

**ENVIRONMENTAL ASSESSMENT  
DOI-BLM-NV-W010-2011-0002-EA**

**HUMBOLDT COUNTY  
WINNEMUCCA MOUNTAIN HIKING/BIKING TRAIL  
Humboldt County, Nevada**

June 2011

**BLM**

*Winnemucca District Office | Nevada*



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

**BLM/NV/WN/EA/11-16+1792**

**DOI-BLM-NV-W010-2011-0002-EA**

**Environmental Assessment  
HUMBOLDT COUNTY  
WINNEMUCCA MOUNTAIN HIKING/BIKING TRAIL**

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## **1.0 INTRODUCTION**

### **1.1 Background**

Humboldt County is proposing a hiking and biking recreational trail system on Winnemucca Mountain. The trail system would consist of interconnected trails of differing skill levels. The trails would be on public land managed by the Bureau of Land Management (BLM). Construction of recreational trails is consistent with the BLM's mandate to manage public lands for multiple-uses. There are few professionally designed and constructed recreational trail opportunities available to residents of Winnemucca and the surrounding area. This trail system would provide residents with sustainable hiking and mountain biking opportunities.

This project design and permitting has been made possible by grant funding from the State of Nevada Division of State Lands Question 1 Program.

Humboldt County submitted an application for Winnemucca Mountain Bike and Hiking Trail right-of-way (ROW), (N-86277) for the securing of a ROW on which Humboldt County would develop a bicycling/hiking trail system on September 17, 2008. The application requested a right-of-way for no less than 20 years. The trail system consists of interconnected trails of differing difficulty with associated trailheads and parking areas. Subsequently, on March 24, 2009, a Memorandum of Understanding (MOU# 1792-NV-020-0903) was signed between Humboldt County and the BLM for the purpose of preparing an Environmental Assessment.

This Environmental Assessment (EA) contains the site-specific analysis of potential impacts to resources that could result with the implementation of the Proposed Action or alternatives to the Proposed Action. The EA ensures compliance with the National Environmental Policy Act (NEPA), analyzes information to determine whether to prepare an Environmental Impact Statement (EIS) or issue a "Finding of No Significant Impact" (FONSI). A FONSI documents why implementation of the selected action would not result in environmental impacts that would significantly affect the quality of the human environment.

### **1.2 Purpose and Need**

The purpose of this action is to provide Humboldt County the opportunity to construct a multi-use recreational trail system on and near Winnemucca Mountain.

The need for action is established by the BLM's responsibility under the Federal Land Policy and Management Act of 1976 (FLPMA) and BLM Use-Right of Way Regulations at 43 CFR 2800, to respond to a Right of Way application.

### 1.3 Land Use Plan Conformance

The Proposed Action is in conformance with the BLM *Paradise-Denio Management Framework Plan* (1982) (MFP), and serves to support the following MFP recreational objectives:

**Objective 1:** Promote the understanding of the natural resources in the Paradise-Denio Resource Area and the role the BLM plays in managing these resources.

**Objective 2:** Provide as many recreational opportunities as possible in the Paradise -Denio Resource Area.

**Objective 3:** Ensure access to recreation areas for the general public.

**Objective 5:** Maintain safety in recreation areas.

### 1.4 Relationship to Laws, Regulations, and Other Plans

The proposed action and alternatives are in compliance with all other applicable local, state and federal regulations, including:

- National Environmental Policy Act of 1969 (Public Law [PL] 91-190, 42 USC 4321 et seq.);
- Federal Land Policy and Management Act of 1976 (FLPMA) (PL 94-579, 43 USC 1701 et seq);
- 40 CFR 1500, Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA of 1969; and
- 43 CFR Part 46, Department of Interior regulations for the implementation of the NEPA of 1969.

### 1.5 Issues

On October 5, 2009, the BLM sent scoping letters to interested parties including adjacent landowners and mining claimants.

The BLM received one letter in response from AHL Holdings LTD. expressing concerns of the trail over their land holdings.

The Winnemucca Trail was presented at two Humboldt County Planning Commission meetings (on March 1, 2010 and September 7, 2010) at which time the trail alignments were presented and the public was invited to comment.

Resource Concepts, Inc. staff also met with the grazing allotment permittee during the summer 2009 to discuss concerns.

**Environmental Assessment**  
**Humboldt County Winnemucca Mountain Hiking/Biking Trail**

Potential issues include:

- How would conflicts with cattle during the allotment permittee's cattle drives four times per year be avoided?
- How would conflicts between trail users' dogs and the cattle be avoided?
- How would the mining claimant's liability be limited with increased recreational use in the areas with many adits and shafts and unmarked hazards such as unstable ground?
- How would the trail impact the visual resources of Winnemucca Mountain?

## 2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

### 2.1 Proposed Action

Humboldt County is proposing to construct and maintain a non-motorized biking and hiking trail system on Winnemucca Mountain as depicted by Figures 1 and 2 and summarized in Table 1. The Proposed Action is located in Township 36 North, Range 37 East Section 11 to 14 and Township 38 East, Range 38 East Section 18. The trails are entirely contained on the southeast portion of the mountain extending from the top of the mountain to Veteran’s Memorial Park on land managed by the BLM.

The proposed action consists of two trails and two trailheads, with associated signs and kiosks. Signage would provide directional and logistical information regarding the trails, as well as interpretive information on the local ecological and cultural resources. The trails would offer a range of challenges for users, from easy to difficult. Construction would begin following issuance by BLM of a ROW.

The proposed trail design incorporates full bench construction, a technique aimed at stabilizing soils. Full bench construction means that the full width of the trail would be cut into the side of the hill. Part of the process would involve construction of rolling grade dips and water bars to divert water off the trail tread. These would be installed periodically in sloped linear areas requiring additional drainage. The goal of trail construction is to create a sustainable trail with minimal impact to surrounding resources.

The Proposed Action trails are referred to as 1) Meandering Way Trail and 2) Summit Trail:

- The Meandering Way Trail would be a 3.4-mile loop, beginning near the Veteran’s Memorial Park at an elevation of 4,495 feet. The trail rises to a maximum elevation of 4,995 feet. The trail would be constructed with moderate grades, having a minimum average grade of 7.6 percent for the south leg and 4.6 percent for the north leg. The ability level would be rated as “easy” for bikers and hikers. A connector trail would create a one-mile walking loop (Figure 2). The purpose of this would be to accommodate walkers desiring a shorter walk, and discourage short-cutting of the main loop trail.
- The Summit Trail would connect with Meandering Way Trail and provide a 3.9-mile route to the summit of Winnemucca Mountain. Approximately 1.76 miles of the trail would utilize existing two-track dirt roads. The elevation ranges from 4,995 feet at the junction with the Meandering Way Trail to 6,642 feet at the summit. Grades would be moderate to most difficult, with a minimum average grade of 7.2 percent and having 45 percent to 65 percent cross-slopes. The ability level would be rated as “difficult.”

The Proposed Action trailheads:

- Parking for the Meandering Way Trailhead would be at the Veterans’ Memorial Park located off of Highway 95. The trailhead is located where the pavement ends on Bengochea Circle (Figure 3).

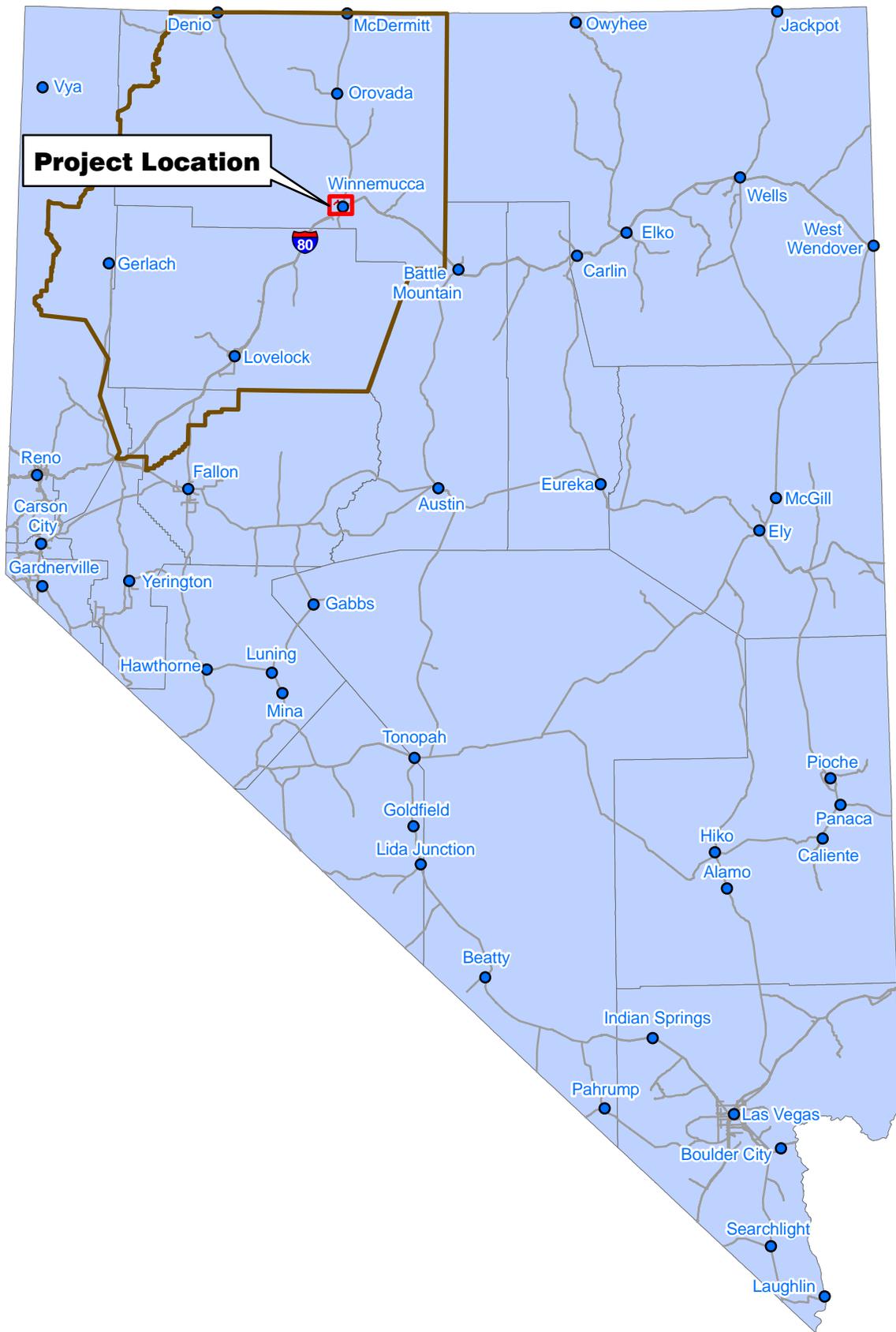
**Environmental Assessment  
Humboldt County Winnemucca Mountain Hiking/Biking Trail**

- The Summit Trailhead would be located at the top of Winnemucca Mountain at the last junction of the paved road accessing the communications and electronic facilities near the peak. The trailhead would have an informative map with signage. There is no proposed parking area for the Summit Trailhead. Due to the existing communication towers and facilities, lack of existing parking, and lack of areas for new parking, the Summit Trailhead would be designated as a drop-off and/or pickup point only (Figure 4).

The trail system would total approximately 7.3 miles in length, incorporating 1.76 miles of existing roads. Some existing roads have slopes averaging 19 percent, but all new trail construction would be constructed with maximum average grades not to exceed eight (8) percent. The proposed trail ROW width is 15 feet, or 7.5 feet each side of the proposed trail centerline. This ROW would accommodate use of U.S. Forest Service (USFS) trail prism standards and specifications (Standard Specifications for Construction and Maintenance of Trails USFS EM-7720-103), plus adjacent drainage structures where needed. Forest Service standards allow for clearance of eight feet in width (four linear feet either side of tread center line). The proposed tread width follows USFS standards and specifications with a minimum of 18 inches and a maximum of 24 inches. The section of the proposed trail system incorporating the existing roads would involve constructed water bars where needed. Road maintenance or improvement tasks designed to accommodate motorized use is not implied or inferred in this ROW proposal and would not be the responsibility of Humboldt County.

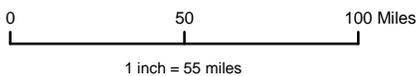
While USFS trail specifications would be applied to the entire trail system, actual construction would not necessarily impact or necessitate ground disturbance to maximum clearances over the entirety of the trail system. The goal in constructing this trail system is creation of a sustainable trail with minimal impact to surrounding resources. The trail width would be excavated employing full bench construction to mineral soil base on steep side hill slopes. All excavated material would be dispersed by shovel or contoured into the downhill side of the trail. The back slope would be contoured according to USFS standards, which depends on the terrain's naturally occurring slope. The back slope would be contoured to minimize erosion and provide clearance for bicycle pedals. The proposed layout of the trail optimizes natural out-sloping, grade dips, and avoids fall-line routes, subsequently reducing erosion. On flat terrain, ground disturbance would involve little more than removing brush and surface obstacles to provide trail continuity and a tread surface safe for users.

Soil disturbance would vary depending on the side hill slope. When cutting tread, excavated earth would be dispersed by shovel or contoured into the downhill side of the trail. Vegetation within the trail prism would need to be removed if affecting trail access. However, trail construction crews would take every step possible to minimize impacts to vegetation. When vegetation is removed it would either be dispersed or transplanted to naturalize disturbed areas.



**Legend**

- Nevada Cities
- Major Roads
- Winnemucca BLM District



**Figure 1**  
**Project Location Map**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail

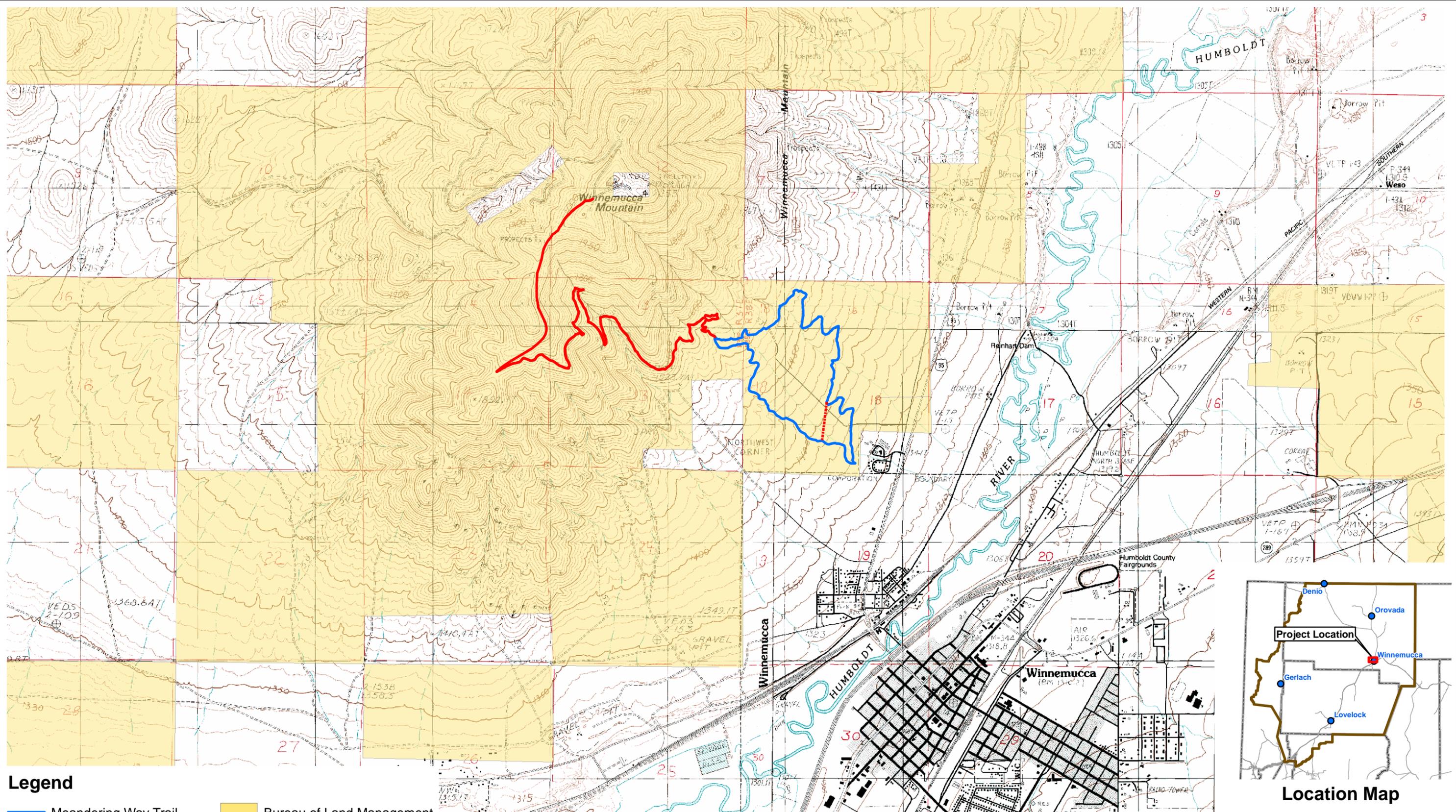
Project data from NGP - July 2007

**United States Department of the Interior**  
 Bureau of Land Management  
 Winnemucca Field Office  
 5100 E. Winnemucca Blvd.  
 Winnemucca, NV 89445



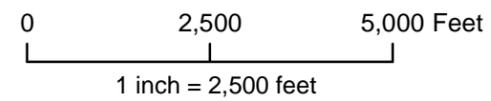
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

Map Date: April 7, 2011

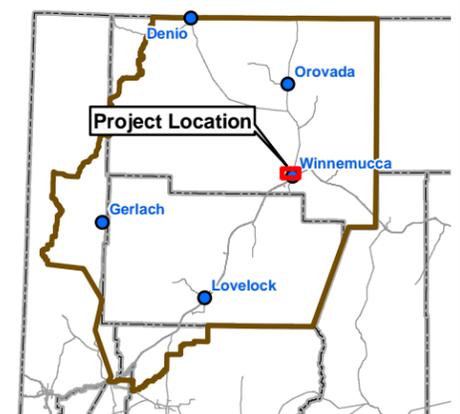


**Legend**

- Meandering Way Trail
- Summit Trail
- - - Connector Trail (1 mile loop)
- Bureau of Land Management
- Private



**Figure 2**  
**Trail System**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007



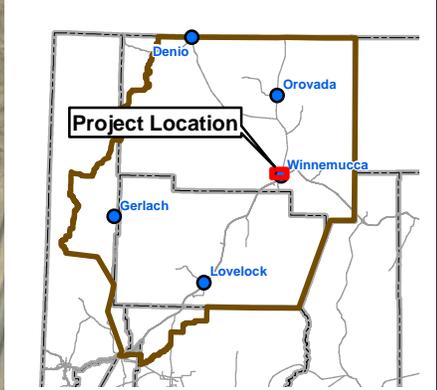
**Location Map**

United States Department of the Interior  
 Bureau of Land Management  
 Winnemucca Field Office  
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 Winnemucca, NV 89445



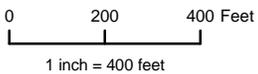
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Map Date: April 7, 2011



**Legend**

- Parking
- Trailhead
- Win Mt Trail
- Connector Trail (1 mile loop)



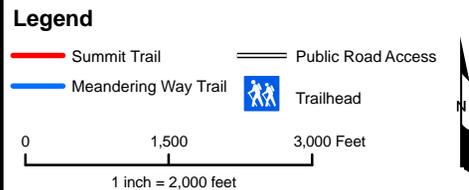
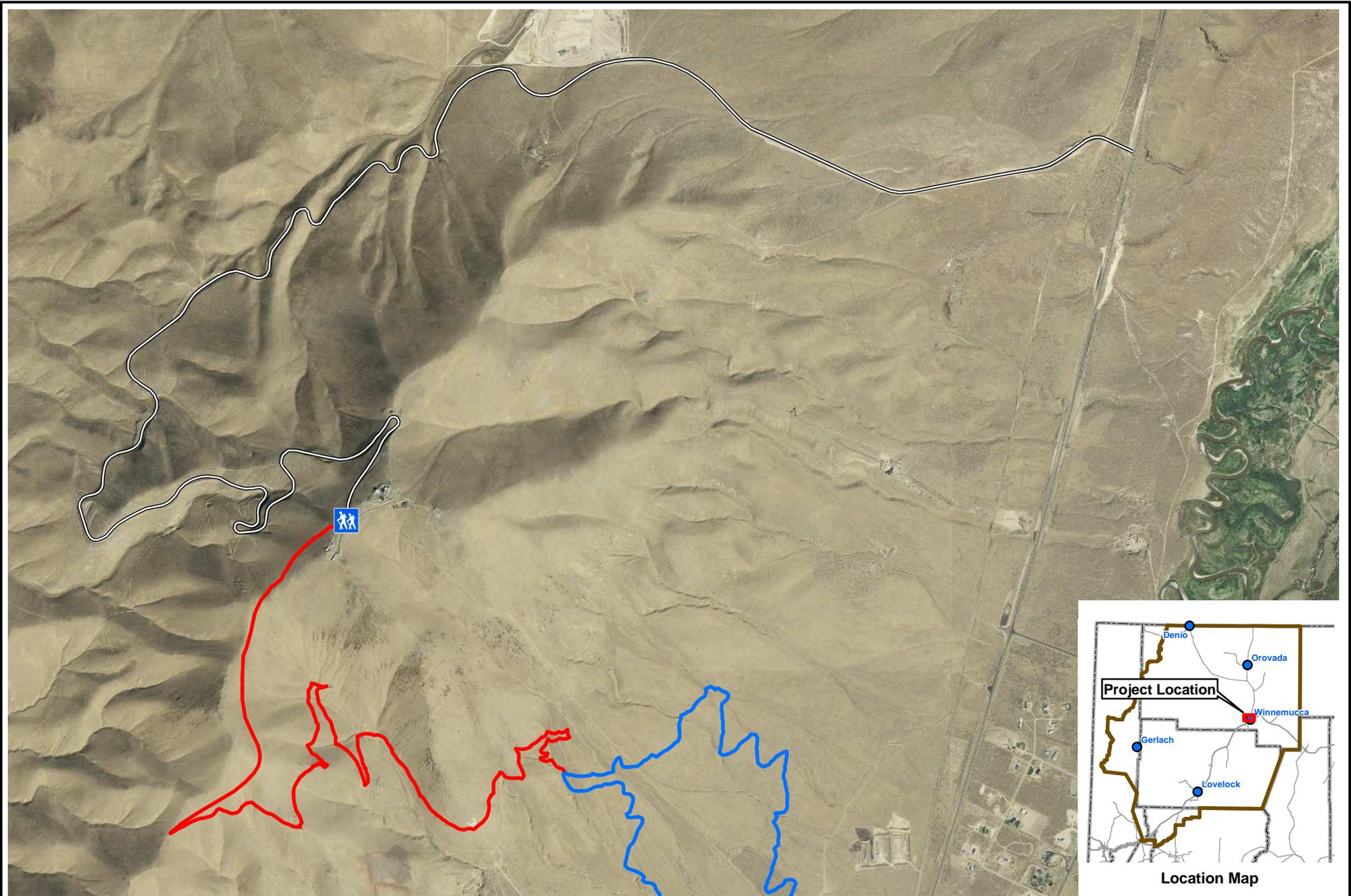
**Figure 3**  
**Meandering Way Trailhead**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007

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Map Date: March 24, 2011



**Figure 4**  
**Summit Trailhead**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007

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 Map Date: April 7, 2011

The trail was designed to avoid structures and locations requiring extensive excavation. No structures would be removed. Any materials excavated, such as rock, would be saved for use in armoring drainage crossings or retaining walls. The trail would be constructed in a manner consistent with USFS standards for trail construction, which incorporates techniques to reduce soil erosion.

Construction of structures would include a cumulative total of three hundred feet of rock retaining walls in dispersed project locations, specifically along ridgelines, talus field crossings, and along steep side slopes. Retaining walls would be constructed using native stone located within 15 meters on either side of the proposed trail centerline. Drainage crossings would be armored with native stone or reinforced with French drains, to reduce erosion.

There would be directional and mileage signs posted at each of the two trail junctions, and trail locator signs where the trail prism interconnects with the existing mining roads along the Summit Trail. All signs would indicate non-motorized use only, except on those portions of Summit Trail incorporating existing mining roads. Further, interpretive signage would be installed at points of interest.

Trail maintenance would be the responsibility of Humboldt County and would be performed commensurate with the level of use and precipitation events as guided by the maintenance standards required by the BLM and contained in the ROW permit to minimize impacts to soil and vegetative resources throughout the life of the trail and permit.

**Table 1. Trail Summary and Comparison Between Alternatives**

<b>Proposed Action Trail</b>	<b>New trail (miles)</b>	<b>Existing trail<sup>2</sup> (miles)</b>	<b>Total trail (miles)</b>	<b>Total new disturbance<sup>1</sup> (acres)</b>
Meandering Way	3.40	0	3.4	0.9
Summit Trail	2.14	1.76	3.9	0.6
<b>Total</b>	<b>5.54</b>	<b>1.76</b>	<b>7.3</b>	<b>1.5</b>

<sup>1</sup> Assumes a 2-foot wide trail.

<sup>2</sup> Existing 2-track road.

## **2.2 Standard Operating Procedures Incorporated into the Project Description**

### **Weed Control:**

- The County will be responsible for noxious weed management within the limits of the right-of-way. In addition to federal noxious weed lists and regulations (U. S. Department of Agriculture, NRCS, Plants Database. 2011), noxious weed species are identified in the Nevada Revised Statutes (NRS) 555.005.
- The County will consult with the BLM Authorized Officer and local authorities for appropriate weed control methods and develop a noxious weed management plan to be implemented within the limits of the trail ROW.
- All construction equipment shall be thoroughly cleaned and free from any seeds prior to arrival and use at the project site.

- All gravel or fill material used for construction of the parking areas must come from weed free sources.
- Trailhead signage would alert trail users to clean their bikes before and after use on the trails to prevent the spread of noxious and invasive weeds.

**Migratory Birds:**

- To avoid direct and indirect impacts to migratory birds, removal of nesting vegetation would occur outside the bird-breeding season. If vegetation removal occurs during the nesting season, then a qualified biologist would survey the area prior to initiation of construction. If active nests of migratory birds are located, a buffer would be established around the nests and the area avoided until the nests are no longer active. The size of the buffer is dependant on the identified nesting species and would be determined by the biologist.

**Soil and Erosion Construction:**

- Construction crew and equipment movement would be restricted to pre-designated access areas and existing roadways.
- Travel would be minimized on dirt roads during wet periods. If soil moisture would cause rutting by construction equipment (greater than 2 inches in depth for a length greater than 25 feet), movement of construction equipment within access roads would cease until dry conditions prevail.
- Servicing and/or refueling of construction equipment would occur off-site at a designated location.
- Oils and chemicals would be hauled to an approved site for disposal to prevent oil products from entering into groundwater or waters of the United States (WOUS). Spills are not expected, but should they occur, they would be addressed immediately. Any spills exceeding standard levels would warrant the notification of the appropriate agency.

**Cultural and Paleontological Resources:**

- Any cultural or paleontological resource, discovered by the permit holder, or any person working on their behalf, during the course of activities on federal land, shall be immediately reported to the authorized officer by telephone, and with written confirmation. The permit holder shall suspend all operations in the immediate area of such discovery and protect it until an evaluation of the discovery can be made by the authorized officer. This evaluation will determine the significance of the discovery and what mitigation measures are necessary to allow activities to proceed. If any significant cultural or paleontological resources are found during operations, impacts would be mitigated through avoidance and/or data recovery. The holder is responsible for the cost of evaluation and mitigation. Any decision on treatment and/or mitigation will be made by the authorized officer after consulting with the permit holder. Operations may resume only upon written authorization to proceed from the authorized officer.

### **Native American Religious Concerns:**

- Pursuant 43 CFR 10.4(g) the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), activities must be stopped in the immediate vicinity of the discovery and protected from activities for 30 days or until notified to proceed by the authorized officer.

### **Minerals:**

- In the event mining claims become active in the close proximity to the proposed trail such that the trail impedes the exploration progress or is a hazard to trail users, the County and the BLM would work jointly to route the trail around the impacted area. Exploration or mining would not be impeded by the biking trail.

### **Public Health and Safety:**

- Trail kiosks shall include educational information regarding the dangers of abandoned mining features. A phone number would be listed for persons to report trail hazards. The County would take appropriate actions commensurate with the hazard.

## **2.3 No Action Alternative**

Under the No Action Alternative, no trails, parking areas, or signage would be built and no additional recreational facilities would be provided on Winnemucca Mountain. While there are some existing trails and roads on the mountain, most are discontinuous and related to the mining operations. These trails and roads are not used by hikers or bikers.

The two-lane access road on the north side of the mountain holds snow and ice through much of the winter. Most of the south side of the mountain is snow-free through the winter. However there are no trails that are continuous top to bottom on the south side of the mountain.

People would continue to use other areas such as the Bloody Shins trail or the Water Canyon Recreational Site to get a similar experience. Under the No Action new user trails could appear, parts of the trails and roads that currently exist would continue to be used. There would continue to be no provision for signage, trail maintenance or parking.

## **2.4 Alternatives Considered but Eliminated from Detailed Analysis**

An Expanded Trail Alternative was considered and was similar to the Proposed Action but also included other trails and trailheads. The Expanded Trail Alternative incorporated three trails: 1) Meandering Way Trail, which was the same as the Proposed Action; 2) the Summit Trail which has a different alignment for the upper portion than the Proposed Action; and 3) The High Lonesome Trail (Figure 5).

- The Summit Trail would have connected with Meandering Way Trail to provide a 4.3-mile route to the summit of Winnemucca Mountain from Veteran's Memorial Park. This

route is longer than the Proposed Action and has a more gradual climb on the northwest face of the mountain. Approximately 1.76 miles of the trail would utilize existing two-track dirt roads. The elevation ranges from 4,995 feet at the junction with the Meandering Way Trail to 6,642 feet at the summit. Grades would be moderate to most difficult, with a minimum average grade of 7.2 percent and having 45 percent to 65 percent cross-slopes. The ability level would be rated as “difficult.” Full bench construction on steep slopes would be necessary.

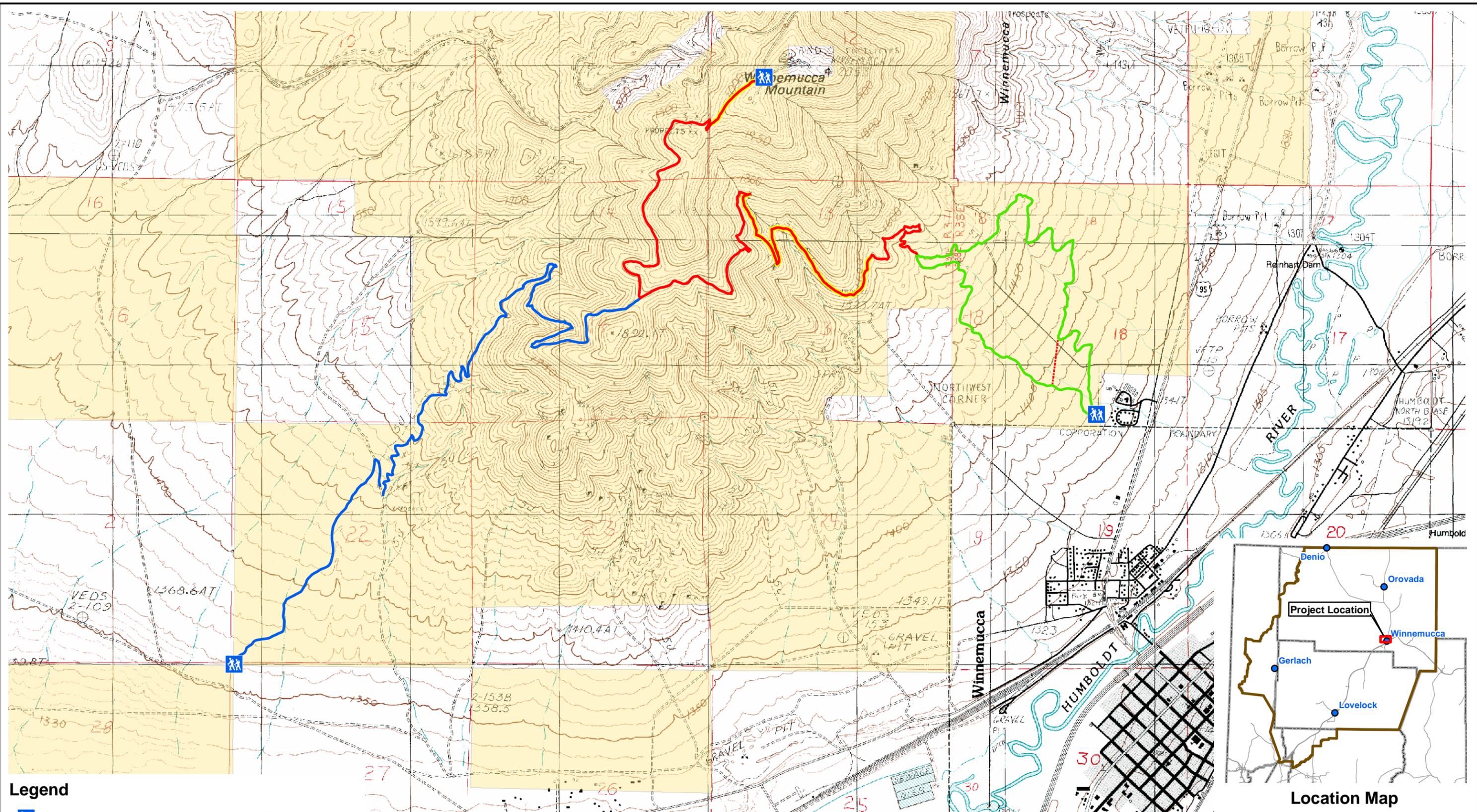
- The High Lonesome Trail would have connected with the Summit Trail to provide a 2.85 mile route beginning at an elevation of 4,789 feet on the west side of Winnemucca Mountain and ending at 6,035 feet at the junction with the Summit Trail, located along the crest of the mountain. Approximately 0.53 miles of the trail would utilize an existing cattle trail. It would be rated as “moderate”. Grades would be moderate to somewhat difficult, with a minimum average grade of 8.3 percent. Full bench construction would be needed on the steeper slope locations. This alignment and access to the trail would be entirely on BLM managed land (see Figure 5).

The Expanded Trail alternative was dismissed from detailed analysis due to conflicts with on-going land uses for mineral exploration activities on the mining claims and livestock grazing on the west side of the mountain.

Construction and use of the High Lonesome Trail would conflict with the mining activities including exploration drilling and the associated roads and drill pads. There are also several dangerous unclosed adits and shafts near the trail.

Construction and use of the High Lonesome Trail would have varying direct, long-term impacts to livestock grazing. The impacts would occur as recreational use increased during the cooler weather in the fall and winter, which would coincide with 200 or more cows with their calves using the Sand Dunes Allotment winter range. Bicyclists coming off Winnemucca Mountain at high speeds could startle livestock and incite them to run from the area.

Additional parking was considered near the Veterans Memorial Park along a dozed fuel break extending from a cattle guard at the southwest corner of Sage Heights subdivision to 100 feet north of where the trail intersects the fuel break. This was dismissed from consideration because the existing parking at the Veterans Memorial Park seemed adequate for the expected amount of use and the County was not interested in maintaining a new parking area if one was not needed.



**Legend**

	Trailhead		Connector Trail (1 mile loop)
	Summit Trail		Trail on Existing Road
	High Lonesome Trail		Bureau of Land Management
	Meandering Trail		Private

0 2,000 4,000 Feet  
1 inch = 2,000 feet

**Figure 5**  
**Alternative Considered but Eliminated**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007

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Map Date: April 7, 2011

### 3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT

The Proposed Winnemucca Mountain Trail System is located on the south and east facing slopes of Winnemucca Mountain in Township 36 North, Range 38 East Section 18 and Township 36 North, Range 37 East sections 11 through 14. All proposed trailheads and trails are located on public lands managed by the BLM.

#### 3.1 Supplemental Authorities

The National Environmental Policy Act (NEPA; 42 U.S.C. §§ 4321 - 4347) specifies that federal government agency decision-making processes include environmental effects analyses. Specifically, entities (federal and non-federal) proposing projects requiring federal actions (e.g., permits, funding) must conduct an environmental analysis of the proposed project actions and reasonable alternatives to those actions. The President's Council on Environmental Quality (CEQ) oversees the regulation of NEPA.

In addition to the mandatory supplemental authorities, there are additional resources that require impact analyses relative to the Proposed Trail and other alternatives. These are presented in **Section 3.2, Additional Affected Resources.**

To comply with the NEPA, the following supplemental authorities are requirements specified in statute, regulation or executive order and must be considered:

**Table 2. Supplemental Authorities**

Supplemental Authorities	Present	Affected
Air Quality	Yes	No
Areas of Critical Environmental Concern (ACEC's)	No	No
Cultural Resources	Yes	Yes
Environmental Justice	No	No
Floodplains	No	No
Invasive, Nonnative Species	Yes	Yes
Migratory Birds	Yes	Yes
Native American Religious Concerns	Yes	No
Prime or Unique Farmlands	No	No
Threatened & Endangered Species	No	No
Wastes, Hazardous or Solids	No	No
Water Quality (Surface and Ground)	No	No
Wetlands and Riparian Zones	No	No
Wild and Scenic Rivers	No	No
Wilderness	No	No

The following supplemental authorities have been identified as being present and affected by the Proposed Trail and alternatives: cultural resources, invasive/non-native species, migratory birds, and Native American religious concerns. These and other resources are described in the following paragraphs.

### *3.1.1 Cultural Resources*

A Class III inventory of the proposed project, CR2-3098(P), was completed by Research Archeology (Matranga and Creger 2010). The Project Area was surveyed between March 13 and April 11, 2010 and again on September 18, 2010. The survey area included both the proposed action as well as the Expanded Trail Alternative, which was subsequently dropped from detailed analyses.

Fieldwork resulted in the discovery of six historic sites (CrNV-22-9580 to CrNV-22-9585), two isolated historic finds, the relocation of one previously recorded historic site (CrNV-221-3455), and one isolated historic find. Survey efforts failed to relocate two previously recorded “prehistoric sites” (actually isolated finds) reported within and/or near project boundaries. All of the sites and isolates were recorded along the Proposed Action Route except site CrNV-22-9584, which was located on the Expanded Route, which is not a part of the Proposed Action. Historic site types include five sites related to mineral extraction, one site related to mineral processing, and one site related to incidental trash disposal. Based on site characteristics and the contexts of archaeological materials, none of the sites have been determined eligible for listing to the NRHP (36CFR60.4).

### *3.1.2 Invasive/Nonnative Species*

Noxious weeds are addressed by Executive Order 13112, which directs federal agencies to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species can cause. The Executive Order further specifies that federal agencies shall not authorize, fund, or carry out actions likely to cause or promote the introduction or spread of invasive species.

In addition to federal noxious weed lists and regulations, the Nevada Revised Statutes, Chapter 555.005-201, (Policy Statement Regarding Noxious Weed Abatement) defines “noxious weeds” and requires land owners or occupants, to control those noxious weeds listed on the Nevada Department of Agriculture’s Noxious Weed Website, ([http://agri.state.nv.us/PLANT\\_NoxWeeds-index.htm](http://agri.state.nv.us/PLANT_NoxWeeds-index.htm)).

No noxious weeds per the State or Federal Noxious Weed List (NDOA 2005) were observed in the Project Area during site visits. Known noxious weed occurrences in the vicinity of the Project Area and with suitable on-site habitat include: hoary cress (*Cardaria draba*), Russian knapweed (*Acroptilon repens*), and Scotch thistle (*Onopordum acanthium*).

Invasive non-native species present include cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerata*), tumble mustard (*Sisymbrium altissimum*), and Russian thistle (*Salsola* spp.) (Messmer, Aug. 31, 2009 personal communication).

In portions of the Project Area, habitat degradation caused by frequent fires (occurring at less than 10 to 15 year intervals) has resulted in local areas dominated by invasive annuals such as cheatgrass and tumble mustards. The Nevada Natural Heritage Program (NNHP) Cheatgrass Percent Coverage database estimates the amount of cheatgrass coverage as ranging from 10 to 30 percent cover on west facing slopes and ranging from 30 to 50 percent on the east facing slopes of the Project Area (NNHP 2003).

### 3.1.3 Migratory Birds

Migratory birds are protected and managed under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et. Seq.*) and Executive Order 13186. The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. Executive Order 13186 (2001) directs federal agencies to take actions to further implement the MBTA by identifying where unintentional takes by federal agencies have a measurable effect on migratory bird populations. With respect to these actions, federal agencies are to develop and use principles, standards, and practices that would lessen the amount of unintentional take.

Migratory birds generally require a diversity of plant structure for sufficient habitat for nesting, foraging and cover. The Project Area would normally be characterized by sagebrush vegetative community interspersed with salt desert scrub and grasslands. However, past wildfires have altered the vegetation communities and associated wildlife use. Currently, there are only isolated, scattered patches of big sagebrush located at lower elevations and low sage at the higher elevations that provide for nesting habitat. These patches of shrubs are interspersed with stands of perennial grasses.

Migratory birds associated with undisturbed desert shrub / sagebrush vegetative communities include: black-throated sparrow (*Amphispiza bilineata*), Brewer's blackbird (*Eugphagus cyanocephalus*), Brewer's sparrow (*Spizella breweri*), canyon wren (*Catherpes mexicanus*), gray flycatcher (*Empidonax wrightii*), green tailed towhee (*Pipilo chlorurus*), loggerhead shrike (*Lanius ludovicianus*), rock wren (*Salpinctes obsoletus*), sage sparrow (*Amphispiza belli*), sage thrasher (*Oreoscoptes mantanus*), western meadowlark (*Sturnella neglecta*), burrowing owl (*Athene cunicularia hypugaea*) and vesper sparrow (*Pooecetes gramineus*) (Neel, 1999). The burrowing owl, loggerhead shrike, and vesper sparrow are designated BLM sensitive species. Burrowing owls could nest in or near Project Area.

Raptors are also protected under the MBTA. Several raptor species may forage in the area, including the golden eagle (*Aquila chryaetos*), ferruginous hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), northern goshawk (*Accipiter gentilis*) and Swainson's hawk (*Buteo swainsoni*), all of which are BLM sensitive species. See more discussion on sensitive species in Section 3.2.9 Special Status Species.

### 3.1.4 Native American Religious Concerns

The Project Area is within the traditional territory of the Northern Paiute. Specifically, the project area is in the territory of the Sawawaktödö band of Northern Paiutes (Stewart 1941). Traditionally, the Northern Paiute maintained a nomadic lifestyle and were well adapted to the Great Basin environment.

The Northern Paiute believed that power (*puha*) could reside in any natural object and that it habitually resided in natural phenomena such as the sun, moon, thunder, clouds, stars, wind and mountains.

### 3.2 Additional Affected Resources

In addition to supplemental authorities, there are additional affected resources including other biological, physical, and human resources, which the BLM considers in the NEPA process. The additional affected resources that have been identified that may be present and/or affected in the Project Area include:

- Geology and Minerals
- Paleontology
- Public Health and Safety
- Rangeland Management
- Realty
- Recreation
- Social and Economic Values
- Soil
- Special Status Species
- Vegetation Resources
- Visual Resources
- Wildlife

#### 3.2.1 *Geology and Minerals*

The general geology of Winnemucca Mountain consists primarily of the Winnemucca and Raspberry formations, which are comprised of Triassic shale, sandstone, limestone, quartzite, and slate, which is locally phyllitic. Intrusions of Jurassic and Cretaceous diorite occur in small masses on the southeastern flank of the mountain, and the north side of the mountain hosts some Tertiary olivine basalt flows.

Winnemucca Mountain is within the Winnemucca mining district. Mining on the mountain began in 1863 with the first mineral discovery and continued periodically by various groups through the 1960's. Sporadic recent exploration work began in the 1980's (Bonham et al, 1985). Currently, there are no mines being actively worked in the Project Area, however there is on-going exploration activity on several claims to the north of the Project Area (Lutz, personal communication 3-1-2010). The mountain is riddled with active and old exploration roads, pits, adits, and shafts. See the Public Health and Safety for additional details.

#### 3.2.2 *Paleontology*

The BLM manages paleontological resources under a number of federal laws including: FLPMA Sections 310 and 302(b), which direct the BLM to manage public lands to protect the quality of scientific and other values; 43 CFR 8365.1-5, which prohibits the willful disturbance, removal,

and destruction of scientific resources or natural objects; 43 CFR 3622, which regulates the amount of petrified wood that can be collected for personal, noncommercial purposes without a permit; and 43 CFR 3809.420 (b)(8), which stipulates that a mining operator "shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands."

Informational Memorandum (IM) No. 2008-009, effective October 15, 2007, defines the BLM classification system for paleontological resources on public lands. The descriptions for the classes used in the Potential Fossil Yield Classification (PFYC) system are intended to serve as guidelines rather than strict definitions. Knowledge of the geology and the paleontological potential for individual units or preservational conditions should be considered when determining the appropriate class assignment. In addition, IM No. 2009-011, effective October 10, 2008, provides guidelines for assessing potential impacts to paleontological resources in order to determine mitigation steps for federal actions on public lands under the FLPMA and the NEPA. Together, these two IMs, with the PFYC system, provide guidance for the assessment of potential impacts to paleontological resources, field survey and monitoring procedures, and recommended mitigation measures that protect paleontological resources impacted by federal actions.

Surface disturbing activities may cause direct impacts to paleontological resources through the damage or destruction of fossils; or loss of valuable scientific information by the disturbance of the stratigraphic context in which fossils are found. Indirect impacts may be created by increased accessibility to important paleontological resources leading to looting or vandalism. Land tenure adjustments may result in the loss of significant paleontological resources to the public if paleontological resources pass from public ownership. Generally, the Project proponent is responsible for the cost of implementing mitigation measures including the costs of investigation, salvage, and curation of paleontological resources.

There is no record of fossils being found in the Project Area. The BLM Winnemucca District Office PFYC GIS rates Paleontology sensitivity for the proposed Project Area as Class 4a--High Potential, Class 3b—Unknown Potential, and Class 3a--Moderate Potential. However consultation with BLM Winnemucca District Office Geologist Kathleen Rehberg indicates that these ratings are incorrect. Ms. Rehberg's analysis of the PFY potential is as follows:

**Winnemucca Mountain - Winnemucca Formation** – The PFYC GIS layer says 4a, but closer examination of the geologic unit suggests a classification of 3b – unknown potential. The formation does contain some stratigraphic layers that have the potential to yield fossils, however no known fossils have been found in the Winnemucca formation in the Winnemucca area.

**Cretaceous-Jurassic intrusive rocks on the SE flank of Winnemucca Mountain** – The PFYC GIS layer says 3b, but the type of geologic unit (intrusive diorite) suggests a classification of 1 – very low potential. Igneous and metamorphic rocks are normally classified as a 1, because they are very unlikely to contain fossils.

**East and SE base of Winnemucca Mountain – Raspberry Formation** – The PFYC GIS layer says 3. The type of geologic units in this formation could contain fossils, but this is unlikely due to alteration and some low-grade metamorphism. There are no known fossils in this location.

### 3.2.3 *Public Health and Safety*

The State of Nevada Division of Minerals' Abandoned Mine Lands Program is legislatively mandated to discover dangerous conditions that resulted from mining practices. Nevada Administrative Code 513 directs the process. There are numerous exploration trenches, adits, and abandoned mines throughout Winnemucca Mountain. These are generally marked by barbed wire and signs. The closest known adits include one located in the northwest corner of Section 13 near the sharp bend in the road for the Summit Trail. No other potential hazards near the trail were identified.

### 3.2.4 *Rangeland Management*

The Project Area is located within the BLM Winnemucca District Sand Dune grazing allotment and is south of the Sand Pass Allotment. The 167,443-acre allotment is physically divided into summer and winter use areas by a natural sand dune barrier north of Winnemucca Mountain. Livestock grazing is permitted to three livestock operators in the Sand Dune Allotment. T-Quarter Circle Ranch is the primary range user and currently has approximately 95 percent of the permitted use. Pedroli Ranches and Mike McNinch have the other five percent. Approximately 69 percent of the allotment AUMs are tied to public land, and 31 percent of the AUMs are tied to private land permitted as exchange of use within the Sand Dune Allotment.

The proposed Project Area is within the Sand Dune winter use area. Approximately 200 to 220 cows with their calves use the Sand Dune winter range on the west side of Winnemucca Mountain from the first of October through mid to late April at which time livestock are moved to summer range. The area near Meandering Trail on the east flank of Winnemucca Mountain has light use by cattle in the winter, but is mostly used in the summer for herding approximately 700 cattle from the summer range in the Sand Dune, Sand Pass, and Bloody Run Allotments. Four to five cattle drives occur in mid-July to mid-August through the Meandering Trail area.

Livestock water developments within the vicinity of the proposed project include the Kelly Well, approximately four miles west of the Summit Trail; Kelsey Spring approximately two miles west of the Summit Trail, and Winnemucca Springs within one mile of the Meandering and Summit Trails. Livestock water developments are maintained by the livestock permittees. Livestock use is always higher in the vicinity of the water developments.

### 3.2.5 *Realty*

The proposed Project Area is located entirely on public lands managed by the Bureau of Land Management – Winnemucca District. Current policies for development and land use decisions are contained in the Paradise-Denio Management Framework Plan (1982).

Access to the Meandering Way trailhead would be from the Veterans' Memorial Park, located off of Highway 95. Paved public parking is available at two small lots, which also serve the

County pool, a retail store, and Veterans' Memorial Park. The parking areas are owned and maintained by Humboldt County.

The Summit Trailhead is accessed by a paved road leading from Highway 95. This road was paved by the military many years ago and is only maintained by Humboldt County up to the landfill site. Past this point, the State of Nevada or the County may plow the road if there is heavy snow. The road is on land managed by the BLM and the County does not have record of a ROW on the road. This road is currently the only access to communication towers at the top of Winnemucca Mountain.

### *3.2.6 Recreation*

There are no formal BLM managed recreational sites within the Project Area. Numerous existing dirt roads allow for frequent, informal use by Off-Highway-Vehicles (OHVs) and less frequently by hikers, bikers and cross-country skiers. The roads on the backside of Winnemucca Mountain provide OHV access to the sand dunes to the north. The summit is often used as a scenic vista. Recreational user access is provided by several dirt roads stemming from Jungo Road. Due to the high summer temperatures and winter snow, the majority of recreational activities on Winnemucca Mountain occur during the spring and fall seasons.

The Bloody Shins Trail System is the only designated mountain biking/hiking trail in the Winnemucca District. The trailhead begins northeast of Winnemucca at the end of Kuncy Canyon Road.

The nearest BLM managed and maintained recreational site is the Water Canyon Recreational Area. It is located approximately five miles east of Winnemucca Mountains in the Sonoma Mountains. Water Canyon Recreational Area provides overnight camping, picnicking, hiking, biking, and limited OHV use.

The Project Area is located within Nevada Hunt Unit 035. Hunting of ground squirrels occurs in the spring and summer when the rodents are present above ground. Dove hunting may occur in the area during the legal hunting season, which runs through the month of September. Hunting for chukar and other upland game species occurs during the open legal season, which is from the second week in October to the first week of February.

### *3.2.7 Social and Economic Values*

The closest town is Winnemucca with a population of approximately 7,646 persons. The population of Winnemucca, together with the surrounding area, is estimated at 15,800 persons (Fadali, Harris, and Borden, 2004). Winnemucca is the only incorporated city within Humboldt County.

According to a study completed in 2004, approximately 20 percent of the employed population of Humboldt County worked in the mining industry, 14 percent worked in the educational, health, and social services, 13 percent in the arts, entertainment, recreation, accommodation and food services, 12 percent worked in the retail trade, nine percent worked in the construction industry and five percent worked in the agriculture, forestry, fishing, or hunting industry (Fadali, Harris, and Borden, 2004).

More recently, energy jobs such as the Blue Mountain Faulkner 1 Geothermal Power Plant completed in 2009, have added to the existing employment in the energy industry. The Valmy power plant employs 100 persons. Wind energy opportunities are also being explored in Humboldt County (HDANV, 2011).

Over half of the population in Winnemucca (57%) is between the age of 15 and 54, which includes the typical ages for mountain bike users (Fadali, Harris, and Borden, 2004).

### *3.2.8 Soil*

In general, soils consist of sandy or gravelly loam derived from residuum and colluvium of mixed rock. Figure 6 illustrates the various soil types found within the Project Area. Susceptibility from water or wind erosion is generally low to moderate. Soil map units within the Project Area include:

- Chiara-McConnel association (mapping unit 184)
- Havingdon-Burrita association (mapping unit 290)
- Atlow-Gowjai association (mapping unit 700)
- Wiskan-Ckimine association (mapping unit 1450)

The bottom half-mile of the Summit Trail and the entire Meandering Way trail would be located within the Chiara-McConnel (mapping unit 184) association. This soil map unit is found on fan remnants and inset fans and is formed from alluvium derived from mixed rocks, loess, and volcanic ash. This soil association is well drained to somewhat excessively drained, with a duripan occurring between 10 to 20 inches in some areas. The surface texture varies between gravelly fine sandy loam and fine sandy loam. Susceptibility to rill and sheet erosion is moderate.

The majority of the Summit Trail is located within the Havingdon-Burrita association (mapping unit 290) and the Wiskan-Climin association (mapping unit 1450) with a few hundred feet located within the Atlow-Gowjai association (mapping unit 700) and several thousand feet located in the Chiara-McConnel association (described above).

The Havingdon-Burrita (mapping unit 290) association is found on mountains and is formed from residuum and colluvium derived from mixed rocks. The association is comprised of well drained but shallow soils with a depth of 14 to 20 inches to lithic bedrock. The surface texture is very gravelly loam and susceptibility to rill and sheet erosion is moderately low.

The Atlow-Gowjai (mapping unit 700) association is found on mountain back slopes. These soils are formed in residuum and colluvium derived from mixed rocks. Soils are well drained with a depth of 14 to 60 inches to lithic bedrock. Surface texture is very gravelly loam or gravelly very fine sandy loam. Susceptibility to rill and sheet erosion is moderate.

The Wiskan-Climin association (mapping unit 1450) is found on mountain back slopes. These soils are formed in residuum and colluvium derived from mixed rocks. Soils are well drained and

very deep with over 80 inches depth to a restrictive layer in some areas. Surface texture is very gravelly loam or very fine sandy loam and susceptibility to rill and sheet erosion is moderate.

### 3.2.9 *Special Status Species*

This section includes taxa that are not Federally listed threatened or endangered species. These species include State of Nevada listed species and Nevada BLM sensitive species. BLM policy is to “ensure that actions authorized, funded, or carried out do not contribute to the need for species to become listed (BLM Manual 6840.06C).

Based on the recent environmental analysis provided in the Winnemucca Wildland Urban Interface Area Treatment Project EA (BLM 2010) and per the direction of the BLM Winnemucca biologists, the following BLM sensitive wildlife and plant species have potential to be impacted by the proposed project:

- Burrowing owl (*Athene cunicularia hypugaea*)
- Ferruginous hawk (*Buteo regalis*)
- Golden eagle (*Aquila chryaetos*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Northern goshawk (*Accipiter gentilis*)
- Prairie falcon (*Falco mexicanus*)
- Pygmy rabbit (*Brachylagus idahoensis*)
- Swainson’s hawk (*Buteo swainsoni*)
- Townsend’s big-eared bat (*Corynorhinus townsendii*)
- Vesper sparrow (*Pooecetes gramineus*)
- Yellow-breasted chat (*Icteria virens*)
- Wind loving buckwheat (*Eriogonum anemophilum*)

#### **Burrowing Owl**

Burrowing owls (*Athene cunicularia hypugaea*) prefer open, often treeless grasslands and Mojave Desert scrub, sagebrush/perennial grassland, and open shrub stages of pinyon-juniper and mixed conifer habitats. They can also be found nesting around the fringes of agricultural lands, and they use crop and pasture lands for foraging during the breeding season. Burrowing owls also nest in open urban areas with open space (e.g. golf courses, airport runways, and industrial areas) if burrows are available. In general, burrowing owls prefer short vegetation and presence of fresh small mammal burrows (USFWS, 2003). Burrowing owls nest primarily in abandoned burrows of ground squirrels, badgers, and coyotes, and are not known to excavate new burrows. They may prefer a high density of burrows, even if they do not actively use all of them. Burrowing owls are opportunistic feeders. Their diet includes large insects, reptiles, amphibians, and small rodents (NDOW 2010).

### **Ferruginous Hawk**

The ferruginous hawk (*Buteo regalis*) inhabits open grassland, sage, and other arid shrub country in western North America. The ferruginous hawk primarily hunts small to medium-sized mammals but will also take birds, reptiles and insects. They are known to breed in central Nevada (NatureServe, 2009).

### **Golden Eagle**

Golden eagles (*Aquila chryaetos*) are primarily cliff nesters and may utilize the Project Area to forage for prey species such as jackrabbits and other small mammals. Golden eagles are protected under the Bald and Golden Eagle Protection Act (NatureServe, 2009).

### **Loggerhead Shrike**

Loggerhead shrikes (*Lanius ludovicianus*) prefer open country with short vegetation. They are often found nesting in isolated trees or large shrubs. In Nevada, it is commonly found in shrub habitat types, such as sage scrub, sage steppe, and greasewood scrub. Suitable hunting perches are an important part of their habitat (NatureServe, 2009), and they are often found perching on poles and wire (Neel, 1999).

### **Northern Goshawk**

Northern Goshawk (*Accipiter gentilis*) is a year-round resident in the Winnemucca District. It forages in open sagebrush adjacent to riparian aspen stands. Nesting is generally in the largest trees of dense, old or mature stands with high canopy (NatureServe, 2009).

### **Prairie Falcon**

Prairie falcons (*Falco mexicanus*) inhabit hills, canyons and mountains of arid grasslands and shrub-steppes of the western US. The prairie falcon primarily eats small mammals, but will also hunt birds, reptiles, and insects. The falcon is a year-round resident in central Nevada (NatureServe, 2009).

### **Pygmy Rabbit**

The pygmy rabbit (*Brachylagus idahoensis*) is a BLM sensitive species. Pygmy rabbits are found in alluvial fans, swales in a rolling landscape, large flat valleys, at the foot of mountains, along creek and drainage bottoms, in basins in the mountains, or other landscape features where soil may have accumulated to greater depths. Habitat is provided by tall dense stands of big sagebrush (*Artemisia tridentata*) on loose soils. Sagebrush is the primary food, comprising as much as 99 percent of the pygmy rabbit diet in the winter, supplemented with grasses in the spring and summer. Pygmy rabbits may be active at any time of day, but primarily during crepuscular hours (NatureServe 2009, Burt and Grossenheider, 1980).

Pygmy rabbit habitat consists of tall, dense stands of big sagebrush on loose soils. Suitable vegetation for the pygmy rabbit habitat is limited to the unburned portions of big sagebrush found at lower elevations on Winnemucca Mountain. However, soils in this portion of the Project Area are classified as Chiara-McConnel association, which is characterized by sandy loam to 14 inches with hardened soils below. These soils are not suitable for construction of burrows; therefore, there is no potential habitat within the Project Area and there would be no

impact to pygmy rabbits. This paragraph concludes discussion of pygmy rabbits in this document.

### **Swainson's Hawk**

Swainson's hawk (*Buteo swainsoni*) inhabits open grassland, sage, and agricultural land in western North America. The hawk hunts small to medium-sized mammals, birds, and reptiles during breeding and insects the remainder of the year. They are known to breed in the western US and winter in South America (NatureServe, 2009).

### **Townsend's Big-eared Bat**

Townsend's big-eared bat (*Corynorhinus townsendii*) species is found throughout the state, from low desert to high mountain habitats as a year-round resident. It is highly associated with caves and mines. It hibernates in the winter in groups of a few individual to many hundreds. It is a moth specialist with over 90 percent of its diet composed of lepidopterans (The Revised Nevada Bat Conservation Plan 2006). The Townsend's big-eared bats eat insects and arthropods during the warmer seasons and hibernate in underground structures during the cooler seasons.

### **Vesper Sparrow**

In Nevada, the vesper sparrow (*Pooecetes gramineus*) typically inhabits sagebrush-grass vegetation communities. It forages on the ground and eats mostly seeds from grasses and forbs and will also eat insects when they are available. In these habitats, it benefits from open areas with scattered shrubs and a cover of good bunchgrasses for nest concealment; it is a ground nester (Paige and Ritter, 1999).

### **Yellow-Breasted Chat**

The yellow-breasted chat (*Icteria virens*) breeds in secondary growth, shrubby old pastures, thickets, bushy areas, scrub, including low wet places near streams, pond edges, or swamps. During the non-breeding season, it establishes territories in young second growth forest and scrub (NatureServe, 2009).

### **Wind Loving Buckwheat**

Wind Loving Buckwheat (*Eriogonum anemophilum*) occurs at high elevations on dry, exposed, relatively barren and undisturbed, gravelly, limestone or volcanic ridges and ridgeline knolls. It is often found growing on rock outcrops or rocky soils over bedrock. Common associated species include *Artemisia arbuscula*, *Ericameria viscidiflora*, *Poa secunda*, *Elymus elymoides*, and *Arenaria kingii* (NNHP, 2001).

## *3.2.10 Vegetation Resources*

Due to the frequent fires in the Project Area, shrub communities are scattered and interspersed among perennial grasslands. Areas of high disturbance are often dominated by invasive annuals, such as cheatgrass and tansy mustard, to the near exclusion of woody plants.

Sagebrush habitat occurring at lower elevations is dominated by Wyoming big sage (*Artemisia tridentata* var. *wyomingensis*). Other commonly occurring species include spiny hopsage (*Grayia spinosa*), Thurber's needlegrass (*Achnatherum thurberianum*), Indian ricegrass (*Achnatherum*

*hymenoides*), Sandberg's bluegrass (*Poa secunda*), bottlebrush squirreltail (*Elymus elymoides*), and cheatgrass (*Bromus tectorum*). Common forbs include several species of phlox (*Phlox* spp.), wild buckwheats (*Eriogonum* spp.), and biscuitroot (*Lomatium* sp.). Approximately one thousand feet of Meandering Trail would be located within big sage vegetation the remainder of the trails would be located in old burn areas dominated by perennial grasses and invasive annual grasses.

The shallow soils of the mountain slopes support black sagebrush (*Artemisia nova*). Other shrubs associated with this habitat include winterfat (*Krascheninnikovia lanata*), spiny hopsage, shadscale (*Atriplex confertifolia*), Nevada ephedra (*Ephedra nevadensis*), and rabbitbrush (*Chrysothamnus viscidiflorus*). Perennial grasses are dominated by Thurber's needlegrass, Indian ricegrass, Idaho fescue (*Festuca idahoensis*), needle and thread (*Achnatherum comata*), basin wildrye (*Leymus cinereus*), and bottlebrush squirreltail.

### 3.2.11 Visual Resources

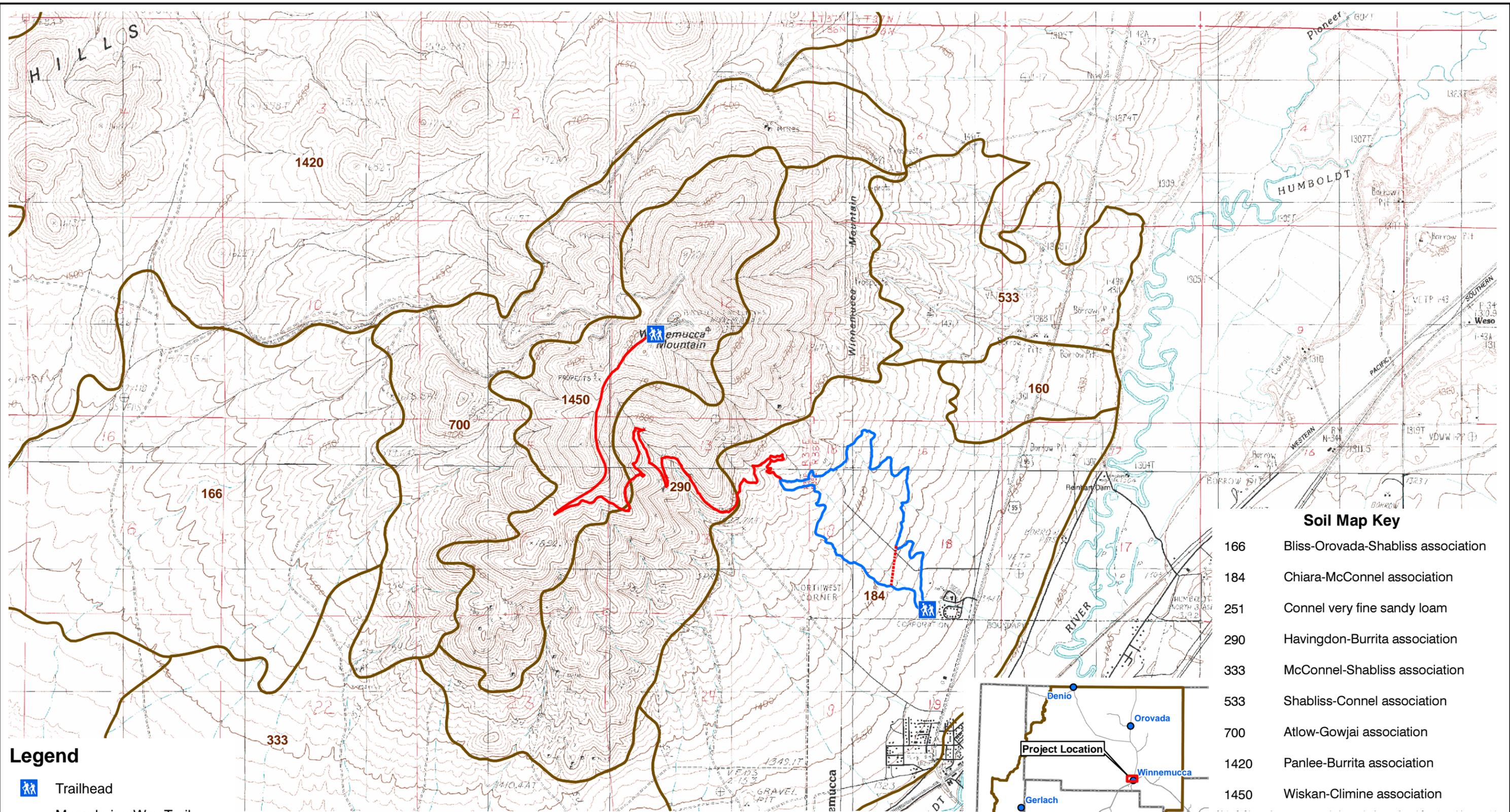
The project is within VRM Class III Partial Retention and Class IV Modification. Essentially the Class III lands are visible from Winnemucca while the Class IV lands are not. The Classes are defined as follows:

The objective of Class III is to partially retain the existing landscape character. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the casual observer's view. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The objective of Class IV is to provide for management activities that require major modification of the existing landscape character. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the major focus of viewer attention. Every attempt, however, should be made to minimize the impact of these activities through careful location, minimal disturbance and repeating the basic landscape elements.

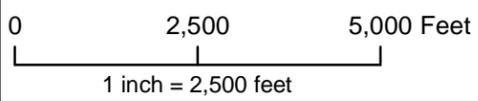
### 3.2.12 Wildlife

Approximately 100 bird species and 70 mammal species can be found in habitats similar to the Project Area and within adjacent vegetative communities (see section 3.2.10 Vegetation). Some of the large mammal species include mule deer (*Odocoileus hemionus*), pronghorn antelope (*Antilocapra americana*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), and badger (*Taxidea taxus*). There are also various small mammals and common reptiles associated with the Project Area (BLM, 1973).

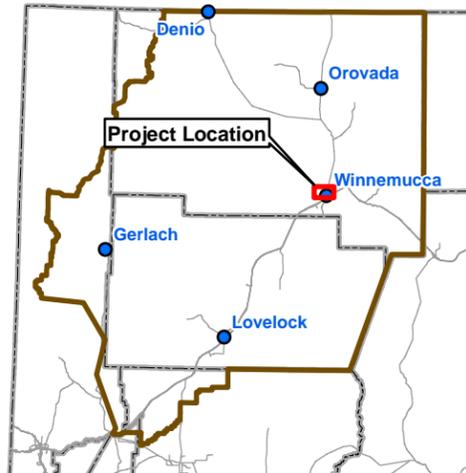


**Legend**

- Trailhead
- Meandering Way Trail
- Summit Trail
- Connector Trail (1 mile loop)
- Soil Boundaries



**Figure 6**  
**Soil Mapping Units**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007



**Location Map**

**Soil Map Key**

166	Bliss-Orovada-Shabliss association
184	Chiara-McConnel association
251	Connel very fine sandy loam
290	Havingdon-Burrita association
333	McConnel-Shabliss association
533	Shabliss-Connel association
700	Atlow-Gowjai association
1420	Panlee-Burrita association
1450	Wiskan-Climine association

United States Department of the Interior  
 Bureau of Land Management  
 Winnemucca Field Office  
 5100 E. Winnemucca Blvd.  
 Winnemucca, NV 89445



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

#### **4.0 ENVIRONMENTAL CONSEQUENCES (DIRECT, INDIRECT, SHORT TERM, LONG TERM)**

This section summarizes the physical, biological, social, and economic environments of the affected Project Area and the potential changes to those environments due to implementation of the proposed action and alternatives.

##### **4.1 Supplemental Authorities**

###### *4.1.1 Cultural Resources*

###### **Proposed Action**

All sites recorded along the proposed route have been determined to be ineligible to the NRHP. No impacts to cultural resources are anticipated (see Section 2.2).

###### **No Action Alternative**

Under the No Action Alternative, impacts to cultural resources would remain at the current level.

###### *4.1.2 Invasive/Nonnative Species*

###### **Proposed Action**

Vegetation communities are more susceptible to infestations of invasive or noxious weed species following soil disturbances. Vegetation removal and soil disturbance during trail construction could create conditions for the establishment of undesirable species. Once established, invasive and noxious weeds could affect habitat by competing for resources such as water and light, changing the community composition, eliminating or reducing native plants or by changing the vegetation structure. The changes in community composition or vegetation structure could reduce native plant populations and could also affect habitat for wildlife.

During construction, movement of crews and equipment within the proposed right-of-way and along access roads could provide opportunities for seed transport into new un-infested areas. In addition, once the trail is established, hikers and bikers may introduce new weed species. Seeds attached to hikers shoes, clothes, or bikes could be transported along the trail and road edges. Direct effects could include the establishment or spread of invasive or noxious plants through the use of the trail after construction, maintenance activities, or by providing a corridor for the establishment and spread of invasive or noxious weeds to adjoining lands.

Weed transport by construction equipment and crews would be minimized or avoided by using the weed control standard operating procedures described in Section 2.2 of this document. With periodic maintenance and prompt treatment of identified infestations, the presence of noxious weeds and invasive, nonnative species would be managed effectively.

###### **No Action Alternative**

Vegetation communities are more susceptible to infestations of invasive or noxious weed species following soil disturbances. The No Action alternative would not create any new land disturbances and the potential for establishment of invasive and nonnative species would remain at the current level.

#### 4.1.3 *Migratory Birds*

##### **Proposed Action**

Migratory bird species would be temporarily disturbed and displaced from the Project Area during construction activities due to noise and increased human presence. New trail construction could directly impact migratory birds and / or nests if vegetation is cleared during the breeding season. The removal of vegetation and potential nesting habitat could cause indirect effects to breeding birds that might normally nest within the Project Area. In the long-term, the trails would likely result in an increase of human activity in the area and disturbance, to some degree, of migratory bird activities.

The project has incorporated wildlife BMPs described in Section 2.2 of this document to avoid direct impacts to nesting migratory birds during construction.

##### **No Action Alternative**

Under the No Action Alternative, impacts to migratory birds would remain at the current level.

#### 4.1.4 *Native American Religious Concerns*

##### **Proposed Action**

Copies of the preliminary EA were sent to Winnemucca Colony and Fort McDermitt Paiute Shoshone Tribe on April 21<sup>st</sup>, 2011. No comments were received from them, nor did they request a consultation meeting with the BLM.

##### **No Action Alternative**

Under the No Action Alternative, impacts to Native American Religious Concerns would remain at the current level.

## 4.2 **Additional Affected Resources**

#### 4.2.1 *Geology and Minerals*

##### **Proposed Action**

The proposed trail would not cross any active mineral exploration or mining related activities but there are several active claims in the area. Should mining operations become active on these claims in the future, the county and the BLM would work jointly to route the trail around the impacted area as described in Section 2.2.

##### **No Action Alternative**

The No Action Alternative would not affect site geology or mineral claims.

#### 4.2.2 *Paleontology*

##### **Proposed Action**

The potential for significant paleontological resources in the Project Area ranges from very low, to unknown, to moderate and there are no known paleontological sites in the Project Area. Given the minimal depth of the proposed surface disturbance, there is little potential for impacts to paleontological resources even if they were present. Therefore no impacts to paleontological resources are anticipated. If any significant paleontological resources are found during

operations, impacts would be mitigated through avoidance and/or data recovery (see Section 2.2).

### **No Action Alternative**

The No Action Alternative would not affect paleontological resources.

#### *4.2.3 Public Health and Safety*

### **Proposed Action**

The proposed trails would be designed, constructed and maintained according to accepted industry standards as described in Chapter 2. The trail location was also selected to avoid identified hazardous mining areas such as pits and adits. There are no known mining hazards along or adjacent to the trail. Public health and safety would not be impacted through the development, use or maintenance of the trail.

### **No Action Alternative**

The No Action Alternative would not affect public health and safety.

#### *4.2.4 Rangeland Management*

### **Proposed Action**

Cattle could be disturbed and harassed by hikers and persons on fast-moving bicycles. Disturbances could cause cattle drives to be more difficult to keep the cattle together and moving along at a steady pace. Most of the winter cattle use and the cattle improvements are on the western side of Winnemucca Mountain, away from the proposed trails. Therefore, disturbances to cattle from bicyclists, hikers, and dogs would be minimal. The trails would not be near any water developments or areas where the cattle tend to congregate. There would be little interaction during summer cattle drives because the trail would receive light use during the hot summer months. Also, both the recreationists and the cattle would tend to avoid interaction.

The following mitigation measures would be implemented to minimize impacts to rangeland resources:

- The approximate dates for the cattle drives in the Sand Dune allotment should be posted at the trail heads.
- Organized biking or hiking events would be permitted to avoid cattle drives.
- Trail kiosks would include educational and etiquette protocols for hikers and bikers who encounter livestock including the following recommendation:
  - Recommendation for dogs to be kept on a leash or controlled by owner to avoid conflicts with livestock, other trail users and wildlife

### **No Action Alternative**

The No Action Alternative would not affect rangeland management.

#### 4.2.5 Realty

##### **Proposed Action**

The Proposed Action is located entirely on public land administered by the BLM and designated for multiple uses. In order for Humboldt County to construct a hiking/biking trail system across federal land, the BLM must grant a ROW to the County for trail construction and maintenance. The ROW would be for the 7.3 miles of trail for not less than 20 years. Approximately 5.5 miles or 1.5 acres of the trail would be a new use. There is an existing two-track road for 1.76 miles of trail or 0.43 acres that would not change use.

##### **No Action Alternative**

The No Action Alternative would not affect realty.

#### 4.2.6 Recreation

##### **Proposed Action**

The Proposed Trail Alignment would have direct, long-term effects on recreation. The project would open the south side of the mountain to hiking and biking trail use where currently none exists. The trails would provide new scenic vistas to hikers and bikers. The project would provide designated parking and signage to improve the trail users experience.

Due to the lack of existing developed recreational opportunities in the area, the trail should result in a measurable increase in visitation, especially during the fall, winter, and spring when the weather would be optimal for use in the typically dry, hot environment. The one-mile loop would be used frequently by local hikers and bikers of all ages and skill levels, while the more strenuous portions of the trails would also be an attraction for the hardier hiker and the intermediate to advanced bikers. With the easy access from I-80 to the trailheads, the trail would be an attraction to out-of-town users for hiking and biking. This caliber of trail with the solid construction and beautiful vistas would also be a draw for local and regional bike race events.

The proposed trail shares access with the pool users at the Veterans Memorial Park. The time of year when the trail would be used (fall, winter, spring) would not overlap substantially with the pool users (summer). Therefore there are no conflicts with other recreational uses in that area.

##### **No Action Alternative**

Under the No Action Alternative, additional recreational trails would not be completed and additional recreational opportunities would not be afforded the residents and tourists to the Winnemucca area.

#### 4.2.7 Social and Economic Values

##### **Proposed Action**

Implementation of the proposed action would lead to increased visitation to the Project Area. Increased visitation would be expected to result in some vandalism of trailheads and or public parking areas, and may result in additional requests from visitors needing emergency services associated with biking or hiking accidents. Increased visitation may also bring potential benefits to local businesses in Winnemucca that provide goods and services to users of the trail. However, the impacts to the community are unquantifiable at this time.

With over half of the local population between the age of 15 and 54, the trail system would offer a new local recreational activity. The trails would provide a healthy form of social and recreational activity.

### **No Action Alternative**

Under the No Action Alternative, the recreational trails would not be completed and the economic benefits afforded by additional recreational opportunities and increased visitation near Winnemucca would not be realized. Residents would not have the local recreational opportunity on Winnemucca Mountain.

#### *4.2.8 Soil*

### **Proposed Action**

The soils in the Project Area have low to moderate erosion potential. The trail design incorporates trail-building techniques and soil and erosion construction actions to minimize erosion. In addition, the county has committed to maintain the trail to minimize erosion and sedimentation. The following actions proposed in section 2.2 would minimize erosion:

- Construction crew and equipment movement would be restricted to pre-designated access areas and existing roadways.
- Travel would be minimized on dirt roads during wet periods. If soil moisture would cause rutting by construction equipment (greater than 2 inches in depth for a length greater than 25 feet), movement of construction equipment within access roads would cease until dry conditions prevail.
- Servicing and/or refueling construction equipment would occur off-site at a designated location.
- Oils and chemicals would be hauled to an approved site for disposal to prevent oil products from entering into groundwater or waters of the United States (WOUS). Spills are not expected, but should they occur, they would be addressed immediately. Any spills exceeding standard levels would warrant the notification of the appropriate agency.

### **No Action Alternative**

Under the No Action Alternative, it would be expected that soils would remain the same as they are currently.

#### *4.2.9 Special Status Species*

### **Proposed Action**

#### **Burrowing Owl**

No colonies were identified within or adjacent to the Project Area. Burrowing owls that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Ferruginous Hawk**

There is habitat for the ferruginous hawk within the Project Area. Ferruginous hawks inhabit open grassland, sage, and other arid shrub country. Ferruginous hawks that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Prairie Falcon**

There is habitat for the prairie falcon within the Project Area. Prairie falcons inhabit hills, canyons and mountains of arid grasslands and shrub-steppes. Prairie falcons that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Swainson's Hawk**

There is habitat for the Swainson's hawk within the Project Area. Swainson's hawks inhabit open grassland, sage, and agricultural land. Swainson's hawks that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Golden Eagle**

There is limited nesting habitat for the golden eagle within the Project Area. Golden eagles are primarily cliff nesters and may utilize the Project Area to forage for prey species such as jackrabbits and other small mammals. Golden eagles that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Loggerhead Shrike**

There is limited nesting habitat for the loggerhead shrike within the Project Area. Loggerhead shrikes nest in isolated trees or large shrubs. Within the Project Area, there are no trees. Meandering Way trail passes through one 10-acre unburned big sagebrush patch. Approximately 1,000 feet of trail or 2,400 square feet of disturbance would occur in potential loggerhead shrike habitat. Loggerhead shrikes that may use areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Northern Goshawk**

There is foraging habitat for the northern goshawk within the Project Area. Northern goshawks forage in open sagebrush adjacent to riparian aspen stands. Northern goshawks that may use areas in and around the Project Area could be disturbed by the increase of human activity in the area.

### **Townsend's big-eared bat**

The mine adits and cliffs in the Project Area provide habitat for the Townsend's big-eared bat. The bats that may use areas in and around the Project Area could be disturbed by the increase of human activity in the area.

### **Vesper Sparrow**

There is limited potential nesting habitat for the vesper sparrow within the Project Area. Vesper sparrows nest in open shrub habitat, and prefer big sagebrush and a minimum ground cover of 20 percent grasses, forbs, and young shrubs. Within the Project Area, large shrubs with sufficient ground cover are limited to the lower, unburned portions of big sagebrush. Approximately 1,000 feet of trail or 2,400 square feet of disturbance would occur in potential vesper sparrow habitat. Vesper sparrows that may use the areas in and around the Project Area could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Yellow-Breasted Chat**

The yellow-breasted chat breeds in secondary growth, shrubby old pastures, thickets, bushy areas, scrub, including low wet places near streams, pond edges, or swamps. There is no nesting habitat for the yellow-breasted chat within the Project Area. Yellow-breasted chats that may use the areas in and around the Project Area for foraging could be impacted in ways similar to those described for Migratory Birds in Section 4.1.3.

### **Wind Loving Buckwheat**

Wind Loving Buckwheat (*Eriogonum anemophilum*) occurs at high elevations on dry, exposed, relatively barren and undisturbed, gravelly, limestone or volcanic ridges and ridgeline knolls. It often is found growing on rock outcrops or rocky soils over bedrock. Common associated species include *Artemisia arbuscula*, *Ericameria viscidiflora*, *Poa secunda*, *Elymus elymoides*, and *Arenaria kingii*.

There is potential habitat for wind loving buckwheat within the Project Area, although there are no documented occurrences. Trail construction would impact approximately 800 square feet of potential habitat located on the Summit Trail. Based on the frequency of fire on Winnemucca Mountain, the species is not likely to occur and there would be no impact to wind loving buckwheat.

### **No Action Alternative**

Under the No Action Alternative, impacts to special status species would remain at the current level.

#### *4.2.10 Vegetation Resources*

### **Proposed Action**

The proposed action would have direct, long-term impacts from construction of the proposed trail. Removal of existing vegetation would occur within the 18 to 24-inch width of the proposed trail. Approximately 2,400 square feet of sagebrush scrub and 1.5 acres of grassland vegetation would be removed and or altered. Continued use of the trail and maintenance would prevent vegetation from reestablishing.

### **No Action Alternative**

Under the No Action Alternative, it would be expected that vegetation conditions would remain at the current condition.

#### *4.2.11 Visual Resources*

##### **Proposed Action**

Visual Contrast Rating Worksheets were completed for two Key Observation Points (KOPs): the Pioneer Park and the I-80 interchange on the west side of town. The trails would not be visible from the town or park without the aid of binoculars because the proposed trails are very narrow with a maximum width of 24 inches. The existing roads on the mountain are approximately 10 feet wide and are barely visible.

##### **No Action Alternative**

The No Action Alternative would not affect visual resources.

#### *4.2.12 Wildlife*

##### **Proposed Action**

Implementation of the Proposed Action would result in direct and indirect impacts to wildlife. Direct impacts during construction would include temporary displacement of wildlife and disruption of wildlife activities in and around the Project Area. Small or subsurface species within the actual surface disturbance area could be injured or killed.

Indirect impacts could result primarily from increased recreational use of the area and, to a lesser degree, from loss of a relatively small amount of habitat (approximately 1.5 acres).

##### **No Action Alternative**

Under the No Action Alternative, impacts to wildlife would remain at the current level.

## 5.0 CUMULATIVE IMPACTS ANALYSIS

Cumulative impacts are defined as the impact on the environment, which results from the incremental impacts of the action when added to other past, present, or reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The cumulative impact assessment area for this EA was determined by the BLM interdisciplinary team (IDT) on January 10, 2011. The scale, context, magnitude and intensity of the project and the potentially affected resources were taken into account. Based on this review, the IDT determined that the extent of cumulative impacts would not be likely to reach beyond the Winnemucca Mountain. The cumulative impact assessment boundary was drawn according to hydrographic unit code (HUC) boundaries where possible.

The cumulative impact assessment area for this EA area is essentially the watershed draining the sides of Winnemucca Mountain. The area consists of approximately 11,362 acres of which about 7,686 are public lands and 3,675 are private lands. The area is generally bounded by Highway 95 on the east, Jungo Road to the south, the radio facility access road to the northeast and various roads to the northwest (see Figure 7).

### 5.1 Past, Present, and Reasonably Foreseeable Future Actions

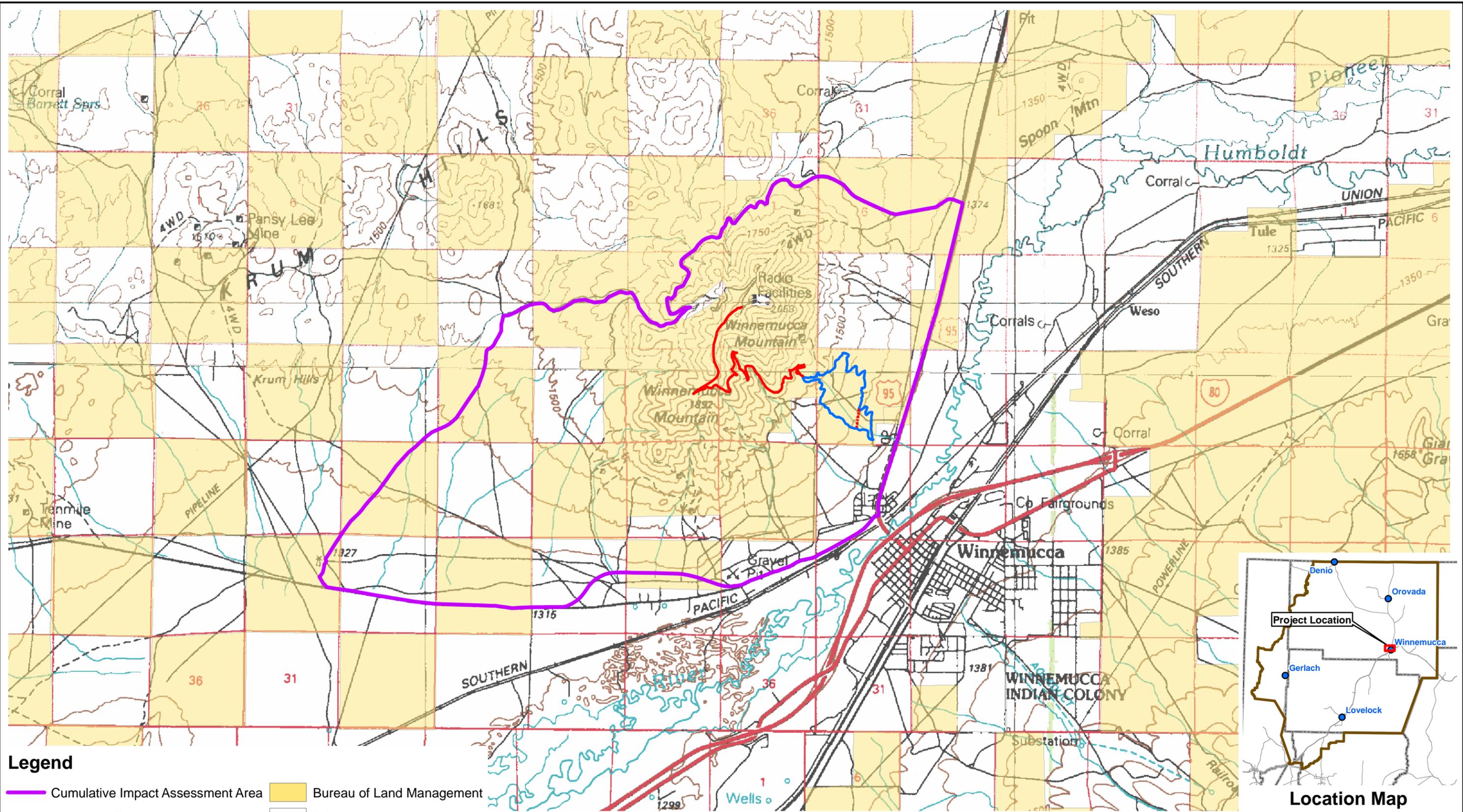
On the basis of aerial photo data, agency records, GIS analyses and interdisciplinary team discussion, the following past and present actions, which have impacted the affected resources within the assessment area to varying degrees, have been identified. The information has been extracted from recent NEPA documents for projects in the area (BLM, 2010a; BLM, 2010b) and a review of the LR2000 public database.

#### *Livestock Grazing*

Livestock grazing has a long history in the region dating back to the late 1800's. Today, it remains a dominant use of the southern part of the cumulative impact assessment area. Throughout its history, ranching has remained a dispersed activity characterized by localized areas of more intensive use. In order to support the management of the grazing allotments, a range improvement projects have been implemented in the area including fencing and water developments. There is one allotment in the cumulative impact assessment area and it is described in Section 3.2.4.

#### *Recreation*

Most of the organized recreational activity in the assessment area occurs at Veterans Memorial Park in Winnemucca where the public swimming pool is located. Dispersed recreational activities in the area include hunting, hiking, biking, rock hounding, and OHV use. The BLM has permitted a number of competitive recreational events in the area, including motorcycle and mule races and running events.



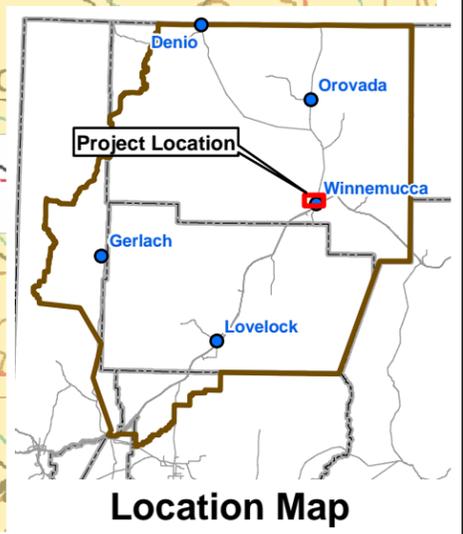
**Legend**

- Cumulative Impact Assessment Area
- - - Connector Trail (1 mile loop)
- Meandering Way Trail
- Summit Trail
- Bureau of Land Management
- Private

0      5,000      10,000 Feet

1 inch = 5,000 feet

**Figure 7**  
**Cumulative Impact Assessment Area**  
 Humboldt County Winnemucca  
 Mountain Hiking/Biking Trail  
 Project data from NGP - July 2007



**Location Map**

United States Department of the Interior  
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 Map Date: April 7, 2011

### ***Residential, Commercial, and Industrial Development***

Residential, commercial and industrial development is dispersed adjacent to Jungo Road and is characterized by large lot sizes (1 to 10 acres). This area is not supported by municipal water and wastewater systems, but is served by individual wells and septic systems. The developments are supported by secondary paved and graveled roads and unimproved dirt tracks.

### ***Social and Economic Values***

The Humboldt Development Authority of Winnemucca, Nevada is currently engaged in a countywide planning process for a shared plan for local economic development in the area. The project is called the Winnemucca Futures Project. The outcome of this planning process and the associated actions may have implications and consequences regarding the local social and economic values.

### ***Transportation Networks***

Paved roads in the assessment area include approximately 4.5 miles of Highway 95, 5 miles of the Jungo Road and six miles of the radio facility access road. There are numerous unpaved roads on the lower flanks of the mountain associated with utilities (water tanks, power lines), private land access, and mining. On the upper part of the mountain, the unpaved roads are mostly associated with mining exploration.

### ***Wildfire and Fuels Management***

Since 1981 three wildfires have burned a total of 800 acres within the assessment area (Resource Concepts, Inc. 2005). As described in the vegetation section, portions of the mountain are dominated by cheatgrass as a result of older fires, which are not recorded in available databases. These areas are vulnerable to re-occurring fires. The ignition risks are lightning and highway or railroad accidents although human caused ignitions are unpredictable and can occur at any time. It is anticipated that wildfire ignitions would continue in the area.

## **5.2 Cumulative Impacts to Affected Resources**

Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes those actions. Cumulative impacts could result from individually minor, but collectively significant actions, taking place over a period of time (Council on Environmental Quality, Regulations for Implementation of NEPA, 1508.7).

Based on the environmental analysis of direct and indirect impacts, there would be no cumulative impacts to cultural resources, geology and minerals, visual resources, paleontology, or public health and safety.

### ***5.2.1 Invasive/Nonnative Species***

#### **Proposed Action**

The proposed action would result in more persons on Winnemucca Mountain, which could result in the spread of noxious weeds and invasive species because seeds attached to hikers shoes, clothes, or bikes could be transported along the trail and road edges. Weeds along the trail

would be controlled under a Weed Management Plan (see Section 2.2 Weed Control). Weed control actions (including prompt treatment of infestations and periodic trail maintenance) with implementation of the proposed action would limit the establishment and spread of invasive species.

**No Action Alternative**

With the no action alternative there would be no anticipated increase in use of the mountain and also there would be no weed control actions or weed monitoring. There would be no increase in the potential for the spread of invasive or nonnative species.

*5.2.2 Migratory Birds, Special Status Species, and Wildlife*

**Proposed Action**

Wildlife habitat within the impact assessment area would continue to be impacted by activities as described under the Past, Present and Reasonably Foreseeable Future Actions. Implementation of the proposed action, combined with past, present, and reasonably foreseeable actions, is expected to have minimal cumulative impacts to wildlife. Recreational use of the trail would lead to low levels of localized disturbance to the habitats adjacent to the trail system.

**No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to wildlife and no cumulative impacts.

*5.2.3 Rangeland Management*

**Proposed Action**

Livestock grazing would continue on the existing allotments at the existing levels or levels per the allotment permit. Non-motorized recreational uses in the area would increase after the construction of the trails. The level of increased recreational use in the allotment is expected to be low and occur during a time when the area is not heavily used by cattle. The proposed action would not result in any measurable incremental impact.

**No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to rangeland management and no cumulative impacts.

*5.2.4 Realty*

**Proposed Action**

Approximately 5.5 miles or 1.5 acres of the trail would be a new use for recreation. Similarly to vegetative resources, the area used for recreation would be one hundredth of one percent of the assessment area. Therefore cumulative impact to realty would be de minimis.

**No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to realty and no cumulative impacts.

### 5.2.5 Recreation

#### **Proposed Action**

The project would open the south side of the mountain to hiking and biking trail use where currently none exists. The project would provide a new form of non-motorized recreation within the assessment area, which currently has no formal non-motorized trails. As there are no other formal non-motorized trails in the assessment area, there would be no cumulative effects to recreation.

#### **No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to recreation and no cumulative impacts.

### 5.2.6 Social and Economic Values

#### **Proposed Action**

Implementation of the proposed action would lead to increased visitation to the assessment area. The proposed action would have an unquantifiable increase in visitation from persons outside of the assessment area. However, cumulative impacts would be expected to be low as there are no similar projects within the assessment area.

#### **No Action Alternative**

With the no action alternative there would be no increased visitation to the Project Area and no cumulative impacts.

### 5.2.7 Soil Resources

#### **Proposed Action**

Based on implementation of the proposed action standard operating procedures described in Section 2.2, the impacts to soil resources within the assessment area would be low. Similarly to vegetative resources, the area disturbed would be one hundredth of one percent of the assessment area. Therefore cumulative impact to soil would be de minimis.

#### **No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to soil and no cumulative impacts.

### 5.2.8 Vegetation

#### **Proposed Action**

Current cumulative impacts have caused disturbance to vegetation within the assessment area over time. The vegetation disturbance from the proposed action would total approximately 2,400 square feet of sagebrush scrub and 1.5 acres of grassland vegetation. The area disturbed would be one hundredth of one percent of the assessment area. Therefore cumulative impact to these vegetation types would be de minimis.

#### **No Action Alternative**

With the no action alternative there would be no anticipated direct impacts to vegetation and no cumulative impacts.

## 6.0 MITIGATION AND MONITORING

Section 2.2 contains a listing of the Standard Operating Procedures that would be implemented as part of the Proposed Action. In addition, the following mitigation recommended under proposed action is:

### *Rangeland Management*

- The approximate dates for the cattle drives in the Sand Dune allotment should be posted at the trail heads.
- Organized biking or hiking events should be permitted to avoid cattle drives.
- Trail kiosks should include educational and etiquette protocols for hikers and bikers who encounter livestock including the following recommendation:
  - Recommendation for dogs to be kept on a leash or controlled by owner to avoid conflicts with livestock, other trail users and wildlife

## 7.0 LIST OF PREPARERS

### Bureau of Land Management

Name	Title	Resource Area
Joey Carmosino,	Outdoor Recreation Planner	Project Lead, Recreation, Visual Resources
Gerald Gulley	Outdoor Recreation Planner	Recreation, Visual Resources
Peggy Mc Guckian	Archaeologist	Cultural Resources, Paleontology
Mark Hall	Archaeologist	Native American Religious Concerns
Debbie Dunham	Realty Specialist	Realty
Robert Burton	Natural Resource Specialist	Noxious/Invasive Weeds
Celeste Mimnaugh	Wildlife Biologist	Wildlife, Threatened & Endangered Species, Special Status Species
Kathleen Rehberg	Geologist	Minerals, Paleontology
Mike Zielinski	Soil Scientist	Soil, Vegetation, Air Quality
Derek Messmer	Supervisor Rangeland Management	Rangelands
Al Wilcox	Engineer	Public Health & Safety
Lynn Ricci	Environmental Coordinator	NEPA Compliance
Tessa Teems	Environmental Coordinator	NEPA Compliance

### Resource Concepts, Inc.

Name	Title
Lynn Zonge	Geologist, Hydrologist
JoAnne Robben	Biologist
Rachel Kozloski	Soil Scientist
Sheila Anderson	Biologist

### Research Archaeology

Name	Title
Pete Matranga	Archaeologist
Cliff Creger	Archaeologist

## 8.0 CONSULTATION AND COORDINATION

- US Fish and Wildlife Service
- Nevada Department of Wildlife
- Nevada Natural Heritage Program

Native American Consultation:

- Winnemucca Indian Colony
- Fort McDermitt Paiute & Shoshone Tribe

## 9.0 PUBLIC INVOLVEMENT

The BLM sent letters to adjacent landowners and to the patented mining claim holders on October 5, 2009. The BLM received one comment letter. The letter from AHL Holdings LTD, a mining claimant, expressed concerns that a trail over and near their mining claims would restrict their ability to explore and eventually develop a mine in the area. They also pointed out that there are several dangerous unclosed adits and shafts near the proposed trail.

The Winnemucca Trail was presented at two Humboldt County Planning Commission Meetings at which time the trail alignments were presented and the public was invited to comment. The meetings were held on March 1, 2010 and September 7, 2010. AHL Holdings was the only public to comment during the meetings.

As a result of AHL Holding's letter and comment at the Commissioner's meeting, the county decided to modify its proposal by realigning the trail system to keep the trails away from the mining claims.

On April 20 and 21, 2011 the BLM issued a Press Release, sent letters to interested parties, and posted the Preliminary EA on the Winnemucca District Office web site. The comment period remained open through May 20, 2011. Five comments were received from the general public via email expressing support for the project and one comment from the Nevada State Clearing House stating the "proposal supported as written". No changes to the Preliminary EA were necessary based on public comment.

In finalizing the EA, BLM made several updates and clarifications. These changes included modifications to Figure 3 Proposed Meandering Way Trailhead and text clarifying parking accommodations at the Veterans Park on State Route 95. Results of Native American Consultation were added to appropriate locations of the document.

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