

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

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## Zero One Odysseys Special Recreation Permit SRP-NVB0000-12-01 DRAFT ENVIRONMENTAL ASSESSMENT

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### **BLM Mission Statement**

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

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## ACRONYMS AND ABBREVIATIONS

AML	appropriate management level
amsl	above mean sea level
BLM	Bureau of Land Management
CESA	Cumulative Effects Study Area
CFR	Code of Federal Regulations
EA	environmental assessment
ESA	Endangered Species Act of 1973
FLPMA	Federal Land Policy and Management Act of 1976
FO	Field Office
Forest Service	U.S. Forest Service
GIS	geographic information system
GMU	game management unit
HMA	herd management areas
ID	interdisciplinary
MBTA	Migratory Bird Treaty Act
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act of 1969
NNHP	Nevada Natural Heritage Program
OHV	off-highway vehicle
PL	Public Law
PMU	population management unit
RFFA	reasonably foreseeable future action
RMP	resource management plan
ROD	Record of Decision
ROW	right-of-way
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
SWCA	SWCA Environmental Consultants
Trac-On, LLC	Trac-On
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
Wide Open Nevada, LLC	Wide Open Nevada
Zero One	Zero One Odysseys

## 1.0 INTRODUCTION

### 1.1 Background

The Bureau of Land Management (BLM) Tonopah Field Office (FO) has received a Special Recreation Permit (SRP) application from Zero One Odysseys (Zero One), which proposes to conduct guided, non-competitive off-highway vehicle (OHV) tours on lands managed by the BLM Battle Mountain and Carson City Districts in Nevada (the Proposed Action). Although Zero One has not previously been permitted to conduct off-highway vehicle (OHV) tours on BLM lands, the two owners have both previously been permitted for OHV events and tours by the BLM under Wide Open Nevada, LLC (Wide Open Nevada), and Trac-On, LLC (Trac-On). The goals, objectives, and business plan for Zero One vary from the racing operations of Wide Open Nevada and the motorcycle tour operation of Nevada Trac-On. For that reason, Zero One is proposing to conduct guided, non-competitive OHV tours on lands managed by the BLM Battle Mountain and Carson City Districts in Nevada under a new SRP.

As stated in the BLM Recreation Permit Administration Handbook (H-2930-1), the issuance (including renewal) of an SRP is a federal action subject to analysis under the National Environmental Policy Act (NEPA) of 1969 (Public Law [PL] 1-91-190, as amended [42 United States Code (USC) 4321 *et seq.*]). The BLM Tonopah FO has determined that an environmental assessment (EA) is required for the Zero One SRP.

Because the majority of the proposed tour routes are located on lands managed by the Tonopah FO, the Tonopah FO has taken the lead in the preparation of this EA. Portions of the proposed tour routes are also located within the Mount Lewis and Stillwater FOs. The overall location and extent of the Zero One OHV tours are fully described in the Operating Plan (Appendix A).

### 1.2 Purpose of and Need for Action

The purpose of the action is to provide the public with an opportunity to experience the natural, historical, and scenic resources available to them on the BLM Battle Mountain and Carson City via organized and safe “safari-style” driving tours. The need for the action is established by the BLM’s responsibility under BLM Manual 2930 and the H-2930-1 Recreation Permit Administration Handbook (43 Code of Federal Regulations [CFR] 2930) to respond to SRP applications. The BLM will decide whether or not to grant the SRP for Zero One and, if it is granted, under what terms and conditions.

### 1.3 Scoping

The project was internally scoped by a BLM interdisciplinary (ID) team composed of specialists from the Tonopah and Mount Lewis FOs at a meeting held on September 7, 2011, at the BLM Tonopah FO. Additional internal scoping occurred at a follow-up ID team meeting held on February 13, 2012, at the BLM Tonopah FO with specialists from the Tonopah, Mount Lewis, and Stillwater FOs.

### 1.4 Preliminary Issues

Resource specialists from the BLM Tonopah and Mount Lewis FOs who participated in the BLM ID team project-scoping meeting on September 7, 2011, and specialists from the Stillwater FO who

participated in the February 13, 2012, meeting identified the following preliminary issues to be addressed in this document, as outlined in Chapter 3:

- The increased risk of spreading noxious weeds and invasive non-native species along routes associated with the Proposed Action.
- Damage to roads as a result of higher-speed vehicle use.
- The need for coordination with local government, private land owners, and active mining operations.
- Impacts to public safety.
- Impacts to riparian areas in the Desatoya Range.
- Impacts to sage grouse habitat.

In addition to the above issues, several supplemental authorities have provided guidance on other issues and resources necessary for analysis. These authorities are further described in Chapter 3, Affected Environment. The following specific resources related to the Proposed Action were also identified:

- Wildlife
- Special-Status Species
- Noxious Weeds/Invasive Non-native Species
- Grazing
- Land Use
- Recreation
- Socioeconomics

## 2.0 PROPOSED ACTION AND ALTERNATIVES

### 2.1 Proposed Action

The Proposed Action is to consider issuing a 1-year SRP to Zero One Odysseys to conduct up to 24 guided tours on existing roads in the Tonopah, Mount Lewis, and Stillwater FOs. The proposed tours would occur as either 2-day or 5-day events. Each tour would involve no more than eight two-passenger vehicles made up of one guide vehicle, six client vehicles, and one sweep vehicle. All vehicles would be registered and insured. This format allows for a total of 12 tour participants—two participants in each of the six client vehicles. In addition, Zero One proposes to use tour support vehicles each day that include a motor home and up to two large pickup trucks. The support vehicles would travel on highways and county roads in addition to the tour routes in order to reach predetermined meeting locations with the tour group each day.

Each tour would be conducted in a “follow the leader” format, with all participants escorted and following the instruction of a Zero One guide. Participants would also be followed by a Zero One “Tail or Sweep” vehicle to monitor for safety and rule compliance. The tour leaders would maintain radio contact with each tour vehicle. Tour vehicles would maintain enough spacing to stay out of any dust generated by the lead vehicles and maintain visibility and safe driving. Participants would be instructed to follow the posted speed limit, or no more than 35 miles per hour (mph) when not posted.

The typical mileage per day for each tour would be approximately 90 to 220 miles. This daily routine would be repeated on a different route for all subsequent days of the tour. Routes would be located on paved roads and highways, established dirt roads, and existing OHV trails. The guide would lead participants along one of the five proposed routes to points of interest, a lunch stop, and eventually the day’s final destination or overnight stop. Overnight stops would be in towns along the route using hotels; no overnight stays on BLM lands are proposed. All tour participants must follow the guide’s commands during the tour.

Zero One would provide a preliminary overall tour schedule to each BLM FO at the start of the touring season. Prior to conducting individual tours, Zero One would provide a minimum 2-week advance notification to the three affected BLM FOs. That notification would include the following information: the dates of the tour, routes being used, and number of participants. This would allow the BLM to respond to question or concerns raised by the public or other land users. In addition, it would allow the BLM to work with Zero One to adjust tours if necessary to address resource concerns such as road conditions, wildfires, and other events and land uses.

### 2.2 No Action Alternative

Under the No Action Alternative, an SRP for Zero One to conduct OHV tours on existing roads and trails in the Battle Mountain District and Stillwater FO would not be permitted. Casual OHV use of existing roads and associated impacts would continue under existing trends. The No Action Alternative forms the baseline against which the potential impacts of the Proposed Action are compared. Thus, it includes current actions and activities within the district. The selection of the No Action Alternative would not preclude OHV recreation on designated and existing roads and trails in the Battle Mountain District as allowed under the Tonopah Resource Management Plan (RMP) (BLM 1997) and the Shoshone-Eureka RMP (BLM 1986), as well as Carson City District, as allowed under the Carson City Consolidated RMP (BLM 2001).

## 2.3 Conformance with BLM Land Use Plans

The Proposed Action would occur on land administered by the BLM Tonopah, Mount Lewis, and Stillwater FOs.

### ***Tonopah Resource Management Plan***

Although the Tonopah RMP is silent on the issuance of SRPs, the proposed project is in conformance with the following decision of the Tonopah RMP and Record of Decision (ROD), approved on October 2, 1997 (BLM 1997:20), which states, “In order to protect sensitive resource values such as threatened and endangered species and cultural resources, designate 1,250,290 acres as limited to vehicle use (restrictions limiting use to existing roads, trails, and washes; seasonally; or by type of user) and keep 4,840,811 open to unrestricted vehicle use.”

### ***Shoshone-Eureka Resource Management Plan***

The Shoshone-Eureka RMP (BLM 1986) is silent on the issuance of an SRP. The 1984 Proposed RMP is limited in scope to five significant issues, none of which includes recreation or travel management (BLM 1984). Nonetheless, the 1986 RMP/ROD (BLM 1986:30) provided for objectives for recreation, including the following: “encourage recreation use on the public lands.”

### ***Carson City Consolidated Resource Management Plan***

The Carson City Consolidated RMP (BLM 2001) acknowledges BLM’s policy for the issuance of SRPs as follows: “Organized events will be handled on a case-by-case basis through Special Recreation Permit review and environmental review processes. Organized activity is generally restricted to existing roads and trails” (BLM 2001). The 2001 RMP goes on to acknowledge the following: “Exceptions to these general rules may be authorized after consideration of . . . the need to promote user safety” (BLM 2001:REC6).

The 2001 RMP also includes specific management actions for OHV use: “All public lands under Carson City Field Office jurisdiction are designated open to OHV use unless they are specifically restricted or closed” (BLM 2001:REC2).

## 2.4 Relationship to Statutes, Regulations, or Other Plans

Federal regulations and policies require the BLM to make public land and resources available based on the principle of multiple use, as mandated by the Federal Land Policy and Management Act of 1976 (FLPMA). At the same time, it is BLM policy to conserve special-status species and their habitats and to ensure that actions authorized by the BLM do not contribute to the species’ becoming listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS).

The Proposed Action would be in conformance with NEPA, as environmental impacts have been disclosed in this EA. The Proposed Action would be in conformance with FLPMA by providing for multiple uses on public lands.

The BLM must adhere to Section 106 of the National Historic Preservation Act. The BLM also must comply with the Nevada State Historic Preservation Office protocol agreement, which is authorized by the National Programmatic Agreement between the BLM, the Advisory Council on Historic Preservation,

and the National Conference of State Historic Preservation Officers. As the Proposed Action does not include new disturbance, Section 106 consultation is not required.

### ***Nye County Comprehensive Plan***

The *Nye County Comprehensive Plan* (Nye County Board of Commissioners 1994) includes a Federal Lands section that acknowledges that the federal government owns land within the county. However, no goals, objectives, or policies for federal lands or recreation within Nye County have been developed. The Proposed Action would not conflict with any elements of the *Nye County Comprehensive Plan*.

### ***Mineral County***

Mineral County, Nevada, does not currently have a county Land Use Plan. The Mineral County Chamber of Commerce's list of purposes includes "developing, and promoting recreational . . . resources" (Mineral County 2010). The Proposed Action would not conflict with the Mineral County Chamber of Commerce's recreation purpose.

### ***Esmeralda County Master Plan***

The *Esmeralda County Master Plan* advises the following: "The wide-open backcountry of Esmeralda County is readily available through a well-developed network of roads and highways. The visitor using this road network is cautioned to take adequate precautions prior to setting out on a backcountry expedition, and should inquire locally as to conditions and access" (Esmeralda County Land Use Advisory Committee [ECLUAC] 2010:29).

### **ESMERALDA COUNTY PUBLIC LAND POLICY PLAN**

Esmeralda County states that all decisions by any government agency affecting lands in Esmeralda County shall be coordinated with the ECLUAC. The master plan also acknowledges that "people from outside the area are coming into Esmeralda County in increased numbers for off-road vehicle (ORV) recreation. This situation will undoubtedly blossom into a very controversial local issue" (ECLUAC 2010:31). The Proposed Action includes OHV use of existing roads and trails and does not include cross-country travel. The Proposed Action would operate under the terms and conditions identified by the BLM and would not conflict with the *Esmeralda County Master Plan* since all routes and alternate routes would be restricted to existing roads and trails.

The *Draft Esmeralda County Public Lands Policy Plan* (Esmeralda County 2011) represents a review of existing and emerging public lands issues that are of importance to Esmeralda County. The plan's policy 1-1 states, "All proposed actions on State and federally managed lands shall be brought to the attention of the Esmeralda Board of County Commissioners and ECLUAC for purposes of review to determine if the state and federal proposed actions are in conformance with this Plan pursuant to NEPA requirements." Policy 13-3 states, "Promote 'Eco-Tour' and responsible off highway vehicle businesses in the County. . . . OHV users are encouraged to visit and patronize county communities." The Proposed Action would not conflict with the *Esmeralda County Public Lands Policy Plan*.

### ***Churchill County Master Plan***

The *Churchill County 2010 Master Plan* (Churchill County 2010) includes updates to the 2003 *Churchill County Policy Plan for Public Lands* (Churchill County 2003). Policy PL 3.2 states, "Proper notification of pending and proposed federal actions should be provided to Churchill County to ensure adequate

review.” The Proposed Action would not conflict with the *Churchill County Policy Plan for Public Lands*.

### ***Lander County Master Plan***

The *Lander County Master Plan* (Lander County 2010) includes policies for recreation and OHV use. Recreation Policy 6.1 (page 6-6) states, “Facilitate development of recreational improvements on Public and Forest Service Lands.” The Proposed Action would not conflict with the *Lander County Master Plan*.

### **LANDER COUNTY POLICY PLAN FOR FEDERALLY ADMINISTERED LANDS**

The *Lander County Policy Plan for Federally Administered Lands* (Lander County Public Land Use Advisory Planning Commission 2005) includes policies for recreation and OHV use. Policy 15-8 (page 40) states, “Promote “Eco-Tour” and responsible off-highway vehicle businesses in the County.” In addition, Policy 23-1 (page 47) states, “Direct OHV use to designated trails and actively discourage the pioneering of new trails and use in sensitive areas through collaborative public education efforts with local communities and federal planning partners.” The Proposed Action would not conflict with the *Lander County Policy Plan for Federally Administered Lands*.

## 3.0 AFFECTED ENVIRONMENT

### 3.1 Introduction

The purpose of this section of the EA is to describe the existing environment of the project area affected by the Proposed Action or alternatives under consideration.

Supplemental authorities that are subject to requirements specified by statute or executive order must be considered in all BLM environmental documents. The elements associated with supplemental authorities are listed in Table 1. Additional resources are listed in Table 2.

The BLM has used environmental data and existing land management prescriptions collected for the lands that include the proposed routes to predict the potential environmental effects that could result from the Proposed Action. A level of uncertainty is associated with any set of data in terms of predicting outcomes, especially when natural systems are involved. The predictions described in this analysis are intended to allow comparison of the Proposed Action with the existing conditions, as well as to provide a method for determining whether activities proposed by Zero One would be expected to comply with applicable regulations.

**Table 1. Supplemental Authorities**

Supplemental Authority*	Not Present <sup>†</sup>	Present/Not Affected	Present/May Be Affected <sup>‡</sup>	Rationale
Air Quality		X		The proposed tour routes do not include new surface disturbance and would comply with existing air quality standards.
Area of Critical Environmental Concern	X			The proposed tour routes do not occur within designated Areas of Critical Environmental Concern.
Cultural Resources		X		The BLM has communicated on this project in accordance with its protocol with the State Historic Preservation Office. However, since there is no major adverse impact to cultural resources, formal consultation is not required.
Environmental Justice	X			No minority or low-income population would be disproportionately affected by the Proposed Action.
Farmlands, Prime or Unique	X			No prime or unique farmlands are located within the area of the Proposed Action.
Floodplains		X		There are no permanent facilities involved with the Proposed Action that could be impacted by floods. Safety and training briefings will determine whether flood danger is present before Zero One's tour would travel through potential flood zones
Forests and Rangelands (Healthy Forest Restoration Act only)	X			No Healthy Forest Restoration Act projects would be impacted by the Proposed Action.
Human Health and Safety		X		The Proposed Action does not contain the use of herbicides or other pesticides; therefore, Human Health and Safety are not analyzed in this EA.
Migratory Birds			X	There is the potential for migratory birds along proposed routes; this has been carried forward for detailed analysis. See discussion in Section 3.2.
Bald and Golden Eagles		X		Use of the proposed tour routes during tours would comply with requirements of the Bald and Golden Eagle Protection Act.

**Table 1.** Supplemental Authorities (Continued)

Supplemental Authority*	Not Present <sup>†</sup>	Present/Not Affected	Present/May Be Affected <sup>‡</sup>	Rationale
Native American Religious Concerns		X		Several Native American Tribes were contacted and informed about the Proposed Action, and no concerns or issues were brought forward by the tribes. See Chapter 7.0, Consultation and Coordination, for more details on communication with Native American Tribes.
Noxious Weeds/Invasive Non-native Species			X	There is the potential for invasive and nonnative species in the area; this has been carried forward for detailed analysis. See discussion in Section 3.3.
Threatened, Endangered, and Special-status Species			X	See discussion in Section 3.4.
Waste-Hazardous/Solid		X		Fuel is transported to overnight rendezvous points where vehicles are refueled. Absorbent mats are used in case minor spills occur. Solid wastes are contained and removed to an authorized land fill.
Water Quality		X		The proposed tour routes do not include new surface disturbance and would not impact water quality.
Wetland/Riparian Zones		X		Some riparian wetland areas may be crossed by tour routes, but the tours will avoid disturbing riparian soils and vegetation and will rehabilitate any crossings that have been disturbed.
Wild and Scenic Rivers	X			The proposed tour routes do not cross any designated or eligible for designation Wild and Scenic Rivers.
Wilderness	X			The proposed tour routes do not cross any Wilderness Study Areas, designated Wilderness areas, or lands managed to maintain wilderness characteristics.

\* See BLM H-1790-1.

<sup>†</sup> Supplemental Authorities determined to be Not Present or Present/Not Affected need not be carried forward for analysis or discussed further in the document.

<sup>‡</sup> Supplemental Authorities determined to be Present/May Be Affected must be carried forward for analysis in the document.

**Table 2.** Other Resources

Other Resources	Not Present <sup>†</sup>	Present/Not Affected	Present/May Be Affected <sup>‡</sup>	Rationale
Land Use and Ownership			X	See discussion in Section 3.6.
Minerals		X		Tours will cross two or three active mining areas: Goldfield Gemfield Project, Mineral Ridge Mine, and Manhattan Gulch. These mines will be contacted prior to tour dates so that the Mines can notify operators and workers of the increased traffic in the area.
Soils		X		The proposed tour routes do not include new surface disturbance and would not result in impacts to soil resources.
Paleontological Resources		X		The proposed tour routes do not include new surface disturbance and would not impact existing paleontological resources.
Rangeland and Livestock Grazing			X	See discussion in Section 3.5.
Recreation			X	See discussion in Section 3.7.
Socioeconomics			X	See discussion in Section 3.8.
Transportation/Access			X	See discussion in Section 3.9.
Vegetation		X		The proposed tour routes do not include new surface disturbance and would not impact vegetation.

**Table 2.** Other Resources (Continued)

Other Resources	Not Present <sup>†</sup>	Present/Not Affected	Present/May Be Affected <sup>‡</sup>	Rationale
Visual Resources		X		The proposed tour routes do not include new surface disturbance and would not impact visual resources.
Wildlife			X	See discussion in Section 3.10.
Wild Horse and Burros			X	See discussion in Section 3.11.

<sup>†</sup> Supplemental Authorities determined to be Not Present or Present/Not Affected need not be carried forward for analysis or discussed further in the document.

<sup>‡</sup> Supplemental Authorities determined to be Present/May Be Affected must be carried forward for analysis in the document.

## 3.2 Migratory Birds

The USFWS defines a migratory bird as any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. All migratory birds are protected under the Migratory Bird Treaty Act, as amended (MBTA) (16 USC 703 *et seq.*).

The federal MBTA states that it is unlawful to “pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess, offer to or sell, barter, purchase, deliver, or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not.” Depending on distribution, abundance, and breeding habits, the Secretary of the Interior may determine how much a migratory bird may be hunted or taken, if at all (USFWS 2007). To minimize unintentional take as defined by Executive Order 13186, the BLM has issued Washington Office Instructional Memo No. 2008-050, Migratory Bird Treaty Act–Interim Management Guidance, to provide interim guidance to meet the BLM responsibilities under the MBTA. This provides the BLM with a consistent approach for addressing migratory bird populations and habitats. Currently, there are 1,007 species that are protected under the federal MBTA (USFWS 2010). The Instructional Memo also lists species of conservation concern by the USFWS as those migratory bird species on which the BLM will focus.

Numerous migratory bird species are known to occur throughout the area, and they occupy a diverse array of habitat types, such as grassland, desert scrub, sagebrush, pinyon-juniper woodland, and coniferous forest.

## 3.3 Noxious Weeds/Invasive Non-native Species

A noxious weed/invasive non-native species survey was not deemed necessary for this Proposed Action since the Proposed Action does not include any new surface disturbance, and all activity would take place on existing roads and trails and parking areas. Known non-native species that occur along the proposed tour routes include cheatgrass (*Bromus tectorum*) and halogeton (*Halogeton glomeratus*). In addition, known noxious species that have been observed along the proposed routes consist of hoary cress (*Cardaria draba*), knapweed (*Centaurea* spp.), and saltcedar (*Tamarix* sp.).

## 3.4 Threatened, Endangered, and Special-Status Species

No threatened or endangered species occur along the proposed tour routes. BLM special-status species are (1) species listed or proposed for listing under the Endangered Species Act (ESA), or (2) species requiring special management consideration to promote their conservation and reduce the likelihood of and need for future listing under the ESA, which are designated as BLM Sensitive by the State Director(s). All federal

candidate species, proposed species, and delisted species in the 5 years following delisting will be conserved as BLM Sensitive species.

Species designated as BLM Sensitive must be native species found on BLM-administered lands for which the BLM has the capability to significantly affect the conservation status of the species through management, and either:

- There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species' range, or
- The species depends on ecological refugia or specialized or unique habitats on BLM-administered lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.

Nevada Natural Heritage Program (NNHP) geographic information system (GIS) data (Nevada Department of Wildlife [NDOW] 2008) were evaluated to determine the extent of previously documented sensitive biological resources and to determine the presence or absence of special-status species along the proposed tour routes. In addition, the Nevada BLM Sensitive Species and Special Status Species (threatened and endangered) lists were evaluated. Thirteen species were identified as potentially occurring near the proposed tour routes and are listed in Table 3.

**Table 3.** BLM Special-status Species in the Proposed Action Area

Common Name	Scientific Name	Status	Presence along Proposed Tour Route(s)
<b>Birds</b>			
Northern goshawk	<i>Accipiter gentilis</i>	BLM Sensitive Species	Route C
Ferruginous hawk	<i>Buteo regalis</i>	BLM Sensitive Species	Route D
Golden eagle	<i>Aquila chrysaetos</i>	Nevada State Protected Species	Routes B, D, and E
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	BLM Sensitive Species	Route C
Greater sage grouse	<i>Centrocercus urophasianus</i>	BLM Sensitive Species	Routes B–D
<b>Mammals</b>			
Western small-footed myotis	<i>Myotis ciliolabrum</i>	BLM Sensitive Species	Route B
Pygmy rabbit	<i>Brachylagus idahoensis</i>	BLM Sensitive Species; Nevada Protected	Route C
<b>Plants</b>			
Eastwood milkweed	<i>Asclepias eastwoodiana</i>	USFWS/ESA species of concern; BLM Special-Status Species; U.S. Forest Service (Forest Service) Sensitive Species	Alternate route west of Mud Lake; Route B; Route D
Candelaria blazingstar	<i>Mentzelia candelariae</i>	NNHP vulnerable to decline	Routes B and E
Beatley buckwheat	<i>Eriogonum beatleyae</i>	NNHP imperiled	Route B
Tonopah milkvetch	<i>Astragalus psuedoiodanthus</i>	BLM Special-Status Species (California)	Route B
Pahute green gentian	<i>Frasera pahutensis</i>	BLM Special-Status Species	Route C
Toquima milkvetch	<i>Astragalus toquimanus</i>	BLM Special-Status Species; Forest Service Sensitive Species	Route C

Source: NDOW (2008).

## **Special-Status Bird Species**

Raptor nesting areas and foraging habitat are known to occur along the proposed routes. Special-status raptors known to occur include northern goshawk (*Accipiter gentilis*), golden eagle (*Aquila chrysaetos*), and ferruginous hawk (*Buteo regalis*).

The ferruginous hawk is a nesting summer resident of the area. This species breeds primarily in sagebrush and grassland areas where small-mammal prey is abundant. Nests are normally constructed in lone juniper trees that overlook large, open areas on alluvial fans. The Bald and Golden Eagle Act is similar to the MBTA in that it prohibits the take of bald and golden eagles. Because there is no ground disturbance or new construction associated with the project, there is little likelihood of take.

## **Pygmy Rabbit**

Pygmy rabbit typical habitat consists of dense stands of big sagebrush growing in loose soils that are deeper than 20 inches, have at least 13% to 30% clay content, and are light colored and friable. Pygmy rabbit habitat is generally on flatter ground or moderate slopes in Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) uplands, basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) drainages, and ephemeral drainages in between ridges of low sagebrush (*Artemisia arbuscula*) (Ulmschneider 2004).

The pygmy rabbit is believed to be one of only two rabbits in North America that digs its own burrows. Pygmy rabbits dig burrows 3 inches in diameter, and a burrow may have three or more entrances (NDOW 2011). Burrows are relatively simple and shallow, often no more than 7 feet in length and less than 4 feet deep, with no distinct chambers. The elevational range for this species is 4,500 to 7,450 feet above mean sea level (amsl); however, they occur in elevations up to 8,000 feet amsl in the mountains in central Nevada. The winter diet of pygmy rabbits is composed of up to 99% sagebrush. In spring and summer, their diet may consist of roughly 51% sagebrush, 39% grasses, and 10% forbs. In winter, pygmy rabbits use extensive snow burrows to access sagebrush forage, as travel corridors among their underground burrows, and possibly as thermal cover (USFWS 2003).

According to NDOW records, pygmy rabbits have been documented along proposed tour route C; the records note that if suitable habitat is present within the area of the proposed tour routes, this species is likely to occupy the area (NDOW 2008).

## **Western Small-Footed Myotis**

The NDOW (2008) indicated that the western small-footed myotis (*Myotis ciliolabrum*) may occur along the proposed tour routes B and E. Western small-footed myotis are crevice roosters, meaning that they can roost in trees, talus slopes, and rock outcrops along the proposed tour routes. Additionally, areas along the proposed tour routes may provide foraging habitat for the western small-footed myotis.

## **Desert Bighorn Sheep**

The desert bighorn sheep is a BLM Sensitive species. Desert bighorn sheep live in areas of rough terrain characterized by rocky canyons and washes. They require standing water sources during the summer months. The desert bighorn sheep is currently managed as a game animal in Nevada by NDOW (NDOW 2011). The population of desert bighorn sheep is considered to be stable (NDOW 2010). Route B travels through lambing habitat for the Desatoya herd, Route C travels through occupied year-round habitat for the Desatoya herd, and Route E travels through occupied year-round habitat for the Lone Mountain and Silver Peaks herds. Route E also travels between three sheep guzzlers (Silver Peak Nos. 2, 3, and 4).

## **Greater Sage-grouse**

Four greater sage-grouse population management units (PMUs) exist in the Proposed Action area. The greater sage-grouse (*Centrocercus urophasianus*) is listed as a federal candidate species in Nevada under the ESA and is protected under State law (Nevada Revised Statutes 527.270). In March 2010, the USFWS published the 12-month findings for petitions to list the greater sage-grouse under the ESA. The USFWS announced that listing the greater sage-grouse under the ESA is warranted but precluded by higher-priority listing actions; the species was given a priority ranking of 8. The greater sage-grouse population occurring in portions of Carson City, Lyon, Mineral, Esmeralda, and Douglas Counties in Nevada, referred to as the Bi-State population, was recognized as a Distinct Population Segment under the ESA. The listing was also found to be warranted but precluded, and the population was given a priority ranking of 3. As a result, both the greater sage-grouse range-wide and the Bi-state Distinct Population Segment are now candidate species for ESA protection.

Portions of routes B, C, and D travel through greater sage-grouse preliminary priority habitat (Figure 1). Preliminary priority habitat areas are identified as having the highest value for maintaining a sustainable greater sage-grouse population.

## **Special-Status Plant Species**

No species-specific surveys were conducted for special-status plant species; however, suitable habitat has the potential to occur along routes B through E.

Eastwood milkweed generally occurs in open areas on a wide variety of basic soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops. These areas are typically barren and lacking in competition. They are also known to occur in small washes or other moisture-accumulating microsites, shadscale, mixed-shrub, sagebrush, and lower pinyon-juniper zones.

Candelaria blazingstar generally occurs in barren, calcareous, gravelly, or clay soils on weathered volcanic ash deposits, scree slopes, hot spring mounds, washes, or road banks or other recovering disturbances in the shadscale, mixed-shrub, and sagebrush zones.

Beatley buckwheat is known to occur in dry volcanic outcrops. There is little information regarding suitable habitat in Nevada.

Tonopah milkvetch generally occurs in deep, loose sandy soils of stabilized and active dune margins, old beaches, valley floors, or drainages that have salt desert shrub. It is known to be dependent on sand dunes or deep sand in Nevada.

Pahute green gentian occurs in relatively non-specific habitats within pinyon-juniper and lower montane scrub zones. It occurs most frequently in deep, stable, sandy, or sandy-rocky soils on or near protected exposures or in small drainages, or on more open, south-sloping exposures at higher elevations.

Toquima milkvetch occurs in dry, sandy to gravelly, generally basic or calcareous soils in pinyon-juniper or sagebrush communities, mostly on flats or gentle slopes growing under or up through shrubs.

## **3.5 Land Use**

Tour routes would occur on lands managed by BLM, U.S. Forest Service (Forest Service), and the municipal town limits in which the tour routes would begin and end. Refer to the operating plan for land

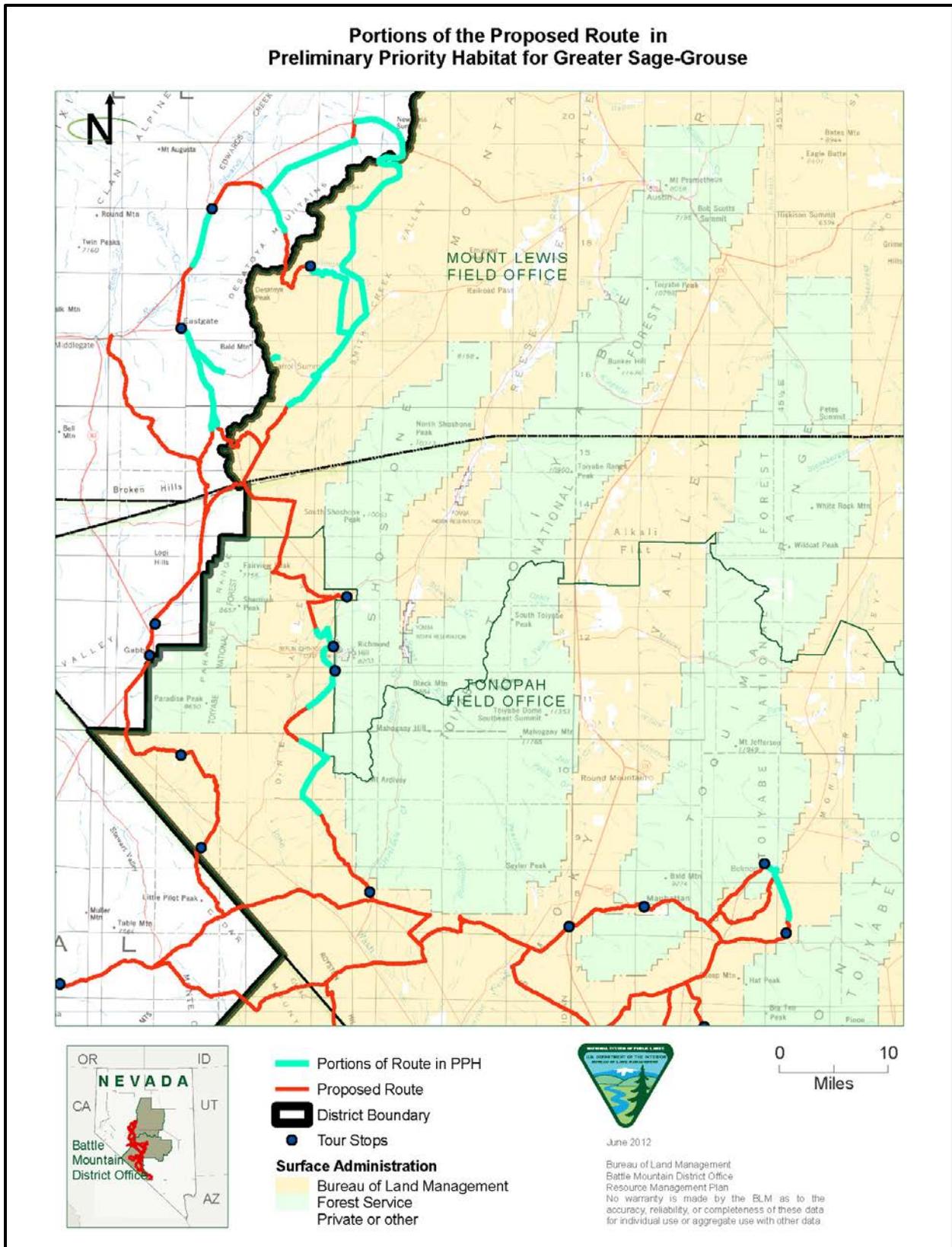


Figure 1. Greater sage-grouse preliminary priority habitat.

ownership status (see Appendix A). Land use demands in the analysis area are mainly for utility rights-of-way (ROWs), renewable energy, roads, communication ROWs, grazing, and dispersed recreation. Grazing and dispersed recreation uses are described in Sections 3.6 and 3.7. The analysis area is primarily undeveloped land and can be characterized as open rangeland interspersed with utilities, roads, communication lines, agricultural uses, and widely dispersed residential uses on private parcels. Entities with a land use authorization or other BLM-approved interest in the location or general vicinity of the proposed tour routes are limited to transportation ROWs, utility-scale ROWs, such as transmission line corridors, solar generation facilities, and buried pipelines, geothermal companies, mining companies and individuals, grazing permittees, and other SRP holders. Zero One is not proposing any changes or alterations to existing land uses, land use authorizations, or access roads.

## 3.6 Grazing

Livestock grazing and production is one of the dominant land uses throughout Nye, Mineral, Esmeralda, Churchill, and Lander Counties. Areas through which the tour routes travel have been used as rangeland, both historically and currently, for cattle and sheep grazing. Rangelands are divided into allotments for management purposes. The proposed tour routes are located within numerous BLM allotments, listed in Table 4. Resource management objectives for the allotments listed in the Tonopah, Shoshone-Eureka and the Carson City Consolidated RMPs reflect BLM's national policy (BLM Manual Section 4100 – Grazing Administration), which is that livestock grazing management shall be prescribed to provide harmonious and coordinated management of the various resources.

**Table 4.** Existing Grazing Allotments Crossed by the Proposed Tour Routes

Allotment Name	Allotment No.	BLM Field Office	Proposed Tour Route that Intersects with Allotment
Montezuma	NV00094	Tonopah FO	Routes A, D, and E
Magruder Mountain	NV00099	Tonopah FO	Route A
Yellow Hills	NV20101	Tonopah FO	Route A
Silver King	NV05308	Tonopah FO	Routes B and D
San Antone	NV00072	Tonopah FO	Routes B and C
Monte Cristo	NV00104	Humboldt River FO	Routes B and E
Cedar Mountain	NV03515	Stillwater FO	Route B
Pilot-Table Mountain	NV03574	Stillwater FO	Route B
Stewart Springs	NV03584	Sierra Front FO	Route B
Ione Unit	NV10071	Tonopah FO	Routes B–D
Eastgate	NV03020	Stillwater FO	Route B
Dixie Valley	NV03018	Stillwater FO	Routes B and C
Clan Alpine	NV03009	Stillwater FO	Routes B and C
Edwards Creek	NV03021	Stillwater FO	Route C
Porter Canyon	NV10013	Stillwater FO	Route C
South Smith Creek	NV20010	Mount Lewis FO	Route C
Forest Service Allotment	NV N9PJW9	Humboldt-Toiyabe National Forest	Route C
Ralston	NV00076	Tonopah FO	Routes C and D
Monitor	NV00077	Tonopah FO	Route D
Hunts Canyon	NV00078	Tonopah FO	Route D

**Table 4.** Existing Grazing Allotments Crossed by the Proposed Tour Routes (Continued)

Allotment Name	Allotment No.	BLM Field Office	Proposed Tour Route that Intersects with Allotment
Silver Peak	NV00097	Tonopah FO	Route E
Sheep Mountain	NV00100	Tonopah FO	Route E

Source: BLM (2012).

### 3.7 Recreation

Dispersed recreation along the proposed tour routes is dominated by OHV use and driving for pleasure. In addition to the primary recreation experiences of OHV use and driving for pleasure, hunting, horseback riding, sight-seeing, outdoor photography, nature study, wildlife viewing, bird watching, rock collecting, and heritage tourism are also conducted along the proposed tour routes. The BLM also issues SRPs for competitive OHV race events along segments of the proposed routes.

The proposed tour routes would cross into an area currently designated by the Tonopah RMP as a BLM special recreation management area (SRMA): the Crescent Dunes SRMA (BLM 1997). The Crescent Dunes SRMA is approximately 3,000 acres. No SRMAs were designated for the Mount Lewis FO.

Areas in which dispersed recreation occurs that are not designated as SRMAs are still managed to meet the needs of dispersed recreation and to protect the environment (BLM 2011).

The proposed tour routes are within NDOW game management units (GMUs) 161, 162, 171, 172, 181, 184, 205, 206, 211, 212, and 251. Hunting pursuits in these GMUs include big-game hunting such as elk, deer, mountain lion, and bear; small-game and varmint hunting; and upland bird hunting. Season dates for different hunts within the GMUs identified vary from year to year; however, it is assumed they will consistently range from a start date as early as August 22 continue as late as January 1 of the following year. In addition, it is not uncommon for hunters to scout areas in advance of the season opening dates.

### 3.8 Socioeconomics

The Proposed Action spans five counties in Nevada: Nye, Esmeralda, Lander, Churchill, and Mineral.

#### ***Nye County***

Nye County is located in central and southern Nevada and encompasses 18,159 square miles; it is the third-largest county in the contiguous United States. Approximately 92% of the land in the county is administered by the federal government.

The total population of Nye County in 2010 was 42,934, a 25% increase from the 2000 census (U.S. Census Bureau [Census Bureau] 2011a). The majority of the county's residents, approximately 86%, live in or around the community of Pahrump, not in the unincorporated town of Tonopah. The population of Tonopah in 2000 was approximately 2,627 (Census Bureau 2011b). The town of Tonopah provides a variety of retail, restaurant, and lodging options, as well as recreational facilities and government services. The majority of job-related income is derived from the agriculture, forestry, fishing and hunting, and mining sector, as well as construction. The unemployment rate in Nye County was 3.7% in 2010, well below the Nevada state average.

## ***Esmeralda County***

Esmeralda County is located in central and southern Nevada and encompasses 3,589 square miles. The County has the second-lowest population density of all the counties in the contiguous United States. The majority of the land in the county is administered by the federal government. The total population of Esmeralda County in 2010 was 849, a 13% decrease from the 2000 census (Census Bureau 2011c). The majority of the county's residents live in or around the county seat and unincorporated town of Goldfield. The population of Goldfield in 2000 was approximately 440 (Census Bureau 2011c). Gold exploration turned Goldfield into a boom town until the 1940s, when the gold mines were largely mined out. The majority of job-related income is derived from the mining sector.

## ***Lander County***

Lander County is located in central Nevada and encompasses 5,519 square miles. The county seat is Battle Mountain. The total population of Lander County in 2010 was 5,047, a 12% decrease from the 2000 census (Census Bureau 2011d). The majority of the county's residents live in or around the unincorporated town and county seat of Battle Mountain. The population of Battle Mountain in 2000 was approximately 2,711 (Census Bureau 2011e). Battle Mountain's primary source of job-related income is derived primarily from the mining sector, but income is also derived from legalized gambling. The town of Battle Mountain is located on Interstate 80.

## ***Churchill County***

Churchill County is located in central Nevada and encompasses 5,023 square miles. The county seat is Fallon. The total population of Churchill County in 2010 was 24,877 a 4% increase from the 2000 census (Census Bureau 2011d). The majority of the county's residents live in or around the city and county seat of Fallon. The population of Fallon in 2000 was approximately 7,536 (Census Bureau 2011e). Fallon is primarily an agricultural community. The city of Fallon is located on U.S. Route 50.

## ***Mineral County***

Mineral County is located in central-western Nevada and encompasses 3,813 square miles. The county seat is Hawthorne. The total population of Mineral County in 2010 was 4,772 a 6% decrease from the 2000 census (Census Bureau 2011d). The majority of the county's residents live in or around the unincorporated town and county seat of Hawthorne. The population of Hawthorne in 2010 was approximately 3,269 (Census Bureau 2011e). The Hawthorne Army Depot is the main economic base of the community.

### **3.9 Transportation and Access**

Numerous roads, tracks, and paths for motorized travel occur within or near the project area. These include U.S. Route 6/50 and U.S. Route 95 in addition to State, County, and BLM roads. The routes are all used by the general public, ranchers, and miners and for geothermal exploration, recreation, and public land management.

### **3.10 Wildlife**

Wildlife species in tour areas are typical of those associated with sagebrush vegetation communities found throughout the southern Great Basin desert areas. Sagebrush provides habitat for various Great Basin wildlife species and supports a high diversity and density of wildlife species.

The proposed tour routes extend across mountains, canyons, several ephemeral washes, and Great Basin valleys. A wildlife survey was not deemed necessary for this project since the Proposed Action does not include any new surface disturbance, and all activity would take place on existing roads and trails and in parking areas.

Several species of reptiles and amphibians are known to occur along the proposed routes. Common reptile species include side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), Great Basin gophersnake (*Pituophis catenifer*), and Great Basin rattlesnake (*Crotalus oreganus lutosus*). Reptile species in the project area occupy a variety of habitats, from sagebrush and desert scrub to grassland, pinyon-juniper woodland, and montane coniferous forest. Reptiles often bask along roadways and/or on rocks at various times of day, depending on climatic conditions. Amphibians are primarily encountered near perennial and, to a lesser extent, ephemeral water sources, and activity is often correlated with recent rainfall.

A variety of small mammals occupy various habitat types along the proposed routes. Some of the more common small-mammal species occurring in the project area include American deer mouse (*Peromyscus maniculatus*), Ord's kangaroo rat (*Dipodomys ordii*), and least chipmunk (*Tamias minimus*). Small-mammal species in the project area occupy a broad range of habitat types, including grassland, desert scrub, sagebrush, pinyon-juniper woodland, and coniferous forest.

A variety of mid-sized mammals also occupy various habitat types along the proposed routes. Some of the more common species include badger (*Taxidea taxus*) and coyote (*Canis latrans*). Like small mammals, these mid-sized mammal species in the project area occupy a broad range of habitat types, including grassland, desert scrub, sagebrush, pinyon-juniper woodland, and coniferous forest. Additionally, predators such as mountain lion (*Puma concolor*) are also known to occur throughout the project area.

No wildlife management areas are present along the proposed tour routes. The proposed routes would travel through habitat of the following game species, identified in Table 5.

**Table 5.** Game Species Populations

Species	Herd Name	Habitat	Route(s)
Mule deer	Desatoya Herd	Year-round	C
Mule deer	Silver Peak/Magruder Herd	Year-round	A
Mule deer	Toquima Herd	Year-round	C
Mule deer	Hunt Canyon	Crucial winter	D
Mule deer	Toiyabe	Crucial winter	B and C
Pronghorn	No herd names	Year-round	A–D
Desert bighorn sheep	Desatoya	Lambing	B
Desert bighorn sheep	Desatoya	Year-round	C
Desert bighorn sheep	Lone Mountain	Year-round	E
Desert bighorn sheep	Silver Peak	Year-round	E

### 3.11 Wild Horses and Burros

The Wild Free-Roaming Horse and Burro Act of 1971 requires the BLM to protect and manage wild horses and burros in areas where they were found at the time of the act to achieve and maintain a thriving

natural ecological balance and achieve rangeland health standards consistent with the goals of multiple-use management. For the purpose of managing healthy and sustainable populations of wild horses and burros on public lands, the BLM has established herd management areas (HMAs) based on wild horse use and habitat. HMAs are established through the land use planning process in areas where wild horses and burros can be managed for the long term. The proposed routes cross through 10 HMAs, nine of which are within the Tonopah FO. The Desatoya HMA is within the Battle Mountain Field Office. Each HMA has an Appropriate Management Level (AML) range for herd populations. AMLs are established based on monitoring and evaluation (Table 6).

**Table 6.** Herd Management Areas

<b>HMA</b>	<b>2006 AML Levels</b>	<b>Route(s)</b>
Bullfrog	12 horses, 185 burros	A
Gold Mountain	78 burros	A
Palmetto	76 horses	A
Montezuma Peak	146 horses, 10 burros	A and E
Goldfield	125 horses, 50 burros	C and D
Paymaster	43 horses	E
Silver Peak	6 burros	E
Saulsbury	40 horses	D
Pilot Mountain	69 horses	B
Desatoya	82 horses	C

## 4.0 ENVIRONMENTAL CONSEQUENCES

### 4.1 Introduction

The direct and indirect effects of the Proposed Action on resources present and brought forward for detailed analysis are discussed in this section. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. The effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8).

### 4.2 Migratory Birds

#### *Proposed Action*

Increased human presence and vehicle travel could result in an indirect loss of habitat and an alteration of species composition in the area immediately adjacent to designated route segments. For the purposes of impact analysis, the entire system of proposed routes, 1,008.6 miles, is considered to cross through potential habitat for migratory bird species. The noise resulting from increased human presence and vehicle use could contribute in a loss of individual birds through nest abandonment or habitat disturbance. Because the migratory bird breeding season ends no later than July 15 and increased OHV use is assumed to occur from April to October, there would be an increased risk of interference with breeding behavior in May and June. Migratory birds would only be disturbed by brief and intermittent exposure to dust and noise for a brief and minor impact. This would not result in a significant impact over the No Action Alternative.

#### *No Action*

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing habitat disturbance and OHV usage trends along the proposed routes would continue under the No Action Alternative. Migratory bird species that use habitat along existing routes would continue to use habitat at current levels. Changes in individual animal behavior and movements and nesting success, increased mortality, and introduction of invasive vegetation from motorized travel on existing roads and trails would continue under current conditions.

### 4.3 Noxious Weeds/Invasive Non-native Species

#### *Proposed Action*

New surface disturbance creates favorable conditions for the establishment of noxious, invasive, and non-native species. Although the Proposed Action does not include any new surface disturbance, the potential for the establishment of noxious weeds and invasive, non-native species from vehicles spreading seed via their undercarriage and wheels is high. The potential for spreading weeds will be reduced by applicant-committed practices such as washing vehicles between tours.

As described in the Zero One Operating Plan, all tour vehicles are thoroughly washed each night, minimizing the risk of spread of noxious weeds and invasive non-native species. Impacts would be further reduced by the implementation of standard weed stipulations described in Section 6.0.

## **No Action Alternative**

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as currently allowed under the BLM RMPs. No new impacts from noxious weeds and invasive, non-native species would occur under the No Action Alternative.

## **4.4 Threatened, Endangered, and Special-Status Species**

### **Proposed Action**

#### **SPECIAL-STATUS BIRD SPECIES**

Auditory and visual disturbance from increased traffic and human presence may displace ferruginous hawks and golden eagles from areas adjacent to proposed routes. Because the disturbance would be temporary and spatially limited to existing roads, it would be similar to the disturbance resulting from existing traffic levels.

#### **PYGMY RABBIT**

Since the Proposed Action does not include cross-country travel, the pygmy rabbit and its preferred habitat would be avoided. No long-term impacts to individual pygmy rabbits or to its habitat would occur.

#### **WESTERN SMALL-FOOTED MYOTIS**

The Proposed Action would avoid bats by remaining on existing roads and trails; therefore, a disruption in breeding behavior of sensitive bat species would not occur as a result of the Proposed Action. Bat species do not use the proposed tour routes for roosting but may forage along the proposed tour routes at dusk. Because tours would be conducted during daylight hours only, arriving at each day's destination by 5:00 p.m., the risk of mortality to foraging bats as a result of collisions with tour vehicles would be minimal.

#### **DESERT BIGHORN SHEEP**

Increased human presence and traffic associated with the use of the proposed routes B, C, and E would increase the risk of mortality or injury to desert bighorn sheep from collision with vehicles. Increased human presence, noise, and vibration associated with the increase in traffic along the routes would also result in increased energy expenditures and interference with behavioral activities, as individual animals move away from the existing roads. This could also result in lamb abandonment if sheep run from vehicles for an extended period and lambs are unable to keep pace. These impacts have the potential to occur along routes B, C, and E. Because the disturbance would be temporary and spatially limited to existing roads, the magnitude and duration of effects on desert bighorn sheep would be similar to the results of dispersed recreational users and other motorized vehicle use. Desert bighorn sheep are not expected to be significantly affected by the slight increase in traffic that would result from the tours.

#### **GREATER SAGE-GROUSE**

Route B, C, and alternative C pass through the Desatoya PMU (greater sage-grouse), Route C passes through the Reese River PMU (greater sage-grouse), Routes C and D pass through the Monitor PMU (greater sage-grouse), and Route A passes through the White Mountains PMU (Bi-state sage-grouse). Routes C passes within 3 miles of several previously active leks in the Reese River and Monitor PMUs.

NDOW delineated nesting and early brood-rearing habitat exists along Route C in the Reese River PMUs, as well as late summer habitat on portions of Routes B through D.

Intermittent increases in motorized traffic on the proposed routes through sage-grouse PMUs would result in an increased risk of mortality or injury to greater sage-grouse through occupied habitat. Additionally, increased traffic would contribute to the short-term displacement of individuals and interference with behavioral activities such as nesting as a result of increased human presence and noise. Auditory and visual disturbance from increased traffic and human presence may cause greater sage-grouse to avoid traditional use areas and reduce use of those leks and nearby nesting areas (Holloran 2005). Because the disturbance would be temporary and spatially limited to existing roads, the magnitude and short-term effects on sage-grouse would be similar to the results of dispersed casual motorized users and other motorized vehicle use; therefore, the temporary or long-term population viability for sage grouse is not expected to be negatively affected. Scheduling tour departures no earlier than 1 hour after sunrise will mitigate impacts during lekking season (April) (see Section 6.0). Therefore, no significant displacement of sage-grouse would occur, and the impacts from the Proposed Action would not be different from that of the No Action Alternative.

## **SPECIAL-STATUS PLANT SPECIES**

Because the proposed tours would stay on existing roads and trails and tour stops would be limited to areas of existing disturbance, there would be no impacts to special-status plants or their habitat as a result of the Proposed Action.

No collection of succulent species would be authorized during tours.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM, and impacts to special-status species would remain similar to those described under the Proposed Action.

## **4.5 Grazing**

### ***Proposed Action***

Under the Proposed Action, no new surface disturbance would occur, and no range improvements would be affected. There would be no loss of available forage. Tour participants are instructed to open and/or close fence gates as appropriate. Direct impacts to livestock would consist of mortality and temporary interference with behavior resulting from human activity and the tour vehicle noise. The risk of collisions with livestock crossing roads could occur, but the magnitude of this impact would be similar to that from existing traffic levels on these routes. Interference with livestock behavior and the risk of scattering herds would be site specific, short term, and moderate, since the tour vehicles would continue along the tour route, and human activity and tour vehicle noise would dissipate. Based on the lack of surface disturbance included in the Proposed Action, the sizes of the existing allotments, and the fact that forage is generally not available within a road or trail, potential impacts of the Proposed Action on grazing would be negligible.

## **No Action Alternative**

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM. Impacts to grazing would continue unchanged under the No Action Alternative.

## **4.6 Land Use**

### ***Proposed Action***

The Proposed Action would not result in changes to existing land uses within or along the proposed tour routes. Zero One is not proposing any changes to the existing road, trail, or vehicle-accessible wash network, nor are there proposed changes to existing access. No additional ROWs are proposed under the Proposed Action. In addition, the existing land use authorizations discussed in Section 3.6 would not be restricted, impacted, or modified as a result of the Proposed Action. Therefore, the potential impacts to land use under the Proposed Action would be negligible.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM. No impacts to land use would occur under the No Action Alternative.

## **4.7 Recreation**

### ***Proposed Action***

There would be an increase in permitted tours as a result of the Proposed Action. No new recreation management areas are included under the Proposed Action. Current access roads would remain open, and other users would still be able to use the existing roads and trails that are included in the Proposed Action. The presence of Zero One's tour vehicles may intermittently displace other users. However, the impacts to recreation under the Proposed Action would occur on each proposed route for no more than 24 days and would stop once the tour had moved on.

Although Nevada law precludes hunting from, upon, or across roads, hunters use existing roads, routes, and trails for scouting purposes and for access during actual hunts. The intermittent presence of tour vehicles on the proposed routes may displace hunters to alternative routes. Tours would not occur past October 31 and would use each proposed route for no more than 24 days. There would be no potential impacts to hunting during November and December of each hunting season.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM. No impacts to recreation would occur under the No Action Alternative.

## 4.8 Socioeconomics

### ***Proposed Action***

Zero One is committed to supporting local economies by purchasing products and services locally as often as economically feasible. The most used products and services include fuel, meals, lodging, food and supplies from convenience and grocery stores, hardware, auto parts, and service. Including tour costs, hotel, meals, fuel, and sundries, typically, a 5-day adventure tour for 12 participants would contribute between \$20,000 and \$30,000 to local economies along the tour route, or between \$300 and \$500 per day, per participant.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM. The towns and communities that occur along the tour routes and the products and services that would be used by Zero One would not gain financial benefits under the No Action Alternative.

## 4.9 Transportation and Access

### ***Proposed Action***

There would be no change to BLM or Forest Service travel management plans or public access as a result of the Proposed Action. However, tours associated with the Proposed Action would result in an incremental increase in the use of the proposed routes, which would contribute to increased erosion of road surfaces. Damage to road surfaces would be mitigated by the road and trail maintenance actions described in the Operating Plan (see Appendix A).

Tours would also result in a minor increase in traffic on proposed routes. Tours would occur on proposed routes no more than 24 days during a tour season between April 1 and October 31 of each year. The minor increase in traffic would contribute to potential travel delays to other road, route, and trail users along the tour routes, in addition to potential conflicts with other BLM authorized uses. These delays and conflicts would be reduced by Zero One coordinating with each BLM FO a minimum of 2 weeks prior to conducting each tour.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue under current trends and conditions.

## 4.10 Wildlife

### ***Proposed Action***

The Proposed Action does not include surface disturbance to any wildlife habitat. Direct impacts to wildlife would consist of mortality and temporary interference with wildlife behavioral activities resulting from human activity and the tour vehicle noise. Mortality for individual animals crossing the roads could

occur, but the magnitude of this impact would be no different from the casual use that currently exists on these routes from dispersed recreational users. Interference with wildlife behavior would be site specific, short term, and moderate, since the tour vehicles would continue along the tour route, and human activity and tour vehicle noise would dissipate. Because tours would not be conducted during winter months, the Proposed Action is not expected to result in increased interference to mule deer winter crucial range along routes B through D. However, in years of above-average snow accumulation at higher elevations, mule deer may remain on crucial winter grounds until May or later, depending on snow levels.

Indirect impacts to wildlife would occur as a result of the animals habitually avoiding roads and trails as a result of increased noise but is expected to be only minimally greater than those from dispersed recreation. However, as this Proposed Action includes existing roads and trails, wildlife has been experiencing the presence of human activity and noise for many years. Because the disturbance would be temporary and spatially limited to existing roads, the magnitude and duration of effects on wildlife is similar to the results of dispersed recreational users, the temporary or long-term population viability for any one species is not expected to be negatively affected.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM, and impacts to wildlife would remain unchanged.

## **4.11 Wild Horses and Burros**

### ***Proposed Action***

Tours and tour stops will be brief and intermittent and may result in temporary displacement of wild horses or burros. Because the disturbance would be temporary and spatially limited to existing roads, displacement of horses and burros is expected to be only minimally greater than that from dispersed recreation and existing traffic levels.

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

Under the No Action Alternative, the SRP for the proposed tour routes would not be granted, and Zero One would not conduct tours. Existing use of the roads and trails by other users would continue, as permitted by BLM, and impacts to wild horses would remain unchanged.

## 5.0 CUMULATIVE IMPACTS

For the purposes of this EA, the cumulative impacts are the sum of all past, present (including proposed actions), and reasonably foreseeable future actions (RFFAs) resulting primarily from human settlement, historical mining, commercial activities, and public use. The purpose of the cumulative analysis in the EA is to evaluate the significance of the Proposed Action's contributions to cumulative impacts. A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

As required under NEPA and the regulations implementing NEPA, this chapter addresses those cumulative effects on the environmental resources in the Cumulative Effects Study Areas (CESAs) that could result from the implementation of the Proposed Action and No Action Alternative and from past actions, present actions, and RFFAs. The extent of the CESA may vary with each resource, based on the geographic or biological limits of that resource. For this project, a CESA, including a 1-mile buffer around each of the proposed routes, has been identified for all resources (Figure 2). The list of projects considered under the cumulative analysis may vary according to the resource being considered. In addition, the length of time for cumulative effects analysis may vary according to the duration of impacts from the Proposed Action on the particular resource.

Environmental consequence of the Proposed Action and the No Action Alternative were evaluated previously in Chapter 4. The analysis of the environmental resources showed that the following resources may be impacted by the Proposed Action:

- Migratory Birds
- Noxious Weeds/Invasive Non-native Species
- Threatened, Endangered, and Special-Status Species
- Grazing
- Land Use
- Recreation
- Socioeconomics
- Transportation and Access
- Wildlife
- Wild Horses and Burros

### 5.1 Past Actions

The exploration and subsequent settlement of the Great Basin by Euro-Americans created the basis for the road network still in use today. Most of the roads in the area are the result of prospecting and mining-related activities. Roads followed valleys, led to water sources, and intersected at areas of commerce. Numerous competitive OHV races have occurred on portions of the proposed tour routes over the years. Hunting of both big game and game birds has been a popular activity in the CESA. Research and management of big game and wildlife have been undertaken by the NDOW and the BLM, which may

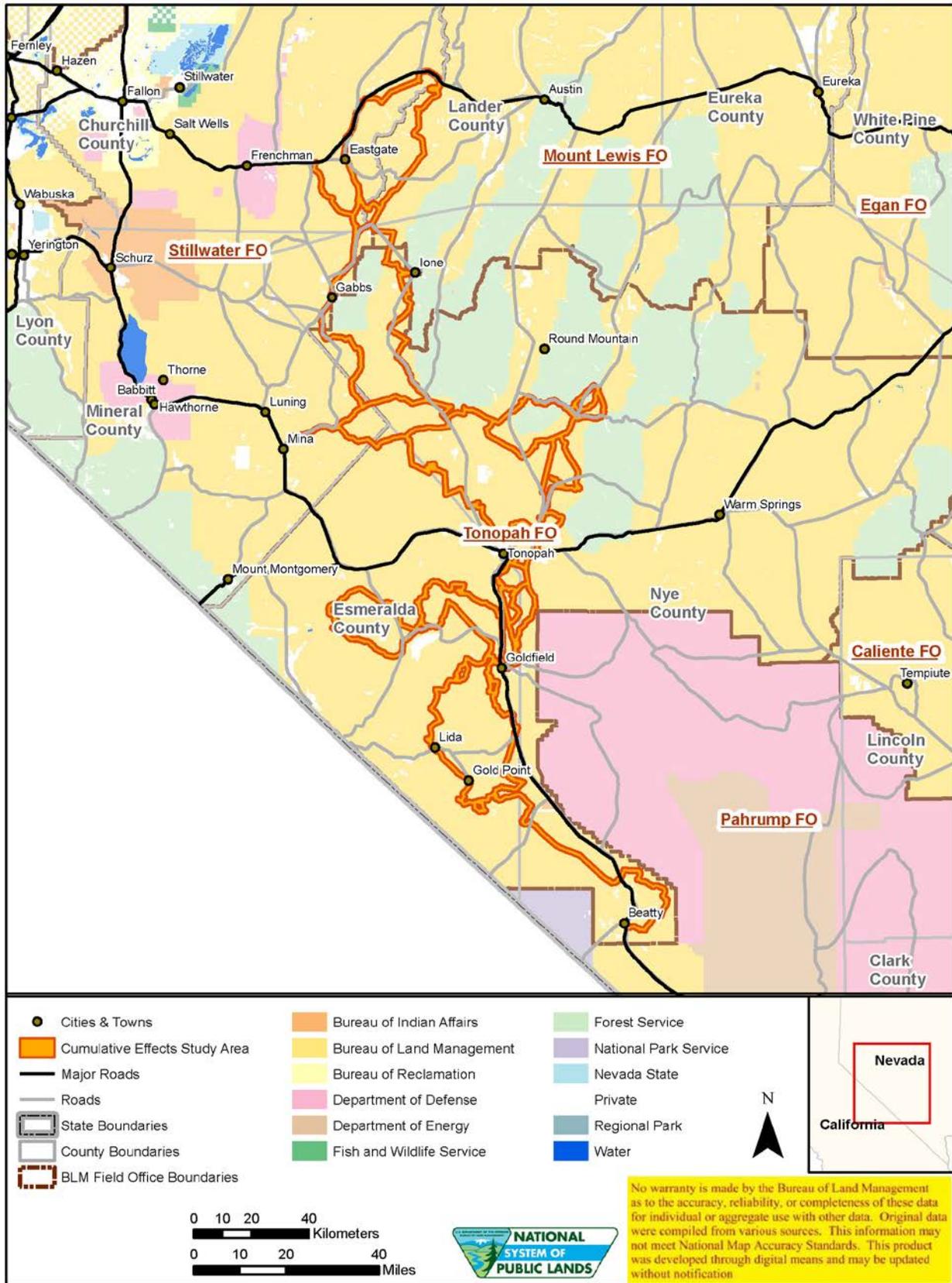


Figure 2. Cumulative Effects Study Area.

include modification to existing habitat, water improvements, and rangeland facilities such as exclusion fencing. Historical mining operations included mining, milling, and waste rock disposal. Vegetation treatments, including mechanical, hand-cut, and prescribed burns, have been done in the CESA to restore proper fire regimes and vegetation composition. Other activities such as wood cutting and nature photography also occur but at indeterminate levels. Finally, wildland fires have occurred in the Great Basin for millennia.

## 5.2 Current Actions

Present actions in the CESA include the following: livestock grazing and range improvements, wildland fires, wildlife and game habitat management, fire treatments, dispersed recreation, competitive recreation, cultural tourism, utility and other ROWs, mineral exploration, mining, and herbicide application to noxious weeds.

## 5.3 Reasonably Foreseeable Future Actions

RFFAs in the CESA include livestock grazing and range improvements (existing allotments can be expected to be adjusted in season of use or numbers of livestock), fire management, wildland fires, wildlife and game habitat management, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining Table 7.

**Table 7.** Currently Approved Projects and Reasonably Foreseeable Future Actions

Action	Description	Resources Affected	Area of Impact
Speedway Community Gravel Pit	Existing sand and gravel material pit located near the Tonopah Airport, Nye County, Nevada, also known as the Speedway Community Pit.	All	160 acres
Tonopah Public Utilities ROW	Tonopah waste system improvement project	All	104 acres
McGuinness Hill Geothermal Development Project	Ormat Nevada, Inc., has been approved to construct and operate two power generating facilities, a geothermal production and injection well field and pipelines, access roads, an electrical transmission line, and ancillary support facilities in Lander County.	All	217 acres
Goldfield Gemfield Mining Project	International Minerals Corporation has completed exploration drilling and is currently preparing a Plan of Operations to conduct gold mining north of Goldfield, Nevada.	All	
Minerals Ridge Plan of Operations for exploration	Mineral Ridge Gold is proposing to amend the Amended Mineral Ridge Mine Plan of Operations/Permit for Exploration to include exploration drilling and associated activities.	All	332 acres
Ione Wildland Urban Interface Project	Varying treatments for fire defense system surrounding the community of Ione.	All	812 acres
Beatty Spring Enhancement project	The BLM, in cooperation with Storm-OV, a non-profit organization, proposes to conduct a rehabilitation effort on five spring sources near Beatty, Nevada.	All	12 acres

In any NEPA analysis, it is preferable to quantify the assessment of impacts on each affected resource. This is true for direct, indirect, and cumulative impacts. Where possible, the following analysis is quantified. Where quantification is not available, a meaningful and qualified judgment of cumulative effects is included to inform the public and the decision-maker.

## **5.4 Migratory Birds**

The past and present land uses along the proposed routes have had a direct effect on migratory birds in the area. Past and present actions have contributed to displacement, nest avoidance, injury, mortality, loss of habitat, and habitat fragmentation.

RFFAs in the area such as road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining would result in a loss of habitat, habitat fragmentation, and increased risk of mortality associated with construction activities, increased human presence, and motorized use of existing roads and trails within the CESA. The Proposed Action would result in an incremental increase in noise from motorized use and human presence along the existing roads and trails during the migratory bird nesting period from April to July and would contribute to short-term displacement and nest avoidance, in addition to injury, mortality, and habitat fragmentation. Because the proposed routes are on existing roads and trails and the Proposed Action is comparable to casual motorized use, the magnitude and duration of cumulative effects on migratory birds would be negligible.

## **5.5 Noxious Weeds/Invasive Non-native Species**

Past and present actions may have introduced and contributed to the spread of invasive, non-native species within the CESA, and the same may be expected from the RFFAs. Past and present actions with impacts created from noxious weeds and invasive, non-native species include road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. RFFAs with impacts from noxious weeds and invasive, non-native species include road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining.

Mitigation measures for all other actions would aid in reducing potential adverse effects. Noxious weeds and invasive non-native species could increase within the CESA in spite of the best management practices and standard operating procedures that would be in place for the Proposed Action. Therefore, the Proposed Action may result in incremental increases in noxious weeds; however, Zero One's commitment to washing tour vehicles and support vehicles before and after every tour and to limiting the Proposed Action to existing roads and trails would minimize this potential.

## **5.6 Threatened, Endangered, and Special-Status Species**

Past and present actions that are likely to have impacts to special-status species include road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. Impacts to special-status species for these activities include loss of forage, cover, and habitat, as well as disturbance of mating and brood-rearing practices.

RFFAs with the potential to impact special-status species include grazing, dispersed recreation, roads, ROWs, mineral activities, and loss of vegetation associated with wildland fires. The Proposed Action would result in an incremental increase in noise from motorized use and human presence along the existing roads and trails and would contribute to short-term displacement and increased risk of injury, mortality, and habitat fragmentation. Because the proposed routes are existing roads and trails and the Proposed Action is comparable to casual motorized use, the magnitude and duration of cumulative effects on special-status species would be negligible.

## 5.7 Grazing

Past and present actions have contributed to disruptions to grazing management and loss of available forage. This includes the permitting of recreation activities, military zoning, wildlife management, and wild horse management. Wildfires have also caused loss of available forage. Fire management, in some cases, may increase available forage by releasing site potential for use by forage species (specifically, brush beating, mowing, and low-intensity, short-duration controlled burns).

RFFAs that may contribute impacts to grazing include road construction and maintenance, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. These RFFAs would contribute to reduced forage available for grazing and increased invasive vegetation as a result of increased human presence and motorized use within the area of analysis. The Proposed Action would be confined to existing roads and trails and would minimize the amount of disruptions to grazing operations and rangeland health since there would be no cross-country travel or surface disturbance to any areas outside the proposed tour route. In addition, because the Proposed Action is comparable to casual motorized use, the magnitude and duration of cumulative effects on grazing and livestock would be negligible.

## 5.8 Land Use

Past and present actions have contributed to land use patterns and defined allowable uses. This includes military zoning, BLM land-use planning, road construction, and municipal settlement. RFFAs that may contribute to land use include renewable energy development. The incremental and additive effect of the Proposed Action, when combined with the past, present, and RFFAs, would be negligible since the Proposed Action follows existing roads and trails and does not designate new or proposed land uses.

## 5.9 Recreation

Past and present actions have contributed to the creation and establishment of additional road and trails within the CESA; this has resulted in an increase in recreational opportunities in the area, particularly for OHV use. This increase in use has led to conflicts between recreation groups, particularly in terms of hunting vs. OHV use. The Proposed Action would have a minimal incremental effect on this conflict because the season of use has a very small overlap with designated hunting seasons.

## 5.10 Socioeconomics

The CESA for socioeconomics includes the towns and communities along the proposed tour routes (Eastgate, Gabbs, Ione, Mina, Tonopah, Goldfield, Lida, and Beatty). Past and present actions have contributed to socioeconomic patterns and characteristics in all of these towns and communities. This includes military zoning, BLM land use planning, road construction, and municipal settlement. RFFAs that may contribute to socioeconomics include road construction and maintenance, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. The incremental and additive impact of the Proposed Action, when combined with the past, present, and RFFAs, would result in an indirect but minor beneficial cumulative impact, with some small yet important income flow to these small communities.

## 5.11 Transportation and Access

The past and present land uses along the proposed routes have had a direct effect on transportation and access in the area. Travel management planning has led to changes in public access in the CESA. However, traffic levels on dirt surface roads and trails would generally remain low. RFFAs in the area would be expected to result in increased traffic levels from construction and operation traffic associated with competitive recreation events, utility and other ROW maintenance, and mineral exploration and mining development. The Proposed Action would result in an incremental increase in motorized use and human presence along the proposed routes. Because the proposed routes are located entirely on existing roads and trails, there would be a negligible contribution to changes in transportation and access in the CESA.

## 5.12 Wildlife

The cumulative impact to wildlife from the incremental impact of the Proposed Action, when added to other actions, is a contribution to the temporary disturbance of wildlife in the immediate vicinity of the proposed tour routes within the CESA. Past and present actions that are likely to have impacts to wildlife include road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. Impacts to wildlife and game animals for these activities include loss of forage, cover, and habitat, as well as disturbance of mating and brood-rearing practices. Natural reclamation of abandoned actions and restorative reclamation of completed actions would decrease the disturbances to wildlife and allow recolonization of native species. The additive effect of the Proposed Action on other past and present actions would be minor since the Proposed Action would not increase, heighten, or intensify past actions that have already caused a wildlife impact.

RFFAs that are likely to have impacts to wildlife include livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, mineral exploration and mining, oil and gas leases, and renewable energy development.

## 5.13 Wild Horses and Burros

The cumulative impact on wild horses and burros from the incremental impact of the Proposed Action, when added to other actions, is a contribution to the temporary disturbance of wild horses and burros in the immediate vicinity of the proposed tour routes crossing HMAs within the CESA. Past and present actions that are likely to have impacts to wild horses and burros include road construction and maintenance, livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, and mineral exploration and mining. Impacts associated with those activities consist of loss of forage, cover, and habitat, as well as disturbance of wild horse and burro behavior.

RFFAs that are likely to have impacts to wild horse and burros include livestock grazing and range improvements, fire treatments, dispersed recreation, competitive recreation, utility and other ROW maintenance, mineral exploration and mining, oil and gas leases, and renewable energy development. The additive effect of the Proposed Action on past and present actions and RFFAs would be minor since the Proposed Action would not increase, heighten, or intensify the actions that would contribute to, or have already resulted in, impacts.

## 6.0 MITIGATION MEASURES

The following mitigation measures would be included as part of the Proposed Action.

### 6.1 Project-Specific Mitigation Measures

*Special-Status Species:* If desert bighorn sheep are encountered on a road, trail, or vehicle-accessible wash, Zero One, to extent feasible and allowed by the SRP, will pull over, stop all engines, and wait for the bighorn sheep to move out of the road, trail, or vehicle-accessible wash.

On routes within PPH during breeding season (March 1–May 15), Zero One will not allow tour stops near leks during early morning hours (daylight to 10:00 a.m.).

On routes near active sage grouse leks, during lekking season (April into early May), Zero One will not allow tour stops near leks during early morning hours (daylight to 10:00 a.m.).

*Wildlife:* If mule deer are encountered on a road or trail in crucial winter habitat as a result of extended winter conditions, Zero One, to extent feasible and allowed by the SRP, will pull over, stop all engines, and wait for the mule deer to move out of the road or trail.

*Noxious Weeds/Invasive, Non-native Species:* Zero One will work with BLM to prevent the spread of noxious weeds and invasive, non-native species in the areas affected by the Proposed Action. Zero One will thoroughly wash each tour vehicle (and the support vehicle) between each and every tour to ensure that all dirt, mud, and seed-containing debris is removed from the vehicle body, tires, wheels, and undercarriage before heading out for another tour.

No collection of succulent species is authorized during tours.

*Transportation and Access:* Where the routes coincide with active mine areas, Zero One will slow down the group and brief participants that they will be passing through an active mine site and that there is a need to stay together and watch for heavy mine traffic.

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## 7.0 CONSULTATION AND COORDINATION

In accordance with the National Historic Preservation Act (PL 89-665), NEPA (PL 91-190), FLPMA (PL 94-579), the American Indian Religious Freedom Act (PL 95-341), the Native American Graves Protection and Repatriation Act (PL 101-601), and Executive Order 13175, BLM must provide affected tribal governments, traditional leaders, and lineal descendants with an opportunity to comment and consult on the proposed project.

BLM's Tonopah FO initiated consultation by providing the project proposal description and location (with attached maps) by mail on April 13, 2012, to the Timbisha Shoshone Tribe, Duckwater Shoshone Tribe, Yomba Shoshone Tribe, and the Fallon Paiute-Shoshone Tribe. Following the initial mailing, multiple communications or coordination occurred wherein BLM requested input and extended field visit and meeting invitations. No comments or requests for a field tour were received from the Native American tribes.

NDOW was informed of the Proposed Action on April 2, 2012. A response was received from NDOW on April 30, 2012. Resource conflicts identified by NDOW are considered in this EA in Sections 4.2, 4.4, and 4.10.

This EA was prepared at the direction of the BLM Tonopah FO, Battle Mountain District, Nevada, by SWCA Environmental Consultants (SWCA) under a contract with Zero One Odysseys. A list of individuals responsible for preparation of this EA is presented in Table 8.

**Table 8.** List of Preparers/Reviewers

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Responsibility</b>
<b>BLM</b>			
Mark Ennes	Assistant Field Manager / Non-renewable Resources	BLM	Minerals, Cultural, Lands and Realty, Recreation/Wilderness/Visual Resources
Alan Buehler	Project Manager/Supervisory Geologist	BLM	Project Management, Recreation, Transportation/Access
Bruce Andersen	Outdoor Recreation Planner	BLM	Project Management, Recreation, Wilderness, Visual Resources
John A. Hartley	Planning and Environmental Coordinator	BLM	Project Lead, NEPA Review
Tessa Teems	Planning and Environmental Coordinator	BLM	NEPA Review
Wendy Seley	Renewable Energy Coordination Office Realty Specialist	BLM	Lands and Realty
Devin Englestead	Wildlife Biologist	BLM	Wildlife and Special-status Species
Brandon Jolley	Natural Resource Specialist	BLM	Range, Noxious Weeds, and Invasive Species
Chris Dalu	Archaeologist	BLM	Cultural Resources
Teresa Dixon	Archaeologist	BLM	Cultural Resources
Dustin Hollowell	Wild Horse and Burro Specialist, Wildlife Biologist	BLM	Wild Horses and Burros, Wildlife, Special-Status Species
John Lockenvitz	Outdoor Recreation Planner	BLM	Recreation
Marc Pointel	Supervisory Natural Resource Specialist	BLM	Natural Resource Review
Steve Kramer	Planning and Environmental Coordinator	BLM	NEPA Review

**Table 8.** List of Preparers/Reviewers (Continued)

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Responsibility</b>
<b><i>BLM, continued</i></b>			
Dan Westermeyer	Outdoor Recreation Planner	BLM	Recreation, Transportation/Access
John Wilson	Wildlife Biologist	BLM	Wildlife and Special-Status Species
Susan McCabe	Archaeologist	BLM	Cultural Resources
Jill Devaurs	Range Management Specialist, Weed Coordinator	BLM	Range, Noxious Weeds, and Invasive Species
John Axtel	Wild Horse and Burro Specialist	BLM	Wild Horses and Burros
Ethan Arky	Outdoor Recreation Planner	BLM	Recreation
<b><i>Non-BLM Preparers</i></b>			
Steve Leslie	Project Manager	SWCA	Project Management, Quality Control
Ryan Rausch	Environmental Planner	SWCA	Primary Author
Bruce Schneider	GIS Specialist	SWCA	Maps and Figures
Matt Villaneva	Biologist	SWCA	Wildlife and Special-status Species
Shari Bell	Publication Specialist	SWCA	Formatting of Document
Danielle Desruisseaux	Technical Editor	SWCA	Technical Editing of Document
Heidi Orcutt-Gachiri	Technical Editor	SWCA	Technical Editing of Document

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## **APPENDIX A**

### **Operating Plan**



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# Operating Plan

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**8/10/2011**  
**Amended 06/18/2012**

The following pages contain the operating plan for Zero One Odysseys, an adventure vacation company that conducts non-competitive two- to five-day guided OHV excursions within Nevada.



# Operating Plan for Zero One Odysseys

## An adventure vacation company

Zero One Odysseys, LLC (Zero One), is an adventure vacation company based in Henderson, Nevada. The owners, David Whitehead and Earl Desiderio, are both avid off-roaders and outdoor adventure enthusiasts. Years of exploring Nevada's Great Basin and surrounding areas have created a vast knowledge of the area, as well as many great memories, experiences, and new friends. These memories and experiences are what Zero One is about. The two owners decided to quit their corporate day jobs and invest their savings into a new venture in which the two could share their experiences and the vastness of the great state of Nevada.

Zero One is a Nevada LLC with David Whitehead and Earl Desiderio as Managing Members. Both Mr. Whitehead and Mr. Desiderio own 50% each, respectively, of the company. Although Zero One has not previously been permitted to conduct off-highway vehicle (OHV) tours on Bureau of Land Management (BLM) lands, the two owners have both previously been permitted for OHV events and tours by the BLM under Wide Open Nevada, LLC (Wide Open Nevada), and Trac-On, LLC (Trac-On). The goals, objectives, and business plan for Zero One vary from the racing operations of Wide Open Nevada and the motorcycle tour operation of Nevada Trac-On. For that reason, Zero One is proposing to conduct guided, non-competitive OHV tours on lands managed by the BLM Battle Mountain and Carson City Districts in Nevada under a new Special Recreation Permit (SRP).

### Business Overview

Zero One is in the business of providing experiences and memories to its clients. We use an off-road tour car as our time machine into Nevada's distinct history, showcasing mining camps, ghost towns, scenery, and wildlife along the way. The largest portion of the business comes from team building, corporate retreats, and corporate sales incentive programs. This makes up 80% of the Zero One Odysseys tours. However, we do have our share of individuals who want to experience our adventures with friends and family.

The Zero One target customers are typically 35 to 50 years in age, with a median income of \$200,000. They are professional persons, usually entrepreneurs or executives of major companies. They use the team building aspect offered by the proposed Zero One tours to bring both associates and customers together. The tours will provide a unique environment that takes them away from their daily routines and gives them a story they can tell for years.

With the growing economies in China and Germany, we are also pursuing sales in these countries. Both share a fondness for the "wild West" and enormity of the Great Basin.

### Tour Format

Zero One is proposing to conduct up to 24 tours annually between April and October. The proposed tours would occur as one of two lengths: two day and five day. Each tour would involve no more than eight two-passenger vehicles made up of one guide vehicle, six client vehicles, and one sweep vehicle. All vehicles would be registered and insured. This format allows for a total of 12 tour participants, two participants in each of the six client vehicles. In addition, Zero One proposes to use tour support vehicles each day that include a motor home and up to two large pickup trucks. The support vehicles would travel on highways and county roads in addition to the tour routes in order to reach predetermined meeting locations with the tour group each day.

Each tour would be conducted in a “follow the leader” format with all participants escorted and following the instruction of a Zero One guide. Participants are also followed by a Zero One “Tail or Sweep” vehicle to monitor for safety and rule compliance. The tour leaders maintain radio contact with each tour vehicle. Tour vehicles would maintain enough spacing to stay out of any dust generated by the lead vehicles and maintain visibility and safe driving. Participants are instructed to follow the posted speed limit, or no more than 35 miles per hour (mph).

The typical mileage per day for each tour is approximately 90 to 220 miles. This daily routine is repeated on a different route for all subsequent days of the tour. Routes are located on paved roads and highways, established dirt roads, and existing off-highway vehicle trails. The guide will lead participants along one of the five proposed routes to points of interest, a lunch stop, and eventually the day’s final destination or overnight stop. Overnight stops would be in towns along the route using hotels; no overnight stays on BLM lands are proposed. All tour participants must follow the guide’s commands during the tour.

Zero One will provide a preliminary overall tour schedule to each BLM field office at the start of the touring season. Prior to conducting individual tours, Zero One would provide a minimum two-week advance notification to the three affected BLM field offices. That notification would include the following information: the dates of the tour, routes being used, and number of participants. This would allow the BLM to respond to question or concerns raised by the public or other land users. In addition, it would allow the BLM to work with Zero One to adjust tours if necessary to address resource concerns such as road conditions, wildfires, and other events and land uses.

### **Tour Season**

Zero One is proposing to conduct tours between April 1 and October 31. Inclement weather and/or long, snowy winters may result in shortening of the start and end of the season. Tours will not be conducted in the snow or the colder months of the year.

### **Number of Tours**

Zero One proposes to conduct up to 24 tours per year based on business conditions.

### **Vehicles**

Although the Zero One tour vehicles resemble off-road racing vehicles, they are designed for effective off-highway/pavement use, and not for racing. The Zero One tour vehicle is designed to traverse difficult dirt road surfaces in a safe, effective manner with minimal disturbance to surrounding terrain (Figure 1). The vehicle is also designed to be extremely tough and reliable with minimal maintenance requirements during tours. All tour vehicles are registered, insured, and street legal. Vehicles are equipped with 89-decibel (dB) or less mufflers with spark arrestors. Additional safety features of tour vehicles include safety seats with five-point restraints; full steel safety cage around cockpit; fire extinguishers; lights, brake lights, turn signals, and horns; global positioning system (GPS) unit; and two-way radios. The tour vehicles are equipped with secondary containment aluminum tanks encasing the internal fuel bladders. Tour vehicles are not equipped with a speedometer to reduce “racing” behavior of tour participants. Drivers can monitor speed using vehicle GPS units. Tour vehicles travel at no more than the posted speed limits or 35 mph if not posted.

#### **Tour Vehicle Specifications:**

- Weight: 2,750 lb
- Length: 15’6”
- Width: 83” to the outside of tires
- Height: 5’8” with roof rack
- Frame: Chromoly tube
- Body: Fiberglass

- Engine: 2000-2001 Subaru EJ 2.5 (Approximate horsepower to rear wheels 115-125)
- Transmission: 4-speed manual
- Exhaust: Muffler specifically designed to meet U.S. Forest Service (Forest Service) sound output and spark resistance; 89-dB rated
- Suspension: A-arm with Fox Shox and 18" wheel travel



**Figure 1.** Typical tour vehicle.

**Tour Vehicle Safety Equipment:**

- Safety seats with five-point restraints
- Full safety cage around cockpit
- Two-way radios and GPS
- Fire extinguishers
- Fuel-safe bladders enclosed within an aluminum tank
- Lights, brake lights, turn signals, and horn
- Personal safety equipment including helmets and goggles

In addition to the Zero One tour vehicles described above, stock four-wheel drive vehicles such as Land Rovers may be used on occasion. Any alternative vehicle proposed for use would be street legal, registered, and insured. Additionally, alternative vehicles would be no larger than a typical four-wheel drive Land Rover. In the event that alternative four-wheel drive vehicles will be used, Zero One will include that information in the notification to the three BLM Field Offices.

**Support Vehicles**

In addition to the tour vehicles, support vehicles are required to move necessary supplies, equipment, staff, luggage, spares, and hospitality items necessary for a successful tour. Support vehicles do not follow tour routes but will meet tours at pre-arranged locations as described below.

The motor home is used for guest hospitality, facilities, and transportation of people and luggage. Specifically built for the Zero One tour purposes, the Zero One support vehicle motor home is designed to transport clients to the tour starts from Las Vegas and allows clients to participate in the pre-tour training seminar while en route. It is equipped with seating for 14 guests for transportation to and from Las Vegas. It is equipped with a generator, heater, air conditioning, fresh water tanks, grey and black water waste tanks, and restroom. Food preparation takes place in the large kitchen, equipped with refrigerators, stoves, ovens, and grills. Additionally, the motor home sets up for the stops in advance of the tour vehicles and carries all emergency supplies (Figure 2). The motor home is completely self-contained.



**Figure 2.** Zero One motor home.

Other support vehicles include service trucks that carry spare parts, maintenance tools, and other emergency supplies. The service truck is responsible for moving mechanical staff, as well as fuel, spare parts, and tools. It typically tows a single car trailer with a spare tour car on it. Current service trucks are Ford Super Duty F-350 pickups with service box and 90-gallon auxiliary fuel tank. One service truck can carry the supplies needed for a typical three-day tour. The service truck is also responsible for packing out the tour’s bagged trash. The typical vehicles that would be included during a full tour are described in Table 1.

**Table 1. Vehicles Used during a 12-Guest Tour**

Quantity	Description	Route Used
1	Guide tour car	Tour route
6	Client tour car	Tour route
1	Tail or sweep tour car	Tour route
1	Service truck with spare car on trailer	County and state highways and roadways
1	Motor home for hospitality or lunch	County and state highways and roadways
<b>10</b>		

## Vehicle Maintenance

### *Vehicle Fueling*

Refueling of tour vehicles would take place at lunch stops and at the day's final destination. All motor fuel is carried in approved fuel safe containers in the service truck described above. Spare fuel will not be carried in the tour vehicles. Absorbent fuel mats are used when fueling is not conducted over concrete or asphalt surfaces. All vehicle fueling is managed and completed by Zero One staff from fuel safe containers; no Zero One clients would be allowed to participate in vehicle fueling.

### *Vehicle Service*

Minor service of vehicles would be conducted at the end of each day. Any necessary service would be conducted at local establishments with the permission of property owners. The types of service that would be conducted during a tour include checking fluids, filters, and safety equipment. If service or repair of a vehicle is needed during a tour, Zero One staff would conduct repairs. Absorbent blankets placed under the vehicle would be used to contain any potential spills. All waste materials associated with vehicle service would be contained appropriately and disposed of in compliance with the provisions of 43 CFR Group 2930. Major repairs or modifications to the tour vehicles are conducted as needed at Zero One's repair facilities.

In the event a tour vehicle cannot complete the day's route; that vehicle will be towed out to pavement using a tow rope attached to the guide or trail vehicle where it will be met by one of the support vehicles.

### *Vehicle washing*

Each vehicle is thoroughly washed between each tour at facilities located at the tour stop. All mud, debris, and dust would be removed from the exterior of each vehicle prior to departing on the next tour. In addition, the underbody, tires, wheels, and axles would also be thoroughly washed before departing on the next tour.

## Emergency and Safety

The following items are used at all events for participant and staff safety:

- Satellite communication, located in support vehicles and guide car
- GPS location in all vehicles
- Two-way radio in all vehicles
- Staff trained in CPR and First Aid
- EMT basic trained employee at all events
- Complete first aid packs with defibrillator in support vehicle and guide car

Emergency responder lists for all routes includes hospitals, life flight, search and rescue, law enforcement agencies, BLM, and other important telephone numbers (carried in all vehicles).

## Proposed Tour Routes and Distances

The five proposed tour routes and their associated alternate routes follow paved roads and highways, established dirt roads, and existing off-highway vehicle trails. All routes begin and end in towns with hotels available to accommodate the tour participants and staff. No overnight camping is included in the Proposed Action. Route C also includes short segments crossing Forest Service lands south of Lone and between Belmont and Manhattan. Zero One has submitted a separate application for those portions to the Forest Service. The Proposed Action's alternate routes are requested for emergencies, bad weather, or to shorten a day as a result of unforeseen circumstances. Zero One has obtained all necessary permission from private landowners for the use of private lands during tour operations.

In addition, each proposed route includes alternate routes that would be available should unforeseen circumstances present themselves during a tour. There are 21 alternate routes that total approximately 245 miles. These alternate routes would be used during, but not limited to, inclement weather events; flooding events; emergency situations; or mechanical issues. The alternate routes generally would enable tour vehicles to have the option of shortening a day's route, connecting different routes together, or taking a more direct route to paved highways or towns from remote areas as opposed to retracing the tour route back to its origin. The goal of the alternate routes is to facilitate a quicker exit from the tour in the event of emergencies.

As with all tour routes included in the Proposed Action, the alternate routes would follow existing roads, motorized trails, and active washes across BLM-managed public lands; no cross-country travel is included in the alternate routes. Tour operators have established emergency protocols for all tour guides to follow during all Zero One tours. The support vehicles are not designed for use on rougher, unimproved roads of the tour routes. The support vehicles follow paved state and federal highways and major county roads.

All relevant federal, state, and local highway and roadway laws will be strictly followed by all Zero One employees and customers, including posted speed limits.

### ***Route A***

Route A begins and ends in the town of Goldfield, located in Esmeralda County, Nevada, on U.S. Highway 95 (Figure 3). Route A totals approximately 125 miles. The tour departs Goldfield south into the Goldfield Hills. After crossing Stonewall Flat and the Lida Valley, Route A ascends Gold Mountain and Slate Ridge. Route A continues northwest to the ghost town of Gold Point. Route A's lunch stop is located in Gold Point. From Gold Point, Route A crosses the expansive Lida Valley before arriving at the ghost town of Lida on State Highway 266. Route A crosses State Highway 266 and heads north across the Palmetto Mountain range. Continuing north, Route A traverses the Montezuma Range for approximately 10 miles before turning toward the east and descending the Montezuma Range back to the town of Goldfield.

Route A includes an alternate route that would allow Beatty as an additional tour staging area. The alternate route would start in Beatty and follow existing roads for approximately 75 miles before joining the proposed Route A and ending in the town of Goldfield. In addition, Route A includes two additional alternate routes that shorten the overall route. The motor home would remain in Goldfield/Tonopah. If the alternate route from Beatty is used, the motor home would follow U.S. Highway 95 from Beatty to Goldfield or Tonopah. The service truck would travel from Goldfield/Tonopah to Lida Junction, Goldpoint, and Lida via U.S. Highway 95, State Highway 266, and State Highway 744.

### ***Route B***

Route B begins in the town of Goldfield, located in Esmeralda County, Nevada, on U.S. Highway 95 (Figure 4). Route B totals approximately 216 miles. The tour departs Goldfield and heads due north to the town of Tonopah. From Tonopah, Route B continues north through the San Antonio Mountains and across the Crescent Dunes. Route B turns northwest across the Big Smoky Valley. Continuing northwest, Route B traverses the Royston Hills. Route B turns west over the Cedar Mountains and across the Monte Cristo Valley. In the mountains overlooking the town of Mina is Route B's lunch stop. From here, Route B turns back east across the Monte Cristo Valley. Route B then turns north toward the Pactolus Hills to the ghost town of Goldyke. From Goldyke, Route B heads north into the Gabbs Valley. From the town of Gabbs, Route B travels north into the Lodi Valley. Continuing north toward the town of Eastgate, Route B crosses the southern reach of the Desatoya Mountain range before ending at either Cold Springs or at Middlegate.

Route B includes nine alternate routes that shorten the overall route, provide connections to Routes C and D, provide shorter connections to Middlegate, and connect to State Highway 376.

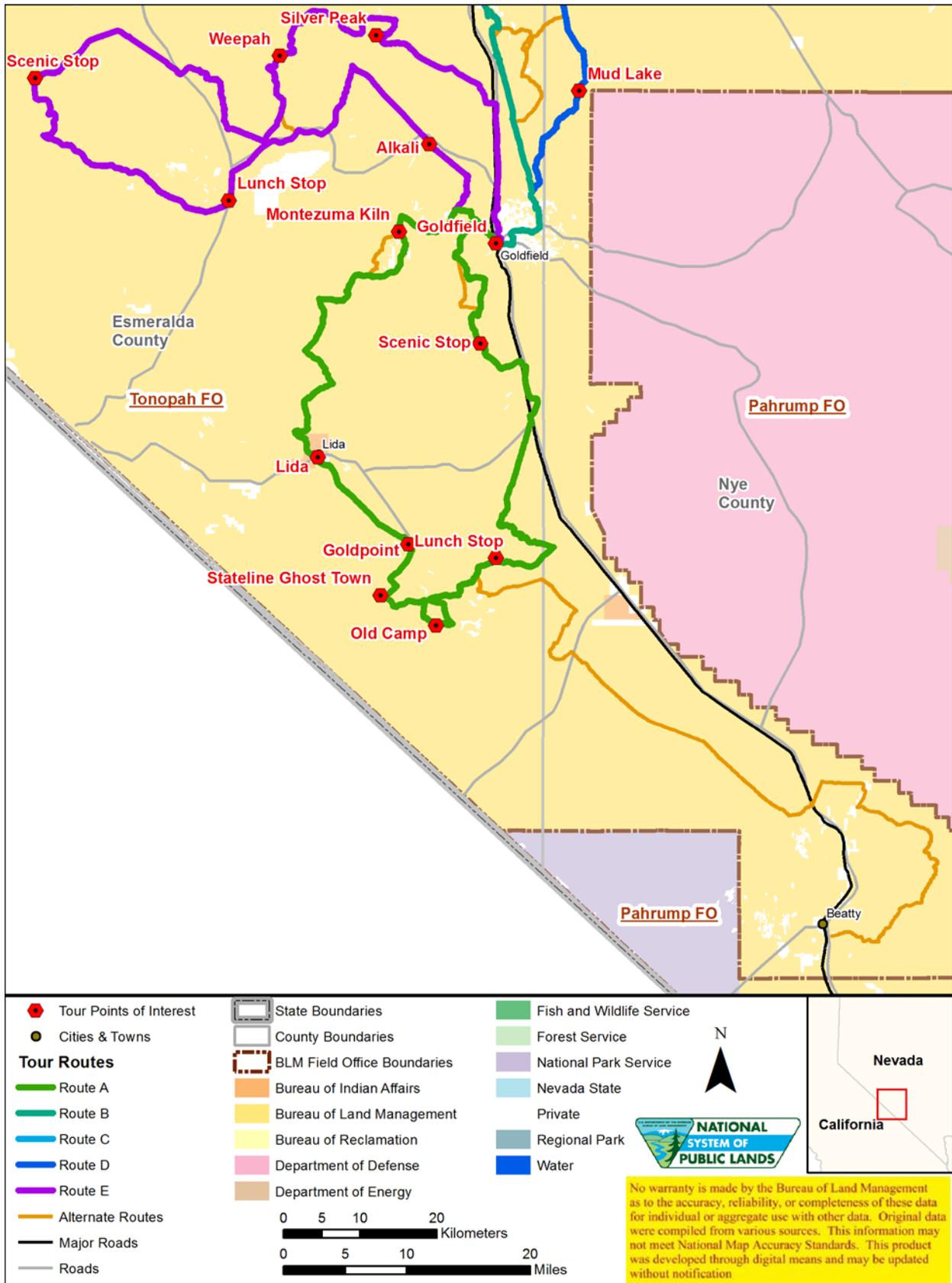


Figure 3. Southern routes.

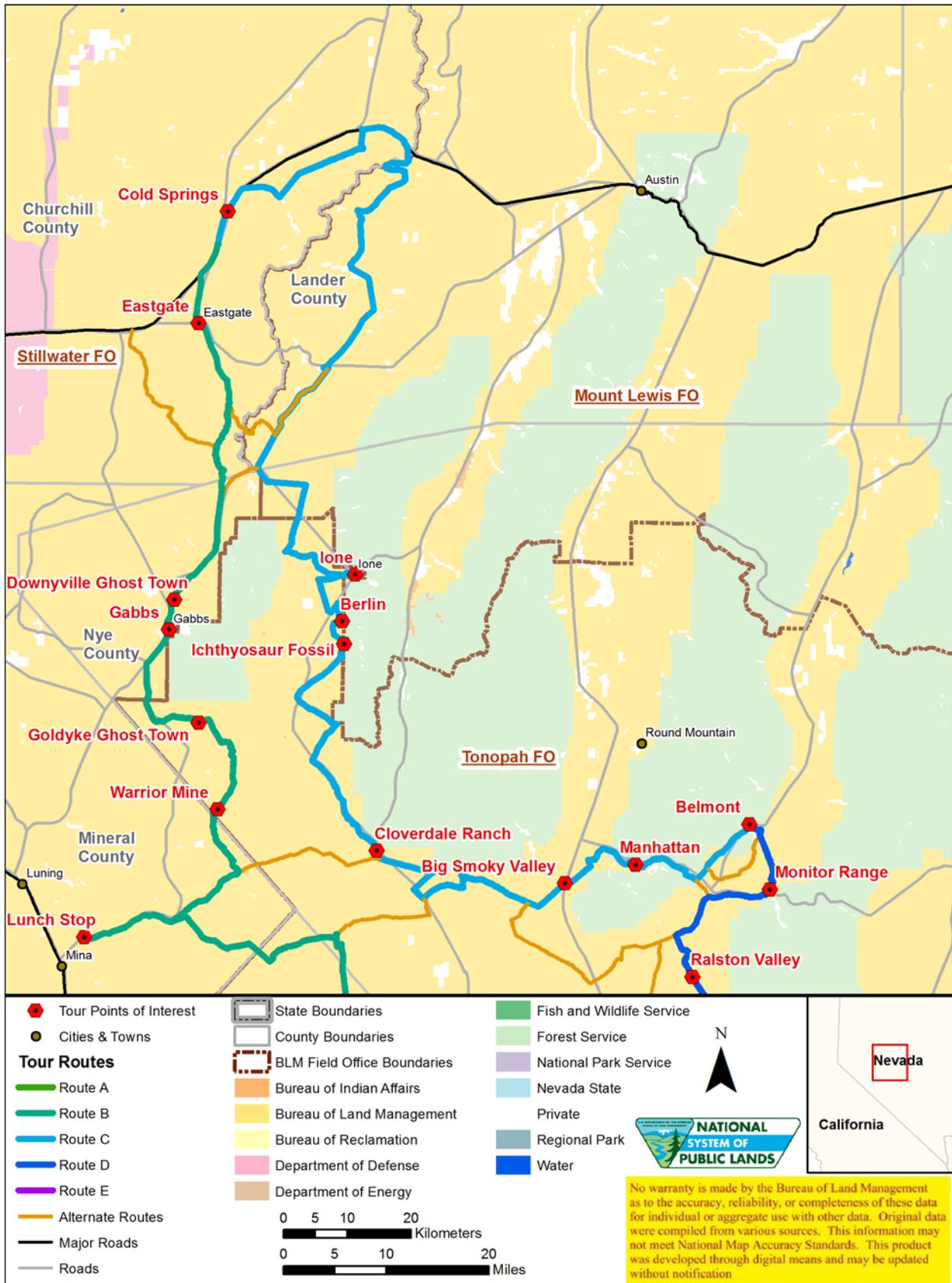


Figure 4. Northern routes.

The motor home would travel from Goldfield to lunch in Mina and to Cold Springs via U.S. Highway 95, State Highway 361, and U.S. Highway 50. The service truck would travel from Goldfield to Crescent Dune, lunch in Mina, Gabbs, and Cold Springs via U.S. Highway 95, Poleline Road 89, and State Highway 361.

### *Route C*

Route C has been developed to avoid sage grouse core breeding areas and sensitive riparian resources associated with the Edwards Creek area of the Desatoya Mountain range (see Figure 4). The route would start at Cold Springs, located in Churchill County, Nevada, on U.S. Highway 50. Route C totals approximately 187 miles. The tour would depart Cold Springs and head north following the powerline road and U.S. Highway 50 before turning south, staying to the east of the Desatoya Mountain range. .

Route C continues in a southwestern direction down the Smith Creek Valley. Route C crosses the Lone Valley. Route C's lunch stop is in Lone. Continuing south down the Lone Valley to the ghost town of Berlin, Route C follows the western slope of the Toiyabe Range. At Cloverdale Ranch, Route C turns east across the Big Smoky Valley and into the Toquima Range. Route C continues east and ends in the town of Belmont.

Route C includes four alternate routes that shorten the overall route, provide shorter connections to Routes B and D, and connect to Poleline Road 89.

The motor home would travel from Cold Springs to lunch in Lone then to Belmont via U.S. Highway 50, State Highway 361, State Highway 844, State Highway 361, U.S. Highway 95, U.S. Highway 6, State Highway 376, and Nevada 82. The service truck would travel from Cold Springs to lunch in Lone then to Belmont via U.S. Highway 50, State Highway 722, State 472, State Highway 844, Poleline Road 89, U.S. Highway 95, U.S. Highway 6, State Highway 376 and Nevada 82.

### *Route D*

Route D begins in the ghost town of Belmont, located in Nye County, Nevada, on the eastern slope of the Toquima Range (Figure 5). Route D totals approximately 94 miles. The tour departs Belmont south toward the Monitor Range. Route D turns to the south down the Ralston Valley. Continuing down the Ralston Valley, Route D crosses Mud Lake. From Mud Lake, Route D traverses the Goldfield Hills southwest before ending in the town of Goldfield.

Route D includes seven alternate routes that shorten the overall route, provide shorter connections to Routes B and C, and connect to Nevada 82 and State Highway 376. Additionally, one alternate route has been developed to avoid a 3-mile section that will be closed as a result of a Tonopah Public Utilities project that will begin in the summer of 2012.

The motor home would travel from Belmont to Goldfield/Tonopah via Nevada 82, State Highway 376, U.S. Highway 6, and U.S. Highway 95. The service truck would travel from Belmont to Goldfield/Tonopah via Nevada 82, State Highway 376, U.S. Highway 6, and U.S. Highway 95.

### *Route E*

Route E begins in the town of Goldfield, located in Esmeralda County, Nevada, on U.S. Highway 95 (see Figure 5). Route E totals approximately 140 miles. The tour departs Goldfield northwest toward the Montezuma Range. Route E continues north to the Alkalai Lake. From Alkalai, Route E continues northwest to Paymaster Canyon and turns southwest. Route E continues west across the Clayton Valley to Silver Peak, which is Route E's lunch stop. The tour continues northwest into the Silver Peak Range. Turning back toward the East, Route E crosses the southern portion of the Big Smoky Valley. Route E turns north into the Weepah Hills. From the Weepah Hills, Route E turns southeast across the Montezuma Valley. Route E heads due south to the end of the tour in the town of Goldfield.

Route E includes one alternate route that shortens the overall route.

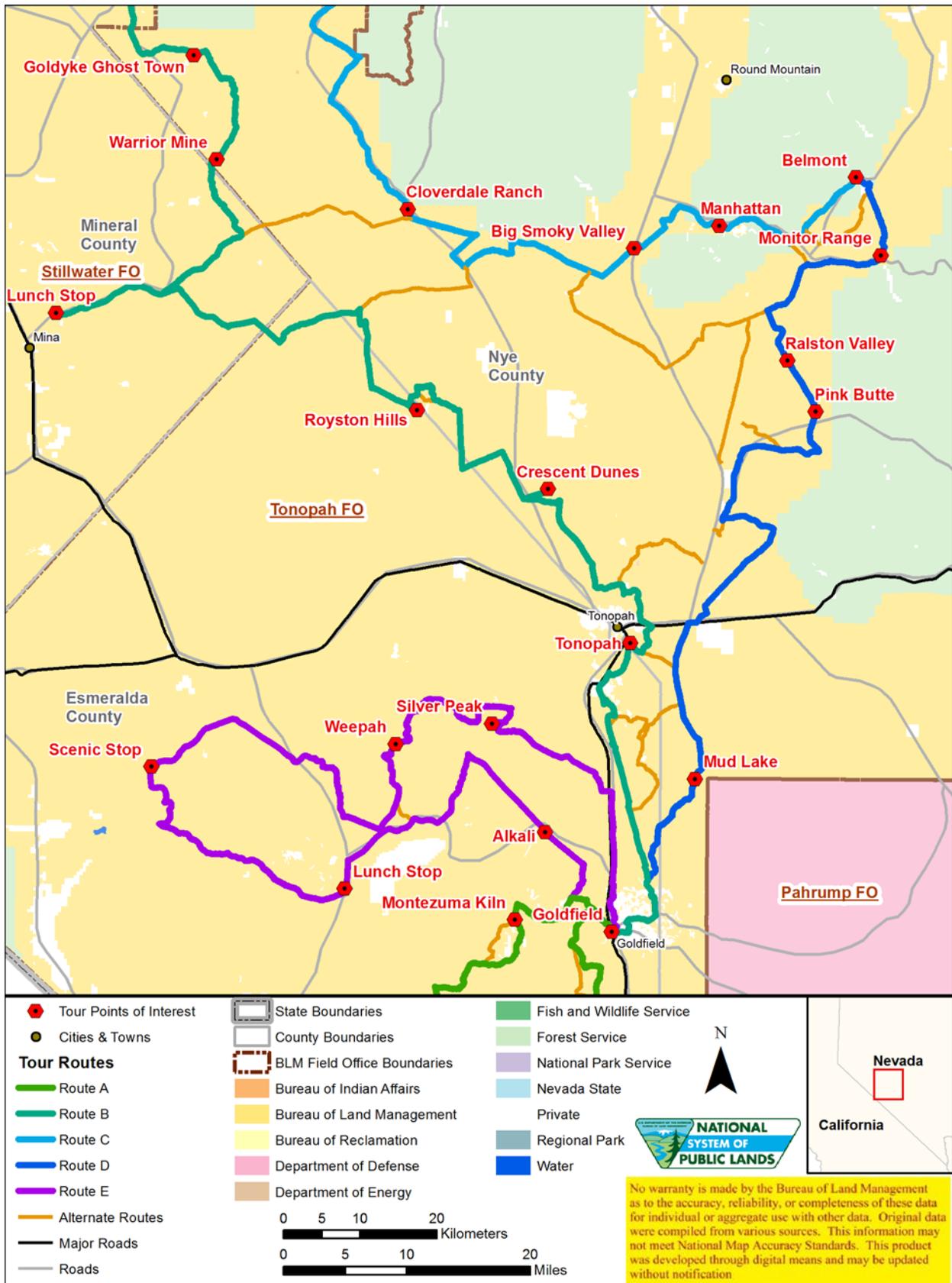


Figure 5. Central routes.

The motor home would travel from Goldfield/Tonopah to lunch in Silver Peak and back to Goldfield/Tonopah via U.S. Highway 95, Nevada 265, and U.S. Highway 95. The service truck would travel from Goldfield/Tonopah to lunch in Silver Peak and back to Goldfield/Tonopah via U.S. Highway 95, Nevada 265, Silver Peak Road, and U.S. Highway 95.

**Total tour route mileage, including alternate routes = 1,008.6**

## Daily Tour Schedule

The driving components to all tours would only occur during daylight hours between 8:00 am and 5:00 pm. A typical 5-day tour schedule is described below.

### Day 1

10:00–11:00 am	Pick up guests from airport or hotels in Las Vegas.
11:00	Start transport via motor home to Goldfield/Tonopah area.
12:00 pm	Serve lunch on the motor home.
1:00–3:00	Start orientation (first run of all tour guidelines and rules, safety and vehicle usage)
3:00–4:00	Arrive in Goldfield/Tonopah area, Check into rooms.
4:00–6:00	Visit local attraction (Tonopah Historical Mining Tour).
7:00	Dinner

### Day 2

7:00 am	Breakfast
7:45	Final orientation, final in-car orientation, and signing of releases.
9:00	Roll out on tour route.
12:00–1:00 pm	Lunch
1:00	Roll out on tour route.
4:00–5:00	Arrive at destination.
5:00–7:00	Guests can participate in local activities.
7:00	Dinner

### Days 3, 4, 5

7:00 am	Breakfast
7:45	Briefing. Question and answer session.
8:30	Roll out on tour route.
12:00–1:00 pm	Lunch
1:00	Roll out on tour route.
4:00–5:00	Arrive at destination.
5:00–7:00	Guests can participate in local activities.
7:00	Dinner

### *Lunch stops*

There are two types of lunch stops proposed. The first would be lunch at a local establishment within a town and does not include stopping on BLM-managed lands along the tour route. Preparation of food and service would be completed by the local establishment. All vehicles would park in the establishment's designated parking areas. The towns of Goldfield and Goldpoint currently have local establishments that can provide lunch and would be included as lunch stops on Routes A and D.

The second type of lunch stop would take place en route during the tour. Lunches would be located at points of interest along the tour route that have existing motor vehicle access and that would accommodate up to eight tour vehicles and the support vehicle. Zero One staff, along with the support vehicle (recreational vehicle [RV] or "lunch bus"), would set up a shade canopy, tables, and chairs. Zero One will ensure that all necessary state and county licenses are in place prior to conducting tours and providing food service. The entire lunch operation, including the vehicles, tables, chairs, and canopies, would occupy approximately 0.1 acre. Lunch would be prepared and served on location. Restroom and wash facilities would be available for participants in the RV. All activities would be conducted in existing disturbance. All vehicles would be parked directly adjacent to existing roadways and or in existing clearings. All waste would be removed and packed out by staff. Safari lunches would be included as lunch stops on Routes B, C, and E at Mina, Lone, and Silver Peak, respectively.

### *Tour Stops*

Tours would begin and be staged out of towns and communities each morning, as described above. The Proposed Action and Alternative do not include vehicle staging areas on BLM-managed lands, but do include stops at existing points of interest for sight-seeing and for lunch stops. Stops along the route occur about every 20 to 25 miles. These stops are generally at a point of interest, whether it is historical or scenic. The participants are given a description of the events that took place at that location as well as a brief history lesson. Participants also have the opportunity to switch driver and co-driver responsibilities at this time. Snacks and refreshments such as beef jerky, granola bars, Gatorade, and water are available at all stops. These items are carried in the guide car. A Luggable Loo (portable toilet) and supplies are available for participants who need them. All waste and trash is bagged and removed to the next stop by the tail car. None of the stops would result in cross-country travel or new ground disturbance. The tour vehicles would park in existing parking areas or along the existing roadway. At no time would tours leave existing roads or parking areas for stops. All vehicles would remain on the cleared roadways during the stops. At all stops, participants are supervised to keep themselves and their surroundings safe. Table 2 provides a list of the typical tour stops that are included in the Proposed Action.

**Table 2. Tour Stops and Points of Interest**

Route	Point of Interest	Description
A, B, D, E	Goldfield	Unincorporated community and county seat of Esmeralda County, Nevada. Former gold boomtown in the first decade of the twentieth century.
A	Scenic Stop	Scenic viewpoint in the Goldfield Hills.
A	Lunch Stop	Gold Point (in town).
A	Old Camp	Historic camp.
A	Stateline Ghost Town	Mining ghost town.
A	Goldpoint	Mining ghost town.
A	Lida	Mining ghost town.
A	Montezuma Kiln	Historical structures.
B	Tonopah	Town and county seat of Nye County, Nevada. Economic hub of region.
B	Crescent Dunes	Natural features.
B	Royston Hills	Prominent turquoise mining region.
B	Lunch Stop	Mina overlook.
B	Warrior Mine	Historical mine site.
B	Goldyke Ghost Town	Mining ghost town.
B	Gabbs/Brucite	Unincorporated town in Nye County, Nevada.
B	Downyville Ghost Town	Mining ghost town.
B, D	Eastgate	Mountain pass through the Monitor Range used by the Pony Express.
C	Cold Springs	Roadside interpretive center at the Cold Springs Pony Express Station site.
C	Ione	Mining ghost town.
C	Berlin	Mining ghost town.
C	Ichthyosaur Fossil	State Park with trails, campgrounds, and mining tours.
C	Cloverdale Ranch	Former stage coach stop and prosperous ranch.
B, C	Big Smokey Valley	100-mile-long valley stretching between the Toiyabe and Toquima mountain ranges.
C	Manhattan	Small town in Nye County, Nevada.
C	Belmont	Mining ghost town.
D	Monitor Range	Mountain range reaching 10,461 feet at Summit Mountain.
D	Ralston Valley	Desolate mining ghost town with no structures remaining.
D	Pink Butte	Natural feature.
D	Mud Lake Dry Lake Bed	Alkali salt flats; former military aircraft test site.
E	Alkali	Natural feature.
E	Lunch Stop	Silver Peak.
E	Scenic Stop	Scenic viewpoint in the Silver Peak Range.
E	Weepah	Natural feature.
E	Silver Peak	Dry lake bed mining community.

## Participant Training

All participants must attend a three-hour training seminar. Training occurs the day before departure on any tour, usually in our motor home classroom.

## **Classroom training includes**

- Vehicle controls, location, and operation.
- Navigation and communication.
- Vehicle safety features and correct usage.
- Responsible adventuring –drivers’ responsibility to public lands.
- Emergency and safety protocols.

## **In-vehicle training includes**

- Correct use of controls and function.
- Use of GPS and two-way radios.
- Correct use of helmets, safety belts, seats, fire extinguishers, and other safety equipment.

## **General Participant Rules**

- No passing of other tour cars or any other vehicles along trail.
- No contact or bumping of any vehicle or obstacle.
- Follow all of the guide’s instructions.
- Never leave the designated route.
- Always give right of way to other vehicles, pedestrians, and wildlife.

There are no exceptions to any of these rules, and non-compliance will result in removal from vehicle.

## **Road Maintenance**

Zero One understands the public concerns regarding damage to existing road surfaces that can result from increased vehicle use and “racing” driving behavior. That kind of “racing” behavior that can damage road surfaces will not be tolerated during Zero One tours. Additionally, the tour format allows Zero One staff to visually inspect all routes after the vehicles have passed. The tail car, which is staffed with two Zero One employees, gets to see the route after all tour cars have passed. The tail car carries shovels and rakes to make any small needed repairs. If the tail car needs to stop and make a repair, they radio for the entire tour to stop and all participants assist with the repair. This action helps all participants understand the severity of their actions. In addition, Zero One will conduct route inspections and audit of all routes two times per year, as well as during each tour by the guide. If needed, Zero One has and will make more serious repairs to routes in order to preserve their original condition. Digital photographs with date stamp and GPS coordinates are taken of all trail maintenance. Zero One will maintain a “leave it the way we found it” ethos. Trash removal is done by all participants and staff.

All gates encountered during tours are left in the position in which they are found. If a gate is open when the guide car gets to it, we leave it open. If a gate is closed when the guide car gets to it, then it is closed by the tail car after all vehicles pass through.

## **Economic Impact to Local Economies**

Zero one is committed to supporting local economies by purchasing products and services locally as often as economically feasible. The most used products and services include fuel, meals, lodging, food, and supplies from convenience and grocery stores, hardware, auto parts, and service. Typically, a three day adventure tour will contribute up to \$10,000 to the local economies along the tour route.

## **Affiliations**

Zero One is proud to be a participating member of Tread Lightly and the Blue Ribbon Coalition. Zero One enjoys its ability to expose individuals to Nevada's remarkable sights and history in a way that they would never be able to experience on their own. We understand that preservation of our natural resources is the only way to continue our program.

## **Contact Information**

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