, stated that the construction and maintenance of the access road for Alternative 2 would be more extensive than Alternative 1 and would be more visible.

Table 5.1 - List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Response
Blaine County Planning and Zoning	Local Government	No Response
City of Sun Valley	Local Government	Verbal Response
Idaho Fish & Game	State Government	No Response
Flat Top Grazing Association	Permittee	No Response
Sun Valley Company	Adjacent Land Owner	Verbal Comment and Comment Letter Rcvd
Benchmark Associates	Engineering Office	Verbal Response

LIST OF PREPARERS

BLM staff specialists who determined the affected resources for this document are listed in the Checklist; which is located in the project file. Those who contributed further analysis in the body of this EA are listed below.

Table 5.2 - List of Preparers/Reviewers

Name	Title	Initials	Date
Bonnie Clairidge	Wildlife Biologist	BC	12/10/2008
Lisa Cresswell	NEPA Coordinator	LC	12/09/2008
Katherine Farrell	District Planning & Environmental Coordinator	KF	01/15/2009
David Frieberg	Outdoor Recreation Planner	DF	01/09/2009
John Kurtz	Outdoor Recreation Planner	JK	01/14/2009
Tara Hagen	Realty Specialist	TH	12/08/2008
Julie Hilty	Botanist	JH	01/13/2009
Joanna Tjaden	Rangeland Management Specialist	JPT	12/11/2008

REFERENCES

Blaine County Comprehensive Plan (11/7/1994, as amended)

Blaine County Cooperative Conservation Recreation and Travel Plan (10/2007)

Blaine County, Idaho County Code (05/08/2008)

Dean Runyan Associates, and Mountain States Appraisal and Consulting, Inc.

Idaho Power Company. Wood River Electrical Plan (12/2007)

Rachlow, J. and Svancara, L. 2003. Pygmy Rabbit Habitat in Idaho. University of Idaho

Rees Consulting, Inc. and RRC Associates, Inc. 2006. Blaine County Needs Assessment

Sawtooth Board of Realtors. 2005

Sun Valley Company Gun Club LUPA Subdivision Application (White Clouds Development) (10/30/2007)

Sun Valley Comprehensive Plan (2005)

Sun Valley, Idaho City Code (07/17/2008)

Sun Valley Water and Sewer District Water Master Plan (2008)

U.S. Census Bureau, available online at <http://www.census.gov>, accessed October 14, 2008

U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey, available online at <http://websoilsurvey.nrcs.usda.gov> (08/21/2007)

U.S. Department of the Interior, Bureau of Land Management. 1981. Final Sun Valley Environmental Impact Statement.

U.S. Department of the Interior, Bureau of Land Management. 1979. Final Shoshone Grazing Environmental Statement.

APPENDIXES/FIGURES

- Figure 1 – Project Location Map
- Figure 2 – Sun Valley Planning & Zoning Parcel Map (2004)
- Figure 3 – Alternative 1 Site Map
- Figure 4 – Alternative 2 Site Map
- Appendix A - Federally Listed and BLM Sensitive Animal Species
- Appendix B – Right-of-Way Grant Stipulations

FIGURE 1
PROJECT LOCATION MAP

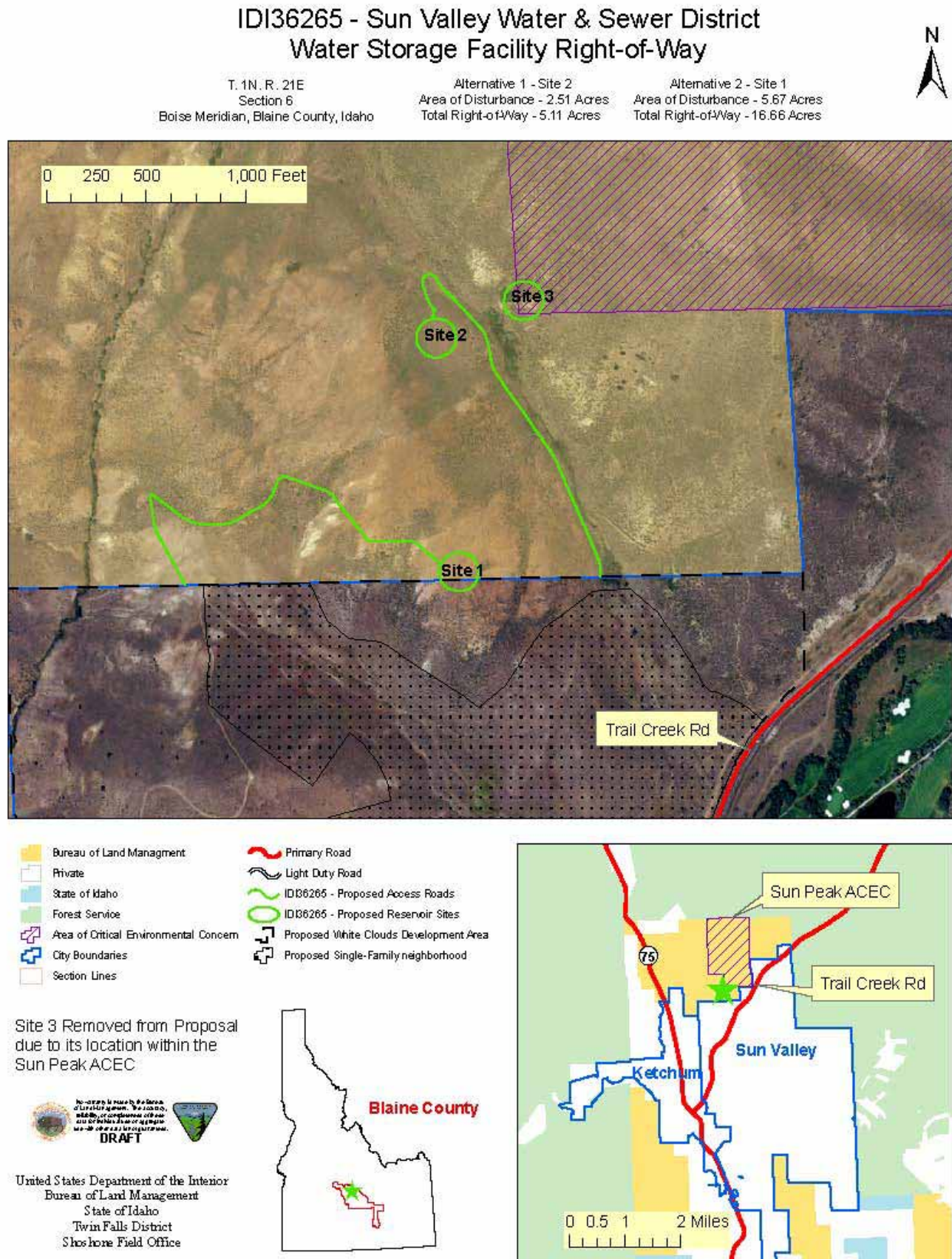


FIGURE 2
SUN VALLEY PLANNING & ZONING PARCEL MAP

ID 230 2008 EA 389
 Sun Valley Water & Sewer Right-of-Way
 Pre-Decisional (January, 2009)

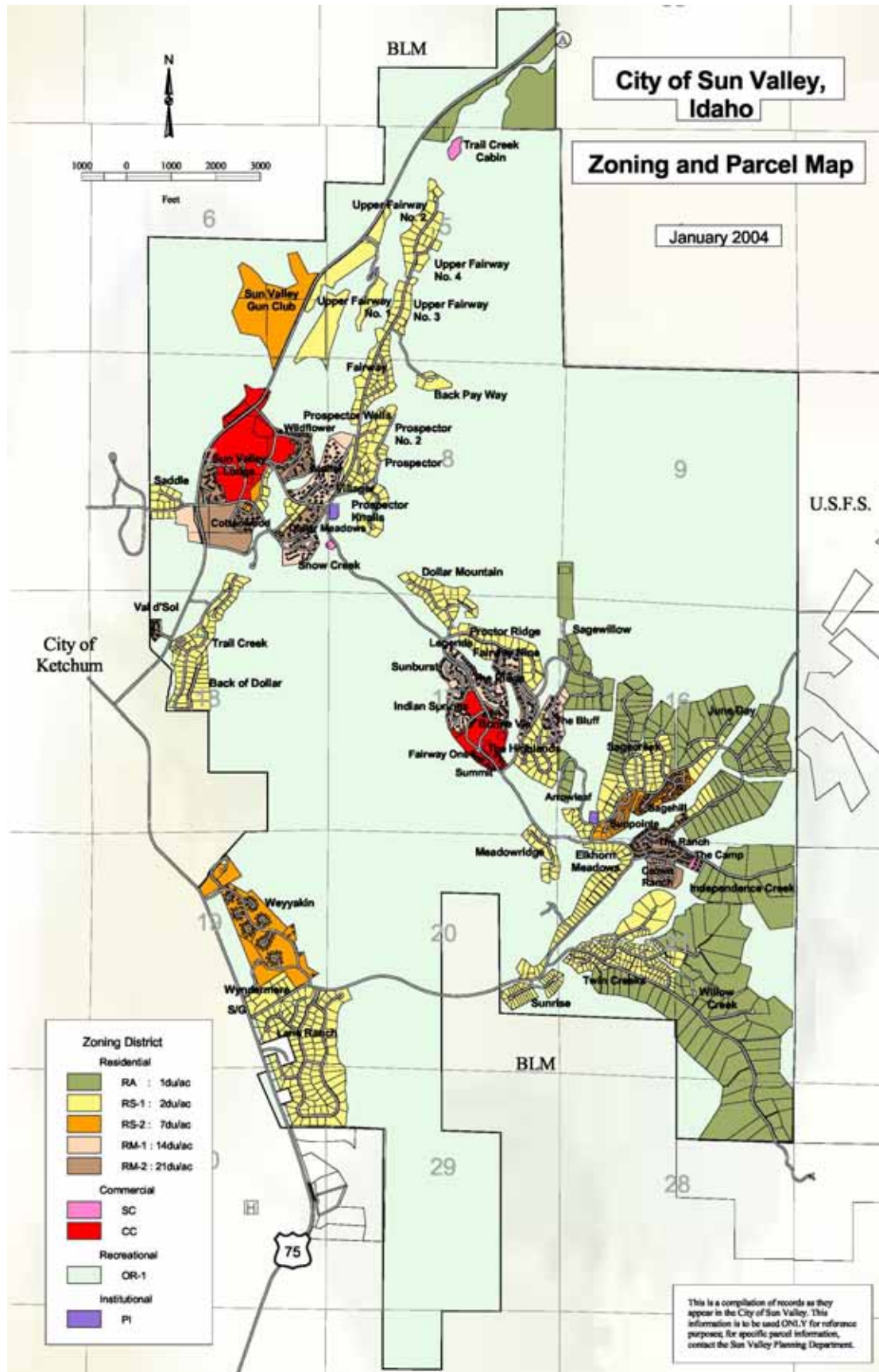


FIGURE 3
ALTERNATIVE 1 SITE MAP

ID 230 2008 EA 389
Sun Valley Water & Sewer Right-of-Way
Pre-Decisional (January, 2009)

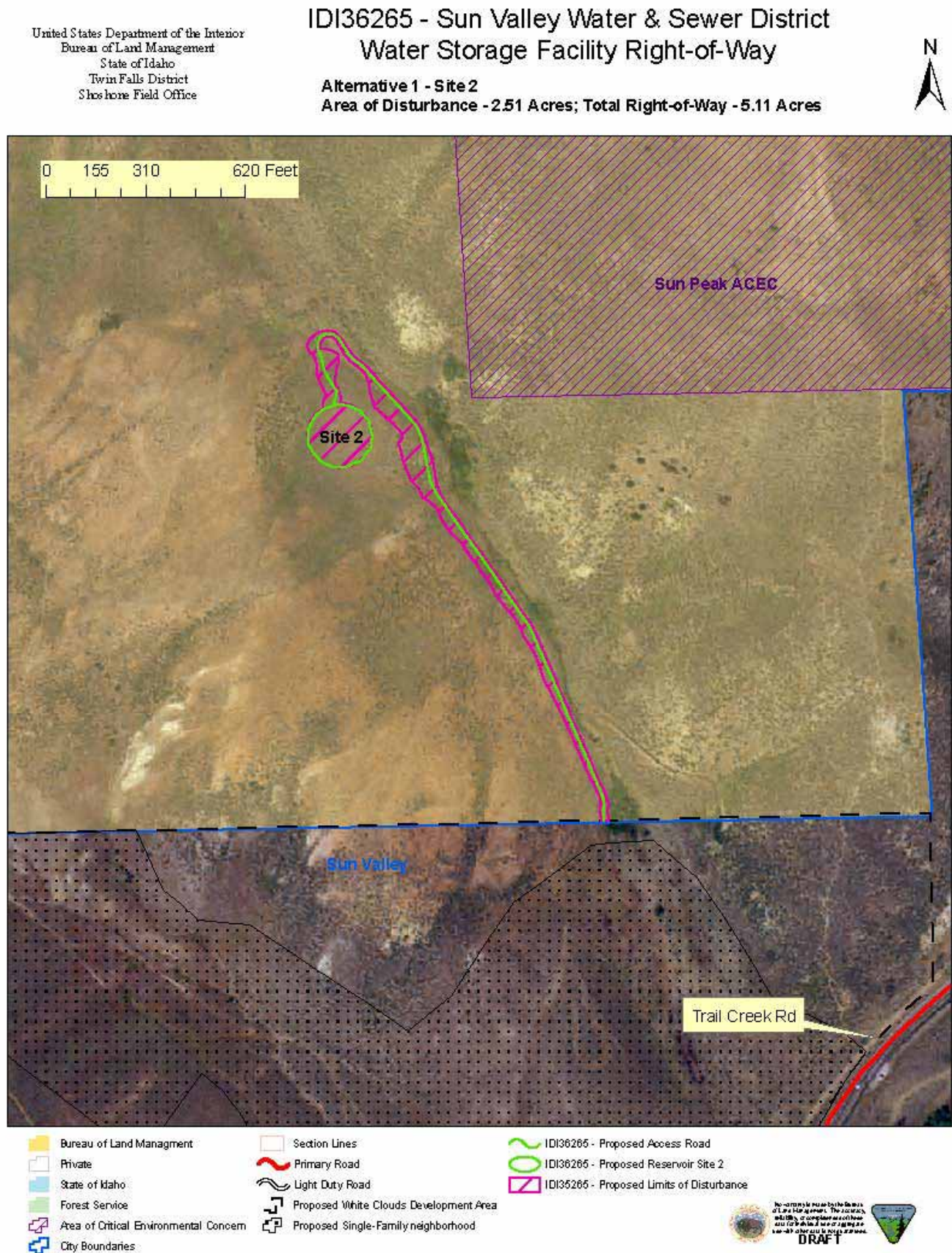


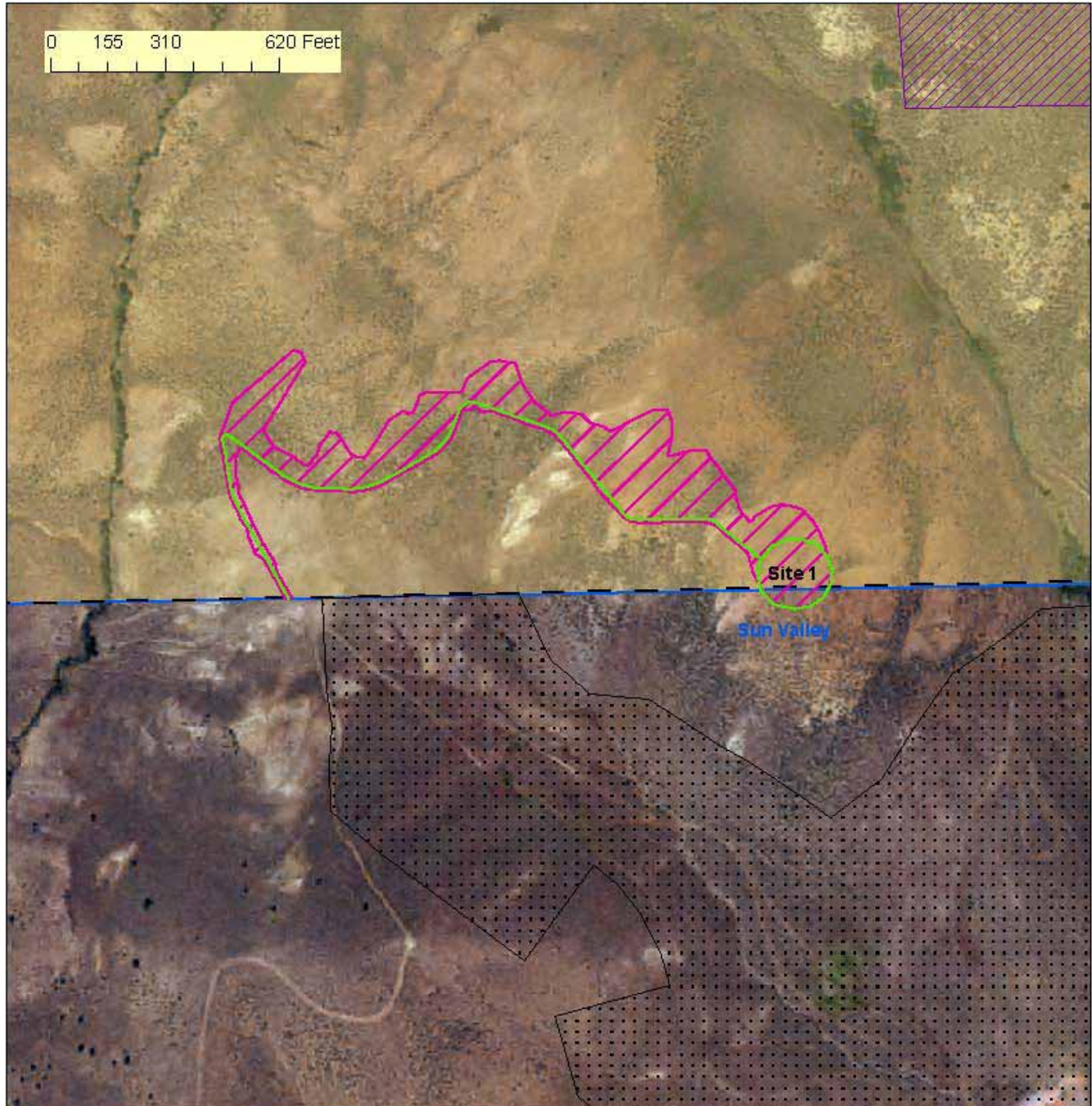
FIGURE 4
ALTERNATIVE 2 SITE MAP

ID 230 2008 EA 389
Sun Valley Water & Sewer Right-of-Way
Pre-Decisional (January, 2009)

United States Department of the Interior
Bureau of Land Management
State of Idaho
Twin Falls District
Shoshone Field Office

IDI36265 - Sun Valley Water & Sewer District Water Storage Facility Right-of-Way

Alternative 2 - Site 1
Area of Disturbance - 6.57 Acres; Total Right-of-Way - 16.66 Acres



- | | | |
|--|--|---|
| Bureau of Land Management | Section Lines | IDI36265 - Proposed Access Road |
| Private | Primary Road | IDI36265 - Proposed Reservoir Site 1 |
| State of Idaho | Light Duty Road | IDI35265 - Proposed Limits of Disturbance |
| Forest Service | Proposed White Clouds Development Area | |
| Area of Critical Environmental Concern | Proposed Single-Family neighborhood | |
| City Boundaries | | |



APPENDIX A
FEDERALLY LISTED AND BLM SENSITIVE ANIMAL SPECIES

ID 230 2008 EA 389
 Sun Valley Water & Sewer Right-of-Way
 Pre-Decisional (January, 2009)

Federally Listed and BLM Sensitive Animal Species that may occur in the Shoshone Field Office		
Common Name	Scientific Name	General Habitat Use
Type 1-Threatened (T), Endangered (E), or Proposed (P)		
Grey Wolf	<i>Canis lupus</i>	Forest, Sagebrush, Riparian
Canada Lynx	<i>Lynx canadensis</i>	Forest
Type 2-Range-wide/Globally Imperiled Species		
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Forest, Sagebrush, Riparian
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	Sagebrush, Riparian
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	Sagebrush
Boreal Toad	<i>Bufo boreas boreas</i>	Riparian
Northern Leopard Frog	<i>Rana pipiens</i>	Riparian
Type 3-Regional/State Imperiled Species		
Townsend's Big-eared Bat	<i>Plecotus townsendii</i>	Sagebrush, Grassland, Cave
Fringed Myotis	<i>Myotis thysanodes</i>	Sagebrush, Grassland, Cave
Fisher	<i>Martes pennanti</i>	Forest, Riparian
Wolverine	<i>Gulo gulo luscus</i>	Forest, Riparian
Prairie Falcon	<i>Falco mexicanus</i>	Sagebrush, Grassland
Peregrine Falcon	<i>Falco peregrinus anatum</i>	Riparian, Sagebrush
Northern Goshawk	<i>Accipiter gentilis</i>	Forest, Grassland, Sagebrush, Riparian
Ferruginous Hawk	<i>Buteo regalis</i>	Forest, Grassland, Sagebrush, Riparian
Mountain Quail	<i>Oreotyx pictus</i>	Forest, Grassland, Sagebrush, Riparian
Flammulated Owl	<i>Otus flammeolus</i>	Forest, Grassland, Sagebrush, Riparian
Lewis's Woodpecker	<i>Melanerpes lewis</i>	Riparian
Willow Flycatcher	<i>Empidonax trailii</i>	Forest, Riparian
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Grassland, Sagebrush
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Sagebrush
Brewer's Sparrow	<i>Spizella breweri</i>	Sagebrush
Sage Sparrow	<i>Amphispiza belli</i>	Sagebrush
Common Garter Snake	<i>Sonora semiannulata</i>	Forest, Riparian
Western Toad	<i>Bufo boreas</i>	Forest, Riparian
Type 4-Idaho Peripheral Species		
California Myotis	<i>Myotis californicus</i>	Sagebrush, Grassland, Cave
White-faced Ibis	<i>Plegadis chihi</i>	Grassland, Riparian
Virginia's Warbler	<i>Vermivora virginiae</i>	Forest, Grassland, Sagebrush, Riparian
Black-throated Sparrow	<i>Amphispiza bilineata</i>	Grassland, Sagebrush, Riparian
Type 1-Threatened, Endangered, and Proposed Species -These species are listed by the Fish and Wildlife Service or National Marine Fisheries Service as threatened or endangered, or they are proposed for listing under the Endangered Species Act.		
Type 2- Range-wide/Globally Imperiled Species -These are species designated as FWS 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) may be local endemics with currently low threat levels or (b) peripheral, rare species in Idaho.		

STIPULATIONS COMMON TO ALTERNATIVES 1 & 2

1. The Holder, by accepting this right-of-way grant, agrees and consents to comply with and be bound by the following terms and conditions:
 - a. To the extent practicable, all Federal and State laws applicable to the authorized use and such additional Federal and State laws along with the implementing regulations that may be enacted and issued during the term of the grant.
 - b. That in construction, operation, maintenance, and termination of the authorized use, there shall be no discrimination against any employee or applicant for employment because of race, creed, color, sex, age, religion, disability or national origin and all subcontracts shall include an identical provision.
 - c. When requested by the Authorized Officer, the Holder shall make his equipment already at the site with operators, temporarily available for fighting fires in the vicinity of the project. Payment for such services will be made at rates determined by the Authorized Officer.
2. Holder shall comply with all applicable federal laws and regulations existing or hereafter enacted or promulgated. In any event, the Holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the permit area or on facilities authorized under this permit. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substances or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S. C. 6901 et. seq.) on the permit area (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
5. As directed by the Authorized Officer the Holder shall be responsible for control of invasive, non-native and/or noxious species that result or would result from the improvements authorized under this grant.
6. The Holder shall ensure that any fill material used within the right-of-way area is certified as 'weed' free. Undercarriages of construction equipment would also be required to be free of all soil and plant material prior to entering and exiting the project area to reduce the establishment of new

invasive, non-native species or the spread of existing species to new areas.

7. Holder shall comply with the applicable Federal and State Laws and regulations concerning the use of pesticides (i.e. insecticides, herbicides, fungicides, rodenticide, and other similar substances) in all activities/operations under this grant. A chemical shall not be used if the Secretary of Interior has prohibited its use. This list is periodically updated; please contact the Shoshone Field Office for the most recent list. Pesticides shall be used only in accordance with its registered uses and within other limitations if the Secretary has imposed limitations. Pesticides shall not be permanently stored on public lands authorized for use under this grant. Applicator(s) shall hold a current applicator's license.
8. The holder shall construct, operate and maintain the facilities, improvements, and structures within the right-of-way limits. If at any time the Holder wishes to reconstruct, remodel or relocate any portion of the right-of-way, or the improvements, prior written approval must be obtained from the Authorized Officer. No such approval will be given unless the request is authorized by law, and an application is made under applicable regulations.
9. The authorized officer may suspend or terminate in whole or in part this right-of-way grant which has been issued when, in his judgment, unforeseen conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.
10. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.
11. The Holder shall conduct all construction and maintenance activities in a manner that will minimize disturbance to vegetation, drainage channels and stream banks. The Holder shall take resource conservation and protection measures on the right-of-way as the Authorized Officer deems reasonably necessary.
12. The Holder shall seed all disturbed areas not covered by aggregate, using an agreed upon method suitable for the location with a seed mixture and rate of success to be determined by the Authorized Officer. The seed mix will be required to be certified 'weed free'.
13. All improved slopes will be scarified along the contour to assist in the revegetation process by retaining moisture and resisting erosion.
14. The Holder shall keep the right-of-way clean by removal of any debris or waste resulting from construction and/or maintenance.
15. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer.
16. Any cultural and/or paleontological resource (historic or prehistoric site object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions

17. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or Bureau cadastral surveyor to restore the disturbed monument and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands of the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.
18. All applicable Blaine County codes and permits associated with the construction and maintenance should be followed and or obtained prior to any construction activity occurring.
19. No signs or advertising devices shall be placed on the premises or on adjacent public lands, except those posted by or at the direction of the authorized officer.
20. Material encountered on the project and needed for select borrow, surfacing, riprap, or other special needs shall be conserved.
21. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation.
22. Holder shall limit excavation to the areas of construction. No borrow areas for fill material will be permitted on site. All off-site borrow areas must be approved in writing by the Authorized Officer in advance to excavation. All waste material resulting from construction or use of the site by the Holder shall be removed from the site. All waste disposal sites on public land must be approved in writing by the Authorized Officer in advance of such use.
23. All above-ground structures shall be painted by the Holder to blend with the natural color of the landscape or powder coated to decrease reflection. The paint used shall be a color approved by the Authorized Officer and one which simulates 'Standard Environmental Colors' designated by the Rocky Mountain Five-State Interagency Committee.
24. The antenna associated with the water storage facility would be required to have raptor perch deterrents. If a structure with guy wires is used then bird diverters for the guy wires would be required.
25. Grazing permittees for the Lake Creek grazing allotment will retain access and use of the area for grazing purposes.

26. A locked gate would be constructed on the southern end of the access road. During construction of the gate all efforts would be made to deter mountain bikers from pushing their bikes around the gate.
27. The access road surface will be constructed with a 2 percent slope from the inside closest to the hillside to the outer edge; allowing for proper runoff of the road surface.
28. Rock backfill with positive drainage features will be installed around the water storage facility to buttress the slope above the facility and provide adequate soil stability.
29. No snow plowing activities are allowed on the access road, unless authorized in writing by the Authorized Officer prior to the activity. Access during winter months will be by snow cat, snowmobile, or foot.
30. The Holder shall provide for the safety of the public entering the right-of-way during construction. This includes, but is not limited to, barricades for open trenches, flagmen/women with communication systems for single-lane roads without intervisible turnouts, and attended gates for blasting operations (if allowed by the right-of-way).

STIPULATIONS SPECIFIC TO ALTERNATIVES 1

31. To reduce impacts to the vegetation it's required that the access road be sited a minimum of 50 feet above the intermittent stream area located in the bottom of the gulch.