

## ENVIRONMENTAL ASSESSMENT

APPLICANT: Huntington Ranch LLC

EA NUMBER: OR-056-01-107

SERIAL NUMBER: OR- 55746

BLM OFFICE: Prineville District

RESOURCE AREA: Deschutes

TYPE OF USE: Road and Utility Rights of Way

### PROJECT

LOCATION: Approximately four miles southeast of the City of Redmond, in Section 16, Township 16 South, Range 13 East, Willamette Meridian, Oregon. (Reference Exhibit "A")

RIGHTS-OF-WAY LOCATION: See Description on each Alternative.

LOCATION:

EA TEAM LEADER: Janet Hutchison

## INTRODUCTION

This Environmental Assessment (EA) will examine the request by Huntington Ranch LLC for rights-of-way across Federal lands to access their proposed destination resort. The applicant proposes development of 640 acres, approximately 3 to 4 miles south of the City of Redmond. The proposed development tract, covering all of Section 16, Township 16 South, Range 13 East, Deschutes County, W.M., is landlocked by public lands. This EA will address potential issues, alternatives, and environmental consequences for each requested right-of-way grant.

Huntington Ranch LLC has asked the Bureau of Land Management (BLM) to authorize two rights-of-way for access and two rights-of-way for utility service to the proposed resort (Reference Exhibits "A" and "B"). The access and utility right-of-way grants may be coincidental for portions of the project. Rights-of-way are needed to accommodate a 32-foot wide road section for primary access, an interim secondary access and utilities. All utilities would be underground, under the road section where applicable, or within a separate 20-foot wide right-of-way.

BLM has an obligation to carefully evaluate the right-of-way application, any potential impact to Federal lands, and generally safeguard the public's interest and allowed activities on the public lands. The BLM is required to grant reasonable access to land locked parcels (BLM Policy Manual 2800.006). The Huntington Ranch Resort property is surrounded by BLM managed lands in all directions. This EA will evaluate reasonable access and utility service, as defined by the Deschutes County Land Use Code and the applicable fire codes.

In requesting the rights-of-way, Huntington Ranch LLC considered a list of criteria for acceptable access and service. This list was compiled from various agencies involved in determining the need for utility service and primary and secondary access to this proposed resort project. The following elements justify consideration of proposed action alternatives and frame the alternatives.

**Deschutes County Land Use Action:** The applicant's property is zoned by Deschutes County for destination resort development. The destination resort overlay zone was established in 1992, following a complex public process to determine which lands in the County were best suited for destination resort development. Development of the proposed Huntington Ranch Resort conforms to the use intended by the existing overlay zone.

Development of the Huntington Ranch Resort would require utility and access right-of-way grants from the BLM, in addition to land use approvals from Deschutes County. Both BLM and Deschutes County applications accommodate public input, evaluation of alternatives, and conformance with previously established criteria in order to gain ultimate approval.

The Deschutes County land use process allows agency and public input over an extended period of time. The developer participated in a pre-application conference with the Deschutes County Planning staff, followed by the filing of the Conditional Master Plan application. The burden of proof statement for the application included a notebook of reports and exhibits to address criteria in the Deschutes County land use code. Deschutes County sent written notices to approximately 75 property owners in the vicinity of the proposed resort. In addition, Deschutes County published a notice of the public hearing for the Conceptual Master Plan in the Bend Bulletin. Further, a proposed land use action sign was posted on the property. The Deschutes County land use process included a description of the pending BLM application for access and utility rights-of-way.

Deschutes County conducted a public hearing on December 14, 2000. Following the hearing, written testimony was accepted from interested parties for an additional 30 days. Deschutes County approved the Conceptual Master Plan application in a decision dated March 5, 2001. Deschutes County upheld the Conceptual Master Plan approval in an appeal proceeding dated June 13, 2001. (A copy of the decisions are available at the BLM office in Prineville.) The Conceptual Master Plan describes the Huntington Ranch with up to 700 dwelling units at full buildout and a peak season population of approximately 2000 people.

An additional Deschutes County land use approval would be required for the Final Master Plan for the proposed resort. Upon completion of the Final Master Plan, site plan and tentative plan land use procedures would be required for all major components or phases of the proposed resort.

**Criteria for Access and Utility Service:** The BLM is required to grant reasonable access to land locked parcels. The Deschutes County Planning Department also has requirements for primary and secondary access. Deschutes County sets construction standards for access and stipulates that both a primary and secondary access be provided. The Deschutes County Conceptual Master Plan land use approval (available at the BLM office in Prineville) stipulates the primary access road be constructed in conformance with the minimum standards for a rural collector road, as specified in the subdivision ordinance. Collector road standards stipulate minimum curve radii to eliminate sharp corners and improve sight distance.

*Resort Primary and Secondary Access Objectives:* Land use planning for the Huntington Ranch destination resort placed considerable emphasis on the primary access road and the associated sense of arrival at the resort. Many successful resort projects offer a scenic arrival at the resort entry following a well planned approach to the resort to build guest suspense for the point of entry.

Guest services facilities, such as the hotel check-in, golf course pro shops, commercial facilities, and major recreational amenities are often clustered around the primary entry. The busy commercial and recreational area of the resort accommodates the largest number of guests and owners. The location of guest services facilities near the resort entry provides an obvious destination for the first time visitor and maintains the congestion and activities away from the slower paced residential areas.

The secondary access for the resort is much less important from a marketing standpoint. Often, the secondary access is utilized only by long-term residents of the resort, after they have learned the local roadways. Many resorts utilize a gated secondary entry and use is restricted to authorized guests with a security pass.

**Deschutes County Findings and Requirements for Development of the Huntington Ranch Resort:**

The Deschutes County destination resort land use code provides a significant list of requirements and findings for the approval of a destination resort. The recent land use decision by the Deschutes County Hearing's Officer provides findings applicable to this BLM access and utility right-of-way grant application.

*Primary Access:* The Deschutes County land use approval process frames the route considered for primary access to the resort. That access, with public support, focuses primary ingress and egress on the Powell Butte Highway, avoiding neighborhoods by using existing public land primitive access.

Morrill Road is being considered as an alternative for the proposed resort primary access. Morrill Road is a primitive road over which Deschutes County may have jurisdiction. Using Morrill Road as the access route to the proposed resort would diminish the probability of multiple improved roads in close proximity to the area. However, conflicts would occur with wildlife habitat and the Oregon Military Department.

*Secondary Access:* The area between the south edge of the City of Redmond Urban Growth Boundary and the Powell Butte Highway is the focus of a considerable demand on public lands for community expansion and local and regional transportation infrastructure support. These types of growth pressures in the region have led the BLM to re-evaluate the portion of the Brothers/LaPine RMP (Resource Management Plan) that includes this area. Simultaneously, the Federal Highway Administration agreed to a "Collaborative Community Solutions" project grant that includes the stakeholders involved or affected by the decisions associated in the Bend-Redmond area. The Upper Deschutes RMP planning efforts would ultimately establish the long-term major transportation corridor uses on BLM managed lands. Secondary access could be supplied to the resort in a number of ways that could be affected by these efforts. Deschutes County requirements do not mandate a permanent secondary access until 50 percent build-out of the resort, estimated at five years. Secondary access is available on existing roads that could meet emergency vehicle standards during the interim period while the planning efforts are completed.

The Redmond Fire Department requires primary access and a second emergency access (Reference the 3-22-2001 Redmond Fire Marshall Correspondence at the BLM office) for the Huntington Ranch Resort. The Uniform Fire Code (Section 902.2.2 in Appendix III-E) allows the Fire Department to require a second access when there are 25 or more dwelling units. The Fire Department has requested that points of access be separated as widely as conditions allow.

Deschutes County land use standards also require primary and secondary access. The secondary access may initially be an all weather surfaced or graveled roadway. This application requests BLM approval of an interim secondary access, but excludes the permanent secondary access. A permanent paved secondary access would be required in the future as discussed in the County Commissioner's decision dated May 23, 2001. (Reference Page 3 in the Deschutes County Decision, Permanent Secondary Access Road – Condition 31 – available at the BLM office in Prineville).

*Utility Requirements:* Underground utility requirements include sewer, an effluent irrigation main, domestic water, a power/phone/television combined system, and possibly a natural gas extension.

The Deschutes County Land Development Code and the Rural Fire Protection District establish specific standards for access and general requirements for utility service. The Oregon Health Division and the Oregon Department of Environmental Quality (DEQ) also stipulate specific requirements for sewer and water service. These standards are summarized in the land use decision (available at the BLM office in Prineville).

**Market Demand for Resort Development:** Development of existing Central Oregon resorts was initiated in the 1960s. Since then, resorts have grown due to market demand for housing and recreational facilities. Success of the existing resorts suggests a continuing market demand for destination resort development. Deschutes County recognized this demand and the associated economic benefits to the County by adopting a destination resort ordinance and an associated map that designated lands available for destination resort development. That map identifies the Huntington Ranch LLC property in Section 16 for resort development.

The Oregon Department of Land Conservation and Development issued a guide to Statewide Planning Goal 8's procedures and requirements for siting destination resorts. (Goal 8 is a State of Oregon land use regulation establishing the procedures and requirements for siting destination resorts.) The Destination Resort Handbook is dated July 1989. The handbook describes the State of Oregon's policy towards siting new resorts. The handbook states:

*“The State supports siting new resorts. New resorts are an appropriate way to expand the State’s economy. Property sited in planned resorts can be compatible with the other objectives of Oregon’s Planning Program. This includes protecting highly valuable farm and forest lands and promoting efficient growth in urban and rural areas.” “State law and Statewide Planning Goal 8 implement this policy in two ways: First, by defining what qualifies as a destination resort; and second, by identifying the lands that are eligible for resort development. These rules are precisely written so resort developers and the public will know ahead of time what lands will qualify and exactly what can be built.”*

In addition, the City of Redmond filed correspondence in the Deschutes County land use process to support development of the Huntington Ranch Resort.

## PURPOSE AND NEED

Huntington Ranch LLC has applied for new rights-of-way across BLM managed public lands to provide primary and interim secondary access to the proposed destination resort, and for rights-of-way to accommodate power, telephone, television, domestic water, irrigation, natural gas, and sewerage systems. The applicant has proposed development of 640 acres, with up to 700 dwelling units and a peak season project population of 2000 people, at ultimate buildout.

Deschutes County has approved the conceptual destination resort master plan, conditional upon BLM approval of the primary and interim secondary access, and granting of utility rights-of-way. The Deschutes County approval included consideration of Oregon statewide land use goals and objectives (available in the BLM office in Prineville).

There is an existing BLM granted right-of-way to the Huntington Ranch Resort tract, however the existing right-of-way does not meet Deschutes County or Oregon Department of Transportation (ODOT) standards for resort development. The existing BLM granted right-of-way extends to Highway 97 (Reference Exhibit “B”). ODOT would not allow resort access to Highway 97 because of safety issues and ODOT policies on access control. (Reference 10-31-2000 ODOT correspondence available at the BLM office in Prineville.) In addition, the BLM granted right-of-way does not conform to the Deschutes County and the Fire Department requirements for primary and secondary access. Although the existing right-of-way would accommodate power, telephone, and television service, it does not accommodate sewer, irrigation water, natural gas, and domestic water. Adequate sewer and water service are available only from the City of Bend to the south.

**BLM Decision To Be Made:** While the Deschutes County Land Use Decision and Fire Department requirements set construction standards for access and stipulate that both the primary and secondary access be

provided for resort development, the BLM Field Manager would determine whether to authorize rights-of-way for utility, primary, and interim secondary access for the resort development. Decisions on permanent secondary access would not be made at this time, pending completion of the Upper Deschutes RMP.

In addition, this EA will provide the BLM Field Manager with the environmental analysis needed to determine whether to change an existing grazing permit use to allow horses, cattle, or both. Huntington Ranch LLC, who holds the grazing permits on the Crenshaw allotment, adjacent to the lands where the Huntington Ranch Resort would be developed, requested this proposed change to the grazing permit. This grazing decision and analysis is included in this document, but separate from the decision to be made on the rights of way.

**BOR (BOR) Decision To Be Made:** The BOR must determine whether to grant necessary permits for the selected access and utility alternatives affecting a BOR managed right-of-way. The BOR right-of-way includes the North Unit Main Canal and the decision to be made would include a request to cross the canal with a new access road, bridge, and the water, sewer and natural gas main lines. The proposed access and utility lines would not affect the delivery of irrigation waters.

### CONFORMANCE WITH APPLICABLE BLM LAND USE PLAN

The proposed action is subject to and in conformance with the following land use plan:

Name of Plan: Brothers/LaPine Resource Management Plan

Date Approved: July 1989

On Page 29 under Rights-of-Way and Utility and Transportation Corridors, the following guidance is provided: “Public lands will continue to be available for rights-of-way, including multiple use and single use utility/transportation corridors following existing routes, communication sites, and roads.”

The BLM Manual, under 2800.06 Policy, states, “Allow owners of non-Federal lands surrounded by public land managed under FLPMA a degree of access across public land which will provide for the reasonable use and enjoyment of the non-Federal land. Such access must conform to the rules and regulations governing the administration of the public land; keep in mind however, that the access necessary for the reasonable use and enjoyment of the non-Federal land can not be denied.” BLM Policy Manual (2800) and the RMP are available at the BLM office in Prineville).

### ISSUES

The BLM is required to carefully evaluate the applicant’s right-of-way application and provide a degree of access across public lands to provide for the reasonable use and enjoyment of the non-Federal land. The BLM staff, OMD, Huntington Ranch LLC, and the public have raised a number of potential issues. These issues determine the alternatives developed, establish the factors considered as environmental consequences, and determine mitigation measures to employ. These issues include:

**Traffic, Noise, and Pollution:** Public input from residents in the vicinity of Deschutes Junction indicate opposition to a primary or secondary access extending to Deschutes Junction. Residents of Deschutes Junction voiced concerns about changes resulting from the proposed actions and alternatives including traffic noise and congestion, wildfire, light pollution, and pollution from vehicles at Deschutes Junction. Public input was generally acceptable on a primary access from the Powell Butte Highway and a secondary access extending north from the proposed resort.

**Water Quality and Quantity:** Consumption of water for irrigation and domestic purposes at the proposed resort would potentially reduce flows in surface water streams if the source of water supply is groundwater withdrawals. The Huntington Ranch proposes to utilize sewage effluent for irrigation and previously permitted Avion Water Company wells for a domestic water supply.

Contamination of groundwater would be a potential issue with resort development due to increased activity and the associated use of chemicals or other possible contaminants for operation and maintenance activities.

**Water, Sewer, and Natural Gas Alignment/North Unit Main Canal:** In the August 2, 2001 correspondence, BOR and NUID described the underlying rock strata, and the potential for leakage in the canal prism resulting from underground utility construction. The letter describes alternate construction methods that would reduce the potential for leakage. The letter describes the possibility of pressurized line breakage, if the irrigation canal should experience a failure. BOR and the NUID “would prefer that the utility alignment adjacent to the natural gas line be considered as the preferred alternative.” “Regardless of the alignment finally agreed to, the utility lines would cross the canal and would require a consent permit from Reclamation.”

Because of these issues, two alignments for underground water, sewer, and natural gas utilities are evaluated. Both alignments propose effluent and sewage lines in a common trench with a parallel water line and natural gas line. One alternative follows the current natural gas pipeline and one alignment follows the North Unit Main Canal.

**Noxious Weeds:** Construction activities for roads and utilities on public lands and on the resort tract have the potential to spread existing or introduce new populations of noxious weeds to public lands. Exotic weeds could be introduced into the area during construction and operation of the resort, and by increased use of surrounding BLM lands resulting from the construction of the resort

**Wildlife:** All access alternatives would affect wildlife habitat by increasing the amount of traffic use within the area and may have cumulative effects on a resident antelope herd. Construction and use of roads can disturb wildlife nesting and reduce the amount of effective habitat area available to non-adaptive species.

Wildlife habitat changes within the proposed resort area could add new attractants for species that currently use the area, and species that do not currently use the area. The attractants could change the distribution and use of the area by resident species.

**Recreation:** All access alternatives would change the amount and type of motorized and non-motorized access to the public lands in the vicinity of the proposed Huntington Ranch Resort. Changes would occur through paving and widening the roadway, increasing traffic speeds, and increasing the number of visitors traveling into the area on a regular basis. Improved access to the area that currently is designated as “open” to OHV/ motorized use under the Brothers/La Pine RMP, which means it is available to motorized cross-country travel, could increase the amount of motorized use actually experienced in the area. The paved road would likely improve access into the area for vehicles, particularly for vehicles with trailers (i.e., equestrians and OHV users).

Increased traffic and construction along an improved roadway could also present a hazard to motorized and non-motorized users or disrupt uses of the “open” area to OHV recreationists at road crossing points. Greater access could lead to new motorized route development, increased garbage dumping, or other undesirable activities.

Increased access to the North Unit Main Canal could lead to increased recreational use of the canal, including bicycling, hiking, motorized use, camping, and kayaking. The BLM managed land at the intersection of the new paved road and the North Unit Main Canal may be impacted. The nearby area may experience increased dumping, creation of new roads, and the disruption of vegetation.

Paved access to the proposed Huntington Ranch Resort would provide easy access to an area that currently has only primitive access. Resort and residential development could result in increased conflicts between resort residents and visitors and traditional BLM uses such as off highway vehicles (OHV) use and target shooting. Concerns about dust, noise, and potential safety could result in conflicts between resort residents and recreationists on public land.

The development of a resort and 700 residences at the resort may also increase the number of recreationists on BLM managed public lands surrounding the resort, as resort homeowners and guests, may choose to hike, horseback ride, or pursue other recreation activities on BLM managed lands.

**Visual Resources:** Under all action alternatives, roadways, and the resort would be visible from adjacent BLM lands, and from nearby buttes. Increased access due to the development of a paved road into the area may lead to increased garbage dumping in the area, particularly on both sides of the primary access road near Powell Butte Highway.

**Transportation Systems:** A BLM right-of-way grant (serial no. OR49075) currently exists to the Huntington Ranch Resort tract. The existing BLM granted right-of-way does not meet Deschutes County or ODOT access standards and does not provide safe access for resort residents and guests. The authorized right-of-way grant to Highway 97 has not been fully constructed across public lands. Previous residents on the private Huntington Ranch Resort tract utilized a series of existing roadways, outside of the BLM granted right-of-way, for access.

The applicant desires primary access for the proposed destination resort. The applicant's right-of-way request includes the primary access and an interim secondary access. The interim secondary access is required by the Fire Department and is intended to provide emergency-only access for resort owners and guests until a permanent secondary access is established with a subsequent application to BLM.

Sharp corners occur on existing roads along the proposed primary access alignment alternatives. Sharp corners can be problematic for safe roadway design and construction because of the differential in design speed and the limited sight distance. Also, the alignment following the existing roads creates out-of-direction travel and a longer access road is created.

*Emergency Services Access Requirements:* The Huntington Ranch Resort property has been annexed into the Redmond Rural Fire Protection District (Reference 7-14-2000 correspondence from the Redmond Fire Department, available at the BLM office in Prineville). For resort development, the Redmond Fire District requires primary access to be paved. The Fire District also requires a secondary access with an all weather surface, prior to the occupancy of 25 equivalent single-family homes. Two accesses represent a standard fire code requirement to assure reasonable alternative access in the case of an emergency.

**Wildfire and Public Safety:** Increased traffic to public lands could result in greater wildfire and public safety concerns. Increased traffic to the area could also provide additional scrutiny of activities occurring on public lands and greater reporting of wildfire and public safety concerns on the public lands.

**Cultural Resources:** Development of utilities and access to the resort may affect historic or prehistoric properties directly through construction activities and indirectly by improved public access to the public lands adjacent to the resort development.

**Existing Permittee Use:** All alternatives would require changes to the OMD activities by allowing for paving and regular highway traffic into areas that have only primitive access at this time. Newly created paved

access into the resort would reduce the number of acres available to the OMD for training purposes. OMD use could create dust, noise, and other indirect effects that conflict with resort residents and visitors.

Livestock grazing is another use the BLM authorizes on land around the proposed resort. All of the right-of-way action alternatives would result in a paved primary access, changing the amount and speed of traffic through the area. The increased human use of the area would increase the potential for gates being left open; livestock straying into the resort; restrictions on management practices such as weed control, burning, and predator control; trespass; loss of livestock from vehicle accidents; marauding dog problems; and increased liability (Huntington and Hopkins, 1996-March 1996 Journal of Range Management, 49: 167-173).

**Existing Deschutes County Land Use Zone:** The Huntington Ranch Resort private land holding is zoned exclusive farm use and multiple use agriculture. The property is also mapped as eligible for destination resort development under the County's destination resort overlay zone. Deschutes County mapped lands eligible for destination resort development in 1992, as part of its Goal 8 destination resort planning process. The Land Conservation and Development Commission (LCDC) acknowledged the County's Comprehensive Plan and Zoning Ordinance Provisions implementing Goal 8. Deschutes County subsequently approved a Conceptual Master Plan for the Huntington Ranch destination resort. The County zoning and resort approval establish the level and extent of development for the Huntington Ranch and the associated requirement for access and utility rights-of-way across BLM lands. The land use approval accommodates resort development and establishes a potential conflict for existing uses and habitat on adjacent Federal lands.

#### ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

The applicant is requesting BLM approval of rights-of-way for primary access, interim secondary access, and utilities. Alternatives were developed to meet the stated purpose and need and to address issues. The applicant has worked closely with BLM staff to consider the applicable BLM land use plan, access across public lands to provide for the reasonable use and enjoyment of the private land tract, issues associated with the requested rights-of-way, and access and utility alternatives.

The Huntington Ranch LLC, BLM, and Deschutes County have worked together on alternative alignments for the primary access right-of-way. Several possible routes were plotted, discussed, and then field examined for feasibility. Although numerous alternatives have been identified and evaluated, only two primary access routes, one existing interim secondary access, and two utility rights-of-way are included in the action alternatives.

Two access routes as well as two utility corridors have been identified. Combinations of these routes and utility corridors, as well as the no action alternative, make up the following five alternatives (Reference Exhibit B):

- **Alternative 1:** No action alternative.
- **Alternative 2:** The existing 6585-C Road and utility/pipeline corridor.
- **Alternative 3:** The existing 6585-C Road and utility canal corridor.
- **Alternative 4:** The Morrill Road access and the utility/pipeline corridor.
- **Alternative 5:** The Morrill Road access and the utility canal corridor.

Many elements are common to all action alternatives. Common elements are summarized in a following section and are not repeated for each alternative. An interim secondary access route is identified on Exhibit 'B' and is common to all alternatives.

During scoping, seven access routes were identified and summarized in a memorandum dated April 20, 2000 (available from the BLM office in Prineville).

Two grazing permit modification alternatives are evaluated. However, these modifications are independent of decisions on the access and utility corridors and are discussed separately at the end of the discussion on the rights of way and utility alternatives.

**Alternative 1 - No Action:** The existing right-of-way grant has not been fully constructed across public lands. The existing grant of right-of-way extends to Highway 97 but cannot meet destination resort access needs or ODOT requirements.

Under this alternative, residents would construct a road to meet minimum standards on the granted right-of-way. Without new access, the resort area would not be developed. Other development could be permitted outright or as a conditional use under existing land use laws that may require new access.

Tax Lot 800 (Reference **Exhibit A**) is zoned MUA-10. The remainder of the private land tract is zoned EFU. Conditional uses permitted in a MUA zone include commercial activities in conjunction with farm use, dude ranch, kennel or veterinary clinic, guest house, exploration for minerals, personal use landing strip for airplanes, golf courses, processing of forest products, planned developments, cluster developments, landfills, and processing of minerals, etc.

Conditional uses permitted on EFU lands include commercial activity in conjunction with farm use, exploration and extraction of geothermal resources, surface mining of mineral aggregate resources, transmission towers over 200 feet in height, personal use landing strip for airplanes and helicopter pad, processing of forest products, storage and processing of minerals, etc.

In a No Action Alternative, no new right-of-way would be approved across federal lands for utilities. The existing right-of-way (Grant OR-49075) would remain to serve the private land tract.

**Alternative 2: Preferred Alternative:** *Access Route:* Alternative 2 is the preferred alternative and includes the proposed southerly alignment, which originates on the Powell Butte Highway and follows the existing 6585-C Road to serve as the primary access. This alignment would intersect and follow the Morrill Road right-of-way for a distance of approximately one-half mile. The alignment crosses the North Unit Main Canal at the OMD's existing Bailey Bridge site and proceeds north adjacent to the canal in Section 28. The alignment proceeds directly north on an existing dirt road bed through Section 21 into the southeast corner of the proposed resort property (**Reference Exhibit "B"**)

This proposed southerly right-of-way would be approximately 4.54 miles, with a 50-foot width, for a total of about 27.5 acres. The 50-foot right-of-way is proposed to accommodate the roadway section and any necessary cut and fill slopes, drainage ditches, or culverts. Construction of the road would follow the standards outlined under the section on road construction standards in *Actions Common to All Alternatives* in this EA.

A refinement to the Alternative 2 alignment (Access Alternative 2A) would extend the 6585-C Roadway approximately due north at the intersection of Morrill Road. An extension to the north could eliminate the sharp corners and out-of-direction travel, and connect with an existing dirt roadway on the north edge of the North Unit Main Canal. (**Reference Exhibit "B"**) The direct route refinement requires approximately 0.4 miles of new construction for the primary access roadway through undisturbed BLM lands, but also reduces the total length of the right-of-way by approximately 0.5 miles. The specific alignment could be established in the field by the BLM to preserve trees and natural features and utilize openings or previously disturbed areas where possible. The refinement would relocate the new bridge site further north to a canal-crossing site used previously by the

OMD. The existing Bailey Bridge site would be abandoned and blocked. Traffic currently using the existing Bailey Bridge on Morrill Road would be diverted north on existing roads to the new bridge.

*Water, Sewer, and Natural Gas Line Route:* This water, sewer, and natural gas line route would parallel the existing natural gas pipeline. Water, sewer and natural gas must be extended north from the City of Bend sewage treatment plant approximately five miles to the proposed resort.

The proposed right-of-way would extend approximately one mile easterly along the section line through relatively undisturbed BLM lands to the existing natural gas line. The parallel water, sewer and natural gas lines would be routed northeasterly, parallel to the existing natural gas line to the existing Morrill Road. At Morrill Road, the water, sewer and natural gas lines would follow the proposed access alternatives northerly to the Huntington Ranch (Reference Exhibit "B"). This alternative would include two parallel 20-foot wide right-of-ways for a total of 25.5 acres. A typical 20-foot width is requested for a construction zone, allowing a 10-foot minimum separation between water and sewer lines. The utility right-of-way width would be reduced to 20 feet parallel to the natural gas line if construction activities are allowed on the existing gas line right-of-way grant (12.75 acres). Approximately 5,300 lineal feet of the parallel utilities would cross relatively undisturbed BLM managed lands between the Bend sewage treatment plant and the existing gas line. Approximately 14,600 lineal feet of the water, sewer and natural gas lines would parallel the existing natural gas line and essentially expand the existing right-of-way grant. Approximately 7,900 lineal feet of water, sewer and natural gas lines would fall within the proposed access alternatives, between Morrill Road and Huntington Ranch. The total length would be approximately 5.26 miles.

**Alternative 3: Access Route:** Alternative 3 would use the same access route described in Alternative 2 – Preferred Alternative.

*Water, Sewer and Natural Gas Canal Route:* The water, sewer and natural gas canal route alternative is proposed for parallel water, sewer, and natural gas lines to the proposed resort property, following the existing North Unit Main Canal. Underground water, sewer and natural gas pipelines have been proposed to extend from the City of Bend, nearly 5 miles north to the proposed resort property.

The proposed utility right-of-way would be approximately 4.92 miles with two parallel 20-foot wide rights-of-way for a total of 23.9 acres. A 20-foot width is being requested as a construction zone. A minimum of 10 foot separation is required between water and sewer lines. The proposed alignment would follow the North Unit Main Canal right of way grant. Discussions with BOR and NUID have been initiated. All utility lines would be underground. Upon completion of the utility mains, the construction zones would be revegetated as detailed in the common to all alternatives section.

**Alternative 4: Access Route:** Huntington Ranch LLC would develop a primary access on the easterly segment of the existing Morrill Road off the Powell Butte Highway. The proposed easterly right-of-way grant would be approximately 4.92 miles, with a 50-foot width, for a total of about 29.8 acres. The same 32-foot wide roadway is proposed in the 50-foot right-of-way. The easterly right-of-way would accommodate primary vehicle access between the proposed resort and the Powell Butte Highway. Approximately two-thirds of this alternative would be accommodated within the Morrill Road right-of-way. This alternative crosses at the existing Bailey Bridge site, continues adjacent to the North Unit Main Canal, and like the 6585-C Road alternative, follows an existing dirt road bed the last 1.5 miles to the proposed resort entrance. Subject to final design review by Deschutes County, excavation within the Powell Butte Highway right-of-way and on adjacent BLM managed lands would be necessary to improve intersection sight distance.

*Water, Sewer, and Natural Gas Line Route:* Alternative 4 would use the same utility route as described in Alternative 2 – Preferred Alternative.

**Alternative 5: Access Route:** Alternative 5 would use the access route described under Alternative 4.

*Water, Sewer, and Natural Gas Canal Route:* Alternative 5 would use the utility route described under Alternative 3.

### EFFECTS ON OREGON MILITARY OPERATIONS:

The OMD holds a BLM permit to conduct training exercises in the vicinity of the proposed Huntington Ranch Resort. The Oregon Military training site boundary extends from Highway 126 on the north to the 6585-C Road intersection on the Powell Butte Highway to the south. Several large land tracts, including the private Huntington Ranch Resort ownership, are not included in the OMD permit. OMD training operations include an out-door small arms firing range, administrative offices, storage buildings and equipment maintenance facilities. The OMD operates Abrams Tanks, Bradley Fighting Vehicles, and Armored Personnel Carriers on the training site.

An EA was prepared by the OMD in March of 1995. The Central Oregon Training Site (COTS) surrounds the applicant's property. **Figure 2-1 (A)** (attached) is a map of the Central Oregon Training Site.

**Alternative 1 - No Action:** A No Action Alternative could include private land activities under the existing Deschutes County MUA-10 and UAR zoning. Residential development could occur on MUA-10 lands, providing the potential for conflicts with OMD operations. Residential development would require dual access and utility services, similar to the requirements for the Huntington Ranch. Even a no-action alternative could impose restrictions on current Oregon Military operations because of increased private land activities, the associated traffic, and need for improved access. Access to private lands on the existing right-of-way grant (OR-49075) would impose less impacts on OMD operations than any of the four action alternatives.

**Alternative 2 – Preferred Alternative and Alternative 3:** The proposed primary access road under Alternatives 2 and 3 is the 6585-C Road. In a letter dated December 13, 2000, from Colonel William R. Spores, use of the 6585-C Road was described as minimizing the civilian/military interface. Colonel Spores explained use of the 6585-C Road for primary access would require modification of training practices, while a northern access (toward Highway 126) is clearly problematic for present and future OMD operations.

The proposed Alternative 2 – Preferred Alternative or Alternative 3 action would include relocation of the existing South Bailey Bridge. The 6585-C Road alternative incorporates relocation of the Bailey Bridge to the north. The developer would then construct a new bridge to Deschutes County standards over the North Unit Main Canal near or at the existing Bailey Bridge site.

The existing Bailey Bridge could be relocated to the north of the current location (Reference **Exhibit 'B'**). Several sites are currently used for temporary bridge crossings by the Oregon Military during their maneuvers and operations. These sites currently provide access approaches to the canal from routes followed by the military vehicles. Relocation of the existing Bailey Bridge would then meet the needs for the Oregon Military's training and separate potentially conflicting uses between the military and the resort.

The Deschutes County land use decision also addressed operations of the OMD. The Hearing's Officer quoted correspondence from Colonel Spores, dated December 13, 2000 (available at the BLM office in Prineville), which included: "We stand committed to working with the developer in support of this project and believe both our interests, and land use requirements can be met." "We believe, with some planning to appropriately separate potentially conflicting uses and the installation of buffers on BLM land by the developers, the development can be accomplished in conformance with our operations on the BLM owned property." The Hearing's Officer concluded "it is feasible to develop the resort in a manner that is compatible with the OMD's activities." Approval conditions were imposed through the County's land use decision that require continued cooperation

between the developer and the OMD. Additional cooperation between the OMD and Huntington Ranch LLC is needed to refine and confirm specific buffers and their locations and operational details. Buffers are being considered to address noise and potential visual impacts. Buffers being discussed would not impact OMD’s permitted uses on BLM managed lands, however they would impact areas of use on BLM managed lands.

Major Bill McCaffrey recently analyzed impacts to the OMD training area based on the alternatives. An eastern access via Morrill Road would reduce the available training area by an additional 1,600 acres as compared to Alternative 2 and cause potential over use of the remaining training area (see Tables 1 and 2 below). Again, this action would include relocation of the existing South Bailey Bridge. The Morrill Road alternative incorporates relocation of the Bailey Bridge to the north, to a site to be determined by the BLM and OMD.

The following tables (Table 1 and Table 2) were prepared by the OMD and estimates acreage of training areas affected each of the action alternatives.

**TABLE 1: LOSS TO OREGON MILITARY OPERATIONS – ALTERNATIVES 2 AND 3**

<b>Alternatives 2 and 3</b>	<b>Training Area Lost Due to New Road Construction</b>	<b>Training Area Lost to Buffer Zones</b>	<b>Total Training Area Lost</b>
Preferred 6585-C Route	7,360 Acres	2,720 Acres	10,080 Acres

**TABLE 2: LOSS TO OREGON MILITARY OPERATIONS – ALTERNATIVES 4 AND 5**

<b>Alternatives 4 and 5</b>	<b>Training Area Lost Due to New Road Construction</b>	<b>Training Area Lost to Buffer Zones</b>	<b>Total Training Area Lost</b>
Morrill Road Alternative	8,960 Acres	2,720 Acres	11,680 Acres

**ELEMENTS COMMON TO ALL ACTION ALTERNATIVES:**

Within all the right-of-way alternatives that have been developed for the proposed Huntington Ranch Resort, many elements, conditions, objectives, and mitigations are common to all action alternatives. These include:

**Water and Sewer Systems:** A sanitary sewerage collection and disposal system master plan was prepared for the Huntington Ranch, as required by the Deschutes County Land Use Code. The master plan report describes DEQ requirements and criteria for sewage collection and disposal. The master plan described and evaluated multiple alternatives for sewerage service and estimated design contributions for the overall collection and treatment systems at full buildout of the resort. The sewerage system is expected to ultimately serve 700 equivalent dwelling units or rooms and a project population of approximately 2,000 people. The master plan describes low-pressure sewerage collection and gravity collection system alternatives. It also describes on-site sewage treatment and an alternative forcemain connection to the City of Bend sewage treatment plant. The master plan describes a Oregon Department of Environmental Quality (DEQ) preference for regional sewage treatment facilities like the City of Bend plant, rather than small on-site treatment plants.

The Huntington Ranch subsequently executed a contract with the City of Bend for piping resort sewage to the City of Bend treatment plant. The City contract also allows the Huntington Ranch to utilize treated sewage effluent for irrigation purposes at Huntington Ranch. The executed City of Bend contract is included in the Deschutes County land use record. The sewage force main and the effluent irrigation main are proposed in a

common trench. The underground sewer/irrigation piping would be parallel and approximately ten feet offset from the proposed domestic water main.

Piping raw sewage from the Huntington Ranch to the City of Bend would be supported by the DEQ because of the greater reliability of a municipal wastewater treatment plant. Piping raw sewage to the City of Bend would eliminate any sewage treatment at the resort and the associated liabilities and potential problems of wastewater treatment operations.

Use of highly treated City of Bend effluent for large turf irrigation at the resort would allow the City of Bend to construct and operate an enhanced wastewater treatment system (reference the executed sewer and effluent agreement between High Desert Development Partners, LLC and the City of Bend, dated October 5, 2000. The agreement is available at the BLM office in Prineville). Enhanced wastewater treatment would improve the effluent quality, not only for irrigation water at the resort, but also for continued use of the City's disposal ponds. In a May 4, 2000 attachment to the executed City agreement, City Manager Ronald Garzini stated, "it is fair to say that the resorts possible use of large volumes of effluent could allow us to upgrade our nitrate processing systems making environmentally sound improvements to our waste handling systems. Our waste would be upgraded to Level 4, which would eliminate our current groundwater infiltration concerns. At the same time, our rate payers might avoid the necessary cost increases to further process our waste without effluent re-use. State environmental quality policies encourage effluent re-use."

The water supply system master plan for the Huntington Ranch describes the same buildout projection for the resort and the estimated ultimate population. The water master plan estimates total water consumption at full buildout of the resort and describes multiple options for water supplies.

The Huntington Ranch has executed a contract with Avion Water Company to provide domestic water for the resort. The Avion Water Company intends to extend a pipeline from the City of Bend northerly across BLM managed lands to the resort. The water main would be sized to accommodate required fire protection flow rates and domestic use. The Avion contract is included in the Deschutes County land use documents. The Huntington Ranch would not seek on-site groundwater wells or other water supply alternatives, if a BLM right-of-way can be obtained to accommodate the Avion water main extension.

The Avion Water Company would utilize previously authorized and valid groundwater withdrawal rights to serve the Huntington Ranch. The Avion water rights would be available for use by other customers, if not consumed at the Huntington Ranch. Because of the Avion Water Company contract, no groundwater withdrawals would occur at the Huntington Ranch.

Additional mitigating factors would protect against contamination from effluent re-use or raw sewage contributions at the resort. For example, the DEQ would require application of effluent for irrigation at agronomic rates, allowing plant uptake of nutrients without migration of contaminants through the soil profile. Well logs from existing domestic wells on the Huntington Ranch property describe a layered volcanic lithology, with multiple basalt layers, protecting against the migration of contaminants to the regional groundwater table. The well logs document no perched water table and the regional groundwater table at an average depth of approximately 500 feet. In all cases, hydraulic head was documented in the regional groundwater table. The layered volcanic lithology, the significant depth of the groundwater table, and the hydraulic head in the aquifer would provide protection against migration of contaminants to the groundwater table. (Well logs are available for review at the BLM office in Prineville).

**Ambient Noise:** Ambient noise levels on BLM lands would increase during construction and as the new resort is developed and occupied. Off-site access and utility construction noise impacts would occur during construction. Noise levels associated with ongoing use of the access roads would increase.

Deschutes County imposed a 25 mph speed for the resort access road. Michael A. Minor & Associates report speed control as a mitigating factor, particularly less than 30 miles per hour, in a technical memorandum of November 29, 2000 (available at the BLM office in Prineville).

**Soil and Vegetation:** These issues are addressed through the Road Access and Bridge Construction Standards in that follow in this section.

**Wildlife:** Under all the action alternatives, mitigations stated in the Biological Evaluation (BE), attached as Appendix A of this EA and described under the Environmental Consequences Section of this EA, would be followed. The applicant also would follow mitigations required by ODFW. Any fencing constructed by the applicant around the resort would be required to meet BLM fencing design standards, which allow wildlife such as antelope, deer, and elk to pass safely under, over, and through.

The Biological Evaluation (BE) provided by Mr. Ed Styskel, August 2001, concludes that there would be No Effect to Federal-listed species or designated critical habitat. However, the BE found that there would be adverse affects to varying degrees on the western toad, ferruginous hawk, Swainson's hawk, pygmy nuthatch, black-throated sparrow, pale western big-eared bat, pallid bat, silver-haired bat, long-eared myotis, long-legged myotis, and western small-footed myotis without compensatory mitigation. Mitigation measures proposed to compensate for those effects and result in a determination of no significant effect to populations, individuals, or suitable habitat would be as follows:

1. Develop and implement a monitoring plan to measure primary access road crossing mortality to toads near the silt pond during the first breeding season after resort opening. If mortality is judged to be significant by the ODFW, retrofit the road with safe crossing features. Prohibit introduction of bullfrogs and predatory fish into resort ponds.
2. Construct and install one artificial nesting tree platform on the analysis area periphery or outside. (For the Ferruginous Hawk and Swainson's Hawk.)
3. Restrict free-roaming or abandoned cats via covenants for residential and condominium occupancy. Initiate education about predation upon small wildlife from free roaming cats via *Cats Indoor* awareness program (American Bird Conservancy 2001) or equivalent. (For the Pygmy Nuthatch, Western Greater Sage-grouse, and Black-throated Sparrow.)
4. Avoid disturbance to rock outcrops containing abundant fissures, if economically feasible. Avoid widespread use of insecticides that kill moths. (For the Pale Western Big-eared Bat, Pallid Bat, Silver-haired Bat, Long-legged Myotis, and Western Small-footed Myotis.)
5. Construct one artificial roosting structure per 10 acres of resort juniper clearing and install proportionately around the resort periphery. (Note. These structures duplicate mitigation – so are not additive – for the long-eared myotis.) (For Silver-haired Bat and Long-eared Myotis.)
6. Thin young juniper canopy to release native grasses and shrubs on BLM lands. Create brush piles from thinning to improve wildlife protection.

**Recreation:** Under all action alternatives, the developer would enter into a Volunteer Use Agreement in BLM's Adopt an Open Space Program for coordinated resource management projects.

The proposed road would be built to a paved width of 28 feet with 14 foot travel lanes. Many rural roads are 28 feet wide, with fog lines striped at 11 feet from centerline. While the 3 foot paved edge of the road cannot be considered a bikeway (requiring a 4 foot minimum paved edge width), it does provide a shared roadway opportunity, as most cyclists ride on or near the fog line.

**Visual Resources:** Under all action alternatives, roadways and resort buildings would be visible from adjacent BLM lands, the west slopes of Powell Butte, or other buttes in the vicinity. Proposed mitigation measures and natural site elements would address visual impacts.

Revegetation would be proposed for disturbed areas adjacent to new roadways and utilities. Revegetation with native plant species, seeded to BLM specifications, would reduce the construction scars and help construction areas blend into the adjacent lands and natural landscape.

Deschutes County land use codes stipulate exterior setbacks on the private resort property, including a 350-foot exterior setback for commercial development and parking areas, 250 feet for multi-family accommodations, 150 feet for above grade development, 100 feet for private roadways inside the resort, and 50 feet for trails and golf course.

The setbacks imposed by the Deschutes County land use code would be effective in minimizing the visibility of the resort from adjacent lands managed by BLM, because of the flat terrain and the juniper tree cover. Roadway and resort development would not occur on visible ridges or hillsides, because only flat and uniform terrain is found in the area. The juniper trees are naturally bushy with limbs extending to the ground, minimizing the sight lines through the juniper woodlands.

Proposed resort buildings would not be visible from existing highways in the vicinity because of the flat terrain and the separation of approximately 2-1/2 miles from Highway 97 or the Powell Butte Highway.

**Access Road and Bridge Construction Standards:** Deschutes County determined two access routes, one primary and one secondary, would be needed to meet fire access standards. The County Road Department also established minimum roadway improvement standards, which are represented by the proposed roadway section and the alignment.

All primary access construction would typically be restricted to a 50-foot wide right-of-way to accommodate a Deschutes County rural collector road improvement, slopes, drainage ditches, and culverts. A rural collector road requires a pavement width of 28-36 feet, a 3" thick asphaltic concrete surface course, and an 8" depth aggregate base course. The maximum grade is stipulated at 8 percent. The applicant has proposed a 28-foot wide paved surface with 14-foot travel lanes and 2-foot wide gravel shoulders on each side. Shoulder striping could be added to accommodate bike paths.

All primary access alternatives are oriented to the Powell Butte Highway. (Reference **Exhibit "B"**) Under all action alternatives a new bridge would be required for the North Unit Main Canal crossing to meet Deschutes County access standards. Action alternatives must also include construction of a north bound left turn lane and a south bound right turn deceleration lane on the Powell Butte highway at the intersection with the resort road access.

Typical construction activities would include clearing and grubbing, earth moving for subgrade construction, placement of an aggregate base course, and paving. Bulldozers, excavators, trucks, rollers, blades, backhoes, and a paving machine would be required. The described alternatives would generally follow existing dirt roadbeds and alignments. The existing disturbed areas within these proposed rights-of-way are typically 20-feet in width. The additional area of disturbance associated with access construction would equal 50 to 60 percent of the calculated right-of-way areas.

Revegetation of the disturbed areas outside of the pavement would be initiated through planting or seeding native grasses and shrubs. The applicant would revegetate disturbed areas according to a plan, agreed upon by the BLM, that would include certified and tested weed free seed mixtures including bluebunch wheatgrass and

thickspike wheatgrass to be broadcast, hydroseeded, or drilled into the disturbed areas outside of the road beds, according to BLM specifications. Roadbeds to be reclaimed would be treated with a minimum of 2 passes with a ripper blade to break up the existing road bed. In these areas, a combination of Indian Ricegrass and bottlebrush squirrel tail would be broadcast or drilled. The roadbed would be harrowed prior to seeding. Seeding would occur between October 1<sup>st</sup> and February 1<sup>st</sup>, by drilling, broadcasting, or hydroseeding. Any seeding of disturbed areas would be with a weed-free seed. Any mulch material used would be certified weed-free.

The applicant would be required to suppress noxious weeds within the specified rights of way using a method approved by the BLM for a period of three years following construction. The applicant would be required to use a licensed applicator using herbicides and application rates approved by the BLM. All construction equipment would be required to be washed before and after use. Surface and fill material used on roads would be required to be from a weed-free site.

The applicant would mark all trees to be removed with flagging within the clearing limits of new road or utility line construction or existing road widening and contact BLM prior to clearing operations. The applicant would make the initial route selection and, at BLM request, consider reasonable modifications to avoid removal or impacts to old-growth juniper or other sensitive areas. Trees would be cut down to a stump height of 8 inches or less for any trees that would not be grubbed out. All cut trees 6 inches or greater in diameter would be limbed and bucked into pieces not to exceed 8 feet in length. Bucked and limbed poles would be placed in accessible locations within the right-of-way to be later removed by BLM or BLM contractors for firewood. Trees less than 6 inches in diameter and cut limbs and tops would be either chipped or lopped and scattered on BLM public land within or adjacent to the right-of-way such that no hazardous fuel concentrations remain and resulting slash depth does not exceed 8 inches. If chipping is used for slash disposal, chips would be blown away from the road prism perpendicular to the road within or immediately adjacent to the right-of-way. Any slash or chips falling on the roadbed or ditches would be cleared out. BLM would be contracted for final inspection at completion of slash disposal.

***Relocation of the Existing Bailey Bridge:*** Under all action alternatives, the existing Bailey Bridge would be relocated north to an existing site for temporary drop bridges used by the OMD during their maneuvers. Three relocation sites are shown on Exhibit "B" and would take advantage of existing roadways and approaches. BOR permits would be required to cross the canal with a new access road, bridge, and sewer and water mains.

***Interim Secondary Access:*** The Sheridan road is an existing all-weather road, extending from Morrill Road to Highway 126, adjacent to the North Unit Main Canal. (Reference Exhibit "B")

The Sheridan Road currently is used by the OMD. The Sheridan Road is proposed as an interim emergency-only secondary access for the Huntington Ranch under all action alternatives. Turnouts would be constructed at intervisible intervals if necessary to accommodate emergency and military vehicles.

This proposed northerly right-of-way would be approximately 6.06 miles, with a 40-foot width, for a total of approximately 29.5 acres. A 40-foot right-of-way would be adequate for the Sheridan Road alternative because of the existing roadway improvements. The existing roadway connects to Highway 126 and would accommodate an interim secondary, emergency access to the project.

***Existing Right-of-Way Grant OR-49075 Utility Alternative:*** At this time, standard utility service is not available to the private land tract proposed for resort development. Existing residents utilize solar panels, generators, and cellular phones. Development of a resort would require the extension of underground power service, telephone conductors, and television cable. Power, telephone, and television conductors would be installed in a common trench, between Highway 97 and the resort. Under the Deschutes County Destination

Resort Ordinance, these utilities must be extended underground. The Freight Wagon Group held an existing right-of-way, Grant OR-49075. (Reference Exhibit “B”) This right-of-way has been assigned to Huntington Ranch LLC. The applicant proposes to bring dry utilities to the project within this right-of-way (Grant OR-49075 Utility Alternatives). Approximately 2.39 miles with a 20-foot width for approximately 5.6 acres would be disturbed for construction of these underground utilities.

**Access Control:** For all action alternatives, through an agreement with the BLM, the resort would monitor conditions adjacent to the roadway. In cooperation with the BLM, a substantial change in use levels or impacts over current conditions would trigger a need to evaluate access to the public lands from the road. If a reduction in access was needed, this reduction could be achieved through a number of mechanisms including specific administrative closures, fencing, or other means that would continue to provide access to the public lands consistent with the existing RMP.

**Wildfire and Public Safety:** In all action alternatives, leading to the development of the Huntington Ranch Resort, both the Deschutes County Sheriff’s office and Redmond Fire Department would provide staff and equipment at the resort (September 25, 2000 correspondence from the Deschutes County Sheriff’s Office and the August 15, 2000 correspondence from the Redmond Fire Chief – Appendix B). Increased access to the area may subsequently increase the possibility for wildfire or public safety hazards due to greater numbers of people visiting the area. The presence of law enforcement staff and fire department staff in the immediate area due to the resort development is expected to reduce response times to fire, life, and safety situations and mitigate the increased possibility of wildfire and public safety hazards.

The applicant would work with the BLM to obtain and maintain signs stating that patrols of the area occur and “No Dumping” along the paved roadway.

**Cultural Resources:** An Area of Potential Effects (APE) has been established in cooperation with consulting parties for the action alternatives. A cultural resource survey would be undertaken by qualified archaeologists and would include an intensive surface examination extending up to 200 meters on each side of the access corridors (100 meters on the westside of the gas pipeline utility corridor), 100 meters on each side of the canal utility corridor, and for all of Section 16 using a 30-meter transect interval. Portions of Sections 8, 17, 20, 21, 15, and 22 have been included in the APE using 30-meter transect intervals. The objective is to observe and record surface evidence of past human use of the area. Concurrently, a data recovery program is being established.

**Livestock Grazing:** The BLM authorizes livestock grazing on the BLM managed land surrounding the proposed resort. As stated previously, proposed changes to the permitted grazing are separate from the decisions to be made on the access and utility routes. These alternatives only address livestock grazing on the 12,254 acre Crenshaw allotment that is adjacent to the parcel being proposed for resort development by Huntington Ranch LLC. The alternatives include:

- **Alternative 1:** No Action – horse grazing on the allotment would continue as currently permitted.
- **Alternative 2:** Cattle and Horse Grazing – both cattle and horse grazing would be allowed.
- **Alternative 3:** Cattle Grazing –Under this alternative only cattle grazing would be allowed.

#### COMPARISON OF ALTERNATIVES:

For the five alternatives presented and evaluated in this EA, under numerous criteria established by the BLM, a simple comparison of several factors allows a tabular comparison of the alternatives. The following factors were used to make this comparison and the tabular comparison:

- **Total length** of corridors for construction of utilities and access, which is measured in linear feet of access and utility ways.
- **Impacts to undisturbed lands** from construction of utilities or access, which is measured in the acres of undisturbed lands that are impacted.
- **Impacts to recreation** created by greater accessibility to public lands. The recreation comparisons are directed toward accessibility to the North Unit Main Canal trail corridor.
- **Impact on existing permitted Oregon Military Department operations**, which is measured in acres unavailable for use due to buffers around the resort.
- **Vegetation, and soil impacts** are evaluated and generally relate to the acres of previously undisturbed lands that are impacted by the proposed alternative.
- **Wildlife impact** comparisons are generally summarized by the degree of fragmentation to public lands.
- **Noxious weeds** could be spread or introduced to public lands. Construction activities are measured in terms of disturbance to previously undisturbed areas.

The following table (Table 3) compares these factors by each alternative.

**TABLE 3: SUMMARY OF ENVIRONMENTAL IMPACTS FOR ALTERNATIVES**

Alternatives	Total Length	Impact to Undisturbed Lands	Recreation	Permitted Use – Oregon Military Department	Vegetation and Soils	Wildlife	Noxious Weeds
Alternative 1 – No Action	0 Mi.	0 Acres	No Change	*8,800 Acres	-0-	No Change	No Change
Alternative 2 Preferred	9.26-9.8 Mi.	39.55-53.0 Acres	Least Access	*10,080 Acres	39.55-53.0 Acres	Less Fragmentation	Least Disturbance
Alternative 3	8.92-9.46 Mi.	50.7-51.4 Acres	Greater Access	*10,080 Acres	50.7-51.7 Acres	Less Fragmentation	Moderate Disturbance
Alternative 4	10.18 Mi.	42.55-55.3 Acres	Least Access	*11,680 Acres	42.55-55.3 Acres	More Fragmentation	Moderate Disturbance
Alternative 5	9.84 Mi.	53.7 Acres	Greater Access	*11,680 Acres	53.7 Acres	More Fragmentation	Greatest Disturbance

\*These figures assume a one-mile buffer zone around the resort development and ¼ mile adjacent to the primary access road. However, no agreement or determination of exact buffer zones has been established with the OMD.

#### OTHER ALTERNATIVES CONSIDERED BUT DISMISSED

Several access alternatives were developed, considered and evaluated in Huntington Ranch LLC’s original right-of-way application. During a joint meeting with BLM and the applicant on September 8, 2000 and again on April 16, 2001, the alternatives were further examined. Required access was also examined in meetings with Deschutes County, the BOR, and the NUID. These alternatives that were considered but were dismissed include:

**Horner Road:** Horner Road extends easterly from Deschutes Junction. The roadway is considered a historical road in the vicinity of Deschutes Junction and continuing east. The existing roadway does not provide direct access to Highway 97, or to the resort. This alternative was considered and subsequently dismissed primarily because of historical significance.

**Existing Right-of-Way Grant OR-49075:** This existing westerly right-of-way, OR 49075, extends from the resort tract to Highway 97. It would be approximately 2.39 miles, with a typical 40-foot width, for a total of approximately 11.6 acres. A 40-foot right-of-way on this flatter terrain should be adequate to accommodate the same roadway improvements described above. Although the right-of-way grant has been approved by BLM, the access roadway has not been fully constructed. Current residents continue to utilize primitive roadways in the vicinity.

The existing right-of-way does not meet ODOT criteria for a primary resort access. This right-of-way grant was also considered for the secondary access required by both Deschutes County and the Redmond Fire Department on an interim basis. Use of the right-of-way, even on an interim emergency-only basis would require clearing and gravel surfacing. These impacts to BLM managed public lands could be avoided by using the Sheridan Road, an existing all-weather surface road.

**Westerly Morrill Road Segment:** The westerly segment of Morrill Road also extends easterly from Deschutes Junction, and specifically from the Boonesborough Subdivision at Deschutes Junction. The easterly extension of Morrill Road is approximately 1-1/2 miles south of the Huntington Ranch Resort. Boonesborough residents voiced opposition to the use of Morrill Road as an access for the resort during land use proceedings. In addition, Deschutes County staff did not view the Morrill Road alignment as particularly beneficial to a long-term transportation system for the area. The westerly portion of Morrill Road was subsequently dismissed as a viable option.

**McGrath Road:** McGrath Road extends from the Powell Butte Highway, near the Bend Airport, northwesterly to Deschutes Junction. The southern segment of McGrath Road serves the Bend sewage treatment plant and its northern segment connects to the Boonesborough Subdivision. The middle segment of McGrath Road is a dirt track that crosses public lands, but is not identified as a through route in the Deschutes County Official Road Map, 1999. McGrath Road is south of the resort and the alignment is at least three miles distant from the proposed resort, therefore, it is significantly longer than other alternatives and does not provide a reasonable access. Also, Deschutes Junction and Boonesborough residents opposed it. The McGrath Road alternative was considered and dismissed.

**19<sup>th</sup> Street:** A 19<sup>th</sup> Street extension, southerly of the City of Redmond was also considered but dismissed. The 19<sup>th</sup> Street extension is expected to be a viable option for a future secondary access for the resort. The BLM is working collaboratively to evaluate land uses and transportation systems in the area south of the City of Redmond. The collaborative study involves the City of Redmond, City of Bend, Deschutes County, BLM, ODOT, BOR, and others. The collaborative study is intended to be concluded within the next two years. The 19<sup>th</sup> Street extension was dismissed at this time, but is expected to be considered as a permanent secondary access for the resort in the future.

**Access Alternative Avoiding Relocation of the Existing Bailey Bridge:** All action alternatives for primary access could include a route that avoids relocation of the existing Bailey Bridge. The route would leave existing dirt road beds before intersecting Morrill Road and proceed approximately one-half mile through undisturbed lands to a crossing point south of the existing Bailey Bridge. A new bridge would be constructed at a point agreed upon between the applicant, BLM, BOR, and the NUID. After crossing the canal, the alignment would proceed north on undisturbed lands, intersect Morrill Road, and continue north along existing roads into the resort. This alignment would impact approximately three acres of previously undisturbed public lands.

A primary access route avoiding the Bailey Bridge would parallel Morrill Road and effectively segment and divide the public lands. Morrill Road would continue to be used by the OMD, creating the potential for conflicts between resort users and military operations.

**On-Site Sewage Treatment:** Sewer and water system master plan reports for the proposed Huntington Ranch Resort are available for review at the BLM office in Prineville. The reports describe multiple alternatives for sewerage and water service, including on-site sewage treatment facilities and on-site wells.

On-site sewage treatment could be provided through construction of a package sewage treatment plant to serve the resort. Package sewage treatment plants are available and those plants can be expanded as the resort grows. Construction of an on-site sewage treatment plant would eliminate the need for a sewage forcemain connection to the Bend sewage treatment plant.

The Oregon DEQ (Department of Environmental Quality) regulates sewage treatment facilities. DEQ prefers regional sewage treatment facilities, such as the City of Bend or the City of Redmond. Smaller, on-site sewage treatment facilities can be feasible and can be permitted, but are not preferred. DEQ has determined that regional facilities operated by municipalities, provide more consistent operation and generally are more likely to conform with DEQ permit requirements.

The volume of sewage effluent generated by the Huntington Ranch Resort is not adequate to meet the golf course irrigation needs for the project. Another source of irrigation water would be required, even with the on-site sewage treatment plant. The Huntington Ranch Resort has executed a contract with the City of Bend to receive sewage treatment plant effluent, treated to a level four, to serve the irrigation needs of the resort. Alternatively, the Huntington Ranch Resort could obtain an irrigation water supply from the Avion Water Company or from on-site wells. On-site sewage treatment facilities were considered and dismissed, because a pipeline between the Bend treatment plant and the resort is likely, with or without the treatment facilities. The on-site facilities can be eliminated and the sewer installed in a common trench with the irrigation water supply line, without additional impacts on BLM lands.

**On-Site Water Supply:** On-site wells were considered for the Huntington Ranch Resort. Construction of on-site wells would eliminate the need for the extension of an Avion Water Company main between Bend and the resort. On-site wells fall under the jurisdiction of the Oregon Water Resources Department (OWRD). OWRD initial reviews of water right permit applications determined that permits could not be issued without mitigation. The initial reviews were deemed “not favorable.” The developer subsequently executed a contract with the Avion Water Company for the delivery of domestic water supplies and executed a contract with the City of Bend for the delivery of irrigation water supplies. On-site wells were subsequently dismissed as an alternative.

## AFFECTED ENVIRONMENT

**Boundary:** The area analyzed in this document extends north from the proposed resort to Highway 126, west to Highway 97, south to the Bend Sewage Treatment Plant, and east to the Powell Butte Highway.

**Topography:** The topography is generally flat. Volcanic ridges and rocky outcrops are common, but they seldom exceed 20 feet in height. The overall elevation difference between the Bend Airport and the Redmond Airport is approximately 400 feet, over a distance of approximately 11 miles, which calculates to an average grade of less than one percent. The relatively flat terrain deserves consideration in the evaluation of impacts.

**Water:** There are no streams, lakes, or natural water bodies of any kind. No significant erosion or other signs of surface runoff were observed. The North Unit Main Canal runs within one-half mile of the proposed resort property and intersects with the proposed primary access.

**Soils:** This area is located in the rain shadow of the Cascade Mountains. Precipitation is low, occurring mainly in the winter and spring months. The site is gently rolling consisting of small rocky ridges and sandy depressions. Soils consist of sandy pumice with rocky outcrops. Minimal surface rock is associated with the sandy basins.

**Vegetation:** The native vegetation is typical of western juniper woodlands. Common native plants, besides juniper, include big sagebrush, bitterbrush and green and gray rabbitbrush, with an understory of bluebunch wheat grass, Thurber's, and western needlegrasses, and bottlebrush squirreltail. Cheatgrass, an invasive non-native annual grass, is also common. The site occurs within the western juniper vegetation zone. The juniper/sagebrush/bunch grass plant community appears to dominate the site, with plant species that are both structurally and floristically typical of vegetation of the community. No special status plants were expected to be on the site and none were found. A letter from the Oregon Natural Heritage Program, dated 5/18/2000 discusses prior surveys completed in this area (Reference Exhibit "F").

**Wildlife:** Suitable habitat for ferruginous and Swainson's hawk exists in the area. An estimated 150 to 200 antelope exist in the herd range. At any one time, 30 to 40 animals may be seen in the area. Elk have been observed in the area by BLM staff, but no known elk herds exist in the area. Mule deer currently use the proposed resort property and surrounding BLM managed public lands, however, the area is not located within important deer winter range according to ODFW. The BE prepared for this EA provides greater detail on current wildlife habitat in the area.

**Recreation:** On public lands, existing recreational uses include target shooting, horseback riding, mountain biking, hunting, hiking, motorized vehicle use (both on and off-road), sightseeing, educational/interpretive uses, and rockhounding.

The BLM managed lands in the project area are designated "open" in the Brothers/La Pine RMP. This area (BLM managed lands east of State Highway 97, north and west of Powell Butte Highway, and south of State Highway 126) are the largest block of BLM land designated "open" in central Oregon, although they generally receive less OHV use than the Millican Valley area to the east. As stated in the BLM's National OHV strategy (2001):

*The BLM designates areas as "open" for intensive ORV use where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel.*

The North Unit Main Canal is located in the area and is used occasionally by kayakers and other recreationists who travel on the adjacent canal access road. BOR and NUID have not authorized recreational use of the canal and any recreational use of the canal is in trespass according to BOR and NUID. Paved access into the area could increase trespass occurrences on the canal for bicycling, hiking, and other recreational uses. BOR and NUID would anticipate the increased trespass occurrences to require a higher level of trespass violation enforcement. This trespass violation enforcement is anticipated to increase the demand on law enforcement agencies such as the Deschutes County Sheriff.

The canal has been identified by the Deschutes County Bicycle and Pedestrian Advisory Committee as a potential regional trail link, as stated in a July 7, 2000 letter to the BLM:

*In regards to the recreation multi-use trail on North Unit Canal through BLM land... We urge that the BLM identify this canal trail...as an issue to be addressed in the Urban Interface Planning Process." (The Urban Interface Planning Process was renamed the Upper Deschutes RMP).*

The North Unit Main Canal within the Bend Urban Growth Boundary is identified as a proposed trail in the Bend Urban Area Transportation System Plan (Bike and Trail System Map).

OHV use “mudbogging” occurs in the area at the silt pond, located along the North Unit Main Canal, east of the proposed resort. BOR and NUID are considering a proposal to prevent leakage to this silt pond.

**Visual Resources:** The proposed resort is located more than 2 miles from any existing paved road. The view from these roads into the resort site is screened by vegetation and landforms. The project area is identified in the Brothers/La Pine RMP as an area not having high or sensitive visual qualities. Due to the rough roads leading to the area, and relatively few access points (when compared to other BLM lands in Central Oregon), the project area is relatively free from large scale dumping of garbage and abandoned vehicles.

**Transportation:** Numerous dirt roads surround the proposed resort tract in Section 16, with some leading into the parcel. These roads carry a wide variety of designations including County roads, historical roads, military transport roads, and off-road vehicle trails.

**Wildfire and Public Safety:** Illegal activities such as illegal dumping, people living illegally on public lands, illegal firewood cutting, and drug manufacturing have been witnessed on BLM managed lands in the vicinity. Wildfire and public safety are concerns of the current residents in the vicinity and potential threats to wildlife habitat, recreation, and visual resources. Currently it takes the Fire Department/Sheriff’s office approximately 20 minutes to reach these public lands. No Fire Department/Sheriff’s office resources currently exist.

**Cultural Resources:** A draft Literature Review and Record Search for Cultural Resources of the Huntington Ranch Development Area by David Ellis and Bonnie J. Mills dated June 18, 2001, reveals, approximately one-third of the surrounding area has been previously surveyed for cultural resources in the past 23 years. “These previous surveys identified 164 cultural resources. ...14 have been recommended as potentially eligible for listing, and the National Register eligibility of another 15 resources is unknown. The remaining 128 previously identified resources have not been recommended or determined not eligible for the National Register.” Findings are expected to be similar for the project area related surveys.

Previous surveys also “recommended that intact segments of the Bend-Prineville Road be incorporated into a proposed National Register district nomination that would have also included Huntington’s Wagon Road, the Prineville-Deschutes Road, Horner Road, Morrill Road, and the Alfalfa-Redmond Road.” Reports by Chappel 1997 and Oetting 1997 concluded “the remaining road segments in the 1996-1997 project area lacked character and integrity except Horner Road.” (Reference Page 25; Ellis/Mills 2001. It is therefore recommended that determinations of eligibility to the National Register of Historic Places be completed for those historic road segments where they exist on BLM managed lands within the project area as described in the Ellis report.

Based on previous surveys on adjacent BLM lands new surveys could encounter evidence of (1) prehistoric archeological sites, (2) archeological isolates, (3) some traces of Huntington’s Wagon Road and the Alfalfa-Redmond Road, (4) historic and modern trash scatters, and (5) possibly some rock features. All sites documented during cultural resource surveys for the proposed resort would be evaluated for their eligibility to the National Register of Historic Places.

**Commercial Activity:** No commercial forestry practices occur in the vicinity. BLM managed lands currently are used for livestock grazing. However, Huntington Ranch LLC, who would be developing the resort property, currently hold a considerable portion of the grazing permits in the vicinity. No agricultural fields, crops, or intensive agricultural uses exist in the vicinity of the proposed resort.

**Livestock Grazing:** The public land east of Highway 97, south of Highway 126, and northwest of the Powell Butte Highway is grazed by livestock under BLM permits. The BLM managed land immediately surrounding the resort makes up the 12,254 acre Crenshaw allotment. The current Crenshaw permit specifies 656 animal unit months (AUMs) of horse grazing in the allotment under a deferred rotation system. An AUM is the amount of forage one cow and calf, or horse, eat in one month. The grazing permute could graze 656 animals for one month, or 328 animals for two months, or 164 animals for four months, et cetera. Deferred rotation grazing means that grazing does not occur during the critical grass-growing period (approximately April 15 through July 15) at least one year in three.

## ENVIRONMENTAL CONSEQUENCES

**Water Quality and Quantity:** *Alternative 1 – No Action:* Under the No Action Alternative, more intense agricultural uses may occur on the property being considered for resort development. Currently, a number of individual groundwater wells have been constructed and are typically pumped by generator to serve domestic needs. Water use is currently limited, because there is no on-site power to operate pumps. In the future, power would likely be extended to the proposed project area and pumping increased to support agricultural uses. Pumping for irrigation would consume groundwater. However, mitigation would be required to offset any commercial use of groundwater, such as irrigation for agricultural use. Similarly, the more intense agricultural use on the property could increase the potential for water carried contaminates from standard agricultural operations. The probability of contaminating any surface or groundwater is slight due to the flat terrain, the underlying lithology, groundwater well construction standards, and non-existence of streams. The flat terrain and the permeable native soils reduce any potential for runoff.

Pumping for agricultural uses would require water rights. OWRD administers water rights. OWRD and the US Geological Service have recently completed an extensive groundwater study for the Deschutes Basin. The study determined an extensive groundwater supply exists, and that supply is interconnected with Deschutes River and Crooked River surface waters. Due to probable impacts to surface flows with groundwater extraction, obtainment of water rights would require mitigation to offset the impact of groundwater development.

*Alternative 2 – Preferred Alternative:* Development of the destination resort would be supported by an Avion Water Company domestic water supply and a treated sewage effluent supply from the City of Bend for irrigation needs. No additional groundwater withdrawals would occur with development of the resort.

Development of the resort is not expected to introduce hazardous substances or significant potential for contaminants in the area. Chemicals, including herbicides, pesticides, and fungicides may be used on the golf course or landscaped areas. The resort would retain professionally trained superintendents to manage all chemical applications and water would be applied at agronomic rates under DEQ jurisdiction to reduce the potential for flushing contaminates through the soil profile. The layered volcanic lithology of the Deschutes Basin, the flat terrain, depth to groundwater, revegetation of disturbed opens, and carefully designed golf course grading would minimize the potential for run off of chemicals or contamination of surface or ground water.

Irrigation of golf courses with treated sewage effluent should provide beneficial reuse for wastewaters generated in the region. Use of Avion Water Company supplies for domestic service allows efficient use of existing wells, reservoirs, and water supply system components. Resort development, with the intended use of the Avion Water Company domestic supply and the use of sewage treatment plant effluent for irrigation, should improve water quality and provide no measurable impact to water quantity.

Domestic and fire protection water supplies would be piped from the Avion Water Company. City of Bend sewage effluent, treated to a Level 4 standard, would be piped to the resort for irrigation and pond maintenance. On-site ponds would be lined. Raw sewage from the resort would be piped to the City of Bend for treatment. No impact to water resources is expected from the development of access across BLM lands.

*Alternative 3:* Under Alternative 3, the Destination Resort development would occur with different access routes. The different access routes would have no different effect on the water quality and quantity. Reference comments under the Alternative 2 - Preferred Alternative.

*Alternative 4:* Under Alternative 3, the Destination Resort development would occur with different access routes. The different access routes would have no different effect on the water quality and quantity. See comments under the Alternative 2 - Preferred Alternative.

*Alternative 5:* Under Alternative 3, the Destination Resort development would occur with different access routes. The different access routes would have no different effect on the water quality and quantity. See comments under the Alternative 2 - Preferred Alternative.

**Soil and Vegetation:** *Alternative 1 - No Action:* A No Action Alternative would not change current impacts to soil or vegetation. However, existing uses including off-road vehicle use would continue to impact soil and vegetation.

*Alternative 2 – Preferred Alternative:* All vegetation would be removed and soils would be compacted permanently in sections identified for construction. Approximately 27.5 acres would be disturbed on the south 6585-C Road Alternative access, Alternative 2. Slightly less disturbance (26.8 acres) would be created for 2A because of the shorter alignment, even though a segment leaves existing roadbeds. Combined with the natural gas pipeline utility corridor (12.75 acres), the total disturbed area would be 39.55-53.0 acres. The proposed roads would typically follow existing roadbeds, would be narrow and would meander in an attempt to preserve old trees. The slopes would be bladed to conform to natural ground. Revegetation of the disturbed areas outside of pavements would be consistent with the discussion in the common to all alternatives section.

This design approach would minimize clearing, excavation, and embankment associated with road construction and generally minimize changes to the surface of the land. Combining utility routes with access, where possible, would further minimize changes to the surface of the land. Disturbed areas would be revegetated as detailed in the common to all alternatives section.

Construction equipment would be restricted to the roadbeds and utility paths, and not allowed to park upon or cross areas designated to remain natural. The horizontal and vertical alignments for the separate utilities would remain within existing or proposed clearings where possible to minimize impacts.

There are no perennial streams or water bodies in the vicinity. The only surface waters would be periodic runoff, following heavy precipitation events. Roadway culverts would maintain drainage in its natural course, without concentration. The relatively flat terrain would minimize the potential for erosion from natural runoff. The highly permeable sandy and pumice soils would encourage infiltration and minimize erosion. Revegetation would also help to minimize erosion and minimize any impacts from surface waters. Revegetation of areas was described in the common to all alternatives section.

Ron Halvorson, District Botanist for BLM, prepared a botanical evaluation for the proposed rights-of-way. A copy of the survey is attached as **Exhibit “D”**. No special status species were expected and none were found within the project area and no botanical concerns were identified.

The OMD is in the process of completing a floristic survey for the area covered by their Central Oregon Training Site (COTS). This training site is located south and east of the City of Redmond, Oregon. The COTS surrounds Section 16, Township 16 South, Range 13 East, the Huntington Ranch LLC property. An interim report has been prepared for the Oregon Military training site, which identifies types and locations of flora. The executive summary states, “no federally- or state-listed threatened or endangered plants were discovered at the

Central Oregon Training Site (COTS).” “Likewise, no taxa listed as rare by the Oregon National Heritage Program in 1998 were found.”

*Alternative 3:* In road sections identified for primary access construction, approximately 26.8-27.5 acres would be disturbed for the south 6585-C alternative/2A. Combined with the canal route utility corridor (23.9 acres) the total disturbed area would be 50.7-51.4 acres. All vegetation would be removed and soils would be compacted permanently. Again, the proposed road would follow existing roadbeds, would be narrow and would meander in an attempt to preserve old trees. The shoulder slopes would be bladed to conform to natural ground. Revegetation of the disturbed areas outside of pavements would be initiated through planting or seeding natural grasses and shrubs, as previously described in the common to all alternatives section.

*Alternative 4:* In road sections identified for primary access construction, approximately 29.8 acres would be disturbed for the east Morrill Road alternative. Combined with the natural gas pipeline utility corridor (12.75-25.5 acres) the total disturbed area would be 42.55-55.3 acres. All vegetation would be removed and soils would be compacted permanently. Again, the proposed road would follow existing roadbeds, would be narrow and would meander in an attempt to preserve old trees. The shoulder slopes would be bladed to conform to natural ground. Revegetation of the disturbed areas outside of pavements would be initiated through planting or seeding natural grasses and shrubs, as previously described in the common to all alternatives section.

*Alternative 5:* In road sections identified for primary access construction, approximately 29.8 acres would be disturbed for the east Morrill Road alternative. Combined with the canal route utility corridor (23.9 acres) the total disturbed area would be 53.7 acres. All vegetation would be removed and soils would be compacted permanently. Again, the proposed road would follow existing roadbeds, would be narrow and would meander in an attempt to preserve old trees. The shoulder slopes would be bladed to conform to natural ground. Revegetation of the disturbed areas outside of pavements would be initiated through planting or seeding natural grasses and shrubs, as previously described in the common to all alternatives section.

**Wildlife:** *Alternative 1 - No Action:* If similar use of the private lands continue, no additional impacts to wildlife would occur under the No Action Alternative. However, the private land tract is currently zoned for exclusive farm use and mixed use agricultural uses. Activities that can be conditionally authorized on the property could result in considerable development on the subject site.

*Alternatives 2 – Preferred Alternative:* A Biological Evaluation (BE) has been included as Appendix A of this EA. Ed Styskel and Gary Hostick of Ecological Services, Inc. were retained to complete the Biological Evaluation as well as a detailed analysis of the effects on antelope in this area. The antelope report may be found at the BLM office in Prineville.

The short-term, long-term and cumulative impacts of the Huntington Ranch Destination Resort Development on Pronghorn Antelope study provided by Mr. Gary Hostick, August, 2001, Table 4 (shown below) identifies the short and long-term impacts of the Huntington Ranch Destination Resort on antelope. These sources of impact range from construction of buildings, roads, and other changes on the resort property and along access routes, roads and barriers, noise, noxious weeds, human activity, poaching.

**TABLE 4. SHORT-TERM AND LONG-TERM IMPACTS OF THE HUNTINGTON RANCH RESORT ON ANTELOPE**

Source of Impact	Short-term Impact	Long-term Impact	Comments
Construction of buildings, roads, and other changes on the resort property and along access routes.	Moderate	Low	One sq. mile of habitat would be lost, or about 1.4% of the herd range

Source of Impact	Short-term Impact	Long-term Impact	Comments
Fences along resort access roads	Moderate	Low, if built to allow pronghorn passage. Antelope would become habituated to fences that allow passage.	
Roads as a barrier	Moderate	Low, if main access road is built along the existing 6585-C or utility rights-of-way. Moderate if built along Morrill Rd. right-of-way which could affect movement through the herd range.	
Roads as a source of mortality	Moderate	Low.	At least 10 miles of road with higher traffic flow would occur within the habitat.
Vegetation as a barrier		Low, if thick vegetation barriers more than 30 inches high are not planted along roads or across areas of habitat	
Noxious Weeds		Low, if noxious weeds are controlled on the resort area and along new utility and road rights-of-way, and if cooperative efforts are made to control noxious weeds on adjacent BLM land.	
Noise	Moderate	Low. Antelope would become habituated to noises on the resort area and on access roads	
Human activity	Moderate. Antelope would probably be excluded from significant areas during construction of utility corridors, buildings, and roads.	Low. Antelope would become habituated to human activity at a distance and vehicle traffic. If measures are taken to control or monitor public access from the resort and new access roads into the surrounding habitat, this impact would also be low.	An area of habitat up to 200 yards from the perimeter of the resort development area could be impacted by human activity within the resort area, or approximately 105 acres.
Poaching		Low, if measures are taken to control or monitor public access from the resort and new resort access roads into the surrounding habitat, and if cooperative efforts are made by resort personnel to control illegal activities in the area within and around the resort..	

Short-term impacts would be consistently moderate while long-term impacts would be consistently low. The following is a statement from the Cumulative Impacts Section. “It is possible that short-term impacts could result in short-term significant changes in the habitat use by the antelope, and a short-term reduction in antelope numbers in the herd range. However, as antelope become habituated to the change in habitat from the new resort they move back into habitat areas vacated for the short-term, and numbers could again increase to former levels.”

The Biological Evaluation (BE) provided by Mr. Ed Styskel, August 2001, concludes that there would be No Effect to Federal-listed species or designated critical habitat. However, the BE found that there would be adverse affects to varying degrees on the western toad, ferruginous hawk, Swainson’s hawk, pygmy nuthatch, black-throated sparrow, pale western big-eared bat, pallid bat, silver-haired bat, long-eared myotis, long-legged myotis, and western small-footed myotis without compensatory mitigation. Mitigation measures proposed to compensate for those effects and result in a determination of no significant effect to populations, individuals, or suitable habitat would be as follows:

1. Develop and implement a monitoring plan to measure primary access road crossing mortality to toads near the silt pond during the first breeding season after resort opening. If mortality is judged to be significant by the ODFW, retrofit the road with safe crossing features. Prohibit introduction of bullfrogs and predatory fish into resort ponds.
2. Construct and install one artificial nesting tree platform on the analysis area periphery or outside. (For the Ferruginous Hawk and Swainson’s Hawk.)
3. Restrict free-roaming or abandoned cats via covenants for residential and condominium occupancy. Initiate education about predation upon small wildlife from free roaming cats via *Cats Indoor* awareness program (American Bird Conservancy 2001) or equivalent. (For the Pygmy Nuthatch, Western Greater Sage-grouse, and Black-throated Sparrow.)
4. Avoid disturbance to rock outcrops containing abundant fissures, if economically feasible. Avoid widespread use of insecticides that kill moths. (For the Pale Western Big-eared Bat, Pallid Bat, Silver-haired Bat, Long-legged Myotis, and Western Small-footed Myotis.)
5. Construct one artificial roosting structure per 10 acres of resort juniper clearing and install proportionately around the resort periphery. (Note. These structures duplicate mitigation – so are not additive – for the long-eared myotis.) (For Silver-haired Bat and Long-eared Myotis.)
6. Thin young juniper canopy to release native grasses and shrubs on BLM lands. Create brush piles from thinning to improve wildlife protection.

The construction of access and utilities would create wildlife impacts. Approximately 39 acres of habitat (27.5 acres excluding the previously approved secondary access to Highway 97) would be lost with construction of the new segment of roadway. The connection of utilities would only impact wildlife during periods of construction.

*Alternative 3:* The construction of access and utilities would create wildlife impacts. Approximately 26.8 acres of habitat would be lost with construction of the new segment of roadway. Disturbance to wildlife would increase in the area due to resort activities. Mitigation measures would be the same as under Alternative 2 - Preferred Alternative.

*Alternative 4:* The construction of access and utilities would create wildlife impacts. Approximately 29.8 acres of habitat would be lost with construction of the new segment of roadway. Disturbance to wildlife would

increase in the area due to resort activities. Mitigation measures would be the same as under Alternative 2 - Preferred Alternative.

*Alternative 5:* The construction of access and utilities would create wildlife impacts. Approximately 29.8 acres of habitat would be lost with construction of the new segment of roadway. Disturbance to wildlife would increase in the area due to resort activities. Mitigation measures would be the same as under Alternative 2 - Preferred Alternative.

**Recreation:** *Alternative 1 - No Action:* In the near term, current recreation would not be impacted by a No Action Alternative. If uses of existing private lands are expanded under existing zoning, then the increased traffic and activities would impact recreational uses.

*Alternatives 2 – Preferred Alternative:* The Huntington Ranch LLC would accommodate new residential units and related on-site recreational activities.

The proposed rights-of-way would impact existing recreational activities such as horseback riding and off-road vehicle use by fragmenting public lands with paved roads. All proposed rights-of-way, except the utility alignments south, generally follow existing unimproved roads on public lands. The development of access roads could reduce the opportunity for future development or designation of motorized trails in the area. The paved access could create more hazardous conditions for off-road vehicle riders.

The paved primary access road would provide easier access into the area for a variety of recreationists, particularly for vehicles hauling trailers (equestrians and OHV users), and for sedans. The paved primary access road would also provide new access and recreational opportunities for road cyclists, who currently use Powell Butte Highway.

The silt pond is regularly used by OHV enthusiasts for mudbogging and for parties. The improved access to all types of vehicles provided by the paved road would likely increase this activity, unless the silt pond is removed as BOR and NUID are currently considering. If the silt pond is removed, this may result in an increase in mudbogging in Mayfield Pond, located to the southeast. However, mudbogging in Mayfield Pond is already an established trend and management problem for BLM.

The paved primary access road would increase access to the North Unit Main Canal. The creation of a paved road leading to, and crossing the North Unit Main Canal may increase the use of the canal by kayakers, and the use of the canal maintenance road by a variety of recreationists. These recreational uses of the North Unit Main Canal are not authorized by BOR and NUID and are in trespass. Increased trespass would be anticipated with the paving of the primary access. It would be anticipated that a higher level of trespass violation enforcement by BOR, NUID, and local law enforcement agencies. The BOR and NUID have expressed concerns about the use of the canal, and may consider the construction of fences or barricades in the future to block public use of the canal at its intersection with the paved primary access road. Blocking that access could lead to increased road and trail development on BLM managed lands, as recreationists seek ways to go around the fences or barricades to access the canal or maintenance road.

*Alternative 3, 4, and 5:* See above under Alternative 2 - Preferred Alternative

**Transportation and Access:** *Alternative 1 – No Action:* If current land uses continue, there would be little change to transportation and access on BLM lands to serve the subject parcel. The seven existing residences on the private land recently obtained a right-of-way grant from the BLM to construct a new access road to Highway 97. Clearing, grading, and construction of the access road would occur across BLM lands under the No Action Alternative.

If more intensive agricultural and farm uses were developed, as allowed outright and conditionally under the Deschutes County zoning code, then multiple accesses would likely be required. BLM would have to consider rights of way applications for those accesses. If multiple access ways were constructed, then transportation and access impacts on BLM lands may be similar to that for a resort development, even though the number of trips would likely be less for agricultural uses.

*Alternative 2 – Preferred Alternative:* A traffic impact analysis was prepared to describe vehicle trips, impacts to off-site intersections, and projections of future transportation and access conditions associated with resort development. The transportation impact analysis concluded that off-site roadways and intersections would continue to operate acceptably even at full buildout at the resort. A supplemental traffic analysis, dated December 2000, was also prepared and utilized in the Deschutes County land use process. The Deschutes County land use decision (available at the BLM office in Prineville) provides the following findings and summary for the traffic impact analysis:

*“The Hearing’s Officer finds the applicant’s traffic study, including both the October and December analysis, provides substantial, credible evidence from which I can find the proposed resort would not significantly affect a transportation facility with the exception of the resort access road/Powell Butte Highway intersection. I find development of the proposed resort would not result in levels of travel or access that are inconsistent with the functional classification of Powell Butte Highway or its intersections with Highway 126, Highway 20, Butler Market Road, and Alfalfa Market/Neff Road. I also find resort-generated traffic would not reduce the level of service of these transportation facilities below the minimum acceptable level identified in the County’s Transportation System Plan.”*

The Kittelson & Associates, Inc. traffic impact analysis assumed full buildout of the proposed resort by the year 2010. At full buildout, as defined by a maximum number of allowed units in the land use decision, a maximum vehicle trip generation was established. The study predicted that 3,635 average daily vehicle trips (ADT’s) would be generated at full buildout, of which 305 would occur during the afternoon peak hour (4pm-5pm weekdays). The traffic study analyzed impacts at full buildout of the resort, during the busiest summer season, during the busiest hour of the weekday. At all other times, the transportation system would operate better than projected by the traffic study. The transportation impact study was prepared primarily to analyze intersection capacity on Deschutes County and ODOT roadways.

The Powell Butte Highway carried an average daily traffic count of approximately 4,000 vehicles between 1995 and 1999. For comparison, Highway 97 carried an average daily traffic of 24,300 vehicles per day. Highway 126, between Redmond and Prineville, carries approximately 7,000 daily vehicle trips..

*Alternatives 3, 4, and 5:* See the comments under the Alternative 2 - Preferred Alternative.

**Permits Required:** *Alternative 1 – No Action:* The seven residents on the subject site were granted access across BLM lands to Highway 97. Improvements on the seven parcels are subject to Deschutes County Land Use and Building Permits and restrictions. It is assumed that all necessary BLM and Deschutes County permits have been issued to allow current activities to continue.

If more intense agricultural uses occur, as allowed in the MUA or EFU Zones, then Deschutes County Land Use and Building Department Permits and Approvals would be required. Additional BLM utility and access would also be required.

*Alternative 2 – Preferred Alternative:* Permits required for the development of a Destination Resort include a 3-step approval process under the Deschutes County Land Use Code, building permits for each constructed unit under the Deschutes County Building Department, various sewer/water/gas approvals, and approval of right-of-way grants from the BLM. Most approvals, but not necessarily all, are set forth in greater detail below:

- \*Deschutes County Conceptual Master Plan Land Use Approval
- Deschutes County Final Master Plan Land Use Approval
- Deschutes County Site Plan and Tentative Plan Land Use Approvals
- BLM Primary Access Right-of-Way Grant
- BLM Interim Secondary Access Right-of-Way Grant
- BLM Permanent Secondary Access Grant
- BLM Sewer, Water, Power, Telephone, Television, and Possibly Natural Gas Utility Grants
- \*City of Bend Contract Approval for Sewage Treatment and Delivery of Sewage Effluent
- \*Avion Water Company Contract for Domestic Water Supplies
- \*Public Utility Commission Approval of the Avion Water Company Contract
- ODFW Approval of a Wildlife Mitigation Plan for the Destination Resort
- Oregon Health Division Approval for the Domestic Water Supply System
- Oregon Department of Environmental Quality Approval the Sewage Collection and Disposal Facilities
- Deschutes County Road Department Approval of On-Site and Off-Site Roadways
- Deschutes County Surveyor Approval of all Final Plats
- \*Power, Telephone, and Television Company Service Commitments
- \*Redmond Rural Fire Protection District Annexation
- North Unit Irrigation District/BOR Canal Crossing

Those approvals marked with an asterisk have already been received.

*Alternatives 3, 4, and 5:* See the comments for Alternative 2 – Preferred Alternative.

**Effects on Other Plans:** *Alternative 1 – No Action:* Other plans in the vicinity of the proposed Huntington Ranch include the City of Redmond and their plans for relocation of the Juniper Golf Course, expansion of the Redmond Fairgrounds, and other City activities. The BLM is working collaboratively to evaluate land use and transportation systems through a planning effort for the area surrounding the proposed Huntington Ranch Resort.

Under a No Action Alternative, the private land parcel identified for Huntington Ranch development would contribute very little to an overall land use or transportation plan for the area. The seven existing residences, or even more intensive agricultural uses, would be served by existing or previously approved accesses. A more formal primary access and a requirement for a secondary access, would likely lag behind actions by Deschutes County or the City of Redmond in the area.

Under a No Action Alternative, the seven residents on the Huntington Ranch tract would continue to access their property off Highway 97. ODOT has voiced concerns about the safety of the Highway 97 access, relating to high speeds without a deceleration lane or merge facilities. A No Action Alternative does not improve the existing situation.

*Alternative 2 – Preferred Alternative:* A primary access off the Powell Butte Highway and use of the existing Sheridan Road for an interim secondary access would serve the proposed Huntington Ranch Resort without interfering with the continuing collaborative planning process for the area south of the City of Redmond. The preferred alternative would accommodate the Huntington Ranch Resort for an estimated 5 years and would not change opportunities in the Upper Deschutes RMP.

The permanent secondary access for the Huntington Ranch Resort would be expected to coincide with the findings and the conclusions of the BLM Upper Deschutes RMP. The BLM has made a finding of no

significant impact for the relocation of the Juniper Golf Course to BLM lands. The golf course relocation project includes an extension of 19<sup>th</sup> Street southerly to serve the relocated golf course. Further extension of 19<sup>th</sup> Street remains a viable option for the ultimate secondary access for the Huntington Ranch Resort, subject to the thorough review and conclusions of the on going Upper Deschutes RMP.

*Alternative 3:* See above under Alternative 2 – Preferred Alternative.

*Alternative 4:* This alternative would utilize the easterly portion of the Morrill Road, off the Powell Butte Highway, as the primary resort access. Alternative 4 would not interfere with the findings of the Upper Deschutes Resource Management Plan.

*Alternative 5:* See above under Alternative 4.

### ENVIRONMENTAL CONSEQUENCES COMMON TO ALL ACTION ALTERNATIVES:

**Air Quality:** Air quality impacts from equipment exhaust would occur during construction of the resort. The potential for air quality impacts from wind erosion or sediment transfer is of concern. This impact would be minimized by revegetation of disturbed areas as quickly as possible. Dust during construction would be minimized through standard construction watering. Culverts would be installed to maintain natural surface water drainage ways, to prevent the concentration of run-off, and to minimize erosion and sediment transfer.

Vehicles traveling to and from the proposed resort would result in exhaust emissions. Exhaust emissions are regulated under air quality standards to minimize impacts.

**Visual Resources:** The increase in ease of access for vehicles, including sedans, into the BLM managed lands that are currently only accessible to high-clearance, four-wheel drive vehicles would likely increase the amount of dumping of garbage on public lands in the area, particularly on both sides of the paved primary access road close to Powell Butte Highway. In areas of BLM managed lands that are bisected by paved roads with no access controls and no evening patrols, there has been increases in illegal incidents and resource damage. While the presence of a Deschutes County Sheriff deputy at Huntington Ranch may help control the amount of illegal activities in the area, the increase in access to BLM managed lands up to 4 miles away from the resort would likely lead to increased dumping and illegal activities despite the presence of the deputy because these activities generally occur out of view of paved roads and at night.

These illegal activities increase vegetation disturbance, density of roads, and numerous dump sites that detract from the area's visual qualities.

**Wildfire and Public Safety:** The Deschutes County Destination Resort Ordinance stipulates that developments not create the potential for natural hazards and that adequate public safety protection be available. The Deschutes County Hearing's Officer described wild fire hazards and the associated Wild Fire Management Plan prepared by the Huntington Ranch Resort. The Deschutes County Hearing's Officer reviewed testimony from the Redmond Fire Chief and the Deschutes County Sheriff. The Hearing's Officer concluded the required conditions of the County land use ordinance for public safety and fire protection had been met.

The Huntington Ranch Resort and the Redmond Fire Department have entered an agreement whereby the Department would provide an emergency vehicle and staff, and the applicant would provide an on-site fire station to house them. (Reference 8-15-2000 correspondence from the Redmond Fire Chief, available at the BLM office in Prineville) The presence of on-site fire protection equipment and personnel would greatly reduce the response time in the event of a fire on or near the proposed resort. The resort would also provide a domestic water system through which fire protection water is supplied to hydrants throughout the resort. The water supply system would provide a fire protection water supply for emergency crews to serve the entire area.

Hydrants could be considered at off-site locations under special conditions, but fear of vandalism would likely preclude hydrants outside of the resort.

Similarly, the Deschutes County Sheriff committed to provide on-site personnel to improve response time for emergencies at the resort, as well as on surrounding lands. The presence of the Sheriff Department, Fire Department, and resort employees and guests could diminish disruption, dumping, and abuse of adjacent public lands.

**Livestock Grazing:** There may be effects on livestock grazing in the area with any of the action alternatives. The increased human use of the area would increase the potential for gates being left open, and livestock straying into the resort, or onto Highway 97 or the Powell Butte Highway. To mitigate this, the applicant would construct and maintain fencing along the entire BLM/resort boundary. The fence would be three-strand barbed wire (four-strands if adjacent to water or lawns or other attractants), or other design approved by BLM. The applicant would install and maintain 14 foot minimum width cattleguards to BLM specifications at all locations where resort access roads enter/exit public land, where resort access roads cross fences on public land, and where resort access roads cross the irrigation canal. The applicant would install and maintain metal gates, with H-braces on each side, next to each cattleguard. The applicant can attempt to use stripes painted on asphalt, but the BLM can require cattleguards/gates if this is not successful. The applicant would install signs (size, color, and structure approved by BLM), where resort access roads enter public land, stating "Open Range, Watch for Livestock on Road" or other wording approved by BLM.

**Social and Economic Impacts Including Women, Minorities, and Consumers :** The BLM granting of utility and access rights-of-way is necessary for resort development. Without the rights-of-way, the resort development cannot proceed. Development of a resort provides major economic benefits to the entire region, as documented in the report titled Economic Viability and Economic Impacts of Huntington Ranch a Proposed Destination Resort in Deschutes County, Oregon, September 2000 (available in the BLM office in Prineville).

Hobson Ferrarini Associates quotes "As a "basic" industry, tourism is seen as a highly desirable form of economic development, attracting wealth and generating new employment within the region. Based on the proceeding analysis, Huntington Ranch would have a substantial positive economic and fiscal impact on Deschutes County and the greater Redmond area."

The Deschutes County Destination Resort Ordinance requires that a destination resort provide a substantial financial contribution which positively benefits the local economy through the life of the entire project, considering changes in employment, demands for new or increased levels of public service, housing for employees and the effects of loss of resource land. The natural amenities of the resort site, considered together with the identified developed recreational facilities to be provided with the resort, would constitute a primary attraction to visitors, based on the economic feasibility analysis, included in the September, 2000 Hobson report.

The Deschutes County Hearing's Officer reviewed the Hobson economic study and concluded the economic impacts for the proposed resort would be substantial and positive to the local economy. This study, estimated \$315 million to the regional payroll, including \$196 million during the construction phase and \$18 million annually thereafter. The study concludes the proposed resort would have minimal impact on public services compared to the revenue the resort would generate for the County, including property taxes, fees, licenses, and service charges. The study predicts a benefit to Deschutes County service providers of \$19 million over the next 10 years.

The State of Oregon, Deschutes County, and the City of Redmond have voiced support for the proposed Huntington Ranch Resort, in part because of the economic benefits. The development of the Huntington Ranch Resort is expected to generate 1500 full-time equivalent jobs at its peak.

Public testimony in the land use process described concerns for vehicle congestion and noise if access extended to Deschutes Junction. Access to the Powell Butte Highway and north to Redmond were generally acceptable to the public. The benefits of resort development including recreational opportunities, jobs, improved public safety services, and economic impacts were recognized in public testimony.

Women and minorities would benefit from the economic contributions to the regional market place, the considerable number of new jobs, and the diversity of job opportunities at a resort.

**Environmental Justice:** The development of a resort on the subject property would cater to recreational uses, typically enjoyed by higher income families. Visitors and guests at the resort would typically represent people in the highest income brackets. It is expected that the public lands would continue to be accessed and for the current public uses of those lands, however, use of those lands may increase and bring new people into those areas. It is anticipated that those new people would continue to represent a wide range of the public both economically and socially.

### GRAZING PERMIT MODIFICATION

Under the no action and all action alternatives, the BLM would continue to allow 656 AUMs of deferred rotation livestock grazing in the Crenshaw Allotment. Under Alternative 2, the grazing permittee would be allowed to graze cattle or horses or both, offering maximum management flexibility. Alternatives 1 and 3 offer less management flexibility, in that the grazing permittee is allowed to graze only horses or cattle, respectively. Under Alternative 1, and to a lesser extent Alternative 2, horses may graze native grasses closer to the ground than would cattle alone in Alternative 3. This heavier grazing has the potential to reduce grass vigor and reproduction.

Limiting the stocking rate and length of time in each pasture for those alternatives allowing horses would mitigate this impact. Reductions would be made immediately if monitoring indicates grazing is exceeding 50 percent in any one pasture, or is approaching “severe” use on more than a few plants. This may mean that the permittee would not always be able to use all AUMs allocated on the permit.

### CUMULATIVE IMPACTS

**Past, Present, and Reasonably Foreseeable Future Activities:** Past applications for the Huntington Ranch tract have included an access right-of-way for the existing seven residents. The original access grant is included in this document as an alternative for present access and utility needs. As noted, a future permanent secondary access would be solicited. The proposed access and utilities would support a new resort development. This new development would create activities on a private land parcel that is currently occupied by seven families. The BLM parcels being crossed are currently bounded by the existing Powell Butte Highway to the east, existing residential development to the south, Highway 97 and tracts of private land to the west, and the City of Redmond urban area to the north and northwest.

The area surrounding the proposed resort project is being used for and being considered for numerous activities, including but not limited to the 19<sup>th</sup> Street extension, Fairgrounds expansion, OMD maneuvers, and future subdivision development. Urbanization from the City of Redmond is extending southerly, creating proposals for City of Redmond expansion areas.

The private Huntington Ranch LLC land parcel has been designated by Deschutes County for resort development. Impacts associated with development would occur regardless of the specific access alternative. BLM does not control development of private lands. The cumulative impacts of the proposed action are described below:

**Noise and Air Pollution:** This project would contribute to noise and air pollution. However, this project has been approved through the Conceptual Master Plan approval process with Deschutes County. Future developments in the area would have to follow similar land use processing with Deschutes County and address approval criteria related to noise and air pollution impacts.

**Water Resources:** The use of the water rights already granted to Avion Water Company to supply water to the Huntington Ranch Resort may reduce future water rights available to other developments.

**Wildlife:** The following is the cumulative impacts section from Short-term, Long-term and Cumulative Impacts of the Huntington Ranch Destination Resort Development on Pronghorn Antelope prepared by Gary Hostick, August, 2001.

*“The cumulative impacts of the resort could potentially result in primarily two measurable changes to the antelope herd in the area: (1) antelope could permanently move out of habitat in the general area of the resort, or (2) the numbers of antelope in the herd range could be reduced to some lower number (George, Schmidt, Zalunardo, pers. comm.). Therefore, an evaluation of cumulative impacts is basically the estimation of the possibility of either of these two changes occurring. For this report, an evaluation of a low cumulative impact is interpreted as a low possibility that antelope would move out of the area of the new resort permanently, although there may be a short-term reduction in numbers of antelope in the area during the initial construction period; and that the population would not be permanently reduced significantly. A medium cumulative impact would mean that fewer antelope would remain in the area of the resort, and that the population would be reduced to some moderately lower number. A high cumulative impact would mean that the antelope would be expected to move out of a significant area of the habitat around the resort, and that the antelope population within the herd range would be reduced significantly. For purposes of this report, a "significant area of the habitat around the resort" is defined as an area of 14 square miles in a radius around the resort, which would reduce the antelope herd range by 20 percent. A "significant reduction in the herd" would be defined as a reduction of 50 percent in the number of antelope within the herd range, a "moderate reduction in the herd" would be defined as less than a 25 percent reduction in the number of antelope in the herd range, and "no significant reduction" would be defined as antelope numbers in the herd range staying within the range of fluctuation as measured during the past 5 years by ODFW surveys (calendar years 1996-2000.)*

*It is possible that short-term impacts could result in short-term significant changes in the habitat use by the antelope, and a short-term reduction in antelope numbers in the herd range. However, as antelope become habituated to the change in habitat from the new resort, they may move back into habitat areas vacated for the short-term, and numbers could again increase to former levels. Although judgments as to the length of time an impact would be described as short-term is largely up to local biologists, experiments in Utah with loud noises such as jet flyovers indicated that the ungulate species being tested (which included antelope) habituated to the new noise after only four passes by the jets (Bunch et al 1993.) Therefore, it is possible that the antelope may return to forage areas and continue to move through the habitat near the rear the resort area within only a few days of new noises or construction activities being introduced.”*

*...If the indicated actions are taken, then it is believed that the cumulative impact of the resort on the antelope would be low. If the antelope do move away from the new human activity and construction near and within the resort for a period of time, it is believed that the antelope would move back into habitat adjacent to the resort after a period of habituation. If no significant area of habitat is lost beyond the square mile of resort development, no significant reduction in antelope numbers in the herd range is to be expected.”*

*Similarly, the conclusion of the Biological Evaluations conclusion has been prepared by Mr. Ed Styskel, August 2001 states "The project proposed would have no effect on any Federal listed endangered and threatened species or designated critical habitat. With the identified mitigation measures, the project would not significantly affect populations, individuals, or suitable habitat for any State-listed or State-sensitive species."*

In addition to the report on antelope a BE was done on the project. The BE outlines the effects on wildlife of the proposed project. Both reports are available at the BLM office in Prineville.

**Recreation:** The proposed access and utility rights-of-way, eventual development of a permanent secondary access, development of the resort, continued OMD operations, and other existing planned and permitted subdivisions adjacent to this block of BLM managed lands may likely limit the ability of the area to accommodate OHV activities, particularly in an area designated as "open." The cumulative impact of these activities may increase user conflicts, or public safety issues to warrant limiting cross-country travel (BLM National OHV Strategy, 2001). Large tracts of BLM managed lands designated as "open" for OHV activity are generally being diminished in central Oregon.

The addition of approximately 4.5 miles of paved roads could have impacts on the recreation in this area. The area's current condition is relatively good compared to other areas with greater motorized vehicle access. The paved road could result in increased user created roads and trails and a general increase in all public activities, including dumping and target shooting.

### MONITORED MITIGATION MEASURES

**Wildlife:** The applicant is obligated to mitigate wildlife impacts through an agreement with the ODFW and the mitigations contained in the Biological Evaluation and outlined in this EA.

**Recreation:** The resort developers initiated discussions with the Sheriff's Department and subsequently came to an agreement to construct a Sheriff's facility on resort property (See Appendix B). This cooperative law enforcement agreement indicates that law enforcement resources would be applied to BLM lands as well as the resort property.

Mitigation would include a combination of fencing and road closures. Consideration would be given to creation of a designated road system in the area, with the assistance from the project proponents in ripping and reseeding roads that would minimize the creation of additional routes and widespread resource impacts.

**Visual Resources:** BLM would work with Huntington Ranch LLC and a designated liason of Huntington Ranch to organize and conduct annual or biannual clean-ups on the public lands.

### NO IMPACT ITEMS

The following elements were considered but would not be addressed because they do not exist in the project area.

1. Hazardous Materials
2. Floodplains
3. Wetlands/Riparian Areas
4. Wild and Scenic Rivers
5. Prime or Unique Farm Land
6. Wilderness
7. Paleontological Resources

8. Fisheries
9. Threatened or Endangered Species
10. Special Status Plants

## CONSULTATION AND COORDINATION

### PERSONS AND AGENCIES CONSULTED:

1. George Kolb, Deschutes County Public Works
2. Bob Bryant, Oregon Department of Transportation
3. Julie Kuhn, Kittelson & Associates
4. Lynn Sharp, URS Griener, Woodwood, Clyde
5. Larry Zakrajsek, BOR
6. Robert Latimer, PG&E National Energy Group
7. Thomas A. Walker, P.E., Civil Engineer, W&H Pacific
8. George Reed, Deschutes County Planning
9. Randy Davis, Redmond Fire District
10. Sally Bird, Confederated Tribes of the Warm Springs Reservation of Oregon
11. Scott Freshwaters, Deschutes County Road Department
12. Sgt. Major Gerald E. Elliot, Oregon Military Department
13. Maj. Bill McCaffrey, Oregon Military Department
14. Terry Campos, National Heritage Program, State of Oregon
15. Chuck Schonkeker, North Unit Irrigation District
16. David Ellis, Archeological Investigations Northwest, Inc.
17. Gary Hostick, Ecological Services, Inc.
18. Ed Styskel, Ecological Services, Inc.
19. Scott Denney, Huntington Ranch

### PREPARERS (BLM)

1. Robert Towne, Field Manager
2. Ron Wortman, Realty Specialist
3. Teal Purrington, Rangeland Management Specialist
4. Janet Hutchison, Project Manager
5. Greg Currie, Recreational Planner
6. JoAnne Armson, Natural Resources Technician
7. Ron Gregory, Archeologist
8. Ron Halvorson, Botanist
9. Paul Schmidt, Wildlife Biologist
10. Mollie Chaudet, Upper Deschutes RMP/EIS
11. Steve Castillo, Forest Practices
12. Jean Nelson-Dean, District Planning and Environmental Coordinator
13. Sue Stewart, Fire Ecologist
14. Bill Pieratt, District Weed Program Coordinator
15. John Hanf, Natural Resource Staff Leader
16. Bill Dean, Wildlife Biologist

REFERENCES

(Available at the BLM office: 3050 NE 3<sup>rd</sup> Street, Prineville, OR 97754)

- Reference A: Kittelson & Associates, Traffic Study
- Reference B: Sewer and Water Master Plan Reports for Huntington Resort
- Reference C: Hobson and Ferrarini Associates, Economic Study
- Reference D: Huntington Ranch, Deschutes County Conceptual Master Plan Land Use Decision
- Reference E: Short-Term, Long-Term and Cumulative Impacts of the Huntington Ranch Destination Resort Development on Pronghorn Antelope.
- Reference F: Biological Evaluation, Huntington Ranch Resort
- Reference G: Cultural Resources of the Huntington Ranch Development Area: Interactive Review and Records Search, Deschutes County, Oregon
- Reference H: Miscellaneous Correspondence and Documents

APPENDICES

- Appendix A: Biological Evaluation
- Appendix B: Law Enforcement Agreement Between Huntington Ranch and Deschutes County Sheriff
- Appendix C: Legal Descriptions of Alternatives

EXHIBIT ATTACHMENTS

- Exhibit A: Land Ownership and Vicinity Maps
- Exhibit B: Topographic Map Showing Proposed Alternatives
- Exhibit C: Alternatives Map Memo (2 pages)
- Exhibit D: BLM Botanical Evaluation (4 pages)
- Exhibit E: Redmond Fire Marshal Letter
- Exhibit F: State of Oregon Nature Conservancy Letters
- Exhibit 2-1 (A) Map of the Central Oregon Training Sites

/s/Robert B. Towne                      08-22-01  
Responsible Official/Date

NEPA Requirements adequately met:                      /s/ JC Hanf                      08-22-01  
Environmental Coordinator/Date