QUAIL RIDGE RESERVE ROAD CONNECTOR

Initial Study and
Proposed Negative Declaration

The following Initial Study has been prepared in compliance with CEQA.

Prepared By:

OFFICE OF RESOURCE MANAGEMENT AND PLANNING

University of California
One Shields Avenue
376 Mrak Hall
Davis, California 95616

April 2007

Contact: A. Sidney England, UC Davis Director of Environmental Planning
530-752-2432
# TABLE OF CONTENTS

1  **PROJECT INFORMATION**  

2  **INTRODUCTION**  
   2.1 Initial Study  
   2.2 Initial Study Process  
   2.3 Public and Agency Review  
   2.4 Project Approvals  
   2.5 Organization of the Initial Study  

3  **PROJECT DESCRIPTION**  
   3.1 Regional Location  
   3.2 Project Overview  
   3.3 Project Site  
   3.4 Project Need and Objectives  
   3.5 Project Elements  
   3.6 Construction Schedule and Staging  

4  **ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED**  

5  **DETERMINATION**  

6  **EVALUATION OF ENVIRONMENTAL IMPACTS**  
   6.1 Aesthetics  
   6.2 Agricultural Resources  
   6.3 Air Quality  
   6.4 Biological Resources  
   6.5 Cultural Resources  
   6.6 Geology, Soils, & Seismicity  
   6.7 Hazards & Hazardous Materials  
   6.8 Hydrology & Water Quality  
   6.9 Land Use & Planning  
   6.10 Mineral Resources  
   6.11 Noise  
   6.12 Population & Housing  

UCDavис  Quail Ridge Road Extension  i
6.13 Public Services 41
6.14 Recreation 43
6.15 Transportation, Circulation, & Parking 44
6.16 Utilities & Service Systems 46
6.17 Mandatory Findings of Significance 48

7 FISH & GAME DETERMINATION 49
8 REFERENCES 50
9 AGENCIES & PERSONS CONSULTED 51
10 REPORT PREPARERS 51
11 PROPOSED NEGATIVE DECLARATION 52

LIST OF FIGURES

Figure 1. Regional Location 5
Figure 2. Surrounding Area 6
Figure 3. Project Site Plan 7
1 PROJECT INFORMATION

Project title:

Quail Ridge Road Extension

Project location:

Quail Ridge Reserve. Township 08 North, Range 03 West, Section 36; Mt. Diablo Base. Napa County

Lead agency’s name and address:

University of California
Office of Resource Management and Planning
One Shields Avenue
376 Mrak Hall
Davis, CA 95616-8678

Contact person:

A. Sidney England, UC Davis Director of Environmental Planning, 530-752-2432

Project sponsor’s name and address:

See lead agency.

Location of administrative record:

See lead agency.

Availability of environmental analysis:

The Proposed Negative Declaration and Initial Study are available for review at the following locations:

- UC Davis Office of Resource Management and Planning in 376 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus
- Napa County Main Library at 580 Coombs Street in Napa
- Online at http://www.ormp.ucdavis.edu/environreview/
2 INTRODUCTION

2.1 INITIAL STUDY

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an EIR, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The CEQA Guidelines require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project’s consistency with existing, applicable land use controls, and the name of persons who prepared the study.

2.2 INITIAL STUDY PROCESS

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed project to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section 6 of this document, and based on the analysis contained in this Initial Study, it has been determined that the proposed project would not result in any potentially significant impacts that cannot be mitigated to less-than-significant levels. The analysis contained in this Initial Study concludes that the proposed project would result in the following categories of impacts, depending on the environmental issue involved: no impact or less-than-significant impact. The project would not result in potentially significant impacts. Therefore, preparation of a Negative Declaration is appropriate (the Proposed Negative Declaration is presented in Section 11).

2.3 PUBLIC AND AGENCY REVIEW

The Proposed Negative Declaration and Initial Study will be circulated for public and agency review from April 11, 2007 to May 11, 2007. Copies of this document, the 2003 LRDP, and the 2003 LRDP EIR are available for review at the following locations:

- UC Davis Office of Resource Management and Planning in 376 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus
- Napa County Main Library at 580 Coombs Street in Napa

Comments on the Proposed Negative Declaration and Initial Study must be received by 5:00 PM on May 11, 2007 and can be e-mailed to environreview@ucdavis.edu or sent to:

John A. Meyer  
Vice Chancellor - Resource Management and Planning  
University of California  
One Shields Avenue  
376 Mrak Hall  
Davis, CA 95616
2.4 **PROJECT APPROVALS**

As a public agency principally responsible for approving or carrying out the proposed project, the University of California is the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of the environmental document and approving the proposed project. The State of California Department of Fish & Game is a responsible agency for the proposed project. It is anticipated that the University of California will consider approval of the proposed project in May 2007.

2.5 **ORGANIZATION OF THE INITIAL STUDY**

This Initial Study is organized into the following sections:

**Section 1 – Project Information:** provides summary background information about the proposed project, including project location, lead agency, and contact information.

**Section 2 – Introduction:** summarizes the scope of the Initial Study document, the project's review and approval processes, and the document's organization.

**Section 3 – Project Description:** includes a description of the proposed project, including the need for the project, the project's objectives, and the elements included in the project.

**Section 4 – Environmental Resources Potentially Affected:** identifies which environmental resources, if any, involve at least one significant or potentially significant impact that cannot be reduced to a less-than-significant level.

**Section 5 – Determination:** indicates whether impacts associated with the proposed project are significant, and what, if any, additional environmental documentation is required.

**Section 6 – Evaluation of Environmental Impacts:** contains the Environmental Checklist form for each resource area. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project with respect to the 2003 LRDP EIR. This section also presents a background summary for each resource area, the standards of significance, relevant impacts and mitigation measures from the 2003 LRDP EIR, and an explanation of all checklist answers.

**Section 7 – Fish and Game Determination:** indicates if the project has a potential to impact wildlife or habitat and if an associated Fish and Game filing fee would be paid.

**Section 8 – References:** lists references used in the preparation of this document.

**Section 9 – Agencies and Persons Consulted:** provides the names of individuals contacted in preparation of this document.

**Section 10 – Report Preparers:** lists the names of individuals involved in the preparation of this document.

**Section 11 – Proposed Negative Declaration:** presents the Proposed Negative Declaration for the project.
3 PROJECT DESCRIPTION

3.1 REGIONAL LOCATION

Quail Ridge Reserve (Reserve) comprises about 2,000 acres in Napa County, approximately 65 miles northeast of San Francisco and 40 miles west of Sacramento on the south shore of Berryessa Reservoir (Figure 1). The Reserve is one of 35 Natural Reserves administered by the University of California’s Natural Reserve System (NRS). Established in 1991 with 600 acres of land, the Reserve has since been expanded to nearly 2000 acres. It lies on a peninsula formed by the creation of the Berryessa Reservoir. Due to its isolation it retains many elements of the native flora of this region and is available for teaching and research uses through the NRS.

The Reserve is a patchwork of parcels under varied ownership, including the UC Regents, the Quail Ridge Wilderness Conservancy (QRWC), the US Bureau of Reclamation, the US Bureau of Land Management, and the California Department of Fish and Game. The Reserve is managed by UC Davis NRS, and the Napa Valley Land Trust holds conservation easements on many of the properties. The peninsula also includes privately owned parcels that are not part of the Reserve.

3.2 PROJECT OVERVIEW

The NRS proposes to construct a dirt connector road 12 feet wide and approximately 1,500 feet long. The dirt road would connect two existing roads in order to improve site access at the Reserve. Access on a dirt road is needed in order to provide site managers and researchers with a route to distant locations on the 2,000-acre Reserve. The Reserve is accessed from Highway 128 on two deeded easement roads, one on the eastern and one on the western edge of the property. On both of these roads, private parcels must be traversed before accessing the reserve and access has previously been accommodated through an access easement allowing property owners to have reciprocal access through various parcels. These private parcels border the south of the reserve; the remainder of the reserve perimeter runs to the shore of Berryessa Reservoir. The reserve is used for University natural resource research and teaching, and for public outreach programs by the Quail Ridge Wilderness Conservancy.

The proposed connector road would allow reserve personnel to drive to properties in the northwest portion of the reserve, which are currently inaccessible by vehicle. Access to the northwest portion of the reserve was previously allowed across land that did not include an access easement and access permission through this land is no longer available. The proposed road would circumvent those properties and would provide permanent access to the northwest portion of the reserve. The proposed road would be located on land owned by California Department of Fish & Game and would be constructed and maintained by the University of California through an existing management agreement.

The proposed road would connect a road along the central ridge of the Reserve, the Ridge Road, with the eastern easement road. The 1,500 foot route follows a rocky ridge through chamise chaparral. No removal of healthy, mature, or scenic trees would occur. The route is entirely on Bressa-Dibble Complex soils and will not exceed 20% slope. The connector road would be used infrequently (approximately once per week) but is considered critical to the management of the Reserve in order to allow reserve access for checking site conditions and research projects at the Reserve.
3.3 **PROJECT SITE**

The proposed road would be within the Reserve, approximately 2 miles from the east entrance. The proposed project area is unimproved wildlands with dense chamise vegetation. The project site is a ridgetop and includes no healthy, mature, or scenic trees. The project site is not visible from common public viewpoints. The project site is not considered agricultural land and is not subject to Napa County zoning or general plan land use control. The proposed road is consistent with the management practices of the Reserve.

3.4 **PROJECT NEED AND OBJECTIVES**

The proposed project would provide access to an area that is currently inaccessible by vehicle. Objectives of the project include:

- the opportunity to patrol portions of the reserve to prevent illegal hunting and access;
- maintenance and improvement of the existing easement road that is currently inaccessible to the University and emergency egress for people at the Quail Ridge Reserve; and
- access for teaching and research use to the northwest portion of the Quail Ridge Reserve.

3.5 **PROJECT ELEMENTS**

3.5.1 **Roadways and Parking**

The project consists solely of an unimproved dirt road approximately 12 feet wide to be constructed either when the soil has partially dried in the spring or in the fall after the first rains. The road will be approximately 1,500 feet in length and will connect two existing roads. The road will generally not be steep and will contain no section with a slope greater than 20 percent. The road will be engineered to reflect site specific soil conditions with an adequate cross slope for drainage purposes. Dirt roads at the reserve typically do not result in an on-going erosion problem due to the narrow width of the roads, the low volume of vehicle traffic on the roads, and the suitability of the soil for lightly traveled access roads. The proposed project will provide no parking areas.

The construction contractor for the project would construct the project under a construction contract that requires compliance with air quality and stormwater management specifications, including means to reduce dust by watering during ground-disturbing activities to reduce dust and siltation; and using temporary physical barriers such as fiber rolls to protect against runoff and erosion. The proposed project would include site watering of active construction areas if the areas are accessible to a watering truck and if visible dust emissions are apparent. Depending on soil moisture levels, site watering may not be needed. The construction contract would also include specifications for construction management techniques to minimize risk of fuel or other hazardous material spills during construction of the project.

Personnel with firefighting equipment will be on site during construction for ready response to any fire breakout.

3.5.2 **Landscaping**

The project will include no new landscaping but it will result in the removal of dense vegetation.
3.5.3 **Utilities and Infrastructure**

The proposed project would include no utilities improvements and would not affect existing utilities.

3.5.4 **Population**

The proposed project would result in no population change to the Reserve.

3.6 **Construction Schedule and Staging**

Construction of the proposed project is anticipated to begin as early as spring 2007 and would require three to five days of continuous construction activity after the rainy season and before the fire season. If construction is not completed in spring 2007, it would take place in the fall 2007 or spring 2008.
4 ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The environmental resources, if checked below, would be potentially affected by this project and would involve at least one impact that is a significant or potentially significant impact that cannot be reduced to a less-than-significant level as indicated by the checklist on the following pages.

☐ Aesthetics ☐ Agricultural Resources ☐ Air Quality

☐ Biological Resources ☐ Cultural Resources ☐ Geology, Soils & Seismicity

☐ Hazards & Hazardous Materials ☐ Hydrology & Water Quality ☐ Land Use & Planning

☐ Mineral Resources ☐ Noise ☐ Population & Housing

☐ Public Services ☐ Recreation ☐ Transportation, Circulation & Parking

☐ Utilities/Service Systems ☐ Mandatory Findings of Significance

As indicated in the checklist above and based on the analysis presented in this Initial Study, it has been determined that for all resource areas, the proposed project would not result in any significant impacts. The project would require no project-specific mitigation measures and the Proposed Negative Declaration is included in Section 11 of this Initial Study.
5 DETERMINATION

On the basis of this initial evaluation:

☑ The proposed project COULD NOT have a significant effect on the environment and no mitigation measures are required. A NEGATIVE DECLARATION will be prepared. The proposed Negative Declaration is included in Section 11.

☐ The proposed project COULD have a significant effect on the environment, and [a] project-specific mitigation measure[s], [is/are] required to reduce this effect to such a point that clearly no significant impact would occur. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a potentially significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared to address new potential impact(s).
6 EVALUATION OF ENVIRONMENTAL IMPACTS

Introduction

The following Environmental Checklist form is based on the checklist suggested in Appendix G of the CEQA Guidelines, and it has been adapted to assist in evaluating the environmental effects of the proposed project.

The Environmental Checklist identifies potential project effects as corresponding to the following categories of impacts:

- **Potentially Significant Impact**: An effect that may be significant based on substantial evidence and the appropriate significance criteria. If the project may result in one or more Potentially Significant Impacts, an EIR is required. This Initial Study does not identify any potentially significant impacts, and therefore, no EIR is required.

- **Less than Significant with Mitigation Incorporated**: An effect that with the implementation of project-specific mitigation measures, is reduced from potentially significant to less than significant. This Initial Study does not identify any potentially significant impacts; therefore, no project-specific mitigation measures are required.

- **Less than Significant Impact**: An effect for which only less-than-significant impacts result.

- **No Impact**: The project does not create an impact.
## 6.1 AESTHETICS

### 6.1.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to aesthetic resources and provides a description of the existing conditions at the project site and surrounding area.

**Project Site**

The project site is not visible from publicly accessible areas. The proposed project would result in a new dirt road of approximately 1,500 feet. The road would be typical of the existing roads in the Reserve.

### 6.1.2 Standards of Significance

This Initial Study considers an aesthetic impact significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista.
  
  A scenic vista is defined as a publicly accessible viewpoint that provides expansive views of a highly valued landscape.

- Substantially degrade the existing visual character or quality of the site and its surroundings.
  
  For the property, this standard is interpreted in terms of the effect of the proposed project on the any areas of high visual quality or unique visual interest at the project site.

- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

### 6.1.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>AESTHETICS</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to,</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>trees, rock outcroppings, and historic buildings within a state scenic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>highway?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>site and its surroundings?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>affect day or nighttime views in the area?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a,b,c) The proposed project would not be visible from publicly accessible viewpoints and would not affect a scenic vista. The project is not located near a state scenic highway. Therefore, no impact would occur.
d) The project would not result in a light or glare impacts. The proposed connector road would include no lighting and would be surfaced with dirt. No impact would occur.

**Summary**

The proposed project would not exceed the stated standards of significance for aesthetic resources. A potentially significant impact would not occur and no mitigation measures are proposed.
6.2 **Agricultural Resources**

### 6.2.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to agricultural resources and provides a description of the existing conditions at the project site and surrounding area.

**Project Site**

The project site is dense chamise chaparral and is not considered agricultural land. The site lies within a 2,000 acre area managed for natural teaching and research uses of natural resources.

### 6.2.2 Standards of Significance

This Initial Study considers an agricultural impact significant if the project would:

- Convert prime farmland, unique farmland or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to nonagricultural use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland considered prime, unique, or of statewide importance to nonagricultural use.
- Conflict with existing zoning for agricultural use or a Williamson Act contract.

### 6.2.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th><strong>Agricultural Resources</strong></th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a,b,c) The project would result in no conversion of existing farmland to other uses and would have no effect on Williamson Act contracts. The proposed connector road would be located in an area that is not suitable for agriculture and is managed for natural resource teaching and research. No impact would occur.

**Summary**

The proposed project would not exceed the stated standards of significance for agricultural resources. A potentially significant impact would not occur and no mitigation measures are proposed.
6.3 Air Quality

6.3.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to air quality and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The proposed project would include emissions from construction equipment during the construction of the proposed road. The construction would take approximately 3 to 5 days and would include the use of a bulldozer during most of that period. Upon completion, the connector road would be used approximately once per week and with vehicles traveling at low speed.

6.3.2 Standards of Significance

This Initial Study considers an air quality impact significant if the project would:

Criteria Pollutants

- Conflict with or obstruct implementation of the applicable air quality plan.
- Conflict with the Bay Area Air Quality Management District (BAAQMD) Guidelines for control of construction related PM\textsubscript{10} emissions.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation. (According to the BAAQMD, operational emissions of NO\textsubscript{x}, ROG, or PM\textsubscript{10} in excess of 15 tons per year would be considered significant.)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

Toxic Air Contaminants

- Contribute to the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeding the AB 2588 and Proposition 65 threshold of 10 in one million.
- Result in a noncarcinogenic (chronic and acute) health hazard index greater than the AB 2588 threshold of 1.0.
### 6.3.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>AIR QUALITY</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td>☑</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>d) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) Create objectionable odors affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

#### a,b,c) Construction

Construction of the proposed road would include emissions from construction equipment which is expected to consist of a bulldozer operating for approximately 3 to 5 days. Dust emissions during the construction period are expected but these are expected to be minimal because of the short duration of the construction period and the project timing, which would be in either the spring or fall when the soil is moist. In addition, the rural nature of the project site would result in no concentrated dust exposure to the public. The following dust control measures are included the BAAQMD CEQA Guidelines for projects less than four acres (BAAQMD 1999).

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

These measures are largely unnecessary or not feasible for the proposed project. Site watering could not occur until after a road is constructed at which time, the benefit of watering the road would be very minimal because the construction activity would be largely completed. The other listed dust control measures are more appropriate for construction projects that require hauling of loose material and for larger construction sites with paved areas. As stated in the project description, the proposed project would include site watering of active construction areas if the areas are accessible to a watering truck and if visible dust emissions are apparent. Depending on
soil moisture levels, site watering may not be needed. During construction, the potential effect on dust emissions and criteria pollutants emissions would be less-than-significant.

**Operation**

During operation of the connector road, vehicle emission and dust emissions are expected to be minimal because the dirt road will be used infrequently by low-weight vehicles traveling at low speeds. During operation, the potential effect on dust emissions and criteria pollutants emissions would be less-than-significant.

d,e) The proposed project would not be located near any sensitive receptors (such as schools or day care centers) and would result in no emissions of odors. No impact would occur.

**Summary**

The proposed project would not exceed the stated standards of significance for air quality. A potentially significant impact would not occur and no mitigation measures are proposed.
6.4 BIOLOGICAL RESOURCES

6.4.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to biological resources and provides a description of the existing conditions at the project site and surrounding area.

Project Site

Habitat at the project site consists of mature chaparral dominated by chamise (Adenostoma fasciculatum), with individuals of manzanita (Arctostaphylos manzanita), toyon (Heteromeles arbutifolia), scrub oak (Quercus berberidifolia), California bay (Umbellularia californica), and pitcher sage (Lepichinia calycina). The age of the shrubs on the site has not been determined; however, it is clear that the area has not burned or been otherwise disturbed in many years. Because the overstory shrubs are dense and often 3-5 meters tall, and because the soil is very rocky along the proposed route, the herbaceous understory is limited to a few small individuals of common plants. The California Natural Diversity Database was checked to identify special status species that potentially could occur on the project site. The site was surveyed in June and November 2006 by a qualified botanist for the listed plant species of concern and none were found (Boucher, pers. comm.). Also, no habitat suitable for potential special status species was found on the site. The following special status wildlife species could occur on or in the vicinity of the proposed project site.

Special Status Species

Bald Eagle – The Bald Eagle is listed as a threatened species under the Federal Endangered Species Act (FESA) and as endangered under California state listings. Bald Eagles have been reported in the area of Berryessa Reservoir, including a nesting attempt north of the reserve in 1992. Bald Eagles have been seen flying over the Reserve.

Golden Eagle – The Golden Eagle is a state species of concern. Golden Eagles have been reported around Berryessa Reservoir and have been observed flying over the Reserve.

Valley Elderberry Longhorn Beetle (VELB) – The VELB (Desmoceros californicus dimorphus) is listed as a threatened species under the Federal Endangered Species Act (FESA). This species requires its host plant, the Mexican elderberry shrub (Sambucus spp.), for its complete life cycle. The USFWS considers all elderberry shrubs within the historic range of VELB (the Central Valley and foothills up to 2,000 feet) as potential habitat for this species. Some mature elderberries occur on the Reserve, but a systematic survey for VELB exit holes has not been done. Casual observation has not resulted in any observations. No elderberry shrubs occur on or near the project site.

Western Pond Turtle – The Western Pond Turtle is a state species of concern and is known to occur on the reserve in close proximity to the reservoir.

6.4.2 Standards of Significance

This Initial Study considers a biological resources impact significant if the project would:
- Result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS).

- Result in the “take” (defined as kill, harm, or harass) of any listed threatened or endangered species or the habitat of such species.

- Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.

- Result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, or coastal wetland) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish, or wildlife species or with established native, resident, or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any applicable local policies protecting biological resources such as a tree protection policy or ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

### 6.4.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>BIOLOGICAL RESOURCES</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b)</td>
<td>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c)</td>
<td>Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d)</td>
<td>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e)</td>
<td>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

- [x] No
- [ ] Yes
- [ ] No Data
- [ ] Not Applicable

**a) Plants**

A comprehensive plant species list has been compiled for the Reserve by the Director of the UC Davis Herbarium. No candidate, sensitive, or special-status plant species have been identified on the Reserve. Candidate, sensitive, or special-status plant species have been identified around the Reserve; however, none of the habitat conditions required by these species occur on the project site.

**Wildlife**

**Bald and Golden Eagles:** There are no trees over approximately 20 feet in height in the area of the project site, which is on a ridgetop, and no trees that are suitable for perching or nesting by these birds.

**VELB:** There are no elderberry shrubs, the habitat species for the VELB, on or near the project site.

**Western Pond Turtle:** There is no water or suitable habitat on or near the project site.

This impact would be less than significant because the project area would not have a substantial adverse effect on any species identified as candidate, sensitive or special-status.

**b,c) Plant communities near the project site include Interior Live Oak; Blue Oak; Interior Live Oak/Blue Oak; Scrub Interior Live Oak/Scrub Oak; and chamise chaparral. The proposed project site is entirely chamise chaparral with no proximity to any riparian, wetland, or other sensitive natural communities. The nearest wetland and riparian areas are over a mile away from the project site. Additionally, the project will be engineered and constructed to minimize erosion and runoff. Please see Section 6.8, Hydrology, items c,d,e) for more information about runoff minimization. These impacts would be less than significant.**

**d) The project would not affect movement of native resident and migratory fish and wildlife through the project site. The project footprint is small (approximately four-tenths of an acre), and it is a narrow, linear feature that should not adversely impede movement of the small number of resident animals, mostly small rodents, that would be affected. The impact would be less than significant.**

**e) The project site does not have any trees that would be disturbed as a result of undertaking the proposed project. No impact would occur.**

**f) There is no adopted Natural Community Conservation Plan (NCCP) or Habitat Conservation Plan (HCP) for Napa County. Therefore, the proposed project would not conflict with an adopted NCCP or HCP. No impact would occur.**

**Summary**

The proposed project would not exceed the stated standards of significance for biological resources. A potentially significant impact would not occur and no mitigation measures are proposed.
6.5 Cultural Resources

6.5.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to cultural resources and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The project site lies within the Reserve, which is in the ethnographic territory of the Patwin, who used the area for hunting and gathering. The project site lies atop a rocky ridge in dense chaparral. The entire length of the proposed project was surveyed by a qualified archaeologist in November 2006 (Pacific Legacy, 2006). There are no historic resources on the project site. No cultural materials were identified in the project area, including archaeological sites, isolated artifacts or features, or cultural materials. Additionally, no concerns were expressed by local Native American individuals or groups when they were contacted by the surveying archaeologists (Pacific Legacy, 2006).

6.5.2 Standards of Significance

Archaeological Resources

This Initial Study considers an impact on archaeological resources significant if the project would:

- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guideline § 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

A “unique archaeological resource” is defined under CEQA through Public Resources Code Section 21083.2(g). A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it meets one of the following criteria:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions and there is a demonstrable public interest in that information, or
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type, or
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

For a resource to qualify as a unique archaeological resource, the agency must determine that there is a high probability that the resource meets one of these criteria without merely adding to the current body of knowledge (PRC § 21083.2(g)). An archaeological artifact, object, or site that does not meet the above criteria is a nonunique archaeological resource (PRC § 21083.2(h)). An impact on a nonunique resource is not a significant environmental impact under CEQA (CEQA Guidelines § 15064.5(c)(4)). If an archaeological resource qualifies as a historical resource under CRHR or other criteria, then the resource is treated as a historical resource for the purposes of CEQA (CEQA Guidelines § 15064.5(c)(2)).
Section 15064.5 of the CEQA Guidelines assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC § 5097.98. California Health and Safety Code § 7050.5(b) prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC § 5097 procedures.

**Historical Resources**

This Initial Study considers an impact on historical resources significant if the project would:

- cause a significant adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5.

The standards of significance for historical resources are based on Appendix G and § 15064.5 of the CEQA Guidelines. Accordingly, historical resources include resources listed in, or determined to be eligible for listing in, the CRHR; resources included in a qualifying local register (such as the City of Davis Register of Historic Resources); and resources that the lead agency determines to meet the criteria for listing in the CRHR. These criteria may apply to any historic built environmental feature, and to historic or prehistoric archaeological sites. Properties or sites that are eligible for inclusion in the CRHR are termed “historical resources.” Under the provisions of CEQA Guidelines § 15064.5(a)(3), generally a lead agency should find that a property is historically significant if it determines that the property meets one or more of the criteria for listing on the CRHR, which extend to any building, structure, feature or site that:

- is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- is associated with lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history

With few exceptions, to qualify as a historical resource a property must be at least 50 years old and also must retain physical integrity and integrity to its period of significance. For historic structures and buildings, significantly altering the setting, remodeling, or moving the structure may diminish or destroy its integrity. However, under some conditions, a building that has been moved or altered may still retain its historic significance. Landscaping or landscape features may in some cases contribute to the significance of an historic architectural property. Such elements would be assessed as part of the evaluation of the related historic architectural property. Archaeological sites may also qualify as historical resources under CEQA Guideline Section 15064.5(a)(3). Archaeological sites most often are assessed relative to CRHR Criterion D (for potential to yield data important to history or prehistory). An archaeological deposit that has been extensively disturbed and archaeological artifacts found in isolation may not be eligible for listing on the CRHR, because the lack of stratigraphic context may reduce the potential for the resource to yield significant data. A resource that does not meet one of the criteria for eligibility to the CRHR is not a historical resource under CEQA, and impacts to such a property are not significant.
Paleontological Resources

This Initial Study considers an impact on paleontological resources significant if the project would:

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

6.5.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>CULTURAL RESOURCES</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
</tbody>
</table>

a) No historic resources are located on the project site; therefore, no impact would occur.

b) Based on negative findings by archaeologists, the absence of cultural resources indicates that the project would not impact archaeological resources. The archaeology survey did not recommend construction monitoring during the ground disturbance for the dirt road construction (Pacific Legacy, 2006).

c) There is no evidence that the ridgetop that the proposed project would be located along is of unique paleontological or geological value. Furthermore, the ridgetop would not be destroyed by the construction of the dirt road. No impact would occur.

d) The proposed project would not disturb human remains, including those interred outside of formal cemeteries, based on the surveying conducted by the archaeologists (Pacific Legacy 2006). No impact would occur.

Summary

The proposed project would not exceed the stated standards of significance for cultural resources. A potentially significant impact would not occur and no mitigation measures are proposed.
6.6 Geology, Soils, & Seismicity

6.6.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to geology, soils, and seismicity and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The proposed route is sited on a rocky ridge specifically to avoid the consequences of the generally steep topography and unstable soils of the Reserve. The proposed route is entirely on Bressa-Dibble Complex soils and will not exceed 20% slope. Bressa soils are identified as fine and loamy; Dibble soils are fine and have a higher clay content than the Bressa soils. The Bressa and Dibble soil series are so finely intermingled that they are discussed as a soil complex. The sedimentary rocks from which these soils formed generally are thinly layered together. At Quail Ridge, these rocks are tilted to near vertical, and the soils are quite shallow, which creates a finely-scaled variation of soils on the ground surface.

6.6.2 Standards of Significance

This Initial Study considers an impact related to geology, soils, and seismicity significant if the project would:

- Expose people or structures to potential substantial adverse effects involving strong seismic ground shaking.
- Expose people or structures to potential substantial adverse effects involving seismic-related ground failure.
- Result in substantial soil erosion or the loss of topsoil. (Impacts associated with the effect of erosion on water quality are addressed in Section 7.8 Hydrology & Water Quality.)
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.
### 6.6.3 Environmental Checklist and Discussion

#### GEOLOGY, SOILS, & SEISMICITY

<table>
<thead>
<tr>
<th>Would the project...</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>ii) Strong seismic ground shaking?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
</tbody>
</table>

a,i, ii) The project site and the surrounding area are not located within an Alquist-Priolo Earthquake Fault Zone, and the closest Alquist-Priolo mapped active fault rupture zone is approximately 12 miles away (CDOC 1999). However, there is a blind thrust fault underlying the site that produced an earthquake in 1892, and the Wragg Canyon Fault runs the length of Wragg Canyon, west of the site, and is active (Moores 2007). However, the project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death. And, strong seismic ground shaking would be unlikely to cause harm to a user in a vehicle traveling the proposed dirt road. Therefore, these impacts are less than significant.

a,iii) The ridgetop location, rocky soil, and depth of groundwater to the proposed project site makes ground failure and liquefaction unlikely. No impact would occur.

a,iv) Because the proposed project route follows a rocky ridgeline and does not have slopes greater than 20%, it is unlikely to cause a landslide. This impact is less than significant.

b) The project would be designed and constructed to minimize erosion and soil loss by constructing the road with adequate cross slope and using water bars (water diversions placed across the road) to direct small accumulations of water off of the road. By not concentrating the flow of runoff, soil loss and erosion would be minimal. Please see Section 6.8, Hydrology, items c,d,e) for more information about runoff. The impact would be less than significant.
c) The soil on the proposed project site does exhibit instability when lateral road cuts are made as other roads of the same soil are stable and do not present an on-going maintenance problem. To address the potential for instability, the proposed ridgeline route was sited and will be designed and constructed specifically to minimize soil movement. The impact would be less than significant.

d) The Bressa-Dibble complex soils do not exhibit high shrink/swell potential. The road will be designed and constructed to meet engineering standards, which will ensure that this impact is less than significant.

e) No septic tanks or alternative wastewater disposal systems are included in the proposed project, and there would be no impact.

**Summary**

The proposed project would not exceed the stated standards of significance for geology, soils, or seismicity. A potentially significant impact would not occur and no mitigation measures are proposed.
6.7  HAZARDS & HAZARDOUS MATERIALS

6.7.1  Background

The following discussion presents the information assessment methodology for analyzing potential effects to hazards and hazardous materials and provides a description of the existing conditions at the project site and surrounding area.

Project Site

No hazardous materials are currently used or have been used in the past on the project site. The project site is completely undeveloped wildlands that were inaccessible until a narrow trail was cut through the brush to allow engineers and archaeologists access to the site. The undisturbed brush in the area is at least 50 years old and shows no sign of previous anthropogenic disturbance.

6.7.2  Standards of Significance

This Initial Study considers a hazards and hazardous materials impact significant if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
### 6.7.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>HAZARDS &amp; HAZARDOUS MATERIALS</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☑</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### a) Construction

Gasoline and diesel fuels, which are hazardous chemicals, will be used in the construction of the proposed dirt road. The contractor will be required to implement construction contract specifications, as described in Section 3.5.1, which require the contractor to put in place construction techniques to prevent spills or other accidental releases of hazardous chemicals. Therefore, this impact would be less than significant.

#### Operation

Operation of the proposed project would not entail use or disposal of hazardous materials other than fuels used to power equipment for maintaining the road over time. No other hazardous materials, radioactive materials, biohazardous materials, or laboratory animals would be used or generated as part of the proposed project. The proposed project would enable gasoline and diesel-fueled vehicles to operate on the Reserve. Such vehicles are currently used by researchers to access other parts of the Reserve. The proposed 1,500 foot road would allow researchers to drive...
to a part of the Reserve currently inaccessible by automobiles. The infrequent additional trips would not significantly increase the use of gasoline and diesel fuels; therefore, the impact is less than significant.

b) The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed project would comply with all applicable federal and state laws, as well as campus programs, practices, and procedures related to the transportation, storage, and use of hazardous materials, minimizing the potential for an accidental release of hazardous materials and providing for prompt and effective cleanup if an accidental release occurs. Therefore, this impact is considered less than significant.

c) There are no existing schools within ¼ mile of the proposed project. Therefore, no impact would occur.

d) The proposed project site is a wildlands site that is not a hazardous materials site pursuant to Government Code Section 65962.5. No impact would occur.

e,f) The proposed project site is not within 2 miles of a public airport, nor within the vicinity of a private airstrip. No impact would occur.

g) The proposed project would construct a new 1,500 foot connection between two existing roads and would not require the closure of either of the existing roads in order to construct the project. No potential impacts associated with interference of an adopted emergency response plan or emergency evacuation plan would occur.

h) The proposed project site is a wildland site that is susceptible to wildland fires. Construction of the proposed project would be timed to occur either during mid-spring, after the rainy season ends, but while vegetation is still green and less susceptible to fire, or in the fall after the first rains, to minimize the probability of starting a wildfire with heavy equipment. Personnel with firefighting equipment will be on site during construction for ready response to any fire breakout. Therefore, the impact is less than significant.

**Summary**

The proposed project would not exceed the stated standards of significance for hazards and hazardous materials. A potentially significant impact would not occur and no mitigation measures are proposed.
6.8 HYDROLOGY & WATER QUALITY

6.8.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to hydrology and water quality and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The project site is located on a ridgetop and has no surface water sources nearby. No groundwater wells are located along the proposed road alignment. Stormwater percolates into the soil, and any runoff eventually reaches surface water bodies. The site does not have a developed stormwater drainage infrastructure, as it is a wildlands site.

6.8.2 Standards of Significance

This Initial Study considers a hydrology and water quality impact significant if the project would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on site or off site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on site or off site.
- Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- Expose people to significant risk of inundation by seiche, tsunami, or mudflow.
### 6.8.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>HYDROLOGY &amp; WATER QUALITY</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
<td>[ ]</td>
</tr>
<tr>
<td>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
<td>[ ]</td>
</tr>
<tr>
<td>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
<td>[ ]</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
<td>[ ]</td>
</tr>
<tr>
<td>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
</tr>
<tr>
<td>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
</tr>
<tr>
<td>j) Inundation by seiche, tsunami, or mudflow?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>✓</td>
</tr>
</tbody>
</table>

### a,f) Construction

Construction activities for the proposed project would occur during a period after the winter rainy season has passed or before the onset of heavy winter rains, but before vegetation dries and presents a fire hazard. The project is approximately ½ mile from Lake Berryessa. The project, which would construct a 1,500 foot-long, 12 foot-wide dirt road (approximately four-tenths of an acre), would not violate any water quality standards or waste discharge requirements, because no wastewater would be generated or discharged as a result of the project and substantial loads of sediment or other pollutants would not be generated as a result of the project.
Operation

Operation of the project would not generate or discharge any wastewater, and would not substantially degrade water quality because no receiving bodies of water are nearby the project, and the area of disturbance is sufficiently limited as to prevent water quality impairment from sediment loading.

These impacts would be less than significant.

b) The project will not affect groundwater supplies and will not increase demand for any water supply, either surface water or groundwater. The road would be dirt-surfaced, so it would retain some degree of perviousness, though engineering requirements would likely necessitate some compaction of soils, and vehicle traffic will also compact the soils. No impact would occur.

c,d,e) The proposed project site is a wildlands site, and the soils are readily absorb and retain water. The project site does not connect to a storm drainage system, and the proposed project site would not create a storm drainage system. The proposed project will affect the existing drainage pattern by re-contouring the soil and removing vegetation, but it will not affect a stream or river. The selection of the route, along a ridge top, will minimize the disruption, and accelerated runoff will be avoided through installation of water bars, which will direct runoff off the road at small intervals to avoid increased erosion, which could raise the sediment load in surface water bodies. The road surface will not be paved, but the compacted soil will increase runoff slightly. Because the project site is small, the minimal change in runoff rate and direction will not result in flooding, on or off site. These impacts would be less than significant.

g,h,i) No housing or other structures are proposed as part of the project. No people or structures would be affected by the proposed project. No impacts would occur.

j) The project site is located on a ridgetop and is not subject to inundation by seiche, tsunami, or mudflow. Therefore, no impact would occur.

Summary

The proposed project would not exceed the stated standards of significance for hydrology and water quality. A potentially significant impact would not occur and no mitigation measures are proposed.
6.9   LAND USE & PLANNING

6.9.1   Background

The following discussion presents the information assessment methodology for analyzing potential effects to land use and planning and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The Reserve comprises about 2,000 acres in Napa County, approximately 65 miles northeast of San Francisco and 40 miles west of Sacramento on the south shore of Berryessa Reservoir. The Reserve is one of 35 Natural Reserves administered by NRS. Established in 1991 with 600 acres of land, the Reserve has since been expanded to nearly 2,000 acres. It lies on a peninsula formed by the flooding of Berryessa Valley and the creation of the Berryessa Reservoir (Lake Berryessa). Due to its isolation it retains many elements of the native flora of this region and is available for teaching and research uses through the University of California NRS.

The Reserve is a patchwork of parcels under varied ownership, including the UC Regents, the QRWC, the US Bureau of Reclamation, the US Bureau of Land Management, and the California Department of Fish and Game. The Reserve is managed by UC Davis NRS, and the Napa Valley Land Trust holds conservation easements on many of the properties. The peninsula also includes privately owned parcels that are not part of the Reserve. Land development in area is considered very rural with few structures and minimal levels of road development on the adjacent parcels. Basic utilities (sewer, water, or electricity service) are not provided to most parcels and most parcels are largely undeveloped. The Reserve includes land that is owned by the University of California but the project site is on land owned California Department of Fish and Game. Under an existing management agreement with California Department of Fish and Game, UC Davis would construct and maintain the proposed connector road. The University of California manages the Quail Ridge Reserve for natural resource teaching and research uses.

6.9.2   Standards of Significance

This Initial Study considers a land use and planning impact significant if the project would:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
- Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.
- Physically divide an established community.
### 6.9.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>LAND USE &amp; PLANNING</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a) The proposed project would have no potential to physically divide an established community. The proposed connector road is in an undeveloped area with no surrounding development. No impact would occur.

b) The University of California manages the land at the project site. The proposed project is consistent with the land management practices of the Reserve and is consistent with the intended natural resources teaching and research uses at the Reserve. The project would not conflict with any applicable land use plan. No impact would occur.

c) The project site does not fall within the boundaries of, nor is it adjacent to, an adopted regional HCP or NCCP. Therefore, the proposed project would not conflict with an adopted HCP or NCCP. No impact would occur.

d) The proposed connector road would not result in development of land that is incompatible with existing or planned land uses. The proposed road would allow continued management of the land for natural resources teaching and research. No impact would occur.

### Summary

The proposed project would not exceed the stated standards of significance for land use and planning. A potentially significant impact would not occur and no mitigation measures are proposed.
6.10 **MINERAL RESOURCES**

**6.10.1 Background**

The following discussion presents the information assessment methodology for analyzing potential effects to mineral resources and provides a description of the existing conditions at the project site and surrounding area.

**Project Site**

Sand and gravel are important mineral resources in the region. However, the project site is near a ridge and along a hillside. Sand and gravel resources in the region are typically developed from alluvial deposits located close to local rivers or stream channels.

**6.10.2 Standards of Significance**

This Initial Study considers a mineral resources impact significant if the project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

**6.10.3 Environmental Checklist and Discussion**

<table>
<thead>
<tr>
<th>MINERAL RESOURCES</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a, b) The proposed connector road would allow access between two existing dirt roads for the purpose of managing the Quail Ridge Reserve. As such, the project would have no effect on the availability of mineral resources or mineral recovery sites. No impact would occur.

**Summary**

The proposed project would not exceed the stated standards of significance for mineral resources. A potentially significant impact would not occur and no mitigation measures are proposed.
6.11 Noise

6.11.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to noise and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The project site is very remote from developed areas. Noise from human activities at the project site consists of noise from aircraft and distant noise from recreational motorboats operating at the Berryessa Reservoir.

6.11.2 Standards of Significance

This Initial Study considers a noise impact significant if the project:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

6.11.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>NOISE</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)  Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b)  Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c)  A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d)  A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ☑

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? ☑

a,c) The proposed project would generate operational noise from occasional vehicle trips that would utilize the proposed connector road. Due to the infrequency of these trips (approximately one trip per week), the noise generated from these trips would not register as a measurable item in relation to typical noise standards. Additionally, the noise from these trips would not be audible from adjacent areas. No impact would occur.

b,d) The proposed project would generate construction noise and groundborne vibration from the operation of the bulldozer that would construct the proposed connector road. The short duration of the project construction and the remote location of the project site would result in a temporary increase in the amount of noise that could be audible from adjacent areas. Because the project site is away from adjacent property lines, the temporary noise increase would be less-than-significant.

e,f) The project is not located near a public or private airport. No impact would occur.

**Summary**

The proposed project would not exceed the stated standards of significance for noise. A potentially significant impact would not occur and no mitigation measures are proposed.
6.12 **POPULATION & HOUSING**

6.12.1 **Background**

The following discussion presents the information assessment methodology for analyzing potential effects to population and housing and provides a description of the existing conditions at the project site and surrounding area.

**Project Site**

The project site is currently vacant. No housing is located or planned on or adjacent to the project site.

6.12.2 **Standards of Significance**

This Initial Study considers an impact related to population and housing significant if the project would:

- Directly induce substantial population growth in the area by proposing new housing and employment.
- Create a demand for housing that could not be accommodated by local jurisdictions.
- Induce substantial population growth in an area indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

6.12.3 **Environmental Checklist and Discussion**

<table>
<thead>
<tr>
<th>POPULATION &amp; HOUSING</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Create a demand for housing that cannot be accommodated by local jurisdictions?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a,b,c,d) The proposed connector road would have no effect on population or housing. The road would allow a connection between two existing roads in order to allow site access to all of the Reserve. No impact would occur.
Summary

The proposed project would not exceed the stated standards of significance for population and housing. A potentially significant impact would not occur and no mitigation measures are proposed.
6.13 PUBLIC SERVICES

6.13.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to public services and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The project site is currently vacant and there are no existing or planned public service facilities (fire, police, schools or libraries) on or adjacent to the site. The connector road would allow emergency access across more of the Quail Ridge Reserve and could be used in emergencies by emergency response personnel.

6.13.2 Standards of Significance

This Initial Study considers a public services impact significant if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

Effects associated with recreation services are evaluated in Section 7.14, Recreation, and effects associated with the capacity of the domestic fire water system to provide adequate fire protection are evaluated in Section 7.16, Utilities.

6.13.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>PUBLIC SERVICES</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Fire protection?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>ii) Police protection?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>iii) Schools?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>iv) Parks?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>v) Other public facilities?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>a) The proposed connector road would have no effect on public services. The project site is remote would not generate demand for or hinder response by public service providers. No impact would occur.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary

The proposed project would not exceed the stated standards of significance for public services. A potentially significant impact would not occur and no mitigation measures are proposed.
6.14 RECREATION

6.14.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to recreation resources and provides a description of the existing conditions at the project site and surrounding area.

Project Site

The project site is currently vacant and there are no existing or planned recreation facilities on or adjacent to the site. Recreational access to the Reserve generally is not allowed and the proposed project would not allow future recreational access. The road would only be used for management of the Quail Ridge Reserve and for access for natural resource research and teaching.

6.14.2 Standards of Significance

This Initial Study considers a recreation impact significant if the project would:

- Increase the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Propose the construction of recreation facilities or require the expansion of recreation facilities, which might have an adverse physical effect on the environment.

6.14.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>RECREATION</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✔</td>
</tr>
<tr>
<td>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✔</td>
</tr>
</tbody>
</table>

a,b) The proposed connector road would not effect recreational resources because no recreational access is allowed to the Quail Ridge Reserve. No impact would occur.

Summary

The proposed project would not exceed the stated standards of significance for recreation. A potentially significant impact would not occur and no mitigation measures are proposed.
6.15  **TRANSPORTATION, CIRCULATION, & PARKING**

### 6.15.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to transportation, circulation, and parking resources and provides a description of the existing conditions at the project site and surrounding area.

**Project Site**

The Quail Ridge Reserve is accessed via Highway 128 and two deeded easement roads on the east and west sides of the peninsula. Locked gates are used to control access to the Reserve. The proposed connector road will join two existing dirt roads within the Reserve that are used to provide access for managing the reserve and for accessing the reserve natural resource teaching and research projects. The road will not be open for public access and will not affect existing roads or circulation in area surrounding the Reserve.

### 6.15.2 Standards of Significance

This Initial Study considers a transportation, circulation, and parking impact significant if the project would:

- Cause an increase in the traffic that may be substantial in relation to the existing roadway capacity of the street system as indicated by LOS standards for congestion at intersections.
- Result in inadequate parking capacity.
- Conflict with applicable adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impacts related to safety risks associated with airport and emergency access are discussed in Section 7.7 Hazards and Hazardous Materials.

### 6.15.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th><strong>TRANSPORTATION, CIRCULATION, &amp; PARKING</strong></th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
e) Result in inadequate emergency access? ☑ ☐ ☐ ☐
f) Result in inadequate parking capacity? ☐ ☐ ☐ ☑
g) Conflict with applicable adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ☐ ☐ ☐ ☑

a,b) The proposed connector road would be used infrequently (approximately one trip per week) to access portions of the Quail Ridge Reserve and would not be accessible to the public because of the existing system of locked gates. The road would have no effect on street system capacity and would have no effect on roadway congestion. No impact would occur.

c) The proposed project would have no affect on air traffic patterns. No impact would occur.

d) The proposed connector road would be designed to allow management access to a portion of the Quail Ridge Reserve that is currently not accessible by vehicle. The road would be designed to an adequate width with sufficient visual clearance and vehicle clearance around turns to minimize hazards. Accordingly, the project is not expected to include any increase in hazards. No impact would occur.

e) The proposed connector road could be utilized by emergency vehicles to augment emergency access at the Quail Ridge Road. During an emergency, fire personnel may decide to use the road as a fire break or an access road and could widen the connector road to meet such requirements. The project would improve emergency access. No impact would occur.

f) The proposed project would have no effect on parking supply or parking demand. No impact would occur.

g) The proposed project would have no effect on alternative transportation. No impact would occur.

Summary

The proposed project would not exceed the stated standards of significance for transportation and circulation. A potentially significant impact would not occur and no mitigation measures are proposed.
6.16 Utilities & Service Systems

6.16.1 Background

The following discussion presents the information assessment methodology for analyzing potential effects to utilities and service systems and provides a description of the existing conditions at the project site and surrounding area.

- Domestic/Fire Water
- Utility Water
- Agricultural Water
- Storm Drainage
- Wastewater
- Solid Waste
- Chilled Water
- Steam
- Electricity
- Natural Gas
- Telecommunications

Project Site

The project site is a remote area of an undeveloped parcel of land managed for natural resource teaching and research. The project site is served by no utilities, and the proposed project will require no utility service.

6.16.2 Standards of Significance

This Initial Study considers a utilities and service systems impact significant if the project would:

- Exceed the Central Valley Regional Water Quality Control Board's wastewater treatment requirements.
- Require or result in the construction or expansion of water or wastewater treatment facilities, which would cause significant environmental effects.
- Require or result in the construction or expansion of storm water drainage facilities, which could cause significant environmental effects.
- Result in the need for new or expanded water supply entitlements.
- Exceed available wastewater treatment capacity.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Fail to comply with applicable federal, state, and local statutes and regulations related to solid waste.
- Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts.
- Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts.
### 6.16.3 Environmental Checklist and Discussion

#### UTILITIES & SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>Would the project...</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the providers existing commitments?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>h) Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>i) Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
</tbody>
</table>

a-i) The proposed project is a connector road of approximately 1,500 feet to establish a connection between two existing dirt roads. The proposed road would be used by personnel working at the Quail Ridge Reserve to access a remote portion of the Reserve. The proposed road would require no connections to utilities and would affect no utility systems. The proposed project would not increase the population at the Reserve and accordingly, would have no cause to increase demand for any utility system. No impact would occur.

#### Summary

The proposed project would not exceed the stated standards of significance for utilities and service systems. A potentially significant impact would not occur and no mitigation measures are proposed.
## 6.17 Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Mandatory Findings of Significance</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

| a) The proposed project would not significantly affect fish or wildlife habitat, nor would it eliminate examples of California history or prehistory. The proposed project would have only minor effects on wildlife habitat as described in Section 6.4 (Biological Resources) of this Initial Study. The project effects would be less-than-significant. |
| b) The proposed project would have no impacts that would be individually limited but cumulatively considerable. No other projects are planned for the Quail Ridge Reserve. Surrounding lands are currently being managed in a long-term manner without proposals for significant changes to these lands. Any potentially cumulative project effects would be less-than-significant. |
| c) The proposed project would have no substantial adverse effects on human beings either directly or indirectly. |
7 FISH & GAME DETERMINATION

Based on the information presented in this Initial Study, the project has a potential to adversely affect wildlife or the habitat upon which wildlife depend. Therefore, a filing fee will be paid.

____ Certificate of Fee Exemption

__X__ Pay Fee
8 REFERENCES


Boucher, Virginia. 2007. Personal communication with Camille Kirk; regarding project site surveys for listed plant species of concern conducted on 9 June 2006 and 15 November 2006.


Moores, Eldridge. 2007. Personal communication with Virginia Boucher; regarding active faults in Quail Ridge locale.


9 AGENCIES & PERSONS CONSULTED

Virginia Boucher, University of California, Quail Ridge Reserve
Shane Waddell, University of California, Quail Ridge Reserve
Eldridge Moores, Professor Emeritus of Geology, UC Davis
Tom Emme, UC Davis Facilities: Operations & Maintenance
Kurt Wengler, UC Davis Architects and Engineers
Sid England, UC Davis Office of Resource Management & Planning

10 REPORT PREPARERS

Matt Dulcich, UC Davis Office of Resource Management & Planning
Camille Kirk, UC Davis Office of Resource Management & Planning
11 PROPOSED NEGATIVE DECLARATION

Lead Agency: University of California, Natural Reserve System

Project Proponent: University of California, Natural Reserve System

Project Location: Quail Ridge Reserve, Napa County

Project Description: The University of California Natural Reserve System proposes to construct a dirt connector road 12 feet in width and approximately 1,500 feet in length. The dirt road would connect two existing roads in order to improve site access at the Quail Ridge Reserve. Access on a dirt road is needed in order to provide site managers and researchers with a route to distant locations on the 2,000-acre Quail Ridge Reserve.

Reference: This Proposed Negative Declaration incorporates by reference in its entirety the text of the Initial Study prepared for the project.

Determination: In accordance with CEQA, an Initial Study has been prepared by the University that evaluates the environmental effects of the proposed project. On the basis of the project's Initial Study, the University found that the proposed project could not have a significant effect on the environment and no mitigation measures are required.

Public Review: In accordance with Section 15073 of the CEQA Guidelines, the Proposed Negative Declaration and Initial Study for the project will be circulated for public and agency review from April 11 to May 11, 2007. Comments received during the review period and responses to these comments will be presented in a revised Initial Study.