# MITIGATED NEGATIVE DECLARATION

**FILE:** Z16-0001/P16-0001

**PROJECT NAME:** Hansen Parcel Map

**NAME OF APPLICANT:** Allen J. Hansen

**ASSESSOR'S PARCEL NO.:** 087-021-05 **SECTION:** 10 **T:** 8N **R:** 9E

**LOCATION:** West side of South Shingle Road 6 miles south of the intersection with Highway 50 in the Shingle Springs area. (Attachment 1).

☐ **GENERAL PLAN AMENDMENT:** **FROM:** **TO:**

☒ **REZONING:** **FROM:** RL-20 **TO:** RL-10

☒ **TENTATIVE PARCEL MAP** ☐ **SUBDIVISION TO SPLIT 10.94 ACRES INTO 2 LOTS**
**SUBDIVISION (NAME):** Hansen Parcel Map

☐ **SPECIAL USE PERMIT TO ALLOW:**

☐ **OTHER:**

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**REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:**

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☒ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this MITIGATED NEGATIVE DECLARATION. A period of thirty (30) days from the date of filing this mitigated negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

**This Mitigated Negative Declaration was adopted by the Board of Supervisors on _____.**

_____
Executive Secretary

# Exhibit J

# EL DORADO COUNTY PLANNING SERVICES
# 2850 FAIRLANE COURT
# PLACERVILLE, CA 95667

## INITIAL STUDY
## ENVIRONMENTAL CHECKLIST

**Project Title:** Z16-0001/P16-0001/Hansen

**Lead Agency Name and Address:** El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

**Contact Person:** Evan Mattes, Assistant Planner | **Phone Number:** (530) 621-5994

**Owner's Name and Address:** Allen J. Hansen, 6740 South Shingle Road, Shingle Springs, CA

**Applicant's Name and Address:** Allen J. Hansen, 6740 South Shingle Road, Shingle Springs, CA

**Project Engineer's Name and Address:** Ken Purcell, P.O. Box 30, El Dorado, CA

**Project Location:** West side of South Shingle Springs Road 6 miles south of the intersection with U.S. Highway 50 in the Latrobe area.

**Assessor's Parcel Number:** 087-021-05 **Acres:** 45.69 acres

**Sections:** Sec. 10 **T:** 8 N **R:** 9 E

**General Plan Designation:** Rural Residential (RR)

**Zoning:** Rural Lands Twenty Acre (RL-20)

**Description of Project:** The zone change request would rezone the parcel from Rural Lands 20-Acres (RL-20) to Rural Lands 10-Acres (RL-10). The Tentative Parcel Map would create four parcels from a 45.69 acre site. Parcel 1 would be 13.5 acres, Parcel 2 would be 10.27 acres, Parcel 3 would be 10.04 acres, and Parcel 4 would be 10.04 acres. Parcel 1 is currently occupied by a single family residence and served by a private well and septic system. Parcel 4 is vacant and is served by a private well and would require installation of a septic system, all other parcels would require the installation of wells and septic systems. Access to the parcels via private driveways would be from a new private road connecting to South Shingle Road, an existing public, county-maintained road. A cemetery known as "Bryant Cemetery" exists in the northern end of the project site, identified as Parcel B. While, Bryant Cemetery is currently held in private trust, the cemetery is maintained by the County and open to the public. The cemetery would be conveyed to and accepted by the County of El Dorado. Site disturbance would avoid steep slopes, cultural resources, watercourses, wetlands, and sensitive plant communities.

**Environmental Setting:** The project site consists of 45.69 acres and is located at approximately 1,000 to 1,100 feet above mean sea level. The topography is relatively flat, gently sloping to the west. One ephemeral drainage swale with two small wetlands and an intermittent creek within a wetland were found on the project site. The primary on-site vegetation communities consist of annual grasses and oak woodland. The site is surrounded by other large-lot residential parcels similar to the development on-site. A single-family residence, well and septic system already exists on proposed Parcel 1. An additional well exists on proposed Parcel 4.

**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)**

1. El Dorado County Fire Protection District: Review and approval of building permits.
2. Transportation Division: Review of Conditions of Approval, encroachment permits.
3. El Dorado County Surveyor: Certification of Parcel Map.
4. El Dorado County Environmental Management- Review Conditions of Approval.
5. El Dorado County Building Services new construction review.

**Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

At the time of the application request, two tribes, the United Auburn Indian Community of the Auburn Rancheria and the Wilton Rancheria, had requested to be notified of proposed projects for consultation in the project area. Pursuant to the records search conducted at the North Central Information Center on May 1, 2015, the geographic area of the project site is not known to contain any TCRs.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| | Aesthetics | | Agriculture and Forestry Resources | | Air Quality |
| X | Biological Resources | X | Cultural Resources | | Geology / Soils |
| | Greenhouse Gas Emissions | | Hazards & Hazardous Materials | | Hydrology / Water Quality |
| | Land Use / Planning | | Mineral Resources | | Noise |
| | Population / Housing | | Public Services | | Recreation |
| | Transportation/Traffic | | Tribal Cultural Resources | | Utilities / Service Systems |

## DETERMINATION

**On the basis of this initial evaluation:**

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: _____ Date: 3/31/2017

Printed Name: Evan Mattes, Project Planner For: El Dorado County

Signature: _____ Date: 3/31/17

Printed Name: Rommel Pabalinas, Acting Principal Planner For: El Dorado County

## PROJECT DESCRIPTION

Introduction

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project. The project would allow the subdivision of a 45.69-acre property into four parcels ranging in size from 10 to 13.5 acres.

Project Description

This project is a Tentative Parcel Map to create four parcels from a 45.69 acre site. Parcel 1 would be 13.5 acres, Parcel 2 would be 10.27 acres, Parcel 3 would be 10.04 acres, and Parcel 4 would be 10.04 acres. Parcels 1 is currently served by a private water well and septic system. Parcel 4 has an existing well and would require the installation of a septic system. Parcels 2 and 3 would require the installation of wells and sewer systems. Access to the parcels via private driveway would be from South Shingle Road, an existing public, county-maintained road.

Project Location and Surrounding Land Uses

The project site is located on the west side of South Shingle Road approximately 6 miles south of the intersection with Highway 50 in the Shingle Springs Area. The site is in a rural region with surrounding land uses being mostly residential, agricultural, and open space uses.

Project Characteristics

1. Transportation/Circulation/Parking

Access to the parcels would be from a new privately maintained road and improved driveways to each new parcel, which are proposed to be improved to meet the standards required by Transportation and Fire Departments. This activity would require an encroachment permit to be reviewed by the Transportation Division.

2. Utilities and Infrastructure

Each lot would be served by an individual well and septic system. Condition of Approval 15 requires that the project shall develop, implement, and maintain a Wildland Fire Safe Plan, which would require a water tank to be installed at each residence to supply residential, fire sprinkler and firefighting water. The tank size is to be determined by the square footage of the residence. With the creation of four parcels, a second dwelling unit could be constructed on each lot. If a second dwelling unit were constructed, the project would be required to provide a safe and reliable water source at the time of building permit application.

3. Construction Considerations

Residential development of Lots 1 through 4 is possible as a result of this parcel map. Any future construction activities, such as additional dwelling units, would be completed in conformance with the County of El Dorado Grading and Erosion Control, Air Quality Management District, and Important Biological Corridor regulations, and subject to a building permit.

Project Schedule and Approvals

This Initial Study is being circulated for public and agency review for a 30-day period. Written comments on the Initial Study should be submitted to the project planner indicated in the Summary section, above. Following the close of the written comment period, the Initial Study will be considered by the Lead Agency in a public meeting and will be certified if it is determined to be in compliance with CEQA. The Lead Agency will also determine whether to approve the project.

**EVALUATION OF ENVIRONMENTAL IMPACTS**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

## ENVIRONMENTAL IMPACTS

| I. **AESTHETICS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Have a substantial adverse effect on a scenic vista? | | | **X** | |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | **X** |
| c. Substantially degrade the existing visual character quality of the site and its surroundings? | | | **X** | |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal regulations are applicable to aesthetics in relation to the proposed project.

***State Laws, Regulations, and Policies***

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2015). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

There are no officially designated state scenic corridors in the vicinity of the project site.

***Local Laws, Regulations, and Policies***

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a state highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities.

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the USFS, which under the Wild and Scenic Rivers Act may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

**Discussion:** A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

a. **Scenic Vista or Resource:** The project site is located in a rural region surrounded by agricultural land and large lot single family residences. No scenic vistas, as designated by the county General Plan, are located in the vicinity of the site (El Dorado County, 2003, p. 5.3-3 through 5.3-5). The project site is not adjacent to or visible from a State Scenic Highway. There is the potential for added accessory dwelling units on each of the sites, which is allowed on all lots zoned for single family residential use. Any new structures would require permits for construction and would comply with the general plan and zoning code. Impacts would be less than significant.

b. **Scenic Resources:** The project site is not visible from an officially designated State Scenic Highway or county-designated scenic highway, or any roadway that is part of a corridor protection program (Caltrans, 2013). There are no views of the site from public parks or scenic vistas. Though there are many trees in the project vicinity, there are no trees or historic buildings that have been identified by the County as contributing to exceptional aesthetic value at the project site. There would be no impact.

c. **Visual Character:** Each lot proposes the development of a new single-family residence. An accessory dwelling unit could also be added to the developable area of each lot. Since the site is surrounded by other single family homes on large rural and agricultural lots, the proposed project would not affect the visual character of the surrounding area. Impacts would be less than significant.

d. **Light and Glare:** The proposed project does not include any substantial new light sources, however, the project would allow for additional dwelling units to be developed in the future, which could produce minimal new light and glare. All future development would be required to comply with County lighting ordinance requirements, including the shielding of lights to avoid potential glare. Impacts would be less than significant.

**FINDING:** As conditioned and with adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, impacts would be anticipated to be less than significant.

**II. AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | **X** | |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract? | | | **X** | |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | **X** | |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | | | **X** | |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

***State Laws, Regulations, and Policies***

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2008). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

***Farmland of Statewide Importance:*** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

***Unique Farmland***: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

***Farmland of Local Importance:*** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

**Discussion:** A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a. **Farmland Mapping and Monitoring Program:** The project site is zoned for residential uses and is not located within an Agricultural District. The site is not currently used for farming. The project also does not include a change the current use from agriculture or convert farmland to another land use. The impact would be less than significant.

b. **Agricultural Uses:** The project site is not located within a Williamson Act Contract. The property directly to the south is under a Williamson Act contract, for grazing. The project contains a 200 foot agricultural setback and meets the 10 acre minimum parcel size for projects adjacent to lands under Williamson Act contracts. Impacts would be less than significant.

c-d. **Loss of Forest land or Conversion of Forest land:** The site is not designated as a Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. Three trees would be removed for road improvements. Impacts would be less than significant.

e. **Conversion of Prime Farmland or Forest Land:** The project is not within an agricultural district or located on forest land and would not convert farmland or forest land to non-agricultural use. There would be not impact.

**FINDING:** For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would be anticipated to result from the project.

| **III. AIR QUALITY.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Conflict with or obstruct implementation of the applicable air quality plan? | | | **X** | |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | **X** | |
| c. 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)? | | | **X** | |
| d. Expose sensitive receptors to substantial pollutant concentrations? | | | | **X** |
| e. Create objectionable odors affecting a substantial number of people? | | | | **X** |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

***State Laws, Regulations, and Policies***

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The proposed project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County AQMD, which consists of the western portion of El Dorado County. The El Dorado County Air Pollution Control District manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Air quality in the project area is regulated by the El Dorado County Air Quality Management District. California Air Resources Board and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits,

and reviewing air quality-related sections of environmental documents required to comply with CEQA. The AQMD regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. National and state ambient air quality standards (AAQS) have been adopted by the Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard, and is in attainment or unclassified status for other pollutants (California Air Resources Board 2013). County thresholds are included in the chart below.

| **Criteria Pollutant** | **El Dorado County Threshold** | |
|---|---|---|
| Reactive Organic Gasses (ROG) | 82 lbs/day | |
| Nitrogen Oxides (NOx) | 82 lbs/day | |
| Carbon Monoxide (CO) | 8-hour average: 6 parts per million (ppm) | 1-hour average: 20 ppm |
| Particulate Matter (PM10): | Annual geometric mean: 30 µg/m3 | 24-hour average: 50 µg/m3 |
| Particulate Matter (PM2.5): | Annual arithmetic mean: 15 µg/m3 | 24-hour average: 65 µg/m3 |
| Ozone | 8-hour average: 0.12 ppm | 1-hour average: .09 |

The guide includes a Table (Table 5.2) listing project types with potentially significant emissions. ROG and NOx Emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later

If the project meets one of the conditions above, APCD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

For Fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s).

Naturally occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

**Discussion:** The El Dorado County Air Pollution Control District (APCD) has developed a Guide to Air Quality Assessment (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and $No_x$ will result in construction or operation emissions greater than 82lbs/day (Table 3.2);

- Emissions of $PM_{10}$, CO, $SO_2$ and $No_x$, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

a. **Air Quality Plan:** El Dorado County has adopted the Rules and Regulations of the El Dorado County Air Quality Management District (2000) establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NOx, and O3). The EDC/State Clean Air Act Plan has set a schedule for implementing and funding transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Driveway improvements would require an encroachment permit and grading permit and will undergo review to determine if any further actions or approvals are needed, including any measures for sediment control. Any activities associated with future plans for grading and construction would require a Fugitive Dust Mitigation Plan (FDMP) for grading and construction activities. Such a plan would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level. Therefore, the potential impacts of the project would be anticipated to be less than significant.

b-c. **Air Quality Standards and Cumulative Impacts:** Minor grading improvements and roadway improvements are proposed as part of the project. Residential development is anticipated consequent to approval. There is also the potential for future development of the lots for construction of an additional dwelling unit on each lot. Although this would contribute air pollutants due to construction and possible additional vehicle trips to and from the site, these impacts would be minimal. Existing regulations implemented at issuance of building and grading permits would ensure that any construction related PM10 dust emissions would be reduced to acceptable levels. The El Dorado County AQMD reviewed the application materials for this project and determined that by implementing typical conditions including Rule 215 (Architectural Coating) and 501 and 523 (New Paint Source), which are included in the list of recommended conditions, the project would have a less than significant impact. The conditions would be implemented, reviewed, and approved by the AQMD prior to and concurrently with any grading, improvement, or building permit approvals. With full review for consistency with General Plan Policies, impacts would be anticipated to be less than significant.

d. **Sensitive Receptors:** The CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. No sources of substantial pollutant concentrations would be emitted by the single family residences, during construction or following construction. There would be no impact.

e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use of the parcels as a use known to create objectionable odors. The requested Parcel Map would not generate or produce objectionable odors as it would create residential lots for single family homes. There would be no impact.

**FINDING:** The proposed project would not affect the implementation of regional air quality regulations or management plans. The proposed project would not be anticipated to cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

| **IV. BIOLOGICAL RESOURCES.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. 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 Wildlife or U.S. Fish and Wildlife Service? | | **X** | | |
| b. 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 U.S. Fish and Wildlife Service? | | | **X** | |
| c. 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? | | | **X** | |
| d. 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? | | | **X** | |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | **X** | | |
| f. 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** |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in "take" of endangered or

threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

***State Laws, Regulations, and Policies***

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or

threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. CALFIRE works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

***Local Laws, Regulations, and Policies***

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;

- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

**Discussion:** A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

a. **Special Status Species:** A Biological Resources Report (Site Consulting, Inc., 2015) (Attachment A) was prepared for the project under a Preliminary Jurisdictional Determination in June of 2015. The project site consists of 45.69 acres, and the land contains several sensitive areas, including a small, unvegetative seasonal pond in a drainage swale south of the Bryant Cemetery on proposed Parcel 3, another small wetland farther east in the same drainage, and a larger wetland associated with an intermittent fork of Clark Creek that crosses the northeast corner of Parcel 3. Primary onsite vegetation consists primarily of annual grasses and oak woodlands.

Potential habitat for twenty-three additional species of concern was found. The suitability of the site to support each species was evaluated in the report. For the majority of these species, suitable habitat is contained to oak woodlands, and in and around the wetlands.

One species of concern was found on-site, the Oak titmouse (*Baeolophus inornatus*).

Oak titmouse (*Baeolophus inornatus)* was found in oak woodlands on the project site. The species occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California. They nest in cavities or tree snags. Removal of oak trees would eliminate potential habitat for the species. The impact of construction during the nesting season could disrupt nesting birds, which could be a potentially significant impact. Mitigation Measure BIO-1 would reduce this impact to a less than significant level.

Development proposed for this project includes driveway improvements to serve the proposed residences. There is also potential for additional dwelling units or other structures to be constructed in the future.

Other special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project area. Nests of raptors and other birds are protected under Section 50 CFR 10 of the Migratory Bird Treaty Act and Section 3503.5 of the California Fish and Game Code. The Project area, and adjacent trees and utility poles, could contain suitable nesting habitat for various bird species. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree trimming or removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, project construction is considered a potentially significant adverse impact to nesting birds. With the implementation of the Mitigation Measure BIO-1, potential adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

Mitigation Measure BIO-1: If any grading or construction activities occur during the nesting season (March 1 to August 31), a preconstruction survey for the presence of special-status bird species or any nesting bird species shall be conducted by a qualified biologist within 500 feet of proposed construction areas, no more than 30 days prior to construction activities. The survey shall be

submitted to Planning Services for review. If active nests are identified in these areas, CDFW and/or USFWS shall be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a 40-foot, fenced buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

**Monitoring Requirement:** The applicant shall conduct all construction activities outside the nesting season or perform a pre-construction survey and the necessary avoidance measures prior to initiation of construction activities. This mitigation measure shall be noted on the Final Map, in a notice of restriction that shall be recorded on the property and future grading and residential construction plans. If a pre-construction survey is required, the Development Services-Planning Division shall verify the completion of survey prior to issuance of grading permit.

**Monitoring Responsibility:** El Dorado County Development Services-Planning Division.

b., c. **Riparian Habitat and Wetlands:** A wetland delineation (Site Consulting, Inc., 2015) was prepared for the project under a Preliminary Jurisdictional Determination in June of 2015 in accordance with U.S. Army Corps of Engineers' Wetland Delineation Manual. Three wetlands are located on the project site, a small unvegetated seasonal pond in a drainage swale south of the Bryant Cemetery on Proposed Parcel 3, another small wetland farther east in the same drainage, and a larger wetland associated with an intermittent fork of Clark Creek that crosses the northeast corner of Parcel 3. Jurisdictional waters total 4,113 square feet (0.0944 acres). No development is proposed for these areas, and no discharge or fill is proposed to be directed to these waters. Access driveways would not cross any streams or wetlands, and the sites proposed for residential structures avoid these sensitive areas. Impacts would be less than significant.

d. **Migration Corridors:** Review of the Department of Fish and Wildlife Migratory Deer Herd Maps and General Plan DEIR Exhibit 5.12-7 indicate that the Outside deer herd migration corridor does not extend over the project site. Additionally the El Dorado County General Plan does not identify the project site as an Important Biological Corridor. Impacts would be less than significant.

e. **Local Policies:** Local protection of biological resources includes the IBC overlay, oak woodland preservation, rare plants and special-status species, and wetland preservation with the goal to preserve and protect sensitive natural resources within the County. The project is not located in the IBC. The site is covered with oak woodland. Common tree species associated within this habitat type include blue oak, valley oak and interior live oak. According to policy 7.4.4.4 of the general plan, all new development projects that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover, the project shall adhere to the tree canopy retention and replacement standards. Under Option A, the following tree canopy retention standards apply:

| Percent Existing Canopy Cover | Cover Canopy Cover to be Retained |
|---|---|
| 80–100 | 60% of existing canopy |
| 60–79 | 70% of existing canopy |
| 40–59 | 80% of existing canopy |
| 20–39 | 85% of existing canopy |
| 10-19 | 90% of existing canopy |
| 1-9 for parcels > 1 acre | 90% of existing canopy |

According to a tree survey dated May 13, 2015, oak tree canopy covers 8.1 acres (17.8 percent) of the subject parcel. Under Policy 7.4.4.4 Option A of the El Dorado County General Plan, the project would be required to retain 90 percent of the existing oak tree canopy. The project purposes impacts, through the grading of driveways, to 2.15 percent (0.174 acre) of the total oak tree canopy, thus retaining the 90 percent of oak tree canopy required by General Plan Policy 7.4.4.4. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure BIO-2: Oak woodland preservation and replacement shall be consistent with Sections C and D of the Biological Resources Report prepared by Site Consulting Inc. dated June 2015 (Attachment A). The plan identifies appropriate oak woodland canopy preservation measures, and identifies replacement requirements for oak woodland canopy removal resulting from the proposed project. Removal of oak woodland canopy must be mitigated by replanting oaks at a 1-to-1 ratio of canopy removed to area revegetated. Using the standard of 200 sapling or 600 acorns per acre, the mitigation for proposed oak woodland canopy removal for Parcel 3 would be 4 saplings or 10 acorns planted on 0.02 acres; and for Lot 4 would be 32 saplings or 95 acorns planted on 0.16 acres. Proposed mitigation areas shall be in substantial conformance with Figure 10 Oak Mitigation Areas.

**Monitoring Requirement:** All grading and construction activities will require compliance with the oak woodland preservation measures and replacement measures as described in Sections C and D (Oak Tree Survey, Preservation and Replacement Plan) of the *Biological Resources Report* prepared by Site Consulting Inc. dated June 2016 (Attachment A). The applicant shall plant oak trees or acorns in compliance with said Report and the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 Option A. Planning Services shall verify the inclusion of the requirement prior to the issuance of grading and building permits.

**Monitoring Responsibility:** El Dorado County Development Services-Planning Division.

f. **Adopted Plans**: No impacts to protected species, habitat, wetlands, or oak trees were identified for this project. This project would not conflict with the provisions of an adopted Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

| **V. CULTURAL RESOURCES.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | | **X** | | |
| b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5? | | **X** | | |
| c. Directly or indirectly destroy a unique paleontological resource or site or | | | **X** | |

| V. CULTURAL RESOURCES. *Would the project:* | | | | |
|---|---|---|---|---|
| unique geologic feature? | | | | |
| d. Disturb any human remains, including those interred outside of formal cemeteries? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
B. Are associated with the lives of persons significant in our past (persons);
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
D. Have yielded or may likely yield information important in prehistory or history (information potential).

***State Laws, Regulations, and Policies***

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

B. Are associated with the lives of persons important to local, California or national history.
C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

**Discussion:** In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a-b. **Historic or Archeological Resources.** A cultural resource study of the site was conducted by Historic Resource Associates in May 2015. According to the North Central Information Center (NCIC) staff, seven cultural resource studies have been conducted within ¼ mile of the project area. None of these studies encompassed the project location. No prehistoric or historic archaeological sites or properties over 45 years old were noted within ¼ mile of the project location. A field survey was conducted on the project site by an Archaeologist. The field survey identified one historic resource, a historic cemetery, commonly known as the Bryant Cemetery. While, Bryant Cemetery is currently held in private trust, the cemetery is maintained by the County and open to the public. Bryant Cemetery has been County Maintained since 1973, when the El Dorado County Board of Supervisors authorized County Grounds Maintenance to care for and map the County Operated Cemeteries. Bryant Cemetery was included in this list of County Operated Cemeteries

where it remains presently. In 2002 the Board of Supervisors authorized Ground Penetrating Radar and mapping of the plots for recordation with the Recorder's Office. With this Bryant Cemetery was officially dedicated as public cemetery in 2003.With incorporation of Mitigation Measure CUL-1 impacts would be less than significant.

Mitigation Measure CUL-1: The site identified as Bryant Cemetery shall be offered to and accepted by the county. A 30 foot buffer zone will be set to the southern and eastern sides of the cemetery. Building, excavation, and grading would be restricted within this buffer.

**Monitoring Requirement:** All grading and construction activities will require compliance with the cultural resource preservation measures as described in Sections VI and VII (Report of study Findings and Recommendations) of the *Cultural Resources Study of Assessor's Parcel Number 087:021:05, West of South Shingle Road, Shingle Springs, El Dorado County, California 95682* prepared by Historic Resource Associates dated May 2015 (Attachment B). Planning Services shall verify the inclusion of the requirement prior to the issuance of grading and building permits.

**Monitoring Responsibility:** El Dorado County Community Development Services- Planning Division

c. **Paleontological Resources.** The project site is not known to contain any paleontological sites or known fossil strata/locales. In the event subsurface paleontological sites are disturbed during earth disturbances and grading activities on the site, standard condition of approval requiring that all work activities shall be stopped in the event of an unanticipated discovery would ensure that impacts are less than significant.

d. **Human Remains.** A cultural resources study was conducted by Historic Resource Associates in May 2015 (Supernowicz). Aside from the Bryant Cemetery, there is a low likelihood of human remains discovery on the project site. No further archeological or historic study was recommended for this project. During any future development of the property, a standard condition of approval would stop work activities in the event any human remains are found. Standard conditions of approval would apply during all grading activities to address accidental discovery of human remains. Impacts would be less than significant.

**FINDING:** Mitigation measures would serve to protect any cultural resources on-site. Standard conditions of approval would apply in the event of accidental discovery during any future construction. This project would be anticipated to have a less than significant impact within the Cultural Resources category.

| **VI. GEOLOGY AND SOILS.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent | | | | **X** |

| **VI. GEOLOGY AND SOILS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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. | | | | |
| ii) Strong seismic ground shaking? | | | **X** | |
| iii) Seismic-related ground failure, including liquefaction? | | | | **X** |
| iv) Landslides? | | | | **X** |
| b. Result in substantial soil erosion or the loss of topsoil? | | | **X** | |
| 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? | | | **X** | |
| 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? | | | **X** | |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";
3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown

Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

***State Laws, Regulations, and Policies***

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

**Discussion:** A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a. **Seismic Hazards:**

i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within the west slope of El Dorado County. However, a fault zone has been located in the Tahoe Basin and Echo Lakes area. The West Tahoe Fault runs along the base of the range front at the west side of the Tahoe Basin. The West Tahoe Fault has a mapped length of 45 km. South of Emerald Bay the West Tahoe Fault extends onshore as two parallel strands. In the lake, the fault has clearly defined scarps that offset submarine fans, lake-bottom sediments, and the McKinney Bay slide deposits (DOC, 2016). There is clear evidence that the discussed onshore portion of the West Tahoe Fault is active with multiple events in the Holocene and poses a surface rupture hazard. However, because of the distance between the project site and these faults, there would be no impact.

ii) The potential for seismic ground shaking in the project area would be considered remote for the reason stated in Section i) above. Any potential impacts due to seismic impacts would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. Impacts would be less than significant.

iii) El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (DOC, 2007). There would be no impact.

iv) All grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. There would be no impact.

b. **Soil Erosion:** For development proposals, all grading activities onsite would comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance including the implementation of pre- and post-construction Best Management Practices (BMPs). Implemented BMPs are required to be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any grading activities exceeding 250 cubic yards or graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. Shoulder improvements along South Shingle Road will include the placement of crushed rock. This activity will require an encroachment permit and will undergo review to determine if any further actions or approvals are needed, including any measures for soil and sediment control. Any future construction would require similar review for compliance with the County SWPPP. Therefore, impacts would be less than significant.

c. **Geologic Hazards:** Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or those areas prone to liquefaction and earthquake-induced landslides (DOC, 2013). Therefore, El Dorado County is not considered to be at risk from liquefaction hazards. Lateral spreading is typically associated with areas experiencing liquefaction. Because liquefaction hazards are not present in El Dorado County, the county is

not at risk for lateral spreading. All grading activities would comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. Impacts would be less than significant.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The central portion of the county has a moderate expansiveness rating while the eastern and western portions have a low rating. Linear extensibility is used to determine the shrink-swell potential of soils. Any development of the site would be required to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance and the development plans for any homes or other structures would be required to implement the Seismic construction standards. Impacts would be less than significant.

e. **Septic Capability:** The proposed project would include the construction of four residences, each with a new septic system. A soil percolation test was conducted on site by a Registered Environmental Health Specialist (REHS) on May 8, 2015, to determine the capability of the soil on site. No signs of groundwater were observed, and all parcels would have more 12,000 square feet of usable sewage disposal area, and the soil percolation rate was deemed satisfactory. Environmental Management concluded that sewage disposal could be accommodated on site. Therefore, impacts would be less than significant.

| **VII. GREENHOUSE GAS EMISSIONS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | **X** | |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | **X** | |

**Background/Science**

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide ($CO_2$), methane ($CH_4$) and nitrous oxides ($N_2O$). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of $CO_2$ equivalents; therefore $CO_2$ is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of $CH_4$ than $CO_2$. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of $CO_2$ equivalent units of measure (i.e., $MTCO_2e/yr$). The three other main GHG are Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

***GHG Sources***

The primary man-made source of $CO_2$ is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made $CH_4$ are

natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made $N_2O$ is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

***Federal Laws, Regulations, and Policies***

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of $CO_2$ equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

**Discussion**

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their "significance," but is not clear what constitutes a "significant" impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are "cumulatively considerable." Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. "Tiering" from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project's GHG emissions must be addressed at the project-level.

Unlike thresholds of significance established for criteria air pollutants in EDCAQMD's *Guide to Air Quality Assessment* (February 2002) ("CEQA Guide"), the District has not adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the adopted thresholds of other lead agencies which are based on consistency with the goals of AB 32. Since climate change is a global problem and the location of the individual source of GHG emissions is somewhat irrelevant, it's appropriate

to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluating GHG emissions utilizing significance criteria adopted by the San Luis Obispo Air Pollution Control District (SLOAPCD) to determine the significance of GHG emissions.

SLOAPCD developed a screening table using CalEEMod which allows quick assessment of projects to "screen out" those below the thresholds as their impacts would be less than significant.

These thresholds are summarized below:

| **Significance Determination Thresholds** | |
|---|---|
| **GHG Emission Source Category** | **Operational Emissions** |
| Non-stationary Sources | 1,150 $MTCO_2e/yr$<br>OR<br>4.9 MT $CO_2e/SP/yr$ |
| Stationary Sources | 10,000 $MTCO_2e/yr$ |

SP = service population, which is resident population plus employee population of the project

Projects below screening levels identified in Table 1-1 of SLOAPCD's CEQA Air Quality Handbook (pp. 1-3, SLOAPCD, 2012) are estimated to emit less than the applicable threshold. For projects below the threshold, no further GHG analysis is required.

a. The proposed project is a rezone and subdivision of a rural residential lot into four single-family parcels. The subdivision will necessitate driveway improvements, and will allow the addition of four single-family residences, with the potential for accessory dwellings on each new lot. This future construction may involve a small increase in household GHG production. Any future construction would be required to incorporate modern construction and design features that reduce energy consumption to the extent feasible. Implementation of these features would help reduce potential GHG emissions resulting from the development. According to the SLOAPCD Screening Table, the applicable screening level is Single family housing (rural). The proposed project is a subdivision of to create four single-family parcels. Based on this equivalency, the GHG emissions from this project are estimated at less than 1,150 metric tons/year, thus, no further analysis for GHG emissions impact is required. Therefore, the proposed project would have a negligible contribution towards statewide GHG inventories and would have a less than significant impact.

b. Because any future construction-related emissions would be temporary and below the minimum standard for reporting requirements under AB 32, and because any ongoing GHG emissions would be a result of a maximum of eight additional households, the proposed project's GHG emissions would have a negligible cumulative contribution towards statewide and global GHG emissions. The proposed project would not conflict with the objectives of AB 32 or any other applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. According to the SLOAPCD Screening Table, the GHG emissions from this project are estimated at less than 1,150 metric tons/year. Cumulative GHG emissions impacts are considered to be less than significant. Therefore, the proposed project would have a less than significant impact.

**FINDING:** The project would result in less than significant impacts to greenhouse gas emissions. For this Greenhouse Gas Emissions category, there would be no significant adverse environmental effect as a result of the project.

| VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | **X** | |
| 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? | | | **X** | |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | **X** | |
| 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? | | | | **X** |
| 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? | | | | **X** |
| 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? | | | | **X** |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | **X** | |
| 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? | | | **X** | |

**Regulatory Setting:**

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and EDCAPCD.

***Federal Laws, Regulations, and Policies***

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the

authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Communications Commission Requirements

There is no federally mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC Section 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure, as presented below. The exposure limits are specified in 47 CFR Section 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment (EA) with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

FCC has established two sets of RF radiation exposure limits—Occupational/Controlled and General Population/Uncontrolled. The less-restrictive Occupational/Controlled limit applies only when a person (worker) is exposed as a consequence of his or her employment and is "fully aware of the potential exposure and can exercise control over his or her exposure," otherwise the General Population limit applies (47 CFR Section 1.1310).

The FCC exposure limits generally apply to all FCC-licensed facilities (47 CFR Section 1.1307[b][1]). Unless exemptions apply, as a condition of obtaining a license to transmit, applicants must certify that they comply with FCC environmental rules, including those that are designed to prevent exposing persons to radiation above FCC RF limits (47 CFR Section1.1307[b]). Licensees at co-located sites (e.g., towers supporting multiple antennas, including antennas under separate ownerships) must take the necessary actions to bring the accessible areas that exceed the FCC exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5.0 or more percent of the applicable FCC exposure limits (47CFR 1.1307[b][3]).

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

***State Laws, Regulations, and Policies***

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the CALFIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste

transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

***Local Laws, Regulations, and Policies***

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

**Discussion:** A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a-b. **Hazardous Materials:** The project would not involve the routine transportation, use, or disposal of hazardous materials such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Future housing units may produce small amounts of household cleaners or other hazardous materials on a small scale. The impact would be less than significant.

c. **Hazardous Materials near Schools:** The project is not located near a school. There would be no impact.

d. **Hazardous Sites:** The project site is not included on a list of or near any hazardous materials sites pursuant to Government Code section 65962.5 (DTSC, 2015). There would be no impact.

e-f. **Aircraft Hazards, Private Airstrips:** As shown on the El Dorado County Zoning Map, the project is not located within an Airport Safety District combining zone or near a public airport or private airstrip. There would be no impact.

g. **Emergency Plan:** The project was reviewed by the El Dorado County Fire Protection District, Transportation Division, and California Department of Forestry and Fire Protection (CALFIRE) for circulation. The proposed project would not impair implementation of any emergency response plan or emergency evacuation plan. One new road is purposed, which would provide access to each new lot via new driveways. These improvements would be required to comply with all regulations and standards new roads or major improvements are required for this Parcel Map. These improvements will be built to the satisfaction of the Fire District and CALFIRE. Impacts would be less than significant.

h. **Wildfire Hazards:** The project site is in an area of high fire hazard for wildland fire pursuant to Figure 5.8-4 of the 2004 General Plan Draft EIR. The El Dorado County General Plan Safety Element precludes development in areas of high wildland fire hazard unless such development can be adequately protected from wildland fire hazards as demonstrated in a Fire Safe Plan prepared by a Registered Professional Forester (RPF) and approved by the local fire Protection District and/or California Department of Forestry and Fire Protection. The El Dorado Hills Fire Department has reviewed and conditioned the project to develop, implement, and maintain a Wildland Fire Safe Plan that is approved by the Fire Department as complying with the State Fire Safe Regulations prior to recording the parcel map. The Fire Safe Plan shall

address fire fuel hazard reduction, water tanks at each residence to supply residential, fire sprinkler and firefighting water, standpipes to act as fire hydrants, residential sprinkler systems, and specific building materials. With the incorporation of these requirements, the impacts of wildland fire would be less than significant.

**FINDING:** The proposed project would not expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials. For this Hazards and Hazardous Materials category, impacts would be less than significant.

| **IX. HYDROLOGY AND WATER QUALITY.** Would the project: | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Violate any water quality standards or waste discharge requirements? | | | **X** | |
| 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)? | | | **X** | |
| 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? | | | **X** | |
| 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? | | | **X** | |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | | | **X** | |
| f. Otherwise substantially degrade water quality? | | | **X** | |
| 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? | | | | **X** |
| h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | **X** |
| 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? | | | | **X** |
| j. Inundation by seiche, tsunami, or mudflow? | | | | **X** |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

*Section 303(d) — Listing of Impaired Water Bodies*

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

*Section 402—NPDES Permits for Stormwater Discharge*

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

***State Laws, Regulations, and Policies***

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

**Discussion:** A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- Cause degradation of groundwater quality in the vicinity of the project site.

a. **Water Quality Standards:** No waste discharge will occur as part of this project. The proposed new driveways would require an encroachment permit and would undergo review to determine if any further actions or approvals are needed, including any measures for soil and sediment control in compliance with the County SWPPP. Erosion control would be required as part of any future building or grading permit.

Stormwater runoff from potential development would contain water quality protection features in accordance with a potential National Pollutant Discharge Elimination System (NPDES) stormwater permit, as deemed applicable. The project would not be anticipated to violate water quality standards. Impacts would be less than significant.

b. **Groundwater Supplies:** The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Wells are typically drilled to depths ranging from 80 to 300 feet in depth. There is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. Installation of new private wells would be required for Parcels 2 and 3. Parcels 1 and 4 have existing wells. For the final map, the applicant would need to prove that all parcels would have a safe and reliable water source that meets the minimum criteria of EDC policy 800-02. The project is not anticipated to affect potential groundwater supplies above pre-project levels. Impacts would be less than significant.

c-f. **Drainage Patterns:** An intermittent fork of Clark Creek, as well as two drainage swales was identified on the project site by Wetland Delineation dated June 2015. No construction or grading is proposed near the identified wetlands. Grading permits through Development Services would be required to address grading, erosion and sediment control for any future construction. Construction activities would be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance. This includes the use of Best Management Practices (BMPs) to minimize degradation of water quality during construction. Impacts would be less than significant.

g-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas and would not result in the construction of any structures that would impede or redirect flood flows (FEMA, 2008). No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. There would be no impact.

**FINDING:** The proposed project would be required to address any potential erosion and sediment control. No significant hydrological impacts are expected with the development of the project either directly or indirectly. For this hydrology category, impacts are anticipated to be less than significant.

| **X. LAND USE PLANNING.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| a. Physically divide an established community? | | | | **X** |
| 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? | | | **X** | |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | **X** |

**Regulatory Setting:**

California State law requires that each City and County adopt a general plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the City or County for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was adopted in 2004. The 2013-2021 Housing Element was adopted in 2013.

**Discussion:** A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a. **Established Community:** The project is located within the Rural Region of Latrobe. The project is surrounded by single family residential development on large lots and agricultural land. The project would not conflict with the existing land use pattern in the area or physically divide an established community. There would be no impact.

a. **Land Use Consistency:** The parcel has a land use designation of Rural Residential, and a zoning designation of Rural Lands 20-Acre (RL-20). The project proposes a zone change to Rural Lands 10-Acre (RL-10). This land use designation establishes areas for residential and agricultural development. These lands will typically have limited infrastructure and public services and will remain for the most part in their natural state. This category is appropriate for lands that are characterized by steeper topography, high fire hazards, and limited or substandard access as well as "choice" agricultural soils. The site is in a rural region, and land use proposed for the site is residential. As shown of the site plan, the proposed lots range in size from 10 to 13.5 acres. With approval of the rezone to RL-10, the proposed project is compatible with the land use designation. Impacts would be less than significant.

c. **Habitat Conservation Plan:** The project site is not within the boundaries of an adopted Natural Community Conservation Plan or any other conservation plan. As such, the proposed project would not conflict with an adopted conservation plan. There would be no impact.

**FINDING:** The proposed use of the land would be consistent with the Zoning Ordinance and General Plan. There would be no impact to land use goals or standards resulting from the project.

| **XI. MINERAL RESOURCES.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | | | | **X** |
| b. Result in the loss of availability of a locally-important mineral resource | | | | **X** |

| **XI. MINERAL RESOURCES.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| recovery site delineated on a local general plan, specific plan or other land use plan? | | | | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

***State Laws, Regulations, and Policies***

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

***Local Laws, Regulations, and Policies***

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county's important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

**Discussion:** A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a-b. **Mineral Resources:** The project site has not been delineated in the El Dorado County General Plan as a locally important mineral resource recovery site (2003, Exhibits 5.9-6 and 5.9-7). Review of the California Department of Conservation Geologic Map data showed that the project site is not within a mineral resource zone district. There would be no impact.

**FINDING:** No impacts to mineral resources are expected either directly or indirectly. For this mineral resources category, there would be no impacts.

| **XII. NOISE.** *Would the project result in:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | | | **X** | |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | **X** | |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | **X** | |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | **X** | |
| 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 level? | | | **X** | |
| 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? | | | **X** | |

**Regulatory Setting:**

No federal or state laws, regulations, or policies for construction-related noise and vibration that apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

**Discussion:** A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 130.37.060.1 and Table 130.37.060.2 of the El Dorado County Zoning Ordinance.

**TABLE 6-2**
**NOISE LEVEL PERFORMANCE PROTECTION STANDARDS**
**FOR NOISE SENSITIVE LAND USES**
**AFFECTED BY NON-TRANSPORTATION* SOURCES**

| Noise Level Descriptor | Daytime 7 a.m. - 7 p.m. | | Evening 7 p.m. - 10 p.m. | | Night 10 p.m. - 7 a.m. | |
|---|---|---|---|---|---|---|
| | Community/ Rural Centers | Rural Regions | Community/ Rural Centers | Rural Regions | Community/ Rural Centers | Rural Regions |
| Hourly $L_{eq}$, dB | 55 | 50 | 50 | 45 | 45 | 40 |
| Maximum level, dB | 70 | 60 | 60 | 55 | 55 | **50** |

a. **Noise Exposures:** The proposed project will not expose people to noise levels in excess of standards established in the General Plan or Zoning Ordinance. The driveways and new home construction would require the use of trucks and minor fill and grading, which may result in short-term noise impacts to surrounding neighbors. These activities require an encroachment permit and would be restricted to construction hours pursuant to the General Plan. The newly created lots with one residence each would be allowed by right to develop a second dwelling unit. There could be additional noise associated with an additional dwelling unit. However, the project is not expected to generate noise levels exceeding the performance standards contained within the Zoning Ordinance. The noise associated with the project would be less than significant.

b. **Groundborne Shaking:** Future construction may generate short-term ground borne vibration or shaking events during project construction. Impacts are anticipated to be less than significant.

c. **Permanent Noise Increases:** The project includes the proposed development of four additional single-family homes, with the potential to add an additional dwelling unit on each proposed lot. The long term noise associated with these additional homes would not be expected to exceed the noise standards contained in the General Plan. The impacts would be considered less than significant.

d. **Short Term Noise:** The project includes the potential construction of four single-family homes, with the potential to add an additional dwelling unit on each proposed lot. The construction noise resulting from that development, as well as the minor filling and grading, would result in short-term noise impacts. These activities require an encroachment permit and would be restricted to construction hours. All construction and grading operations would be required to comply with the noise performance standards contained in the General Plan. Impacts would be less than significant.

e-f. **Aircraft Noise:** The project is not located in the vicinity of any airports or airstrips. The impact would be less than significant.

**FINDING:** As conditioned, and with adherence to County Code, no significant direct or indirect impacts to noise levels are expected either directly or indirectly. For this Noise category, the thresholds of significance would not be exceeded.

| **XIII. POPULATION AND HOUSING.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)? | | | **X** | |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | **X** |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | **X** |

**Regulatory Setting:**

No federal or state laws, regulations, or policies apply to population and housing and the proposed project.

**Discussion:** A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a. **Population Growth:** The proposed project would include four lots each with one new residence. If a secondary dwelling unit was constructed on both residential lots in the future, the population could increase by up to 48 persons. This potential additional population would not be considered a significant population growth. Therefore, impacts would be less than significant.

b. **Housing Displacement:** The project would result in the creation of four residential lots. Parcel 1 contains an existing residence, which is to remain. No other residences exist upon the project site. No existing housing stock would be displaced by the proposed project. There would be no impact.

c. **Replacement Housing:** The proposed project would provide up to 8 new residences, including the potential for a secondary dwelling unit for each lot. No persons would be displaced by the proposed project. There would be no impact.

**FINDING:** The project would not displace housing. There would be no potential for a significant impact due to substantial growth either directly or indirectly. For this Population and Housing category, the thresholds of significance would not be anticipated to be exceeded.

| **XIV. PUBLIC SERVICES.** *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:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| a. Fire protection? | | | **X** | |
| b. Police protection? | | | **X** | |
| c. Schools? | | | **X** | |
| d. Parks? | | | **X** | |
| e. Other government services? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

**Discussion:** A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a. **Fire Protection:** The El Dorado Hills Fire Department provides fire protection to the site. The project must prepare and adhere to the approved Wildland Fire Safe Plan for emergency vehicle access including roadway widths and turning radii, fire flow and sprinkler requirements, and vehicle ingress/egress. Compliance with these requirements will assure adequate emergency access and evacuation routes. If any additional dwelling units are proposed in the future the Fire District would review the building permit application and include any fire protection measures at that time. Impacts would be less than significant.

b. **Police Protection:** Police services would continue to be provided by the El Dorado County Sheriff's Department. Four additional dwelling units are proposed. Any eventual addition of one accessory dwelling unit per parcel would not increase demand for law enforcement protection. Impacts would be less than significant.

c-e. **Schools:** As a result of project approval, potential new dwelling units constructed in the future could add a small number of additional students. The impact would be less than significant.

d. **Parks.** Four new single-family homes are proposed for construction on the new Parcels, and one additional accessory dwelling unit could be constructed by right on each lot. Any additional residents would not substantially increase the local population and therefore not substantially increase the use of existing parks and recreational facilities. The dedication of land, the payment of fees in lieu thereof or a combination of both for park and recreational purposes would be required, pursuant to the provisions of Sections 120.12.090 through120.12.110, as a condition of approval for any parcel map which creates parcels less than 20 acres in size. With the payment of park in-lieu fees, impacts would be less than significant.

e. **Government Services.** There are no services that would be significantly impacted as a result of the project. Impacts would be less than significant.

**FINDING:** The project would not result in a significant increase of public services to the project. Increased demand to services would be addressed through the payment of established impact fees. For this Public Services category, impacts would be less than significant.

| **XV. RECREATION.** | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | | | **X** | |
| 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? | | | **X** | |

**Regulatory Setting:**

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes four classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The PCT passes through the Desolation Wilderness area along the western plan area boundary.
2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park

Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri to California before the advent of the telegraph.

3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, state, or private lands. In El Dorado County there are 5 NRTs.

***State Laws, Regulations, and Policies***

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through §16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

***Local Laws, Regulations, and Policies***

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

**Discussion:** A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a. **Parks.** Four new single-family homes are proposed for the site, and one additional unit could be constructed by right on each lot. Any additional units would not increase the local population substantially, and therefore would not substantially increase the use of parks and recreational facilities. The dedication of land, the payment of fees in lieu thereof or a combination of both for park and recreational purposes would be required, pursuant to the provisions of Sections 120.12.090 through120.12.110, as a condition of approval for any parcel map which creates parcels less than 20 acres in size. With the payment of park in-lieu fees, impacts would be less than significant.

b. **Recreational Services.** The project would not include additional recreation services or sites as part of the project. Impacts would be less than significant.

**FINDING:** No significant impacts to open space or park facilities would result as part of the project. For this Recreation category, impacts would be less than significant.

| **XVI. TRANSPORTATION/TRAFFIC.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | | **X** | |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | **X** | |
| 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? | | | | **X** |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | **X** | |
| e. Result in inadequate emergency access? | | | **X** | |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | | **X** |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal laws, regulations, or policies apply to transportation/traffic and the Proposed Project.

***State Laws, Regulations, and Policies***

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

***Local Laws, Regulations, and Policies***

According to the transportation element of the County General Plan, Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F, although none of these are located in the Lake Tahoe Basin. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

**Discussion:** The Transportation and Circulation Policies contained in the County General Plan establish a framework for review of thresholds of significance and identification of potential impacts of new development on the County's road system. These policies are enforced by the application of the Transportation Impact Study (TIS) Guidelines, the County Design and Improvements Standards Manual, and the County Encroachment Ordinance, with review of individual development projects by the Transportation and Long Range Planning Divisions of the Community Development Agency. A substantial adverse effect to traffic would occur if the implementation of the project would:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system;
- Generate traffic volumes which cause violations of adopted level of service standards (project and cumulative); or
- Result in or worsen Level of Service (LOS) F traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county as a result of a residential development project of 5 or more units.

a. **Traffic Increases:** No substantial traffic increases would result from the proposed project, as the project would create four additional residential parcels, which would not result in an increase in traffic exceeding the thresholds established by the General Plan. Access to the site would be from South Shingle Road and the proposed road and driveways. Impacts would be less than significant.

b. **Levels of Service Standards:** Comments concerning the proposed facility were received from the Transportation Division and do not indicate that the LOS would be significantly impacted by the proposed project. Although the new lot would allow for up to two new dwelling units on each of the four new parcels, the LOS established by the County would not be exceeded by the project and the surrounding road circulation system would not be impacted. The impact would be less than significant.

c. **Air Traffic:** The site is not located adjacent to an airport or within an Airport Safety District. The creation of four residential parcels would not result in a change in air traffic patterns or create an air traffic hazard. There would be no impact.

d. **Design Hazards:** The design and location of the project is not anticipated to create any significant hazards. South Shingle Road currently serves the existing homes near the site, and is a county-maintained road. The fire department and the Transportation Division approved the plan for access, as it would not present and hazards and or affect road safety. The impact would be less than significant.

e. **Emergency Access:** Access to the parcels would from South Shingle Road, an existing public, county-maintained road. The project was reviewed by the Transportation Division, El Dorado County Fire Protection District, and CALFIRE to ensure that adequate access would be provided to meet Fire Safe standards and conform to the County Design Improvement Standards Manual. With the inclusion of the Transportation Division, Fire District, and CALFIRE conditions, impacts would be less than significant.

f. **Alternative Transportation.** The project would not conflict with adopted plans, polices or programs relating to alternative transportation. There is no public transit, bicycle lanes or pedestrian paths at this property or along Thompson Hill Road. There would be no impact.

**FINDING:** The project would not exceed the thresholds for traffic identified within the General Plan. For this Transportation/Traffic category, the thresholds of significance would not be exceeded and impacts would be less than significant.

| **XVII. TRIBAL CULTURAL RESOURCES.** *Would the project: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | | **X** | |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the Proposed Project.

***State Laws, Regulations, and Policies***

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

b. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
c. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

**Discussion:**

In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired

**a, b.** **Tribal Cultural Resources.** The United Auburn Indian Community of the Auburn Rancheria (UAIC) and the Wilton Rancheria were notified of the proposed project and given access to all project documents on January 19, 2016, via certified mail. No other tribes had requested to be notified of proposed projects for consultation in the project area at the time. In response to a request from Gene Whitehouse of the UAIC, dated February 25, 2016, the Cultural Resources Study for the project was sent to the tribe via email. No further information or other requests were received from the UAIC, and no other requests for formal consultation were received for this project. Pursuant to the Cultural Resources Study prepared by Historic Resource Associates (2015), the geographic area of the project site is not known to contain any resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or considered significant by a California Native American tribe. The impact would be less than significant.

**FINDING:** No significant TCRs are known to exist on the project site. As a result, the proposed project would not cause a substantial adverse change to a TCR and there would be no impact.

| **XVIII. UTILITIES AND SERVICE SYSTEMS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | **X** |
| 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? | | | **X** | |
| c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | **X** | |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | **X** | |
| 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 provider's existing commitments? | | | | **X** |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | **X** | |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | | | **X** | |

**Regulatory Setting:**

***Federal Laws, Regulations, and Policies***

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

***State Laws, Regulations, and Policies***

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24–Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately 3-year cycle. The 2013 standards went into effect on July 1, 2014.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

***Other Standards and Guidelines***

Leadership in Energy & Environmental Design

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC) that recognizes energy efficient and/or environmentally friendly (green) components of building design (USGBC, 2015). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design (USGBC, 2015). The four levels of LEED certification are related to the number of points a project earns: (1) certified (40–49 points), (2) silver (50–59 points), (3) gold (60–79 points), and (4) platinum (80+ points) (USGBC, 2015). Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20% from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC, 2014). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum 2.0-year establishment period, or by reducing the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month (USGBC, 2014). C&D waste management points may be obtained by diverting at least 50% of C&D material and three material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC, 2014).

**Discussion:** A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;

- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a. **Wastewater Requirements**: The project does not require wastewater treatment as each lot will utilize separate septic systems. The proposed project would include the construction of four residences, each with a new septic system. A soil percolation test was conducted on site by a Registered Environmental Health Specialist (REHS) on May 8, 2015, to determine the capability of the soil on site. No signs of groundwater were observed, and all parcels would have more 12,000 square feet of usable sewage disposal area, and the soil percolation rate was deemed satisfactory. Environmental Management concluded that sewage disposal could be accommodated on site. There would be no impact.

b. **Construction of New Facilities:** The homes would utilize individual septic systems for wastewater and private individual wells on all lots. The project would result in the addition of four new single-family residential lots. A new home would likely be constructed on each lot, with the potential for an accessory dwelling unit on each lot. This would result in, at most, eight new households. Therefore, an expansion to existing systems would not be necessary to serve the project. The impact would be less than significant.

c. **New Stormwater Facilities:** Any possible drainage facilities needed for any future construction would be built in conformance with the County of El Dorado Drainage Manual, as determined by Development Services standards, during the grading and building permit processes. The impact would be less than significant.

d. **Sufficient Water Supply:** Each lot would be served by an individual well and septic system. The water supply source is required to be determined prior to recording the final map. The wildfire safe plan requires a water tank to be installed at each residence to supply residential, fire sprinkler, and firefighting water. The tank size is to be determined by the square footage of the residence. With the creation of four parcels, a second dwelling unit could be constructed on each lot. If a second dwelling unit were constructed, the project would be required to provide a safe and reliable water source at the time of building permit application. No further water supply is anticipated to be needed related to the parcel map. Therefore, impacts would be less than significant.

e. **Adequate Wastewater Capacity:** The project does not require wastewater treatment as each lot would have individual on-site septic facilities. There would be no impact.

f-g. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. This project does not propose to add any activities that would generate substantial additional solid waste, as future additional housing units would generate minimal amounts of solid waste for disposal. Project impacts would be less than significant.

**FINDING:** No significant utility and service system impacts would be expected with the project, either directly or indirectly. For this Utilities and Service Systems category, the thresholds of significance would not be exceeded.

| **XIV. MANDATORY FINDINGS OF SIGNIFICANCE.** *Does the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. 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? | | **X** | | |
| b. 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)? | | | **X** | |
| c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | | **X** | |

**Discussion**

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned or mitigated, and with adherence to County permit requirements, this project would not have the potential to 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 California history or pre-history. Any impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to recording the final Parcel Map or with the building permit processes and/or any required project specific improvements on the property.

b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

The project would not involve development or changes in land use that would result in an excessive increase in population growth. Impacts due to increased demand for public services associated with the project would be offset by the payment of fees as required by service providers to extend the necessary infrastructure services. The project would not be anticipated to contribute substantially to increased traffic in the area and the project would not require an increase in the wastewater treatment capacity of the County. Due to the small size of the proposed project, types of activities proposed, and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Items I through XVIII, there would be no significant impacts anticipated related to agriculture resources, air quality, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, or utilities/service systems that would combine with similar effects such

that the project's contribution would be cumulatively considerable. For these issue areas, either no impacts, or less than significant impacts would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would not include any physical changes to the site, and any future development or physical changes would require review and permitting through the County. Adherence to these standard conditions would be expected to reduce potential impacts to a less than significant level.

**FINDINGS**: It has been determined that the proposed project would not result in significant environmental impacts. The project would not exceed applicable environmental standards, nor significantly contribute to cumulative environmental impacts.

## Attachment

Attachment A: Biological Resources Report; June 2015

**SUPPORTING INFORMATION SOURCE LIST**

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# Biological Resources Report

including

## Special-Status Species Survey

and

## Oak Tree Survey, Preservation and Replacement Plan

for

Assessor' Parcel Number 087-021-05

Latrobe, El Dorado County, CA

Prepared by
***Ruth A. Willson***
**Site Consulting, Inc.**
**Biological Services**
3460 Angel Lane
Placerville, California 95667
(530) 622-7014

Prepared for
***Allen J. Hansen***
(530) 677-0670

June 2015

**ATTACHMENT A**

# Table of Contents

# Table of Contents, continued

# Table of Figures, Tables and Appendices

## Figures



## Tables



## Appendices

# I. Report Summary

## A. Special-Status Species

### 1. Federal and State-Listed Species

No listed species were found on the project site, and no potential habitat was found for any such species.

### 2. Species of Concern

Potential habitat was found for twenty-three species of concern (Table 1).

**Table 1.** Species of concern having potential habitat on the project site.

| Species of Concern | Common Name | Habitat Quality | Species Found On Site? |
|---|---|---|---|
| *Cosumnoperia hypocrena* | Cosumnes stripetail stonefly | Marginal | No |
| *Hydrochara rickseckeri* | Ricksecker's water scavenger beetle | Suitable | No |
| *Phrynosoma blainvillii* | Coast horned lizard | Marginal | No |
| *Accipiter cooperii* | Cooper's hawk | Suitable | No |
| *Ammodramus savannarum* | Grasshopper sparrow | Marginal | No |
| *Aquila chrysaetos* | Golden eagle | Suitable | No |
| *Athene cunicularia* | Western burrowing owl | Suitable | No |
| *Baeolophus inornatus* | Oak titmouse | Suitable | Yes |
| *Buteo lagopus* | Rough-legged hawk | Marginal | No |
| *Chondestes grammacus* | Lark sparrow | Suitable | No |
| *Falco columbarius* | Merlin | Suitable | No |
| *Lanius ludovicianus* | Loggerhead shrike | Suitable | No |
| *Picoides nuttallii* | Nuttall's woodpecker | Marginal | No |
| *Progne subis* | Purple martin | Marginal | No |
| *Spinus lawrencei* | Lawrence's goldfinch | Suitable | No |
| *Spizella passerina* | Chipping sparrow | Suitable | No |
| *Antrozous pallidus* | Pallid bat | Marginal | No |
| *Lasionycteris noctivagans* | Silver-haired bat | Suitable | No |
| *Myotis yumanensis* | Yuma myotis bat | Marginal | No |
| *Balsamorhiza macrolepis macrolepis* | Big-scale balsamroot | Suitable | No |
| *Clarkia biloba* ssp. *brandegeeae* | Brandegee's clarkia | Marginal | No |
| *Downingia pusilla* | Dwarf downingia | Suitable | No |
| *Sagittaria sanfordii* | Sanford's arrowhead | Suitable | No |

### 2. Mitigation

#### a. Invertebrates

Potential habitat for invertebrate species of concern would be protected by normal set-backs from ephemeral and intermittent waters.

#### b. Reptiles

No mitigation is required for marginal potential habitat for Coast horned lizard.

#### c. Birds

Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (March 1-August 31). If raptor nests are found on or immediately adjacent to the site, consultation with the California Department of Fish and Wildlife (CDFW) must be initiated to determine appropriate avoidance measures. If nesting migratory birds are found, a 50-foot buffer around the nest is recommended.

As a conservation recommendation (not mitigation), preservation of two or three oak snags per acre would provide nesting habitat for oak titmouse and Nuttall's woodpecker, which are species of concern having potential habitat on the project site.

#### d. Mammals

As a conservation recommendation (not mitigation), preservation of two or three oak snags per acre would provide roosting habitat for pallid bat, silver-haired bat and Yuma myotis, which are species of concern.

#### e. Plants

No special-status plant species were found on the project site; thus, no mitigation is required. Normal set-backs from ephemeral and intermittent waters would preserve potential habitat for aquatic plant species of concern.

## B. Oak Canopy

Oak woodland canopy coverage is 17.8% on the 45.69-acre project site, which requires 90% canopy retention. Oak canopy retention will be 97.85% for the project.

### 1. Existing Oak Canopy

Parcel 1, with 9% oak canopy (90% retention required), will retain 100% of its oaks; Parcel 2, with 13% oak canopy (90% retention required), will retain 100% of its oaks; Parcel 3, having 30% oak canopy (85% retention required), will retain 99.5% of its oaks; and Parcel 4, having 22% oak canopy (85% retention required), will retain 92.9% of its oak canopy.

### 2. Mitigation

According to current El Dorado County standards, oak canopy removal must be mitigated by replanting oaks at a 1:1 ratio of area of canopy removed to area revegetated. Using the standard of 200 saplings or 600 acorns planted per acre, the mitigation for proposed oak removal on Parcel 3 is 4 saplings or 10 acorns planted on 0.0166 acre, and for Parcel 4, 32 saplings or 95 acorns on 0.158 acres.

# II. Introduction

## A. Purpose of Report

A biological resources study was conducted on the project site, Assessor's Parcel Number 087-021-05 (Figure 1), in order to determine the suitability of its habitat to support state- or federal-listed special-status wildlife and plant species, and to evaluate oak woodlands found on-site.

The project would remove oak canopy for road construction and widening, three dwellings and septic systems. The report will enumerate the existing oak canopy and identify oaks proposed for removal. Oak tree preservation and replacement recommendations will be outlined.

## B. Project Location and Description

The project site, 45.69 acres in size, is located at 6740 South Shingle Road, Latrobe, being in the northeast quarter of Section 3 and the northwest quarter of Section 2, Township 8 North, Range 9 East, M.D.M. (Figure 2). The proposed project would subdivide the parcel into four single-family residential lots, varying in size from 10.1 to 13.4 acres (Figure 3).

The Hansen property has a current General Plan designation of RR with AE zoning. Parcels of land north and west of the project site, varying in size from 9.75 to 35.3 acres, have General Plan designations of RR with RE-10 zoning; the parcel to the south, 105 acres, has a General Plan designation of AL with AE zoning; and the parcels to the east, 46.3 to 134 acres in size, have a General Plan designation of RR with AE zoning.

An existing single-family residence is found on proposed Parcel 1, along with small out-buildings. An existing barn and corrals are located on Parcel 2, and the Bryant Cemetery, established in 1848, covers about one acre on Parcel 3. The Hansen property is otherwise developed with livestock fencing and water troughs, and is utilized as cattle pasture.

## C. Property Owner and Project Manager

Property Owner
Allen J. Hansen
P.O. Box 2163
Shingle Springs, CA 95682-2163
Phone: (530) 677-0670

Project Engineer
Ken Purcell, Civil Engineer
5816 Havenstar Ln.
El Dorado, CA 95623
Phone: (530) 622-5470

## D. Report Preparer

Ruth A. Willson, M.A., Biology, California State University, Fresno, has been preparing biological reports in El Dorado County since 1992. Her educational and experiential background includes proficiency in botany, entomology, ornithology, wildlife biology and ecology. She completed training in wetland delineation with Wetland Training Institute March 31, 2006, and is an ISA Certified Arborist, No. WE-8335A.

**Figure 1.** Assessor's map.

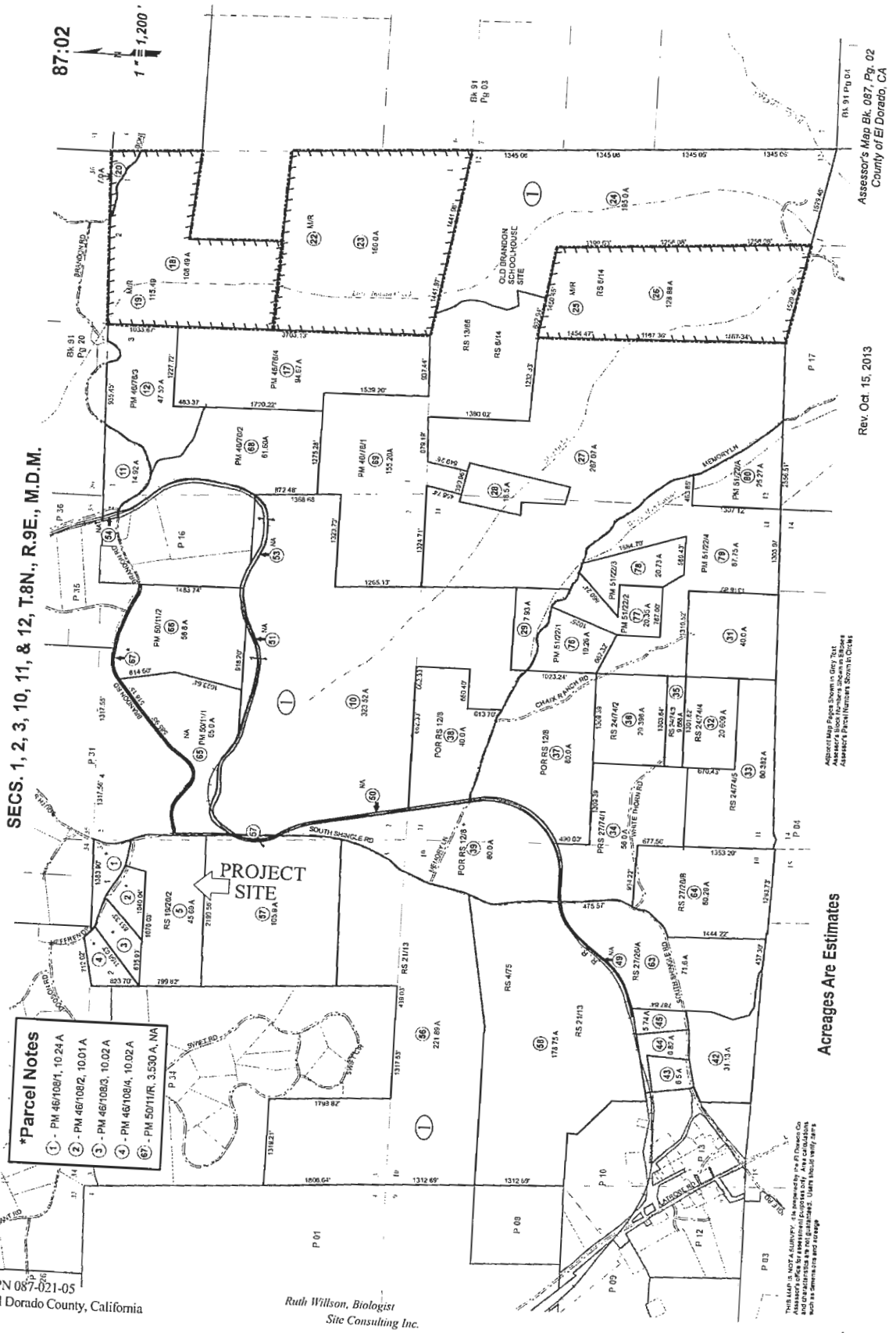
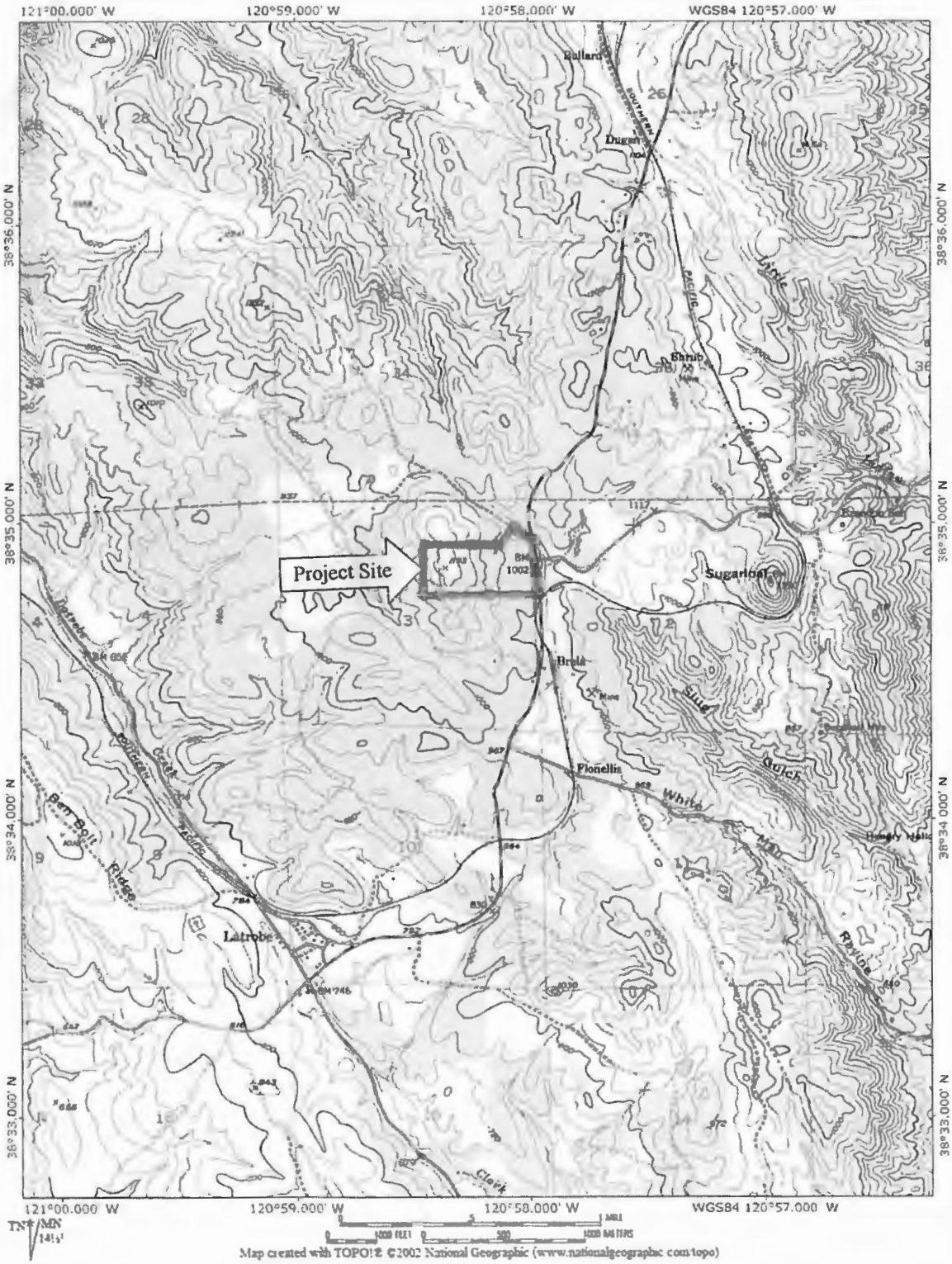


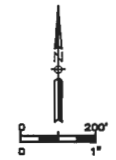
**Figure 2. USGS Topographic map.**



# TENTATIVE PARCEL MAP

## PORTIONS OF THE NW 1/4 OF SECTION 2 AND THE NE 1/4 OF SECTION 3, T. 8 N., R. 9 E., M.D.M., BEING TRACT 2 OF R.S. 19-26


VICINITY MAP
NO SCALE

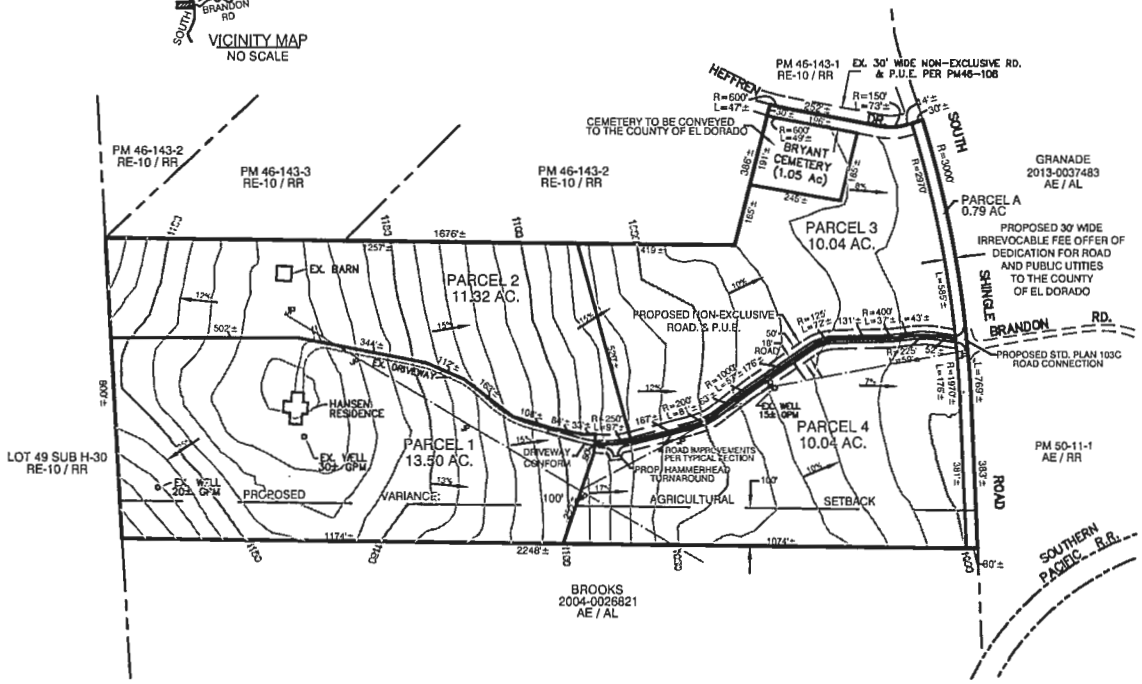



VARIANCES / DESIGN WAIVERS

1) PARCEL 2 - LENGTH TO DEPTH RATIO LESS THAN 3:1
2) REDUCE AGRICULTURAL SETBACK ON PARCELS 1 & 4 SOUTH LINE FROM 200 FEET TO 100 FEET
3) REDUCE STEM OF HAMMERHEAD TO 12 FEET WIDE.
4) ALLOW TANGENT LENGTHS BETWEEN REVERSING CURVES OF 200' OR GREATER IN RADIUS TO NO LESS THAN 40 FEET.

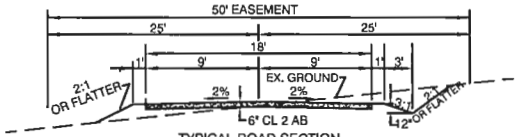
INFORMATION TABLE

| | |
|---|---|
| APPLICANT/OWNER: | ALLEN J. HANSEN<br>6740 SO. SHINGLE ROAD<br>SHINGLE SPRINGS, CA 95682 |
| PREPARED BY: | KEN W. PURCELL, CIVIL ENGINEER<br>P.O. BOX 30, EL DORADO, CA 95623<br>(530) 622-5470 |
| SCALE: | 1"=200' |
| CONTOUR INTERVAL: | 10 FEET |
| SOURCE OF TOPOGRAPHY: | FIELD INSTRUMENT SURVEY |
| ASSESSORS PARCEL NO.: | 087-021-05 |
| PRESENT ZONING: | AE |
| PROPOSED ZONING: | RE-10 |
| CURRENT GENERAL PLAN: | RR |
| AREA: | 45.69 ACRES |
| PROPOSED NUMBER/SIZE OF PARCELS: | FOUR (4) / 10 ACRE MINIMUM |
| DOMESTIC WATER: | INDIVIDUAL WELLS |
| SEWAGE DISPOSAL: | INDIVIDUAL SEPTIC |
| FIRE PROTECTION: | LATROBE FIRE PROTECTION DISTRICT |
| DATE: | JULY 1, 2015 |




LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | BOUNDARY LINE |
| | | PARCEL LINE |
| | | 10 FT. ELEV. CONTOUR LINE |
| 1150 | | 50 FT. ELEV. CONTOUR LINE |
| 15% | | SLOPE |
| JP | | UTILITY LINE & POLE |
| RE-10 / RR | | ZONING / LAND USE DESIGNATION |
| CL | | CENTERLINE |
| PUE | | PUBLIC UTILITIES EASEMENT |




TYPICAL ROAD SECTION
PER STD. PLAN 101C
NO SCALE

NOTE:
REFER TO THE ACCOMPANYING PRELIMINARY ROAD AND DRAINAGE DESIGN PLAN

13-17 Tentative Map.dwg

**Figure 4.** Aerial photograph of the project site.

## III. Evaluation Methods

### A. Field Surveys

The project site was searched for special-status plants during field surveys conducted May 13, 18 and June 20, 2015, by Ruth Willson. The locations of special habitats were mapped using a sub-meter GPS unit. Plants were identified in the field whenever possible; samples of unknown plants were taken with identification achieved in the office through the use of Baldwin, et al. (2012), and Jepson Flora Project (2015). Vegetation communities were identified in the field.

The locations of oak trees within or near proposed construction areas were mapped May 13, 2015, utilizing a submeter GPS unit. The trunk diameter at breast height (dbh) of each tree was measured with a dendrometer, and its drip radius was measured from the center of the trunk to the tip of its longest branch. The health of each tree was also evaluated (Appendix F).

### B. Literature Search

The U.S. Fish and Wildlife Service (USFWS) list, "IPaC Trust Resource Report," generated May 12, 2015 (Appendix A), served as the main source of data on federal-listed special-status species that could be affected by the project. A RareFind 5 report of known occurrences of special-status species in the Latrobe and eight surrounding USGS Quads, updated May 5, 2015, was obtained from the California Natural Diversity Database (Appendix B). Other current lists reviewed include the California Department of Fish and Wildlife (CDFW) publications *State and Federally Listed Endangered, Threatened and Rare Plants of California* and *Special Vascular Plants, Bryophytes and Lichens,* along with the California Native Plant Society (CNPS) list, *Inventory of Rare and Endangered Plants, v7-15may 5-7-15* (Appendix C).

### C. Vegetation Community Classification

References on the classification of vegetation include Mayer & Laudenslayer (1988), Munz & Keck (1959) and Sawyer et al. (2009). Vegetation communities are referenced to those listed in the El Dorado County General Plan, adopted July 19, 2004 (El Dorado County, 2006).

### D. Oak Canopy Determination

The oak canopy coverage on the project site was measured on an aerial photo within a Computer Aided Drafting (CAD) program.

### E. Canopy Removal Calculations

The location and canopy area of each tree measured in the field was entered into a CAD program. The canopy of trees to be removed was calculated by adding together the drip-area of trees to be removed, then subtracting the canopy to be removed that is overlapped by the canopy of trees to remain. The net canopy to be removed was outlined and measured within the CAD program.

### F. Conservation Recommendations for Species of Concern

Conservation recommendations are included in this report to suggest ways to aid species of concern that are not protected by law. They are not necessarily mitigation measures to be listed as conditions of approval for the project.

# IV. Regulatory Setting

## A. Federal Regulations

### 1. Federal Endangered Species Act (ESA)

Section 9 of the ESA prohibits "take" of endangered or threatened species; take is defined "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." Section 10 of the ESA allows incidental take for listed species for otherwise lawful projects. Section 10 Permits can be obtained through the United States Fish and Wildlife Service.

### 2. Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the take, possession, or trade of migratory birds or their parts. The Act specifically protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and take (16 U.S.C., Sec. 703, Supp. I, 1989). The definition of take is to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12). Exceptions from the MBTA prohibitions are prescribed by the Secretary of the Interior, and include non-native, invasive species such as European starling, English sparrow, Rock dove, and Eurasian collared dove.

### 3. Raptors

Raptors and their nests are protected under both federal (MBTA) and state (Fish and Game Code Section 3503.5) regulations. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

### 4. Wetlands and Waters

The U.S. Army Corps of Engineers (USACE) has jurisdiction over "Waters of the U.S." (also called "jurisdictional waters") under provisions of Section 404 of the Clean Water Act (1972). Such "jurisdictional waters" include waters used, or potentially used, for interstate commerce, interstate waters, lakes, rivers, streams, tributaries of streams, and wetlands adjacent to or tributary to the above. Irrigation and drainage ditches excavated on dry land, artificially-irrigated areas, man-made lakes or ponds used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions are usually exempted from USACE jurisdiction (33 CFR, Part 328).

California Department of Fish and Wildlife (CDFW) has jurisdiction over alterations to the beds of rivers, streams, creeks, or lakes. The Fish and Game Code (Section 1602) requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake. Alterations include activities that would: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Disturbance of any potential jurisdictional features on this project could require one or more of the following permits:

- A Clean Water Act, Section 404 permit from the U.S. Army Corps of Engineers.
- A Water Quality Certification, Section 401, permit from the Regional Water Quality Control Board.
- A 1601-1603 Streambed Alteration Agreement from the California Department of Fish and Game.

## B. California Regulations

### 1. California Environmental Quality Act (CEQA)

According to Section 21002 of CEQA, "It is the policy of the State that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. To clarify that statement, CEQA Guidelines, Section 15370, lists five mitigation concepts for listed species.

a. Avoiding the impact altogether by not taking a certain action.
b. Minimizing impacts by limiting the degree or magnitude of the action.
c. Rectifying the impact by repairing, rehabilitating or restoring the impacted area.
d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project.
e. Compensating for the impact by replacing or providing substitute resources or environments.

### 2. California Endangered Species Act (CESA)

Section 2052 of CESA states, "The Legislature . . . finds and declares that it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat." Protection for such special-status species is codified in Section 2080 of the Fish and Game Code, which prohibits "take" of any endangered or threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill."

CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset losses caused by the project, but allows for take incidental to otherwise lawful development projects. . When take of a species cannot be avoided, an Incidental Take Permit, authorized under Title 14, Section 783.2, may be obtained through the CESA Section 2081(b) and (c) incidental take permit process.

### 3. California State Fish and Game Code

The State Fish and Game Code Section 3503 states, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 states, "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 states, " It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act."

## C. El Dorado County Regulations

### 1. El Dorado County Important Habitat Mitigation Program

Mitigation guidelines provided by El Dorado County include, but are not limited to, the following:

a. Avoidance;
b. Open space/conservation easements;
c. Redesign;
d. Clustering;
e. Vegetated buffers;
f. Retaining animal dispersal corridors;
g. Planning construction activity to avoid critical time periods (nesting, breeding) for wildlife species;
h. Careful siting to place new disturbances at previously disturbed locations;
i. Restoration or enhancement of woodland habitat;
j. Best Management Practices for reducing impacts from grading/development in environmentally sensitive areas;
k. Additional oak tree canopy retention and oak woodland habitat preservation or replacement on-site and/or off-site;
l. Retaining contiguous stands of oak woodland habitats by retaining corridors between stands.

### 2. El Dorado County Oak Woodland Policy

The El Dorado County Oak Woodland Policy is currently found within *Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A)*, adopted November 9, 2006, Amended October 12, 2007. The Policy sets tree retention standards, depending upon existing canopy cover (Table 2), and applies to parcels over an acre that have at least one percent total canopy cover by oak woodlands, or less than an acre having at least ten percent canopy cover. If the oak canopy removed is within the retention standards set forth in Option A of Policy 7.4.4.4, the applicant may mitigate for the loss by planting on-site the area of oak canopy removed, at a 1:1 canopy surface area ratio, and at a density of 200 saplings per acre. Acorns may be planted instead of saplings, at a ratio of three acorns per sapling.

**Table 2**. Oak canopy retention standards.

| Percent Existing Canopy Cover | Percent Canopy Cover to be Retained |
|---|---|
| 80-100 | 60 |
| 60-79 | 70 |
| 40-59 | 80 |
| 20-39 | 85 |
| 10-19 | 90 |
| 1-9 for parcels > 1 acre | 90 |

## V. Topographic Features

### A. Topography

The project site lies between 1000 and 1193 feet (305 and 634 meters) elevation, encompassing a north-south knoll and the east- and west-facing slopes on either side of it (Figures 2 and 4; photos below). The average east-slope gradient is 10 percent, but it varies from five to twenty percent; the average west-slope gradient is 13 percent.

Two drainage swales originate on the knoll, one carrying water west and the other, east. The west-flowing swale does not form a channel on the project site, but eventually joins an ephemeral creek that flows into Latrobe Creek, which joins Deer Creek, a perennial stream that joins the Cosumnes River south of Elk Grove. The east-flowing swale forms a very small wetland south of the Bryant Cemetery on proposed Parcel 3, then carries water easterly through a discontinuous channel that disburses through the pasture before forming another small wetland. After the second wetland, water continues eastward, forming neither a channel nor other wetlands, to a culvert beneath South Shingle Road.

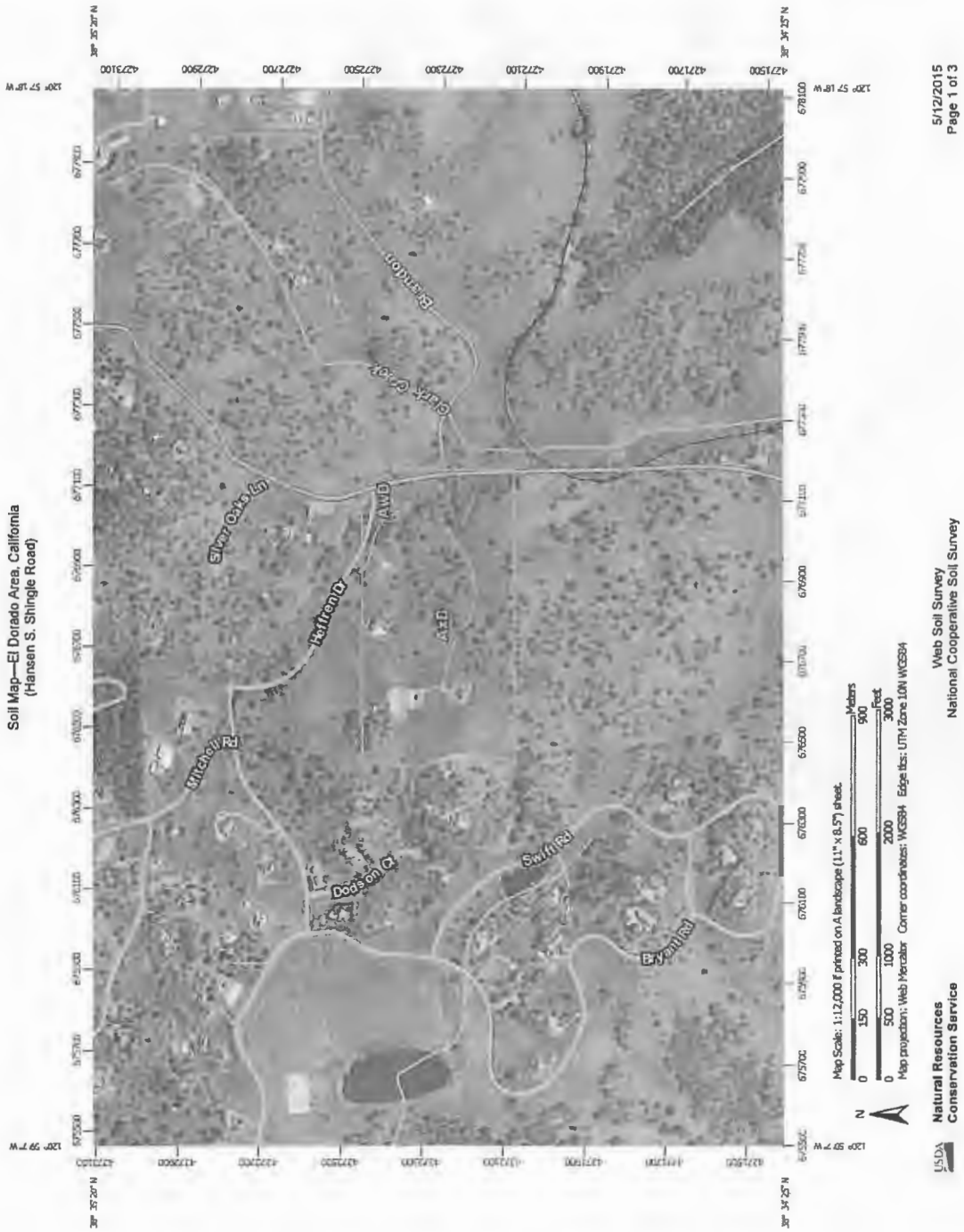
An intermittent fork of Clark Creek enters the project site from a culvert beneath Heffren Drive and flows southeasterly across the northeast corner of the project site, forming a wetland, before leaving the east boundary of proposed Parcel 3, passing beneath South Shingle Road in a culvert. Clark Creek joins the Cosumnes River near the historic community of Michigan Bar, about five miles south of the project site.

### B. Soils

The soils on the project site (Figure 5) are classified in the Auburn series, predominantly Auburn very rocky silt loam (AxD), and Auburn silt loam (AwD), found at the northeast corner of the project site. (NRCS 2015).

Auburn soils are well-drained and underlain by hard metamorphic rock at a depth of 12 to 26 inches. The two Auburn soils are similar, differing mainly in the percentage of surface covered by bedrock outcrops: Auburn very rock silt loam has 5 to 25 percent, and Auburn silt loam has less than 5 percent.

**Figure 5.** Soils map, generated by Natural Resources Conservation Service's Web Soil Survey.




AxD = Auburn very rocky silt loam
AwD = Auburn silt loam

# VI. Biological Resources

## A. Vegetation Communities

The vegetation communities on the project site (photo at right and Figure 6) consist of blue oak woodland and California annual grassland (El Dorado County 2004). Blue Oak Woodland may also be classified as Blue Oak/Annual Grass-Forb Sub-Alliance (Klein et. al 2007), and consists of scattered oaks within savannah. The most common oak species is blue oak *(Quercus douglasii)*, followed by valley oak (*Q. lobata)* and interior live oak (*Q. wislizenii)* in a ratio of 33:8:1. No other tree species were found on-site, except landscape trees planted near the existing dwelling. The shrub layer is completely absent from the project site, and the herbaceous layer consists of mostly non-native species, such as wild oats *(Avena barbata),* bromes (*Bromus diandrus, B. hordeaceus),* Italian thistle*(Carduus pycnocephalus),*dogtail grass (*Cynosurus echinatus)*, perennial ryegrass *(Lolium multiflorum)*, Medusa head (*Elymus caput-medusae)*, tall sock-destroyer *(Torilis arvensis)*, barbed goatgrass (*Aegilops triuncialis*), and rose clover (*Trifolium hirtum).* Interspersed among the non-native species are some natives, including sky lupine*(Lupinus nanus)*, white brodiaea *(Triteleia hyacinthina*), needle-leaf navarretia (*Navarretia intertexta*) and Sacramento Valley buttercup *(Ranunculus canus*).

## B. Wetlands and Waters

Three wetlands were found on the project site (Figure 6): a small, unvegetated seasonal pond in a drainage swale south of the Bryant Cemetery on Parcel 3, another small wetland farther east in the same drainage, and a larger wetland associated with an intermittent fork of Clark Creek that crosses the northeast corner of Parcel 3 (photo at right).

## C. Hydrophytic Vegetation

Hydrophytic vegetation[1] was found within the wetland associated with the intermittent creek on Parcel 3. Obligate[2] wetland plants (OBL) were limited to three species: watercress (*Nasturtium officinale*), common spikerush (*Eleocharis palustris*) and seep monkeyflower (*Mimulus guttatus*). Three facultative[3] wetland plants (FACW) were also found in that wetland: tall flatsedge (*Cyperus eragrostis),* annual beard grass (*Polypogon monspeliensis*), and clustered dock (*Rumes conglomeratus*); a fourth FACW plant, needleleaf navarretia (*Navarretia intertexta*), was found within a roadside ditch along the existing driveway separating Parcels 1 and 2. Six facultative[4] plant species (FAC) were found scattered around the property: perennial ryegrass (*Festuca perennis*), Italian plantain (*Plantago lanceolata*), red-tipped rabbit-tobacco (*Pseudognaphalium luteoalbum*), annual quaking grass (*Briza minor*), Sacramento Valley buttercup and white brodiaea.

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[1] Plants listed in the U.S. Army Corps of Engineers 2014 Arid West Region Wetland Plant List. http://wetland_plants.usace.army.mil/

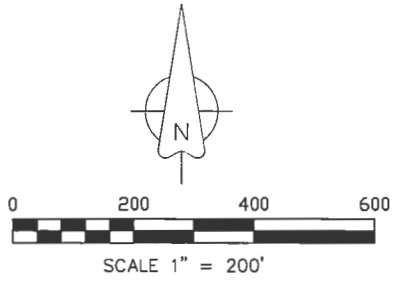
[2] Obligate wetland plants (OBL) almost always occurs in wetlands (estimated probability > 99%)

[3] Facultative wetland plants usually occur in wetlands (estimated probability 67% – 99%)

[4] Facultative (FAC). Equally likely to occur in wetlands (est. probability 34% – 66%) or non-wetlands.

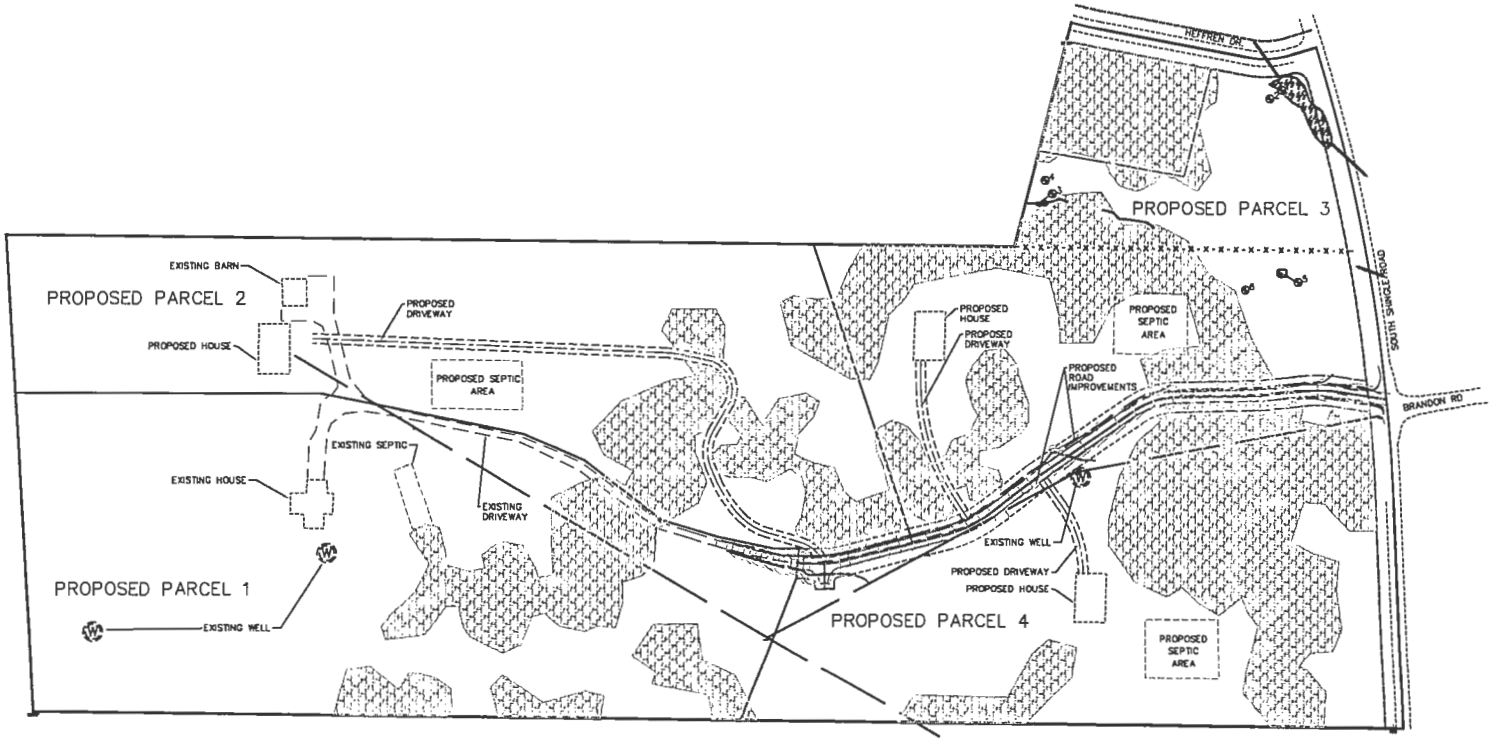
# FIGURE 6
# VEGETATION, WETLANDS & WATERS MAP

A PORTION OF THE NW 1/4 OF SECTION 2 AND THE NE 1/4 OF SECTION 3, T.8N., R.9E., M.D.M.
BEING TRACT 2 OF RS 19/26
EL DORADO COUNTY STATE OF CALIFORNIA
JUNE 2015
FOR: ALLEN HANSEN
APN: 087-021-05




## LEGEND

- CALIFORNIA ANNUAL GRASSLAND
- BLUE OAK WOODLAND
- DATA POINT
- EXISTING CHANNEL
- WETLANDS





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### D. Wildlife

Three reptile species were observed on the project site: California alligator lizard (*Elgaria coerulea*), Western fence lizard (*Sceloporus occidentalis*) and gopher snake *(Pituophis catenifer)*. The site has suitable habitat for additional reptiles not observed during field surveys, including, but not limited to, Common garter snake (*Thamnophis sirtalis*), Common king snake (*Lampropeltis getula*), North American racer (*Coluber constrictor*), Sharp-tail snake (*Contia tenuis*), and Western rattlesnake (*Crotalus viridis*).

One amphibian, Pacific tree frog (*Pseudacris egilla*), was observed. The site has suitable habitat for an additional amphibian: Western toad (*Anaxyrus boreas*).

Evidence of mammals found on the project site include Coyote (*Canis latrans*), Black-tailed deer (*Odocoileus hemionus),* Gray fox (*Urocyon cinereoargenteus*), Striped skunk (*Mephitis mephitis*) California ground squirrel (*Spermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*). Not observed, but having suitable habitat on-site, are the following mammals, among others not listed: Deer mouse (*Peromyscus* sp.), Broad-footed mole (*Scapanus latimanus*), Black-tailed jackrabbit (*Lepus californicus*), California vole (*Microtus californicus*) and Raccoon (*Procyon lotor*).

Several bird species were found on or near the project site, including Scrub jay (*Aphelocoma coerulescens),* Turkey vulture (*Cathartes aura*), California quail (*Callipepla californica*), Oak titmouse (*Baeolophus inornatus*), Acorn woodpecker (*Melanerpes formicivorus*), Tree swallow (*Tachycineta bicolor*), European starling (*Sturnus vulgaris*), Western kingbird (*Tyrannus verticalis*), Western meadowlark (*Sturnella neglecta*), Western bluebird (*Sialia mexicana*), Pacific-slope flycatcher (*Empidonax difficilis*), Brown-headed cowbird (*Molothrus ater*), Northern mockingbird (*Mimus polyglottos*), American robin (*Turdus migratorius*), Red-winged blackbird (*Agelaius phoeniceus*), Black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), Wild turkey (*Meleagris gallopavo),* and Red-tailed hawk (*Buteo jamaicensis*).

The site has suitable habitat for several bird species not observed during field surveys, including, but not limited to, the following: Bullock's oriole (*Icterus bullockii*), Cooper's hawk (*Accipiter cooperii*), House finch (*Carpodacus mexicanus*), House wren (*Troglodytes aedon*), Dark-eyed junco (*Junco hyemalis*), Yellow-rumped warbler (*Dendroica petechia*), White-breasted nuthatch (*Sitta carolinensis*), Mourning dove (*Zenaida macroura*), and Western screech owl (*Megascops kennicottii*).

### E. Special-Status Species

#### 1. Special-Status Species Without Habitat on the Project Site

An evaluation of special-status species which may be found in the Latrobe and surrounding USGS Quads is shown in Appendix D. Species lacking suitable habitat on the project site are not discussed further in this report.

#### 2. Special-Status Species with Habitat on the Project Site

No potential habitat was found on the project site for state- or federal-listed species. Potential habitat was found for twenty-three species of concern, including two insect: Cosumnes stripetail stonefly and Ricksecker's water scavenger beetle; one reptile: Coast horned lizard; eleven birds: Cooper's hawk, Grasshopper sparrow, Golden eagle, Western burrowing owl, Oak titmouse, Rough-legged hawk, Lark sparrow, Merlin, Loggerhead shrike, Nuttall's woodpecker, Purple martin, Lawrence's goldfinch, and Chipping sparrow; three mammals: Pallid bat, Silver-haired bat and Yuma myotis bat; and four plants: Big-scale balsamroot, Brandegee's clarkia, Dwarf downingia and Sanford's arrowhead (Table 3). The suitability of the site to support each species is evaluated in Subsection 3, below.

**Table 3.** Special-status species with potential habitat on the project site.

| Species of Concern | Common Name | Listing Status | Habitat Quality | Species Found On Site? |
|---|---|---|---|---|
| **Invertebrates** | | | | |
| *Cosumnoperia hypocrena* | Cosumnes stripetail stonefly | — / — | Marginal | No |
| *Hydrochara ricksecker*i | Ricksecker's water scavenger beetle | — / — | Suitable | No |
| **Reptiles** | | | | |
| *Phrynosoma blainvillii* | Coast horned lizard | SSC[1] | Marginal | No |
| **Birds** | | | | |
| *Accipiter cooperii* | Cooper's hawk | LC[2] | Suitable | No |
| *Ammodramus savannarum* | Grasshopper sparrow | SSC[1] | Marginal | No |
| *Aquila chrysaetos* | Golden eagle | LC[2] | Suitable | No |
| *Athene cunicularia* | Western burrowing owl | SSC[1] | Suitable | No |
| *Baeolophus inornatus* | Oak titmouse | BCC[3] | Suitable | Yes |
| *Buteo lagopus* | Rough-legged hawk | LC[2] | Marginal | No |
| *Chondestes grammacus* | Lark sparrow | LC[2] | Suitable | No |
| *Falco columbarius* | Merlin | LC[2] | Suitable | No |
| *Lanius ludovicianus* | Loggerhead shrike | SSC[1] | Suitable | No |
| *Picoides nuttallii* | Nuttall's woodpecker | BCC[3] | Marginal | No |
| *Progne subis* | Purple martin | SSC[1] | Marginal | No |
| *Spinus lawrencei* | Lawrence's goldfinch | BCC[3] | Suitable | No |
| *Spizella passerina* | Chipping sparrow | LC[2] | Marginal | No |
| **Mammals** | | | | |
| *Antrozous pallidus* | Pallid bat | SSC[1] | Marginal | No |
| *Lasionycteris noctivagans* | Silver-haired bat | LC[2] | Suitable | No |
| *Myotis yumanensis* | Yuma myotis bat | LC[2] | Marginal | No |
| **Plants** | | | | |
| *Balsamorhiza macrolepis macrolepis* | Big-scale balsamroot | 1B.2[4] | Suitable | No |
| *Clarkia biloba* ssp. *brandegeeae* | Brandegee's clarkia | 4.2[5] | Marginal | No |
| *Downingia pusilla* | Dwarf downingia | 2B.2[6] | Suitable | No |
| *Sagittaria sanfordii* | Sanford's arrowhead | 1B.2[4] | Suitable | No |

[1]CA Dept. Fish & Wildlife (CDFW) Species of Special Concern.

[2]International Union for Conservation of Nature Species of Least Concern.

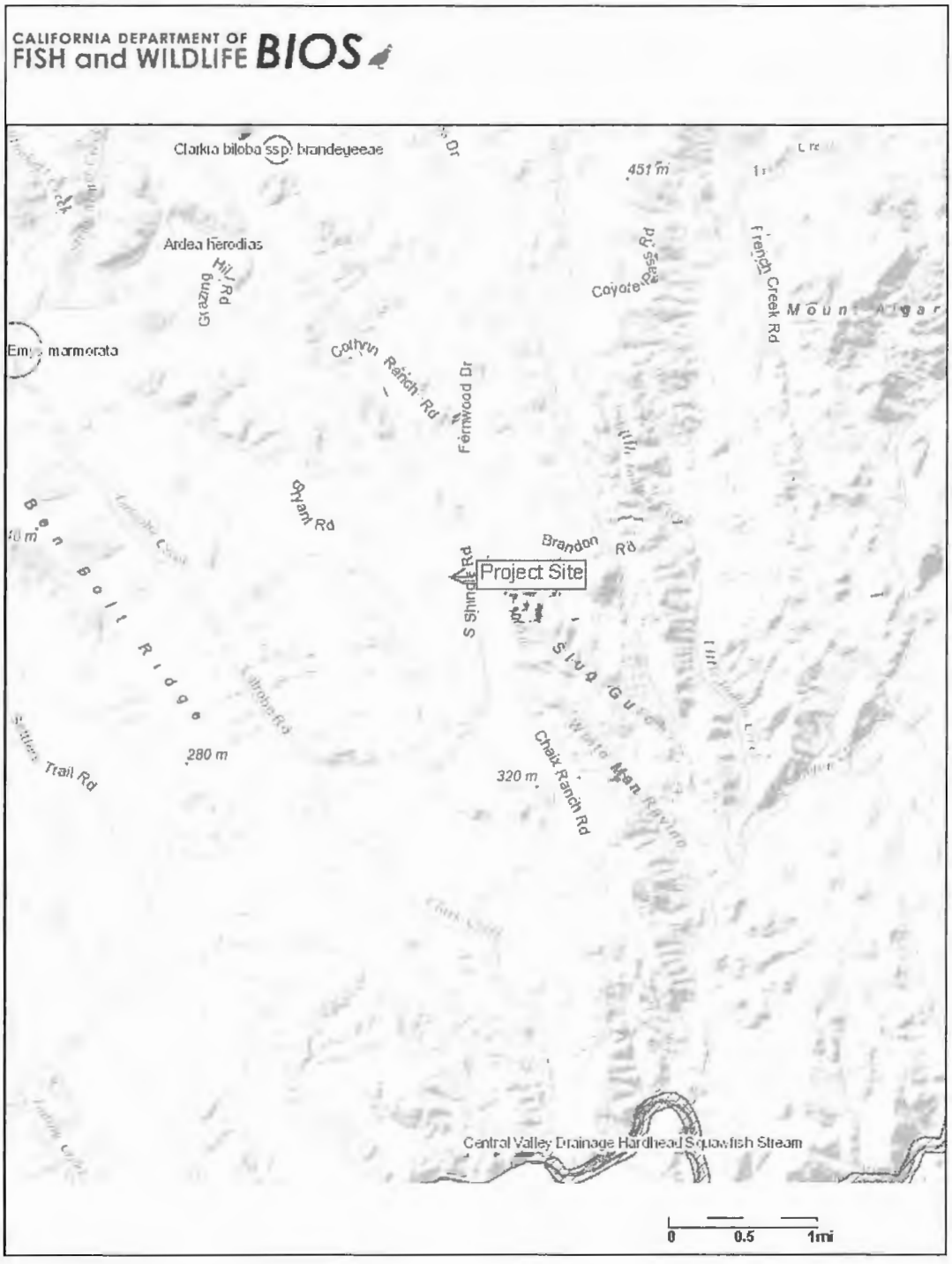
[3]U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern.

[4] California Native Plant Society (CNPS) list of Rare, Threatened or Endangered Plants in California and Elsewhere, Moderately threatened in California

[5] CNPS Plants of Limited Distribution, Moderately threatened in California

[6] CNPS list of Rare, Threatened or Endangered Plants in California but More Common Elsewhere, Moderately threatened in California.

**Figure 7.** California Natural Diversity Database BIOS map of special-status species near the project site.



## 3. Evaluation of Potential Habitat for Special-Status Species

### a. Invertebrates

**Cosumnes spring stonefly (*Cosumnoperia hypocrena)***
**Range:** Known only from the Cosumnes River and American River drainages in El Dorado County. (CNDDB 2015)
**Nearest CNDDB occurrence:** Approximately six and one-half miles northeast of the project site. (BIOS 2015)
**Habitat requirements:** Intermittent streams on the western slope of central Sierra Nevada foothills in American and Cosumnes river drainages. More specifically, the species has been found in shallow spring waters flowing over heavily shaded, moss covered rocks (CNDDB 2015)
**Habitat quality on project site:** Marginal in the seasonal wetland found near the northwest corner of the project site. Wetland is in full sun, not shade, as reported to be good habitat for the species. The remainder of the parcel is unsuitable for the species.
**Potential impacts:** Disturbance of the intermittent creek would be detrimental to potential habitat for the species, but no disturbance is proposed for this project.

**Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*)**
**Range:** Known from Marin, Sonoma, Solano, San Mateo, Lake, Placer (Lincoln area), San Juaquin and Sacramento counties. (CNDDB 2015)
**Nearest CNDDB occurrence:** Approximately eight miles northwest in Sacramento County (BIOS 2015).
**Habitat requirements:** The aquatic beetle lives in weedy, shallow, open water habitats associated with fresh water seeps, springs, farm ponds, vernal pools, and slow-moving streams. (LSA Assoc. 2004) Current CNDDB occurrences were found within vernal pools and seasonal wetlands. (CNDDB 2015)
**Habitat quality on project site:** Suitable in the seasonal wetland found near the northwest corner of the project site; unsuitable on the remainder of the parcel.
**Potential impacts:** No impact to the species is expected from this project because no development is proposed near potential habitat for the species.

### b. Reptiles

**California horned lizard (*Phrynosoma blainvillii*)**
**Range:** Occurs in the Sierra Nevada foothills from Butte Co. to Kern Co. and throughout the central and southern California coast. Its elevation range extends up to 1200 m (4000 ft) in the Sierra Nevada foothills but most often found below 600 m (2000 ft.). (CWHR, March 2000 update)
**Habitat requirements:** Found in open country with sandy areas such as flood plains, washes and loess deposits within habitats ranging from scattered shrubs to clearings in riparian woodlands, uniform chamise chaparral, and annual grassland with scattered shrubs. Feeds in open areas between shrubs, often near ant nests; consumes insects, especially ants. Active between April and October; breeds April and May. Burrows in loose substrate or uses small mammal burrows. (CWHR, March 2000 update)
**Nearest CNDDB occurrence of record:** Approximately five miles north of the project site. (BIOS 2015)
**Habitat quality on project site:** Marginal around rock outcrops; unsuitable on the rest of the property, due to heavy grass cover.
**Suggested mitigation:** None required.

### c. Birds

**Cooper's hawk (*Accipiter cooperii)* nesting**
**Range:** Breeding resident in most wooded portions of California between sea level and 2700 m (9000 ft.) elevation. (CWHR 2015)
**Nearest CNDDB occurrence:** Approximately 13 miles west, near Mather Field, Sacramento County. (BIOS 2015)
**Habitat requirements:** Year-long resident found in areas with dense tree stands or patchy woodland habitats. Feeds on small birds, mammals, reptiles and amphibians. Nests in deciduous trees or conifers, usually near streams. (CWHR 2015)
**Habitat quality on project site:** Suitable within oak groves on the eastern portion the project site.
**Potential impacts:** Construction during the nesting season could disrupt nesting hawks, if found on-site.
**Suggested mitigation:** Pre-construction surveys for nesting raptors, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (March 1-August 31). If raptor nests are found on or immediately adjacent to the site, consultation with the California Department of Fish and Wildlife (CDFW) must be initiated to determine appropriate avoidance measures.

**Grasshopper sparrow (*Ammodramus savannarum)* nesting**
**Range:** Summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity counties south to San Diego county. (CWHR, 2008 update)
**Nearest CNDDB occurrence:** About seven miles southwest of the project site in Sacramento County. (BIOS 2015)
**Habitat requirements:** Dry or well-drained, dense grassland, especially those with a mixture of grasses and tall forbs for foraging and nesting. Uses scattered shrubs for singing perches. (CWHR, 2008 update)
**Habitat quality on project site:** Marginal; the project site lacks shrubs, but may be utilized by the species if it will use fences for singing perches.
**Potential impacts:** Loss of potential habitat due to construction of a house and other structures within grasslands.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (March 1-August 31). If nests are found, a 50-foot radius buffer around the nest, protected with temporary construction fence, is suggested .

**Golden eagle (*Aquila chrysaetos)* nesting**
**Range:** Uncommon permanent resident and migrant throughout California, except the center of the Central Valley, ranging from sea level to 3833 m (11,500 ft.). (CWHR 2015)
**Nearest CNDDB occurrence:** Approximately nine miles northwest of the project site, near El Dorado Hills. (BIOS 2015)
**Habitat requirements:** Rolling foothills, mountain areas, sage-juniper flats and deserts are preferred habitats. Needs open terrain for hunting. Feeds mostly on lagomorphs and rodents, but also other mammals, reptiles, birds and carrion. Nests on cliffs or large trees in open areas. Typical home range in northern California is 124 $km^2$ (48 $mi^2$). (CWHR 2015)
**Habitat quality on project site:** Suitable nesting habitat is found in trees on the eastern half of the project site.
**Potential impacts:** Removal of large trees in open areas would reduce the amount of potential nesting habitat for the species.
**Suggested mitigation:** Pre-construction surveys for nesting raptors, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (March 1-August 31). If raptor nests are found on or immediately adjacent to the site, consultation with the California Department of Fish and Wildlife (CDFW) must be initiated to determine appropriate avoidance measures.

**Western burrowing owl *Athene cunicularia*** (burrow and wintering sites)
**Range:** Resident in suitable habitats throughout California, up to 1600 meters elevation, excluding the humid northwest coastal forests and the high mountains. (CWHR, 1999 update)
**Nearest CNDDB occurrence of record:** Approximately seven mile northwest of the project site, west of El Dorado Hills (BIOS 2015)
**Habitat requirements:** Open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats with burrows. Feeds mostly on insects, but also small mammals, reptiles, birds and carrion. Roosts and nests in rodent or other burrow. (CWHR, 1999 update)
**Habitat quality on project site:** Suitable. The project has ground squirrel burrows which are potential nest sites for the species.
**Potential impacts:** Loss of potential habitat due to construction of a house and other structures within grasslands.
**Suggested mitigation:** Pre-construction surveys for nesting raptors, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (March 1-August 31). If raptor nests are found on or immediately adjacent to the site, consultation with the California Department of Fish and Wildlife (CDFW) must be initiated to determine appropriate avoidance measures.

**Oak titmouse (*Baeolophus inornatus)*** nesting
**Range:** Found in suitable habitat, mostly encircling the San Juaquin Valley and on the west slope of the Sierra Nevada north to Shasta County. (CWHR, 1998 update)
**Nearest CNDDB occurrence:** Tuolumne County. (BIOS 2015)
**Habitat requirements:** Associated with oaks in valley foothill and montane hardwood, valley foothill hardwood-conifer, and riparian habitats. Eats insects, spiders, berries, acorns, seeds. Nests in holes, cavities or nest box. Ventures into residential areas. (CWHR, 1998 update)
**Habitat quality on project site:** Suitable within oak trees on the eastern half of the project site.
**Potential impacts:** Removal of oak trees with cavities during the nesting season could result in illegal "take" of the species.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

**Rough-legged hawk (*Buteo lagopus)*** wintering
**Range:** Migrant and winter resident in Modoc Plateau, northern valleys, Central Valley and coast from Santa Barbara to Sonoma counties.
**Nearest CNDDB occurrence:** None.
**Habitat requirements:** Open areas near riparian or other wooded habitats, especially wet meadows, marshes, and swamp and riparian edges. Feeds primarily on small mammals, but also takes small birds, game birds, and occasionally fish, insects, and reptiles.
**Habitat quality on project site:** Marginal near the wetland on Parcel 3.
**Potential impacts:** Disturbance to wetlands found on-site would disrupt potential habitat for the species, but no disturbances to wetland will result from the project as designed.
**Suggested mitigation:** Normal set-backs from wetlands and waters is sufficient to protect potential habitat for the species.

**Lark sparrow (*Chondestes grammacus*)** nesting
**Range:** Resident in lowlands and foothills throughout much of California. Most common around margins of Central Valley, in bordering foothills, and inner coastal ranges; local on coastal slope, especially north of southern Humboldt Co (CWHR 2015).
**Nearest CNDDB occurrence:** San Diego, CA.
**Habitat requirements:** Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs. Scattered trees or shrubs are required for lookout and song perches and other cover. Fence posts, large rocks, other elevated sites, and ground herbage also provide cover. (CWHR 2015).
**Habitat quality on project site:** Suitable in on-site oak woodlands.
**Potential impacts:** Potential foraging habitat would be lost when structures are built.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

**Merlin (*Falco columbarius*) wintering**
**Range:** Occurs in most of the western half of California below 1500 m (4900 ft.) elevation. (CWHR, 1999 update)
**Nearest CNDDB occurrence:** Approximately 13 miles ENE at Folsom. (BIOS 2015)
**Habitat requirements:** Winter migrant that utilizes coastlines, open grasslands, open woodlands, lakes, wetlands, edges and early successional stages, ranging from annual grasslands to Ponderosa pine and montane hardwood-conifer habitats. Frequents open habitats at low elevations near water and tree stands, especially near coastlines, lakeshores and wetlands. Does not nest in California. Feeds on small birds and mammals, and insects. (CWHR, 1999 update)
**Habitat quality on project site:** Suitable wintering habitat throughout the project site.
**Potential impacts:** Potential foraging habitat would be lost when structures are built.
**Suggested mitigation:** None required.

**Loggerhead shrike (*Lanius ludovicianus*)** nesting
**Range:** Resident and winter visitor in lowlands and foothills throughout California. (CWHR 2015)
**Nearest CNDDB occurrence:** Alameda and San Juaquin Counties.
**Habitat requirements:** Open habitats with scattered trees, shrubs, posts, fences, utility lines or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Rare in urban areas but often in open cropland. Nests in densely-foliated tree or shrub (CWHR 2015)
**Habitat quality on project site:** Suitable nesting habitat in oak trees on the eastern portion of the project site, suitable foraging habitat throughout the site.
**Potential impacts:** Removal of oak trees would reduce the amount of potential nesting habitat for the species.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

**Nuttall's woodpecker (*Picoides nuttallii*)** nesting
**Range:** Central Valley, Transverse and Peninsular Ranges, Coast Range north to Sonoma County, lower portions of Cascade Range and Sierra Nevada. Average home range is 0.8 mile from a riparian strip (CWHR 2015).
**Nearest CNDDB occurrence:** None. (BIOS 2015)
**Habitat requirements:** Resident of low-elevation riparian deciduous and oak habitats. Feeds on oak and riparian deciduous trees for sap, adult and larval insects; also eats seeds, nuts and fruits. Nests in riparian habitat, usually in a dead willow, sycamore, cottonwood or alder, rarely in oaks. (CWHR 2015)
**Habitat quality on project site:** Suitable foraging habitat and marginal nesting habitat in oak trees on the eastern portion of the project site.
**Potential impacts:** Removal of oak trees would reduce the amount of potential foraging and nesting sites for the species.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

**Purple martin (*Progne subis*)** nesting
**Range:** Found throughout the state except higher desert areas and the higher slopes of the Sierra Nevada. (CWHR 2015)
**Nearest CNDDB occurrence:** Approximately 20½ miles northwest in Placer County. (BIOS 2015)
**Habitat requirements:** Inhabits open forests, woodlands and riparian areas in breeding season, and a variety of open habitats during migration, including grassland, wet meadow and fresh emergent wetland, usually near water. Feeds on insects captured in flight; occasionally forages on the ground. Nests in old woodpecker cavity; occasionally in man-made nesting box, under bridge or in culvert. (CWHR 2015)
**Habitat quality on project site:** Marginal nesting habitat in oak trees on the eastern portion of the project site.
**Potential impacts:** Removal of dead wood in trees with woodpecker cavities would have a detrimental potential impact on the species.
**Conservation recommendation:** Preservation of at least three dead tree snags per acre is recommended.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 30-foot setback from trees with active nests is recommended. No mitigation should be required if tree removal and grading are not scheduled during the normal nesting season.

**Lawrence's goldfinch (*Spinus lawrencei*)** nesting
**Range:** Rather common along western edge of southern deserts, common but erratic in Santa Clara County and on the coastal slope from Monterey County south. Uncommon in foothills surrounding the Central Valley. (CWHR 2015)
**Nearest CNDDB occurrence:** Sutter Buttes. (BIOS 2015)
**Habitat requirements:** Utilizes valley foothill hardwood, valley foothill hardwood-conifer, and, in southern California, desert riparian, palm oasis, pinyon-juniper and lower montane habitats. Requires open woodland or shrubland with a nearby source of water, and forb and shrub seeds. Nests in dense foliage of a tree or shrub, especially within oaks, cypresses or riparian thickets. (CWHR 2015)
**Habitat quality on project site:** Suitable nesting and foraging habitat is found among oak groves on the eastern portion of the project site.
**Potential impacts:** Removal of oak trees would reduce the amount of potential habitat for the species on the project site.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

**Chipping sparrow (*Spizella passerina)* nesting**
**Range:** Migrant and summer visitor throughout most of California, excluding Central Valley, southern deserts, and alpine areas. Winters less commonly in Central Valley and southern California lowlands. (CWHR 2015)
**Nearest CNDDB occurrence:** None. (BIOS 2015)
**Habitat requirements:** Prefers open-wooded habitats with a sparse or low herbaceous layer and few shrubs, if any. Apparently requires trees for resting and singing, and prefers trees for nesting, foraging in nearby herbaceous and open shrub habitats. Usually nests in a conifer, but deciduous trees or shrubs are also used. (CWHR 2015)
**Habitat quality on project site:** Marginal. Woodland habitat on-site is open, but the grass understory is more dense and tall than the species' preferred habitat.
**Potential impacts:** Removal of oaks would be reduce the amount of potential habitat for the species.
**Suggested mitigation:** Pre-construction surveys for nesting birds, conducted no more that 30 days prior to construction activities, is recommended if tree removal or grading are scheduled during the normal nesting season (March 1-August 31). A 50-foot setback from trees with active nests is recommended.

### d. Mammals

**Pallid bat *Antrozous pallidus***
**Range:** Occurs throughout California except high mountains and the northwest corner. (CWHR 2015)
**Nearest CNDDB occurrences of record:** Approximately seven miles south of the project site, in Amador County. (CNDDB 2015)
**Specific habitat requirements:** Open locations below 2000 m elevation, including deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting; also roosts in buildings, on cliffs and under bridges. Very sensitive to disturbance of roosting sites. Forages with low flights over open ground, or on the ground for flightless arthropods. (CWHR 2015)
**Habitat on site:** Suitable forage area; marginal roost sites in rock outcrops scattered throughout the project site.
**Potential impacts:** None expected, unless rock outcrops are disturbed, which would reduce the amount of potential habitat on the project site for the species.
**Conservation recommendation:** Preservation of rock outcrops and at least three dead tree snags per acre is recommended.

**Silver-haired bat (*Lasionycteris noctivagans)***
**Range:** Coastal and montane forests from the Oregon border south along the coast to San Francisco Bay, and along the Sierra Nevada and Great Basin region to Inyo County. Also known in Sacramento, Stanislaus, Monterey and Yolo counties. Known as a migrant throughout California. The species likely winters in Mexico. (CWHR, 2005 update)
**Nearest CNDDB occurrence:** Approximately 13 miles northwest at Folsom and the same approximate distance northeast at Chili Bar. (BIOS 2015)
**Habitat requirements:** Summer habitats include coastal and montane coniferous forest, valley foothill woodlands, pinyon-juniper woodlands and valley foothill and montane riparian habitats below 9000 feet elevation. Feeds mainly on moths and other soft-bodied insects. Feeds over forest streams, ponds and open brushy areas. Requires drinking water. Roosts in hollow trees, snags, buildings, rock crevices, caves and under bark. Nurseries are located in dense foliage or hollow trees. (CWHR, 2005 update)
**Habitat quality on project site:** Suitable. Silver-haired bats are known to inhabit oak woodland near water as found on the project site.
**Potential impacts:** Removal of dead trees and snags would reduce the amount of potential roosting and nursery sites for the species.
**Conservation recommendation:** Preservation of at least three dead tree snags per acre is recommended.

**Yuma myotis bat (*Myotis yumanensis)***
**Range:** Widespread in California from sea level to 11,000 feet elevation. Uncommon in desert regions, except the mountain ranges bordering the Colorado River Valley. (CWHR 2015)
**Nearest CNDDB occurrence:** About thirteen miles northeast of the project site, at Chili Bar. (BIOS 2015)
**Habitat requirements:** Open forests and woodlands with bodies of water. Feeds on insects taken over ponds, streams and stock tanks. Requires drinking water. Roosts in buildings, mines, caves, crevices, abandoned swallow nests and under bridges. Maternity colonies of several thousand females and young are found in warm, dark buildings, caves, mines and under bridges. (CWHR 2015)
**Habitat quality on project site:** Marginal. Water sources over which the species forages are limited to the wetland near the northwest corner of the project site, and scattered stock tanks. Suitable nursery habitat is not found on the project site.
**Potential impacts:** None expected, unless rock outcrops are disturbed, which would reduce the amount of potential habitat on the project site for the species.
**Conservation recommendation:** Preservation of rock outcrops and at least three dead tree snags per acre is recommended.

**e. Plants**

**Big-scale balsamroot (*Balsamhoriza macrolepis*)**
**Range:** Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama and Tuolumne Counties (CNPS 2015).
**Nearest CNDDB occurrence of record:** Lincoln and Roseville areas. (BIOS 2015)
**Habitat requirements:** Found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, between 90 and 1555 meters elevation. (CNDDB 2015).
**Habitat quality on project site:** Suitable. Grassland and woodland as found on the project site are the preferred habitats for the species. Species was not found on-site.
**Suggested mitigation:** None required because species was not found on the project site.

**Brandegee's clarkia (*Clarkia biloba* ssp. *brandageeae)***
**Range:** Butte, El Dorado, Nevada, Placer, Sacramento, Sierra and Yuba Counties. (CNPS 2015)
**Nearest CNDDB occurrence:** About three miles NNW of the project site. (BIOS 2015)
**Habitat requirements:** Dry sites in chaparral, cismontane woodland, and lower montane coniferous forest, especially on roadcuts, 75-915 m elevation. (CNDDB 2015, CNPS 2015)
**Habitat quality on project site:** Marginal on cutbank of on-site driveway. Herbicide use along the driveway further limits the on-site habitat.
**Potential impacts:** Brandegee's clarkia was not found on the project site, so there would be no direct impact on it. Development of new roadcuts could increase potential habitat for the species.

**Dwarf downingia (*Downingia pusilla)***
**Range:** Amador, Fresno, Merced, Napa, Placer, Sacramento, San Juaquin, Solano, Sonoma, Stanislaus, Tehama and Yuba Counties. (CNPS 2015)
**Nearest CNDDB occurrence:** About fifteen miles WNW of the project site, near Folsom. (BIOS 2015)
**Habitat requirements:** Vernal pools and wetlands in valley and foothill grassland, 1-445 m elevation. (CNDDB 2015, CNPS 2015)
**Habitat quality on project site:** Suitable in the wetland near the northeast corner of the project site; unsuitable on the remainder of the parcel.
**Potential impacts:** Dwarf downingia was not found on the project site, so no direct impact will result from the project. Disturbance of the wetland would negatively impact potential habitat for the species, but no disturbance to wetlands will result from the project as proposed.

**Sanford's arrowhead (*Sagittaria sanfordii*)**
**Range:** Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, San Bernardino, Shasta, San Juaquin, Solano, Tehama, Ventura and Yuba counties. (CNPS 2015)
**Nearest CNDDB occurrence of record:** Approximately seven miles northwest of the project site, in Sacramento County, west of El Dorado Hills. (CNDDB 2015)
**Habitat requirements:** Found in standing or slow-moving freshwater ponds, marshes, and ditches, 0-650 meters elevation. (CNDDB 2015)
**Habitat on site:** Suitable in the wetland near the northwest corner of the project site.
**Potential impacts:** Sanford's arrowhead was not found on the project site, so there will be no direct impact to the species. Disturbance of the wetland would negatively impact potential habitat for the species, but no disturbance to wetlands will result from the project as proposed.

## VII. Tree Survey, Preservation and Replacement Plan

### A. Tree Survey

The project site was surveyed May 13, 2015, and a representative sample of oak trees was counted and identified to species. Oak trees were the only trees found on-site, except for landscape trees planted near the existing house, which were not counted (Table 4). The most common oak species is blue oak (78.8%), followed by valley oak (18.8%) and interior live oak (2.4%).

**Table 4.** Oak species counted near proposed construction.

| | Blue Oak | Valley Oak | Interior Live Oak | Total Oaks |
|---|---|---|---|---|
| Total Trees Counted | 67 | 16 | 2 | 85 |
| Percent of Sampled Canopy | 78.8 | 18.8 | 2.4 | 100 |

### B. Total Oak Canopy Cover

Oak woodland vegetation is found on the east slope of the 45.69-acre (1,990,256 ft$^2$) project site. The total oak canopy[5], measured on an aerial photograph (Figure 4), was 8.1 acres (353,416 ft$^2$) which is 17.8 percent of the parcel and requires 90% oak canopy retention (10% oak canopy removal allowance).

[5]Oak canopy cover is defined in El Dorado County's "Interim Interpretive Guidelines for Policy 7.4.4.4 (Option A)" as, "The area directly under the live branches of the oak trees, often defined as a percent of a given unit of land."

## C. Project Impacts

Eighty-two oaks with eight-inch dbh or larger were mapped near proposed construction areas (Figure 8). Of those, three oaks will sustain greater than twenty-five percent drip area disturbance to accommodate road construction. Due to the amount of root disturbance, those trees are unlikely to survive, so their canopy loss must be mitigated, whether or not the trees are removed during construction (Table 5 and Figure 9). A portion of the canopy of trees to be removed is beneath oaks that will remain, so only the portion outside of the overlapping canopy will result in a net loss of oak canopy on the project. Total oak canopy removal will be 10,321 $ft^2$ (0.237 acres), but 2731 $ft^2$ (0.063 acre) of that is beneath oak canopy to remain. The net loss of oak canopy, therefore, is 7590 $ft^2$ (0.174 acre), of which 723 $ft^2$ (0.0166 acre) is on Parcel 3 and 6867 $ft^2$ (0.158) is on Parcel 4 (Table 5).

**Table 5.** Oak canopy to be removed.

| | Parcel 3 | Parcel 4 | | |
|---|---|---|---|---|
| **Tree No.** | 140 | 165 | 167 | |
| **Oak Species** | Blue | Blue | Valley | |
| **Trunk Diameter at Breast Height (in.)** | 17 | 27 | 36 | |
| **Drip Radius** (ft.) | 23 | 34 | 40 | **Total Oak Canopy Removal ($ft^2$)** |
| **Canopy Area ($ft^2$)** | 1662 | 3632 | 5027 | 10,321 |
| **Canopy Removal Beneath Oak Canopy to Remain ($ft^2$)** | 939 | 693 | 1099 | **Total Beneath Canopy to Remain ($ft^2$)** 2731 |
| **Net Oak Canopy Removal ($ft^2$)** | 723 | 2939 | 3928 | **Net Project Oak Canopy Removal ($ft^2$)** |
| | | 6867 | | 7590 |

The total oak canopy on the project site is 353,416 $ft^2$ (8.1 acres), which is 17.8 percent of the parcel and requires 90 percent oak canopy retention (318,074 $ft^2$, 7.3 acres). The oak canopy to be removed from the entire project is 7590 $ft^2$ (0.174 acre), which is 2.15 percent of the existing oak canopy, well-within the 10 percent oak canopy removal allowance (Table 6).

**Table 6.** Oak canopy impact, total project.

| Oak Canopy Retention Requirement | Percentage of Total Oak Canopy | Acres | Square Feet |
|---|---|---|---|
| | 90 | 7.3 | 318,074 |
| Oak Canopy to be Removed | 2.15 | 0.174 | 7590 |
| Oak Canopy to be Retained | 97.85 | 7.93 | 345,826 |

### 1. Oak Canopy Impact, Parcel 1

The project will have no impact on oaks found on Parcel 1.

### 2. Oak Canopy Impact, Parcel 2

No oak trees will be removed from Parcel 2. Seven oaks (Tree Nos. 101, 110, 112, 116, 126, 128 and 129) will sustain between 1 and 15 percent disturbance within their canopy (Figure 8). In addition, one tree (No. 111) will have construction less than five feet from the canopy area, and six additional trees (Nos. 117, 121, 122, 123, 124, and 127) are within 25 feet of proposed construction.

### 3. Oak Canopy Impact, Parcel 3

Tree number 140, a 17-inch dbh blue oak, will sustain more than twenty-five percent canopy disturbance, making its long-term survival questionable; therefore, mitigation is required (Table 5, Figure 9). Total parcel area is 439,956 $ft^2$, and the current oak canopy is 136,111 $ft^2$. Oak canopy to be removed is 1662 $ft^2$, which is 1.2 percent of the oak canopy on Parcel 3, well-within the 15 percent canopy removal allowance (Table 7).

**Table 7.** Oak canopy impact, Parcel 3.

| | | Acreage | Square Feet |
|---|---|---|---|
| 1 | Size of Parcel | 10.1 | 439,956 |
| 2 | Total Oak Canopy | 3.12 | 136,111 |
| 3 | Oak Canopy to be Removed | 0.0166 | 723 |
| 4 | Oak Canopy to be Retained | 3.1 | 135,388 |
| 5 | Percent of Parcel with Existing Oak Canopy (line 2 ÷ line 1) | 30.9 | |
| 6 | Percent of Oak Canopy to be Removed (line 3 ÷ line 2) | 0.5 | |
| 7 | Percent of Oak Canopy to be Retained (line 4 ÷ line 2) | 99.5 | |
| 8 | Oak Canopy Retention Requirement | **Percentage** | **Acres** / **Square Feet** |
| | | 85 | 2.66 / 115,694 |
| 9 | Oak Canopy Removal Allowance | 15 | 0.47 / 20,417 |
| 10 | Oak Canopy Removal Over Removal Allowance | 0 | 0 |

### 4. Oak Canopy Impact, Parcel 4

Tree 165, a 27-inch dbh blue oak and Tree 167, a 36-inch dbh valley oak, will sustain more than twenty-five percent canopy disturbance, making their long-term survival questionable; therefore, mitigation is required (Table 5, Figure 9). Total parcel area is 439,956 $ft^2$, and the current oak canopy is 97,406 $ft^2$. Oak canopy to be removed is 6867 $ft^2$, which is 7.1 percent of the oak canopy on Parcel 4, well-within the 15 percent canopy removal allowance (Table 8).

**Table 8.** Oak canopy impact, Parcel 4.

| | | Acreage | Square Feet | |
|---|---|---|---|---|
| 1 | Size of Parcel | 10.1 | 439,956 | |
| 2 | Total Oak Canopy | 2.23 | 97,406 | |
| 3 | Oak Canopy to be Removed | 0.16 | 6867 | |
| 4 | Oak Canopy to be Retained | 2.07 | 90,539 | |
| 5 | Percent of Parcel with Existing Oak Canopy (line 2 ÷ line 1) | 22.1 | | |
| 6 | Percent of Oak Canopy to be Removed (line 3 ÷ line 2) | 7.1 | | |
| 7 | Percent of Oak Canopy to be Retained (line 4 ÷ line 2) | 92.9 | | |
| 8 | Oak Canopy Retention Requirement | **Percentage** | **Acres** | **Square Feet** |
| | | 85 | 1.9 | 82,795 |
| 9 | Oak Canopy Removal Allowance | 15 | 0.34 | 14,611 |
| 10 | Oak Canopy Removal Over Removal Allowance | 0 | 0 | |

# TREE TABLE

| TREE # | COMMON NAME | DBH (in.) | DRIP RADIUS (ft.) |
|---|---|---|---|
| 100 | BLUE OAK | 27" | 31' |
| 101 | BLUE OAK | 28" | 37' |
| 102 | BLUE OAK | 21" | 24' |
| 103 | BLUE OAK | 21" | 18' |
| 104 | BLUE OAK | 20" | 32' |
| 105 | BLUE OAK | 8" | 16' |
| 106 | BLUE OAK | 16" | 29' |
| 107 | BLUE OAK | 12" | 21' |
| 108 | BLUE OAK | 11.5" | 22' |
| 109 | BLUE OAK | 15" | 23' |
| 110 | BLUE OAK | 18" | 24' |
| 111 | BLUE OAK | 21" | 23' |
| 112 | BLUE OAK | 20" | 20' |
| 113 | BLUE OAK | 17" | 25' |
| 114 | BLUE OAK | 21" | 33' |
| 115 | BLUE OAK | 14" | 17' |
| 116 | BLUE OAK | 19" | 20' |
| 117 | BLUE OAK | 18" | 21' |
| 118 | BLUE OAK | 12" | 16' |
| 119 | BLUE OAK | 11" | 19' |
| 120 | BLUE OAK | 12.5" | 17' |
| 121 | BLUE OAK | 14" | 17' |
| 122 | BLUE OAK | 16.5" | 24' |
| 123 | BLUE OAK | 25.5" | 27' |
| 124 | BLUE OAK | 21" | 29' |
| 125 | BLUE OAK | 15" | 27' |
| 126 | BLUE OAK | 15.5" | 19' |
| 127 | BLUE OAK | 27" | 35' |
| 128 | BLUE OAK | 22" | 24' |
| 129 | BLUE OAK | 33" | 32' |
| 130 | BLUE OAK | 24" | 29' |
| 131 | BLUE OAK | 29" | 28' |
| 132 | BLUE OAK | 32" | 25' |
| 133 | BLUE OAK | 27" | 29' |
| 134 | BLUE OAK | 26.5" | 29' |
| 135 | BLUE OAK | 20" | 20' |
| 136 | BLUE OAK | 25.5" | 31' |
| 137 | BLUE OAK | 20.5" | 20' |
| 138 | BLUE OAK | 15" | 19' |
| 139 | BLUE OAK | 23" | 22' |
| 140 | BLUE OAK | 17" | 23' |

| TREE # | COMMON NAME | DBH (in.) | DRIP RADIUS (ft.) |
|---|---|---|---|
| 141 | BLUE OAK | 29" | 34' |
| 142 | BLUE OAK | 28" | 33' |
| 143 | BLUE OAK | 26.5" | 27' |
| 144 | BLUE OAK | 20" | 26' |
| 145 | BLUE OAK | 25" | 33' |
| 146 | VALLEY OAK | 32" | 44' |
| 147 | BLUE OAK | 20" | 24' |
| 148 | BLUE OAK | 22" | 29' |
| 149 | BLUE OAK | 34.5" | 38' |
| 150 | VALLEY OAK | 39" | 35' |
| 151 | BLUE OAK | 31" | 30' |
| 152 | BLUE OAK | 25" | 38' |
| 153 | VALLEY OAK | 20" | 33' |
| 154 | VALLEY OAK | **69" | 41' |
| 155 | BLUE OAK | 26" | 23' |
| 156 | BLUE OAK | 15" | 128 |
| 157 | BLUE OAK | 23" | 16' |
| 158 | VALLEY OAK | 36" | 47' |
| 159 | BLUE OAK | 30" | 30' |
| 160 | BLUE OAK | 38" | 37' |
| 161 | VALLEY OAK | 31" | 38' |
| 162 | VALLEY OAK | 36" | 40' |
| 163 | BLUE OAK | 26" | 33' |
| 164 | BLUE OAK | 33" | 33' |
| 165 | BLUE OAK | 27" | 34' |
| 166 | BLUE OAK | 27" | 27' |
| 167 | VALLEY OAK | 36" | 40' |
| 168 | VALLEY OAK | 33" | 29' |
| 169 | BLUE OAK | 14" | 22' |
| 170 | BLUE OAK | 29" | 32' |
| 171 | VALLEY OAK | 32" | 36' |
| 172 | VALLEY OAK | 33" | 40' |
| 173 | VALLEY OAK | 38" | 42' |
| 174 | BLUE OAK | 35.5" | 33' |
| 175 | BLUE OAK | 32" | 37' |
| 176 | VALLEY OAK | 31" | 40' |
| *177 | VALLEY OAK | 38 | - |
| 178 | BLUE OAK | 32" | 36' |
| 179 | VALLEY OAK | 42" | 34' |
| 180 | VALLEY OAK | 43" | 44' |
| 181 | BLUE OAK | 26.5" | 33' |

*TREE 177 IS A DEAD SNAG WITH SOME WOODPECKER HOLES AND LOOSE BARK THAT COULD HARBOR BATS.
**TREE 154 HAS TWO TRUNKS, ONE WITH 34" DBH AND THE OTHER 34" DBH.

## LEGEND

OAK TREE

### TREE NUMBER

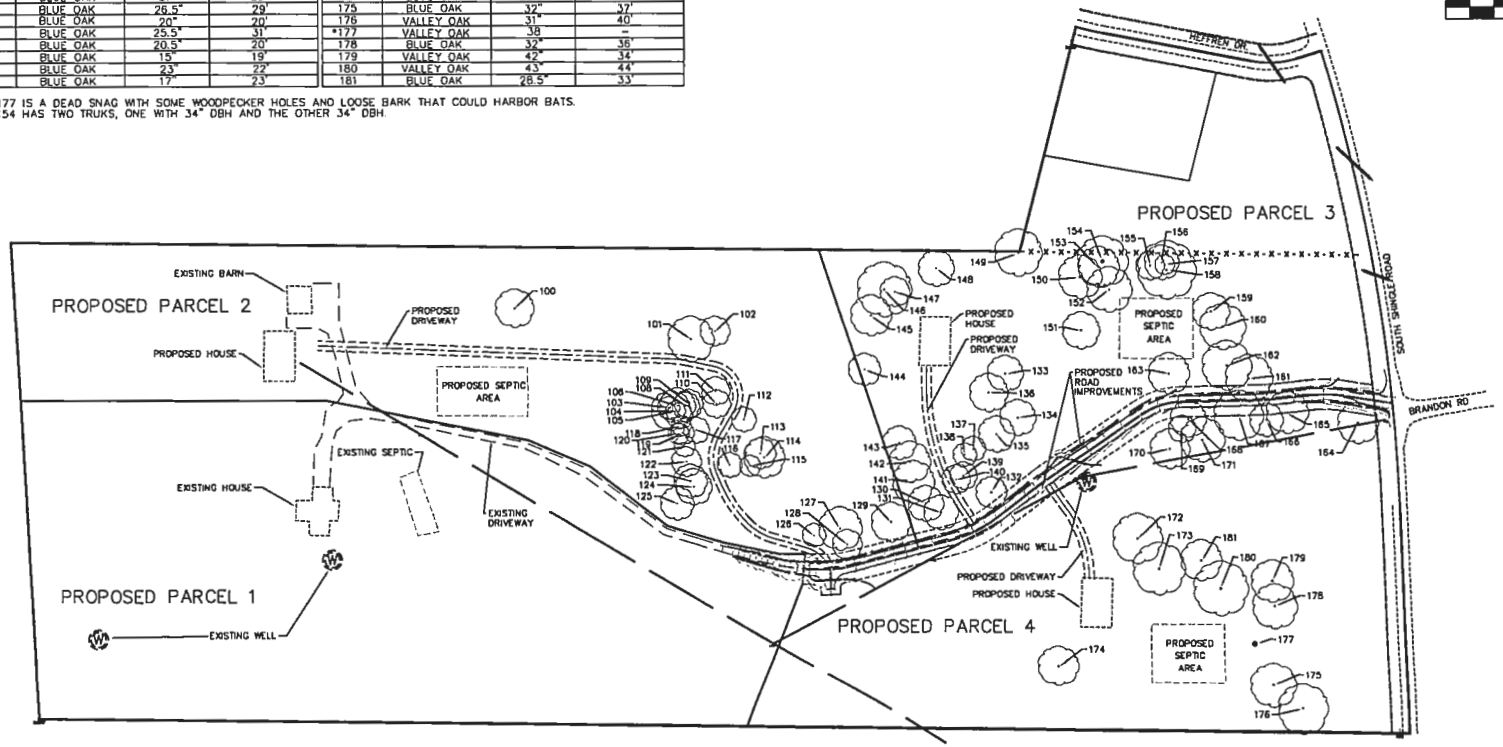
# FIGURE 8
# OAK TREES NEAR CONSTRUCTION

A PORTION OF THE NW 1/4 OF SECTION 2 AND
THE NE 1/4 OF SECTION 3, T.8N., R.9E., M.D.M.
BEING TRACT 2 OF RS 19/26
EL DORADO COUNTY STATE OF CALIFORNIA
JUNE 2015
FOR: ALLEN HANSEN
APN: 087-021-05

N

0 200 400 600

SCALE 1" = 200'





RUTH WILLSON, BIOLOGIST
SITE CONSULTING INC.
3460 ANGEL LANE
PLACERVILLE, CA 95667

# FIGURE 9
# PROPOSED OAK CANOPY REMOVAL

A PORTION OF THE NW 1/4 OF SECTION 2 AND
THE NE 1/4 OF SECTION 3, T.8N., R.9E., M.D.M.
BEING TRACT 2 OF RS 19/26
EL DORADO COUNTY STATE OF CALIFORNIA
JUNE 2015
FOR: ALLEN HANSEN
APN: 087-021-05

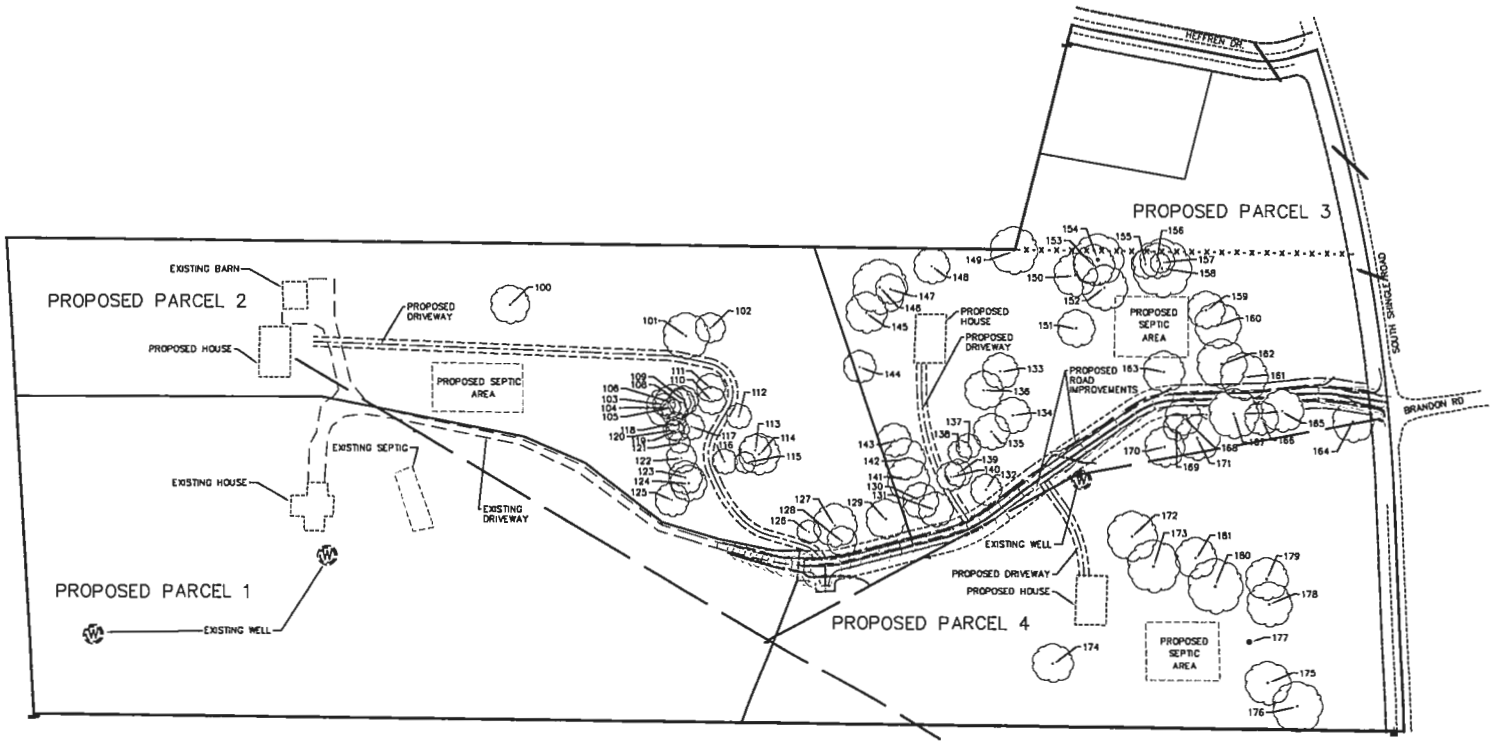
## LEGEND

- OAK TREE
- ### TREE NUMBER
- OAK TREE TO BE REMOVED

N

0 200 400 600

SCALE 1" = 200'





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SHE CONSULTING INC
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PLACERVILLE, CA 95667

## C. Tree Preservation

### 1. General Plan Policy 7.4.4.4

**Policy 7.4.4.4 contains provisions to protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products and aesthetic values. Policy 7.4.4.4, Option A, requires oak canopy to be retained within development projects, with the percentage of retention dependent upon total oak canopy cover of the project.**

The total oak canopy covers 17.8% of the Hansen parcel, which requires 90% oak tree retention under Policy 7.4.4.4, Option A. The oak canopy coverage and impacts per parcel follow: Parcel 1, with 9% oak canopy (90% retention required), will retain 100% of its oaks; Parcel 2, with 13% oak canopy (90% retention required), will retain 100% of its oaks; Parcel 3, having 30% oak canopy (85% retention required), will retain 99.5% of its oaks; and Parcel 4, having 22% oak canopy (85% retention required), will retain 92.9% of its oak canopy. Clearly, Option A requirements will not be exceeded on the project site (Tables 7 and 8).

### 2. General Plan Policy 7.4.4.5, Oak Tree Corridor Retention

**Policy 7.4.4.5 requires retention of a corridor of oak trees around removed trees, maintaining continuity between all portions of the stand. The retained corridor shall have a tree density equal to the density of the stand.**

An unbroken corridor of oak trees surrounds the trees to be removed, and the tree density will remain the same in the retained corridor. The project will not disrupt an oak tree corridor.

### 3. General Plan Policy 2.2.2.1

#### a. Safeguarding Trees During Construction

General Plan Policy 2.2.2.1 of the Biological Resources Study and Important Habitat Mitigation Program Guidelines, adopted November 9, 2006, has sixteen conditions for safeguarding trees during construction.

**1. All oak trees over eight inches dbh in the construction area are required to be inventoried as to size and location on the site.**

Eighty-two oaks eight inches dbh or larger were found in or near the construction zone (Figure 8). The oaks include 66 blue oaks and 16 valley oaks (Table 9).

**Table 9.** Oak trees over eight inches dbh within or near the construction zone.

| Tree Size (dbh, inches) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 1 | 1 | 3 | 1 | 3 | 4 | 2 | 3 | 2 | 1 | 7 | 6 | 1 | 2 | 1 | 2 | 4 |
| Tree Size (dbh, inches) | | | | | | | | | | | | | | | | |
| 27 | 28 | 29 | 30 | 31 | 32 | 33 | 35 | 36 | 38 | 39 | 42 | 43 | 79 | **Total** | | |
| 7 | 2 | 4 | 1 | 3 | 5 | 4 | 1 | 4 | 3 | 1 | 1 | 1 | 1 | 82 | | |

**2 a. Grading, cutting or filling within the tree root zone or within a five foot distance of the tree root zone of an oak to be preserved shall be supervised by a Certified Arborist/qualified professional.**

Thirteen oak trees will be retained that will have soil disturbance of no more than 25% of the tree root zone (Table 10), and five more are within five feet of the tree root zone (Table 11).

**Table 10.** Oak trees to be retained with 25% or less construction disturbance within the tree root zone.

| Tree No. | 101 | 110 | 112 | 116 | 126 | 128 | 129 | 132 | 139 | 152 | 161 | 163 | 164 | 16 | 168 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Root Zone Disturbance | 8 | 1 | 5 | 2 | 2 | 15 | 2 | 15 | 2 | 2 | 10 | 15 | 20 | 10 | 20 |

**Table 11.** Oak trees within five feet of the construction zone.

| Tree Number | 111 | 158 | 159 | 162 | 169 |
|---|---|---|---|---|---|

**2 b. Grading, cutting or filling beyond five feet but within twenty feet of oak trees 6-inches dbh or greater will be monitored by an independent professional.**

Eighteen trees were found beyond five feet but within twenty feet of the construction site (Table 12). It is recommended those trees be monitored for stress, particularly during the dry season, and supplemental irrigation be provided once monthly from July through September for three years if signs of stress are found.

**Table 12.** Oak trees five to twenty feet from the construction zone.

| Tree Number | 117 | 121 | 122 | 123 | 124 | 127 | 128 | 130 | 131 |
|---|---|---|---|---|---|---|---|---|---|
| | 138 | 139 | 141 | 142 | 143 | 160 | 170 | 171 | 180 |

**3. Damage to any protected tree during construction shall be reported to Planning Services. The property owner shall be responsible for correcting any damage to protected trees on the property in a manner specified by a Certified Arborist/qualified professional.**

**4. No oil, gasoline, chemicals or other construction materials or equipment will be stored within any oak tree root zone.**

**5. Drains shall be installed to direct water run-off away from oak tree root zones.**

**6. Wires, signs and similar items shall not be attached to protected trees.**

**7. The existing ground surface within the tree root zone of protected trees shall not be cut, filled, compacted or pared. No soil shall be stored or filled within the root zone of oaks.**

See No. 2 (above) and No. 11 (below) for Arborist's recommendations for trees to be retained that are near the construction site.

**8. No paint thinner, paint, plaster or other liquid or solid excess or waste construction material or waste water will be dumped between the tree root zone and the base of protected trees, or uphill from protected trees where such substance might reach the roots through leaching.**

**9. A minimum four-foot tall temporary orange standard tree protection fence will be installed five feet beyond the dripline of protected oaks, and shall be maintained until construction is complete.**

**10. When cuts are made near roots of protected trees, appropriate measures will be taken to prevent exposed soil from drying out.**

**11. Any cuts within root zones of retained trees will be made before grading and shall utilize methods that would make clean cuts to roots, such as vibrating knives, rock saws, narrow trenchers with sharp blades or hand tools. Root disturbances shall not be accomplished by rough grading equipment such as excavators, bulldozers, graders or backhoes. All excavation activities within the root zone of retained oaks shall be under the direction and supervision of a Certified Arborist or qualified professional.**

When oak roots are disturbed, it is recommended that any frayed ends of the exposed roots be pruned with hand equipment to the nearest healthy root junction.

**12. No building materials, vehicles or equipment shall be parked or stored within the tree root zone of any protected tree during development.**

**13. No metal stakes will be driven into tree trunks, stems or the tree root zone of protected trees for any purpose other than to support the tree.**

**14. No open flames will be allowed within fifteen feet of the foliar canopy or trunk of a protected tree.**

**15. No trenching will be allowed within the root zone of protected oaks, except as allowed in No. 11, above. If it is absolutely necessary to install underground utilities within the root zone of protected trees, the trench shall be either bored or drilled unless a Certified Arborist/qualified professional determines that the trenching will not endanger protected trees.**

**16. No paving shall be installed within the root zone of protected trees. Only porous materials shall be installed beneath protected trees.**

### b. Safeguarding Trees After Construction

It is recommended that the project owners monitor trees having construction-related root disturbances for stress (excessive leaf fall, wilting, dieback, etc.), particularly during the dry season. If signs of stress are found, it is recommended that supplemental deep irrigation be provided once monthly during July, August and September for three years after construction. Supplemental irrigation is especially important for trees having more than 25% root zone disturbances, if those trees are retained.

Landscaping beneath oak trees should be limited to drought resistant plants or mulch materials such as wood chips. All landscaping should be kept at least five feet away from the trunk of oaks.

## D. Tree Replacement Plan

### 1. Revegetation

County standards require a 1:1 ratio between canopy removal area and mitigation area. Replacement standards require 200 trees (or 600 acorns) per acre with a survival rate of 90 percent after ten years. No mitigation is required for Parcels 1 and 2. Mitigation calculations for trees proposed to be removed from Parcel 3 are shown in Table 13, and calculations for Parcel 4 are shown in Table 14. Proposed replacement areas are shown on Figure 10, but the project proponent may choose another replacement site. There is plenty of area available for mitigation purposes on all proposed parcels.

**Table 13.** Oak canopy replacement calculations for proposed oak removal, **Parcel 3**.

| | | | |
|---|---|---|---|
| 1 | Oak Canopy to be Removed | 723 $ft^2$ | 0.0166 acres |
| 2 | Mitigation saplings (line 1 acreage x 200 trees/acre) = # saplings; OR acorns (line 1 acreage x 600 acorns/acre) = # acorns | 4 saplings OR 10 acorns | |

**Table 14.** Oak canopy replacement calculations for proposed oak removal, **Parcel 4**.

| | | | |
|---|---|---|---|
| 1 | Oak Canopy to be Removed | 6867 $ft^2$ | 0.158 acres |
| 2 | Mitigation Plants (line 1 acreage x 200 trees/acre) = # saplings; OR acorns (line 1 acreage x 600 acorns/acre) = # acorns | 32 saplings OR 95 acorns | |

It is recommended that blue oaks be planted for mitigation. If valley oaks are planted, they should be placed on the easternmost, flatter portion of the parcel, or along the intermittent creek.

Planting should follow the guidelines found in *How to Grow California Oaks*[6]. Saplings should be planted with the top of their root flare at ground level and should be protected from sun-scald and browsing animals by tree protection collars. Ground around the trees should be mulched to control weeds, and supplemental irrigation should be provided every two to four weeks during June, July, August and September (or as needed during an unusually dry winter) the first two years after planting.

Acorns should be collected from trees on or adjacent to the project site. Only acorns lacking evidence of insect infestation must be planted, ie. reject any that are very small, cracked, have insect exit holes or feel light and hollow. Acorns should be planted about one-half inch deep in soil that has been loosened to 6 inches or more depth. Acorns should be covered with 1-2 inches of natural fiber mulch (wood or bark chips, straw, etc.), and planting sites/seedlings protected with tree collars to protect them from animals. Supplemental irrigation is not needed for acorns. Further details about collection, planting and storage of acorns may be found in *How to Grow California Oaks.*

[6] McCreary, D. 1995. *How to Grow California Oaks.* University of California Agriculture and Natural Resources Publication 21540.

# FIGURE 10
# PROPOSED OAK MITIGATION AREAS

A PORTION OF THE NW 1/4 OF SECTION 2 AND
THE NE 1/4 OF SECTION 3, T.8N., R.9E., M.D.M.
BEING TRACT 2 OF RS 19/26
EL DORADO COUNTY STATE OF CALIFORNIA
JUNE 2015
FOR: ALLEN HANSEN
APN: 087-021-05

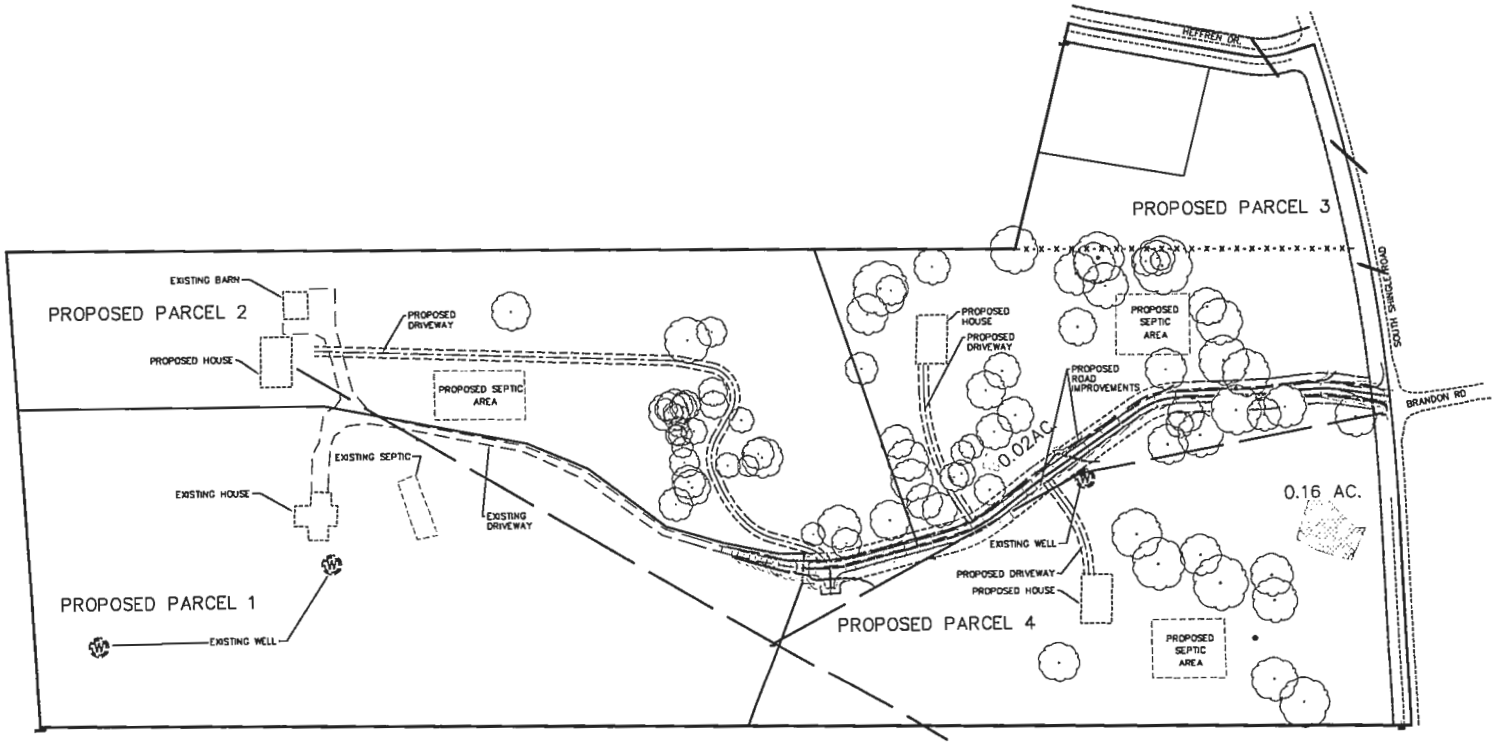
## LEGEND

- OAK TREE
- OAK CANOPY TO BE REMOVED
- POTENTIAL OAK MITIGATION AREA

N

0 200 400 600

SCALE 1" = 200'





RUTH WILLSON, BIOLOGIST
TSI ECOLOGICAL CONSULTING, INC.
3460 ANGEL LANE
PLACERVILLE, CA 95667

### 2. Monitoring and Reporting

Item 2.2.3.1 of the El Dorado County *Biological Resources Study and Important Habitat Mitigation Program Guidelines, Adopted November 9, 2006* outlines reporting requirements for discretionary projects lots utilizing on-site replacement mitigation, summarized below.

A. The monitoring period shall be ten years (15 years for acorns);
B. The mitigation plants will be monitored and photographed annually by a qualified professional;
C. The qualified professional shall report, in writing, to the County annually, on the condition of the trees and number of failures;
D. If the failure rate of the replacement planting exceeds 10 percent of the replanted trees, then replanting of those trees that have not survived is required. The monitoring period will not be extended past the ten (or fifteen) years from the original planting date.
E. The monitoring requirements shall be placed into a standard "Notice of Restriction" or similar County approved document and recorded on the title of the subject property. Once the 10 year (or 15 year) monitoring period has been successfully completed, the County shall record a release of the Notice of Restriction.

## IV. Report Certification

I hereby certify that the statements furnished above and in the attached exhibits, if any, present the data and information required for this Arborist Report, and that the facts, statements and information presented herein are true and correct to the best of my knowledge and belief.

_____ _____

Ruth Willson
ISA Certified Arborist WE 8335A
Expiration Date June 30, 2017

Date

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# APPENDIX A

**United States Fish and Wildlife Service**
***IpaC Trust Resource Report***
**Generated May 12, 2015**

U.S. Fish & Wildlife Service

# My project

## *IPaC Trust Resource Report*

Generated May 12, 2015 03:34 PM MDT

US Fish & Wildlife Service

# IPaC Trust Resource Report

## Project Description

NAME

My project

PROJECT CODE

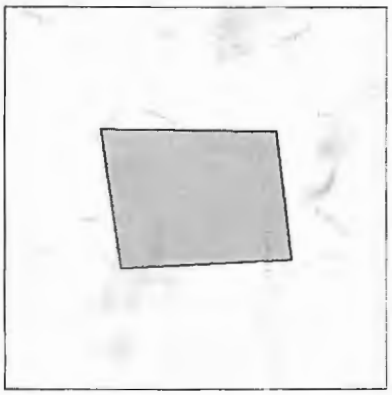
55WVZ-RA2CV-D3FAH-HMO3B-IIYQHE

LOCATION

El Dorado County, California

DESCRIPTION

No description provided



## U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

**Sacramento Fish And Wildlife Office**
Federal Building
2800 COTTAGE WAY, ROOM W-2605
Sacramento, CA 95825-1846
(916) 414-6600

## Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

### Amphibians

**California Red-legged Frog** Rana draytonii

CRITICAL HABITAT

There is final critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=D02D

## Crustaceans

**Vernal Pool Fairy Shrimp** Branchinecta lynchi

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=K03G

## Fishes

**Delta Smelt** Hypomesus transpacificus

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E070

**Steelhead** Oncorhynchus (=Salmo) mykiss

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E08D

## Insects

**Valley Elderberry Longhorn Beetle** Desmocerus californicus dimorphus

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I01L

## Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

## Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

**Bald Eagle** Haliaeetus leucocephalus — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008

**Black Rail** Laterallus jamaicensis — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09A

**Burrowing Owl** Athene cunicularia — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0NC

**Calliope Hummingbird** Stellula calliope — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0K3

**Costa's Hummingbird** Calypte costae — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0JE

**Flammulated Owl** Otus flammeolus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DK

**Fox Sparrow** Passerella iliaca — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0NE

**Green-tailed Towhee** Pipilo chlorurus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0IO

**Lewis's Woodpecker** Melanerpes lewis — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HQ

**Loggerhead Shrike** Lanius ludovicianus — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY

**Nuttall's Woodpecker** Picoides nuttallii — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HT

**Oak Titmouse** Baeolophus inornatus — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0MJ

**Peregrine Falcon** Falco peregrinus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU

**Short-eared Owl** Asio flammeus — Bird of conservation concern
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD

**Snowy Plover** Charadrius alexandrinus — Bird of conservation concern
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0L6

**White Headed Woodpecker** Picoides albolarvatus — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HU

**Williamson's Sapsucker** Sphyrapicus thyroideus — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FX

**Yellow-billed Magpie** Pica nuttalli — Bird of conservation concern
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0N8

## Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

## Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Freshwater Pond
**PUBFh** 0.161 acre

# APPENDIX B

**California Department of Fish and Game**
**Natural Diversity Database RareFind 5 Report**
**Latrobe and Surrounding USGS Quads**
**updated May 5, 2015**

# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad is (Latrobe (3812058) or Amador City (3812047) or Irish Hill (3812048) or Folsom SE (3812151) or Clarksville (3812161) or Carbondale (3812141) or Fiddletown (3812057) or Placerville (3812067) or Shingle Springs (3812068))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Agelaius tricolor*** tricolored blackbird | ABPBXB0020 | None | Endangered | G2G3 | S1S2 | SSC |
| ***Allium jepsonii*** Jepson's onion | PMLIL022V0 | None | None | G1 | S1 | 1B.2 |
| ***Ambystoma californiense*** California tiger salamander | AAAAA01180 | Threatened | Threatened | G2G3 | S2S3 | SSC |
| ***Ammodramus savannarum*** grasshopper sparrow | ABPBXA0020 | None | None | G5 | S3 | SSC |
| ***Andrena blennospermatis*** Blennosperma vernal pool andrenid bee | IIHYM35030 | None | None | G2 | S2 | |
| ***Antrozous pallidus*** pallid bat | AMACC10010 | None | None | G5 | S3 | SSC |
| ***Aquila chrysaetos*** golden eagle | ABNKC22010 | None | None | G5 | S3 | FP |
| ***Arctostaphylos myrtifolia*** Ione manzanita | PDERI04240 | Threatened | None | G2 | S2 | 1B.2 |
| ***Arctostaphylos nissenana*** Nissenan manzanita | PDERI040V0 | None | None | G1 | S1 | 1B.2 |
| ***Ardea alba*** great egret | ABNGA04040 | None | None | G5 | S4 | |
| ***Ardea herodias*** great blue heron | ABNGA04010 | None | None | G5 | S4 | |
| ***Athene cunicularia*** burrowing owl | ABNSB10010 | None | None | G4 | S3 | SSC |
| ***Balsamorhiza macrolepis*** big-scale balsamroot | PDAST11061 | None | None | G2 | S2 | 1B.2 |
| ***Branchinecta lynchi*** vernal pool fairy shrimp | ICBRA03030 | Threatened | None | G3 | S2S3 | |
| ***Branchinecta mesovallensis*** midvalley fairy shrimp | ICBRA03150 | None | None | G2 | S2 | |
| ***Buteo swainsoni*** Swainson's hawk | ABNKC19070 | None | Threatened | G5 | S3 | |
| ***Calystegia stebbinsii*** Stebbins' morning-glory | PDCON040H0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| ***Ceanothus roderickii*** Pine Hill ceanothus | PDRHA04190 | Endangered | Rare | G1 | S1 | 1B.2 |
| ***Central Valley Drainage Hardhead/Squawfish Stream*** Central Valley Drainage Hardhead/Squawfish Stream | CARA2443CA | None | None | GNR | SNR | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Chlorogalum grandiflorum*** Red Hills soaproot | PMLIL0G020 | None | None | G3 | S3 | 1B.2 |
| ***Chrysis tularensis*** Tulare cuckoo wasp | IIHYM72010 | None | None | G1G2 | S1S2 | |
| ***Clarkia biloba ssp. brandegeeae*** Brandegee's clarkia | PDONA05053 | None | None | G4G5T4 | S4 | 4.2 |
| ***Cosumnoperla hypocrena*** Cosumnes stripetail | IIPLE23020 | None | None | G2 | S2 | |
| ***Crocanthemum suffrutescens*** Bisbee Peak rush-rose | PDCIS020F0 | None | None | G2Q | S2 | 3.2 |
| ***Desmocerus californicus dimorphus*** valley elderberry longhorn beetle | IICOL48011 | Threatened | None | G3T2 | S2 | |
| ***Downingia pusilla*** dwarf downingia | PDCAM060C0 | None | None | GU | S2 | 2B.2 |
| ***Elanus leucurus*** white-tailed kite | ABNKC06010 | None | None | G5 | S3S4 | FP |
| ***Emys marmorata*** western pond turtle | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| ***Eriogonum apricum var. apricum*** Ione buckwheat | PDPGN080F1 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| ***Eriogonum apricum var. prostratum*** Irish Hill buckwheat | PDPGN080F2 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| ***Eryngium pinnatisectum*** Tuolumne button-celery | PDAPI0Z0P0 | None | None | G2 | S2 | 1B.2 |
| ***Fremontodendron decumbens*** Pine Hill flannelbush | PDSTE03030 | Endangered | Rare | G1 | S1 | 1B.2 |
| ***Galium californicum ssp. sierrae*** El Dorado bedstraw | PDRUB0N0E7 | Endangered | Rare | G5T1 | S1 | 1B.2 |
| ***Haliaeetus leucocephalus*** bald eagle | ABNKC10010 | Delisted | Endangered | G5 | S2 | FP |
| ***Horkelia parryi*** Parry's horkelia | PDROS0W0C0 | None | None | G2 | S2 | 1B.2 |
| ***Hydrochara ricksecker*** Ricksecker's water scavenger beetle | IICOL5V010 | None | None | G2? | S2? | |
| ***Ione Chaparral*** Ione Chaparral | CTT37D00CA | None | None | G1 | S1.1 | |
| ***Lasionycteris noctivagans*** silver-haired bat | AMACC02010 | None | None | G5 | S3S4 | |
| ***Legenere limosa*** legenere | PDCAM0C010 | None | None | G2 | S2 | 1B.1 |
| ***Lepidurus packardi*** vernal pool tadpole shrimp | ICBRA10010 | Endangered | None | G3 | S2S3 | |

# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Linderiella occidentalis*** California linderiella | ICBRA06010 | None | None | G2G3 | S2S3 | |
| ***Navarretia myersii ssp. myersii*** pincushion navarretia | PDPLM0C0X1 | None | None | G1T1 | S1 | 1B.1 |
| ***Northern Hardpan Vernal Pool*** Northern Hardpan Vernal Pool | CTT44110CA | None | None | G3 | S3.1 | |
| ***Oncorhynchus mykiss irideus*** steelhead - Central Valley DPS | AFCHA0209K | Threatened | None | G5T2Q | S2 | |
| ***Packera layneae*** Layne's ragwort | PDAST8H1V0 | Threatened | Rare | G2 | S2 | 1B.2 |
| ***Pekania pennanti*** fisher - West Coast DPS | AMAJF01021 | Proposed Threatened | Candidate Threatened | G5T2T3Q | S2S3 | SSC |
| ***Phrynosoma blainvillii*** coast horned lizard | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| ***Rana draytonii*** California red-legged frog | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| ***Riparia riparia*** bank swallow | ABPAU08010 | None | Threatened | G5 | S2 | |
| ***Sagittaria sanfordii*** Sanford's arrowhead | PMALI040Q0 | None | None | G3 | S3 | 1B.2 |
| ***Spea hammondii*** western spadefoot | AAABF02020 | None | None | G3 | S3 | SSC |
| ***Sphenopholis obtusata*** prairie wedge grass | PMPOA5T030 | None | None | G5 | S2 | 2B.2 |
| ***Thamnophis gigas*** giant garter snake | ARADB36150 | Threatened | Threatened | G2 | S2 | |
| ***Viburnum ellipticum*** oval-leaved viburnum | PDCPR07080 | None | None | G5 | S3 | 2B.3 |
| ***Wyethia reticulata*** El Dorado County mule ears | PDAST9X0D0 | None | None | G2 | S2 | 1B.2 |

**Record Count: 55**

# APPENDIX C

**California Native Plant Society**
***On-line Inventory of Rare and Endangered Plants***
**Latrobe and Surrounding USGS Quads**
v7-15may 5-7-15

**Status:** search results - Tue, May. 12, 2015 15:54 ET c

{QUADS_123} =~ m/510C|494A|494B|511D|511A|495A|510D|510A|510B/ Search

*Tip:* Words meant to be searched as a unit should be wrapped in quotes, e.g., "coastal dunes".
[all tips and help.][search history]

**Your Quad Selection:** Latrobe (510C) 3812058, Amador City (494A) 3812047, Irish Hill (494B) 3812048, Folsom SE (511D) 3812151, Clarksville (511A) 3812161, Carbondale (495A) 3812141, Fiddletown (510D) 3812057, Placerville (510A) 3812067, Shingle Springs (510B) 3812068

**Hits 1 to 23 of 23**

**Requests that specify topo quads will return only Lists 1-3.**

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press check all check none

Selections will appear in a new window.

| open | save | hits | scientific | common | family | CNPS |
|---|---|---|---|---|---|---|
| | | 1 | **Allium jepsonii** | Jepson's onion | Alliaceae | List 1B.2 |
| | | 1 | **Arctostaphylos myrtifolia** | Ione manzanita | Ericaceae | List 1B.2 |
| | | 1 | **Arctostaphylos nissenana** | Nissenan manzanita | Ericaceae | List 1B.2 |
| | | 1 | **Balsamorhiza macrolepis** | big-scale balsamroot | Asteraceae | List 1B.2 |
| | | 1 | **Calystegia stebbinsii** | Stebbins' morning-glory | Convolvulaceae | List 1B.1 |
| | | 1 | **Ceanothus roderickii** | Pine Hill ceanothus | Rhamnaceae | List 1B.1 |
| | | 1 | **Chlorogalum grandiflorum** | Red Hills soaproot | Agavaceae | List 1B.2 |
| | | 1 | **Crocanthemum suffrutescens** | Bisbee Peak rush-rose | Cistaceae | List 3.2 |
| | | 1 | **Downingia pusilla** | dwarf downingia | Campanulaceae | List 2B.2 |
| | | 1 | **Erigeron miser** | starved daisy | Asteraceae | List 1B.3 |
| | | 1 | **Eriogonum apricum var. apricum** | Ione buckwheat | Polygonaceae | List 1B.1 |
| | | 1 | **Eriogonum apricum var. prostratum** | Irish Hill buckwheat | Polygonaceae | List 1B.1 |
| | | 1 | **Eryngium pinnatisectum** | Tuolumne button-celery | Apiaceae | List 1B.2 |
| | | 1 | **Fremontodendron decumbens** | Pine Hill flannelbush | Malvaceae | List 1B.2 |
| | | 1 | **Galium californicum ssp. sierrae** | El Dorado bedstraw | Rubiaceae | List 1B.2 |
| | | 1 | **Horkelia parryi** | Parry's horkelia | Rosaceae | List 1B.2 |

| | | | | | |
|---|---|---|---|---|---|
| | 1 | **Legenere limosa** | legenere | Campanulaceae | List 1B.1 |
| | 1 | **Navarretia myersii ssp. myersii** | pincushion navarretia | Polemoniaceae | List 1B.1 |
| | 1 | **Packera layneae** | Layne's ragwort | Asteraceae | List 1B.2 |
| | 1 | **Sagittaria sanfordii** | Sanford's arrowhead | Alismataceae | List 1B.2 |
| | 1 | **Sphenopholis obtusata** | prairie wedge grass | Poaceae | List 2B.2 |
| | 1 | **Viburnum ellipticum** | oval-leaved viburnum | Adoxaceae | List 2B.3 |
| | 1 | **Wyethia reticulata** | El Dorado County mule ears | Asteraceae | List 1B.2 |

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press check all check none

Selections will appear in a new window.

No more hits.

# APPENDIX D

**Evaluation of Special-status Species with Known Occurrences in Latrobe and Surrounding USGS Quads**

## Notations and Symbols

**Species printed in bold** are listed under Federal and/or California Endangered Species Acts.

**Listing Status** = Federal and California Endangered Species Acts listing status:
E = Endangered R = Rare T = Threatened
D = De-listed C = Candidate for listing

**CNDDB Ranks** are shorthand formulas compiled by the California Natural Diversity Database that provide information on the rarity of species in their global range (G1 to G5) and within the state (S1toS5). Status of subspecies is also ranked (T1 to T5).

G1 or S1 or T1 = Extremely endangered: <6 viable occurrences (EOs) or <1000 individuals or <2000 acres of occupied habitat
G2 or S2 or T2 = Endangered: 6-20 EOs or 1000-3000 individuals or 2000-10,000 acres
G3 or S3 or T3 = Restricted range, rare: 21-80 EOs or 3000-10,000 individuals or 10,000-50,000 acres
G4 or S4 or T4 = Apparently secure: factors exist to cause some concern, such as narrowing of habitat
G5 or S5 or T5 = Demonstrably secure: commonly found throughout its historic range.
GU = Unrankable

### Other Notations

G1G3 = proper rank is most likely withing this range of ranks
G2? = proper rank is probably G2
Q = there is some taxonomic question about the species

### Abbreviations

**CDFW** = California Department of Fish and Wildlife
FP = Fully protected species
**SSC** = CDFW Species of Special Concern
**CNDDB** = California Natural Diversity Database
**CNPS** = California Native Plant Society
**1B** = CNPS list of rare, threatened or endangered plants in California and elsewhere
**2** = CNPS list of rare, threatened or endangered plants in California, but more common elsewhere
**3** = CNPS review list of plants with limited distribution information or problematic taxonomy
**4** = Plants of Limited Distribution; a watch list
**.1** = Seriously endangered in California (over 80% of occurrences threatened/ high degree of immediate threat
**.2** = Fairly endangered in California (20-80% of occurrences threatened)
**.3** = Not very endangered in California (<20% of occurrences threatened or no threats known)
**CWHR** = California Department of Fish and Wildlife's California Wildlife Habitat Relations
**ICUN** = World Conservation Union
**VU** = World Conservation Union list of vulnerable species
**LC** = World Conservation Union list of species of least concern
**USBC** = United States Bird Conservancy
**WL** = Watch list = USBC list of threatened and declining species
**USFWS** = United States Fish and Wildlife Service

| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| **Invertebrates** | | | | |
| *Andrena blennospermatis* Blennosperma vernal pool andrenid bee | — / — | G2 S2 | Forages on vernal pool *Blennosperma* plants. Nests in uplands surrounding vernal pools. (CNDDB 2015) | No. Project site has no *Blennosperma* plants. |
| *Banksula californica* Alabaster cave harvestman | — / — | GH SH | Known only from Alabaster Cave, 5.5 miles west of Pilot Hill alongside Rattlesnake Bar Road. (CNDDB 2015) | No. Project site has no caves. |
| ***Branchinecta lynchi*** **Vernal pool fairy shrimp** | **T** / — | G3 S2S3 | Vernal pools in grasslands of the Central Valley, Central Coast Ranges and South Coast Mountains. (CNDDB 2015) Known to occur in a wide range of vernal pool habitats in the southern and Central Valley areas of California. (USFWS 2015) | No. Project site has no vernal pools. |
| *Branchinecta mesovaliensis* Midvalley fairy shrimp | — / — | G2 S2 | Vernal pools in the Central Valley. (CNDDB 2015) | No. Project site has no vernal pools. |
| *Chrysis tularensis* Tulare cuckoo wasp | — / — | G1G2 S1S2 | Vernal pools in the Central Valley. (CNDDB 2015) | No. Project site has no vernal pools. |
| *Cosumnoperia hypocrena* Cosumnes stripetail stonefly | — / — | G2 S2 | Found in intermittent streams on western slope of central Sierra Nevada foothills in American and Cosumnes River basins. (CNDDB 2014) | Yes. See text for further discussion. |
| ***Desmocerus californicus dimorphus*** **Valley elderberry longhorn beetle** | **T** / — | G3T2 S2 | Elderberry shrubs (*Sambucus* species), are the host plants of the beetles (USFWS 1999). Prefers stressed hosts with 2-8 inch diameter trunks (CNDDB 2014) | No. The host plant was not found on the project site. |
| *Hydrochara rickseckeri* Ricksecker's water scavenger beetle | — / — | G2? S2? | Vernal pools and seasonal wetlands. Larvae are aquatic, probably predaceous, and adults are probably scavengers. (CNDDB 2012) | Yes. See text for further discussion. |
| ***Lepidurus packardi*** **Vernal pool tadpole shrimp** | **E** / — | G3 S2S3 | Found in vernal pools in the Sacramento Valley and San Francisco Bay area. (USFWS 2015) | No. The project site has no vernal pools. |
| *Linderiella occidentalis* California linderiella | — / — | G2G3 S2S3 | Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. (CNDDB 2015) Currently known from the Central Valley and Coast ranges of California. (USFWS 2015) | No. Suitable pools and soils are not found on the project site. |

| Special-status Species<br>Common Name | Listing Status<br>Federal / State<br>(OTHER) | CNDDB Rank<br>Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| **Fish** | | | | |
| ***Hypomesus transpacificus***<br>**Delta smelt** | **T / E** | G1 S1 | Sacramento-San Juaquin river delta including side channels and sloughs. (MCGinnis 1984) | No. Project site has no perennial streams. |
| *Mylopharodon conocephalus*<br>Hardhead | — / —<br>(SSC) | G3 S3 | Low to mid-elevation streams in the Sacramento-San Joaquin drainage having clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. (CNDDB 2014) | No. Project site has no perennial streams. |
| ***Oncorhynchus mykiss irideus***<br>**Central Valley steelhead** | **T / —** | G5T2Q S1S2 | Sacramento and San Juaquin Rivers and their tributaries that have direct access to the ocean (ie. no dams) (MCGinnis 1984) | No. Project site has no perennial streams. |
| ***Oncorhynchus tsawaytscha***<br>**Winter-run chinook salmon, Sacramento River** | **E / E** | G5 S1 | Sacramento and San Juaquin Rivers and their tributaries that have direct access to the ocean (ie. no dams) (MCGinnis 1984) | No. Project site has no perennial streams. |
| ***Oncorhynchus tsawaytscha***<br>**Central Valley spring-run chinook salmon** | **T / T** | G5 S1 | Sacramento and San Juaquin Rivers and their tributaries that have direct access to the ocean (ie. no dams) (MCGinnis 1984) | No. Project site has no perennial streams. |
| **Amphibians** | | | | |
| ***Ambystoma californiense* central population**<br>**California tiger salamander** | **T / T**<br>(SSC) | G2G3 S2S3 | Grasslands, oak savannah, edges of mixed woodland up to 1054 meters elevation. Breeds in temporary pools in rainy season; lives in rodent or ground squirrel burrows remainder of year. (CWHR 2015) | No. Project site is not within the known range of the species. Nearest CNDDB occurrences are near Galt and Ione, CA. |
| *Rana boylii*<br>Foothill yellow-legged frog | — / —<br>(SSC | G3 S2S3 | Found in or near perennial, rocky streams in a variety of habitats from sea level to 1940 m (6370 ft) elevation. (CWHR 2015) | No. Project site has no perennial streams. |
| ***Rana draytonii***<br>**California red-legged frog**<br><br>Also critical habitat | **T / —**<br>(SSC) | G2G3 S2S3 | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. (CNDDB 2015) | No. Wetlands on-site are shallow and lack suitable shrubby or emergent riparian vegetation.<br><br>Project site is not within critical habitat designated for the species. |
| *Spea hammondii*<br>Western spadefoot toad | — / —<br>(SSC) | G3 S3 | Occurs primarily in grassland habitats, but alos valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying. (CNDDB 2015) The species has never been reported from El Dorado County. (USFWS 2015) | No. Suitable breeding habitat is not found on the project site. |

| Special-status Species<br>Common Name | Listing Status<br>Federal / State<br>(OTHER) | CNDDB Rank<br>Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| **Reptiles** | | | | |
| *Emys marmorata*<br>Western pond turtle | — / —<br>(SSC) | G3G4 S3 | Associated with permanent or nearly permanent water in a wide variety of habitat types. (CWHR 2015) | No. Project site has no permanent water habitat. |
| *Phrynosoma blainvillii*<br>Coast horned lizard | — / —<br>(SSC) | G3G4 S3S4 | Sacramento Valley, surrounding foothills and Coast Ranges below 1200 m (4000 ft) elevation. Requires sandy or loose soil with abundant ant colonies for foraging. (CWHR 2015) | Yes. See text for further discussion. |
| ***Thamnophis gigas***<br>**Giant garter snake** | **T / T** | G2 S2 | Freshwater marshes, low-gradient streams, drainage canals; winters in small mammal burrows in adjacent upland. Ranges from Butte Co. to Fresno Co. (CWHR 2015) | No. Project site is out of the known range of the species.<br><br>Nearest CNDDB occurrence is near Sloughhouse along the Amador/Sacramento counties line. |
| **Birds** | | | | |
| *Accipiter cooperii* (nesting)<br>Cooper's hawk | — / —<br>(IUCN:LC) | G5 S4 | Nests in deciduous trees in riparian areas or second-growth conifers near streams. (CWHR 2015) | Yes. See text for further discussion. |
| *Accipiter gentilis* (nesting)<br>Northern goshawk | — / —<br>(SSC) | G5 S3 | Nests in mature, dense conifer forest. (CWHR 2015) Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees. (CNDDB 2015) | No. Project site has no dense conifer forest habitat. |
| *Accipiter striatus* (nesting)<br>Sharp-shinned hawk | — / —<br>(CDFW:WL) | G5 S3 | Ponderosa pine, black oak, riparian deciduous, mixed conifer & Jeffrey pine habitats. Prefers riparian areas. Nests usually within 275 ft of water. (CNDDB 2015) | No. Project site has no suitable conifer forest habitat. |
| *Agelaius tricolor* (nesting colony)<br>Tricolored blackbird | — / **E**<br>(SSC) | G2G3 S1S2 | Dense thickets of cattail, tule, willow, blackberry, wild rose or tall herbs near or emergent from water (CWHR 2015) | No. Project site has no aquatic thicket habitat. |
| *Ammodramus savannarum* (nesting)<br>Grasshopper sparrow | — / —<br>(SSC) | G5 S2 | Summer resident and breeder in dry, dense grasslands in foothills and lowlands with scattered shrubs west of Sierra-Cascade ranges. Uses shrubs for singing perches. (CWHR 2015) | Yes. See text for further discussion. |
| *Aquila chrysaetos* (nesting and wintering)<br>Golden eagle | — / —<br>(IUCN:LC) | G5 S3 | Nests on cliffs and in large trees in large open areas in rolling foothills. Home range in Northern California averages 124 km² (48 mi²). (CWHR 2015) | Yes. See text for further discussion. |
| *Ardea alba* (rookery)<br>Great egret | — / —<br>(CDF:S) | G5 S4 | Nests in large trees near marshes, tide-flats, irrigated pastures, margins of lakes and rivers. (CWHR 2015) | No. Project site lacks suitable wetland habitat. |

| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Ardea herodias* (rookery)<br>Great blue heron | — / —<br>(CDF:S) | G5 S4 | Forages in marshes, lakes margins, tide-flats, rivers, streams, wet meadows. Nests in colonies in tall trees, cliffsides, marshes near forage sites. (CWHR 2015) | No. Project site has no suitable rookery habitat. |
| *Asio flammeus* (nesting)<br>Short-eared owl | — / —<br>(SSC) | G5 S3 | Freshwater and saltwater marshes, lowland meadows and irrigated alfalfa fields with dense tules or tall grass for nesting and daytime roosts. (CWHR 2015) | No. Project site lacks suitable wetland or alfalfa field habitats. |
| *Asio otus* (nesting)<br>Long-eared owl | — / —<br>(SSC) | G5 S3? | Riparian habitat required; also uses live oak thickets and other dense stands of trees with adjacent open lands for foraging. (CWHR 2015) | No. Project site has neither riparian woodland nor dense tree stands/thickets. |
| *Athene cunicularia* (burrow sites)<br>Western burrowing owl | — / —<br>(SSC) | G4 S3 | Open, dry grassland and desert habitats; in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. (CWHR 2015) | Yes. See text for further discussion. |
| *Baeolophus inornatus* (nesting)<br>Oak titmouse | — / —<br>(BCC) | G4 S4 | Primarily associated with oaks; prefers open woodlands of oak, pine and oak, juniper and pinyon. Ventures into residential areas. (CWHR 2015) | Yes. See text for further discussion. |
| *Botaurus lentiginosus*<br>American bittern | — / —<br>(IUCN:LC) | G4 S4 | Fresh or saline emergent wetlands, adjacent shallow water of lakes, backwaters of rivers or estuaries. Nests within emergent aquatic vegetation.(CWHR 2015) | No. Project site has lacks wetland habitat having dense emergent vegetation. |
| *Buteo lagopus* (wintering)<br>Rough-legged hawk | — / —<br>(IUCN:LC ) | G5 SNRN | Migrant and winter resident in California lowlands. Hunts in wet meadows, marshes, swamps, riparian edges. (CWHR 2015) | Yes. See text for further discussion. |
| *Buteo regalis* (wintering)<br>Ferruginous hawk | — / —<br>(SSC) | G4 S3S4 | Requires large, open tracts of grasslands, sparse shrub, or desert habitats with elevated structures for nesting. (CWHR 2015) | No. Project site lacks open grassland habitat. |
| ***Buteo swainsoni* (nesting)**<br>**Swainson's hawk** | — / T<br>(SSC) | G5 S23 | Breeds in stands with few trees in juniper-sage flats, riparian areas and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields or pastures. (CWHR 2015) | No. Project site is not within the range of the species. |
| *Calypte costae* (nesting)<br>Costa's hummingbird | — / —<br>(IUCN:LC ) | G5 S4 | Desert riparian, desert and arid scrub foothill habitats. (CNDDB 2015) | No. Project site lacks riparian and scrub foothill habitats. |
| *Chaetura vauxi* (nesting)<br>Vaux's swift | — / —<br>(SSC) | G5 S3 | Redwood and Douglas-fir habitats with nest sites in hollow trees and snags. (CWHR 2013) | No. Project site has no redwood or Douglas-fir habitats. |
| *Charadrius alexandrinus* (nesting)<br>Snowy plover | T / —<br>(BCC) | G3S3 S2 | Sandy beaches, salt pond levees & shores of large alkali lakes. (CNDDB 2015) | No. Project site lacks suitable beach, pond or lake habitats. |

| Special-status Species<br>Common Name | Listing Status<br>Federal / State<br>(OTHER) | CNDDB Rank<br>Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Charadrius montanus* (wintering)<br>Mountain plover | — / —<br>(SSC) | G2 S2? | Winters in open plains or rolling hills with short grasses or very sparse vegetation in plowed fields and sandy deserts. Tolerates up to 70% short vegetative cover. (CWHR 2015) | No. Project site has no sparsely vegetated habitat. |
| *Chondestes grammacus* (nesting)<br>Lark sparrow | — / —<br>(IUCN:LC) | G5 S4S5 | Resident in lowlands and foothills throughout much of California. Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs. (CWHR 2015) | Yes. See text for further discussion. |
| *Circus cyaneus* (nesting)<br>Northern harrier | — / —<br>(SSC) | G5 S3 | Nests on ground in shrubby vegetation, usually at edge of marsh or along rivers or lakes, in various habitats up to 800 m in Sierra Nevada and elsewhere. (CWHR 2015) | No. Project site lacks shrubby vegetation near aquatic habitat. |
| *Cinclus mexicanus*<br>American dipper | — / —<br>(IUCN–LC) | G5 S? | Confined to clear, clean streams and rivers with rocky shores and bottoms in the mountains. (CWHR 2015) | No. Project site has no stream or river habitats. |
| ***Coccyzus americanus* (nesting)**<br>**Western yellow-billed cuckoo** | **T / E** | G5T3Q S1 | Inhabits extensive deciduous riparian thickets with willows and dense, low-level foliage, which abut slow-moving watercourses, backwaters, or seeps. (CWHR 2015) | No. Project site lacks riparian thickets and waters. |
| *Contopus cooperi* (nesting)<br>Olive-sided flycatcher | — / —<br>(SSC) | G4 S4 | Conifer or mixed hardwood/conifer forests (montane hardwood-conifer). Requires high perches for singing and hunting. (CWHR 2015) | No. Project site lacks montane hardwood-conifer habitat. |
| *Cypseloides niger* (nesting)<br>Black swift | — / —<br>(SSC) | G4 S2 | Steep, rocky, often moist locations on cliff either on sea or behind or adjacent to a waterfall in a deep canyon. (CWHR 2015) | No. Project site lacks cliff, waterfall and deep canyon habitats. |
| *Elanus leucurus* (=*Elanus caeruleus*)<br>White-tailed kite (=Black-shouldered kite) (nesting) | — / —<br>(CDFW: FP)<br>(IUCN: LC) | G5 S3S4 | Resident in coastal and valley lowlands; rarely found away from agricultural areas. Nests near top of dense stand of oaks or other trees (CWHR 2015) | No. Project site lacks open, agricultural habitat required for foraging by the species. |
| ***Empidonax traillii brewsteri*** (nesting)<br>**Little willow flycatcher** | — / **E** | G5T3T4<br>S1S2 | Wet meadows and montane riparian vegetation, 600-2500 m (2000 ti 8000 ft) elevation. Dense willow thickets are required for nesting and roosting. (CWHR 2015) | No. Project site has no willow thickets. |
| *Falco columbarius* (wintering)<br>Merlin | — / —<br>(IUCN: LC) | G5 S4 | Winter migrant utilizing habitats from grassland to Ponderosa pine and montane hardwood-conifer below 1500 m. Found in dense tree stands near water. (CWHR 2015) | Yes. See text for further discussion. |

| Special-status Species<br>Common Name | Listing Status<br>Federal / State<br>(OTHER) | CNDDB Rank<br>Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Falco mexicanus* (nesting)<br>Prairie falcon | — / —<br>(IUCN: LC) | G5 S4 | Distributed from grassland through alpine meadows, but usually found in grasslands. Nests on ledge of cliff overlooking open area. (CWHR 2015) | No. Project site lacks suitable cliff nesting habitat. |
| ***Falco peregrinus anatum* (nesting)**<br>**American peregrine falcon** | **D / D**<br>(IUCN: LC) | G4T3 S3S4 | Requires protected cliffs and ledges for cover. Breeds near water on high cliffs, banks, dunes, mound; occasionally in tree or snag cavities or old nests of other raptors. (CWHR 2015) | No. Project site lacks suitable cover and breeding habitats. |
| ***Haliaeetus leucocephalus*** (nesting, wintering)<br>**Bald eagle** | **D / E** | G5 S2 | Large bodies of water or free-flowing rivers with abundant fish, and adjacent snags or other perches. (CWHR 2015) | No. Project site is too far from suitable river or lake foraging habitats. |
| *Icteria virens* (nesting)<br>Yellow-breasted chat | — / —<br>(SSC) | G5 S3 | Nests in dense riparian habitats dominated by willows, alders, Oregon ash, tall weeds, blackberry vines and grapevines. (CWHR 2015) | No. Project site has no riparian habitat. |
| *Lanius ludovicianus* (nesting)<br>Loggerhead shrike | — / —<br>(SSC) | G4 S4 | Open habitats with scattered shrubs, posts, etc. for perches. Nests in densely-foliated shrub or tree (CWHR 2015) | Yes. See text for further discussion. |
| ***Laterallus jamaicensis coturniculus***<br>**California black rail** | **— / T** | G3G4T1 S1 | Freshwater marshes, wet meadows, shallow margins of saltwater marshes around larger bays. Requires non-fluctuating water depths of about one inch; dense vegetation for nesting. (CWHR 2015) | No. Project site has no suitable wetland habitat. |
| *Melanerpes lewis* (nesting)<br>Lewis's woodpecker | — / —<br>(IUCN: LC) | G4 S4 | Winters in open oak savannah, broken deciduous and coniferous habitats. Nests in Coast Ranges, Modoc Plateau and eastern slope of Sierra Nevada. (CWHR 2015) | No. Project site is out of the nesting range of the species, but has suitable winter forage habitat. |
| *Melospiza melodia* (Modesto population)<br>Modesto song sparrow | — / —<br>(SSC) | G5 S3? | Freshwater wetlands, early succession riparian thickets and valley oak riparian groves below 200 ft. (61 m.) elevation. (Shuford & Gardali 2008) | No. Project site is out of the range of the species. |
| *Numenius americanus* (nesting)<br>Long-billed curlew | — / —<br>( BCC) | G5 S2 | Grasslands and wet meadows, usually adjacent to lakes, marshes, or estuaries. Breeds on grazed, mixed-grass ands short grass prairies in Siskiyou, Modoc, and Lassen counties. (CWHR 2015) | No. Project site is out of the known breeding range of the species. |
| *Otus flammeolus* (nesting)<br>Flammulated owl | — / —<br>(BCC) | G4 S2S3 | Coniferous forests between 1830-3048 m (6000-10,000 ft) elevation. Favors small openings and edges with snags. (CWHR 2015) | No. Project site has no coniferous forest habitat. |
| *Pandion haliaetus* (nesting)<br>Osprey | — / —<br>(CDF :S)<br>(CDFW: WL)<br>( IUCN: LC) | G5 S4 | Associated strictly with large, fish-bearing waters, primarily in Ponderosa pine and higher-elevation conifer habitats. Preys mostly on fish; also takes a few mammals, birds, reptiles, amphibians, and invertebrates. (CWHR, 2015) | No. Project site has no large, fish-bearing waters. |

| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Passerella iliaca*<br>Fox sparrow | — / —<br>( IUCN: LC) | G5 S5 | Breeds commonly in mountains of California, in dense montane chaparral and brushy understory of other wooded, montane habitats. Winters in dense brush habitats, throughout foothills and lowlands, except in southern deserts. (CWHR 2015) | No. Project site has no brushy habitat. |
| *Phalacrocorax auritus* (nesting colony)<br>Double-crested cormorant | — / —<br>(CDFW: WL)<br>( IUCN: LC) | G5 S4 | Resident along the entire coast of California and on inland lakes, in fresh, salt and estuarine waters. Feeds mainly on fish; also on crustaceans and amphibians. Requires undisturbed nest-sites beside water, on islands or mainland. Nests in colonies of a few to hundreds of pairs, or even thousands. (CWHR 2015) | No. Project site has no permanent water habitats. |
| *Pica nuttallii* (nesting and communal roosts)<br>Yellow-billed magpie | — / —<br>(BCC) | G3G4 S3S4 | Resident of the Central Valley, and coastal mountain ranges south from San Francisco Bay to Santa Barbara Co. Inhabits valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, orchard, vineyard, cropland, pasture, and urban habitats. (CWHR 2015) | No. Project site is outside of the range of the species. |
| *Picoides albolarvatus* (nesting)<br>White-headed woodpecker | — / —<br>(BCC) | G4 S4 | Montane pine and fir forests with large trees, snags and tree/shrub or tree/herbaceous ecotones. (CWHR 2013) | No. Has no mature pine or fir forest habitats. |
| *Picoides nuttallii* (nesting)<br>Nuttall's woodpecker | — / —<br>( BCC) | G4G5 S4S5 | Frequents a mix of deciduous riparian and adjacent oak habitats. Requires snags and dead limbs for nest excavation. (CWHR 2015) | Yes. See text for further discussion. |
| *Pipilio chlorurus*<br>Green-tailed towhee | — / —<br>(IUCN:LC) | G5 SNRB | Montane chaparral, sagebrush, low sagebrush, and bitterbrush habitats. Where such habitats form understory, sparse coniferous forests also are occupied. (CWHR 2015) | No. Project site lacks chaparral, sagebrush and bitterbrush habitats. |
| Plegadis chihi (rookeries)<br>White-faced ibis | — / —<br>(SSC) | G5 S3S4 | Fresh emergent wetlands, shallow lakes, irrigated pastures or cropland. Nests amid tall marsh plants in extensive marshes (CWHR 2015) | No. Project site has no suitable wetland or cropland habitats. |
| *Progne subis* (nesting)<br>Purple martin | — / —<br>( SSC) | G5 S3 | Uses valley foothill, montane hardwood, montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats. Inhabits open forests, woodlands, and riparian areas in breeding season. Nests in tree cavities. (CWHR 2015) | Yes. See text for further discussion. |
| ***Riparia riparia*** (nesting)<br>**Bank swallow** | — / **T** | G5 S2 | Open riparian areas, brushland, grassland and cropland. Nests in vertical banks and cliffs with fine-textured soils near water. (CWHR 2015) | No. Project site lacks suitable bank or cliff nesting habitat, and is out of the known range of the species. |

| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Selasphorus calliope* Calliope hummingbird | — / — (IUCN:LC) | G5 S? | Summer resident of California, breeding in mountain ranges throughout the state; absent in winter. Breeds in wooded habitats from ponderosa pine and montane hardwood-conifer up through lodgepole pine, favoring montane riparian, aspen, and other open forests near streams. (CWHR 2015) | No. Project site lacks ponderosa montane coniferous and riparian habitats. |
| *Setophaga petechia* (nesting) Yellow warbler | — / — (SSC) | G5 S4 | Nests in riparian habitats dominated by willows, cottonwoods, sycamores or alders, or in mature chaparral. (CWHR 2015) | No. Project site has no riparian or chaparral habitats. |
| *Sphyrapicus ruber* (nesting) Red-breasted sapsucker | — / — ( BCC) | G5 S4 | Riparian areas in deciduous and coniferous forest habitats, especially near aspens, open meadows, clearings, lakes. Breeds from ~ 1200-2500 m (4000-8000 ft) elevation in the Sierras. (CWHR 2015) | No. Project site is out of the nesting range of the species, but may provide winter forage areas. |
| *Sphyrapicus thyroideus* Williamson's sapsucker | — / — (ICUN:LC) | G5TU S? | Conifer forests, 1700-2900m elevation. Prefers to nest in lodgepole pine, but also red fir, Jeffry pine and eastside pine habitats. (CWHR 2015) | No. Project site lacks montane conifer habitats and is outside the range of the species. |
| *Spinus lawrencei* (nesting) Lawrence's goldfinch | — / — (BCC) | G3G4 S3 | Breeds in open oak or other arid woodland within 0.5 mi. of water. Prefers to nest in an oak, most often near water, but also uses chaparral. (CWHR 2015) | Yes. See text for further discussion. |
| *Spizella passerina* (nesting) Chipping sparrow | — / — (ICUN:LC) | G5 S3S4 | Oak woodland, orchards, mixed coniferous forest, montane and subalpine forest. Prefers open woody habitats with sparse or low herbaceous layer and few shrubs, if any. Prefers to nest in conifers, but deciduous trees and shrubs also used. (CWHR 2015) | Yes. See text for further discussion. |
| *Strix occidentalis occidentalis* California spotted owl | — / — (SSC) | G3T3 S3 | In northern California, found in dense, old-growth mixed conifer habitats (canopy closure >40%) in narrow, steep-sided canyons with north-facing slopes, within 300 meters of water (CWHR 2015) | No. Project site lacks mixed conifer habitat. |

| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| **Mammals** | | | | |
| *Antrozous pallidus*<br>Pallid bat | — / —<br>(SSC) | G5 S3 | Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Roosts must protect bats from high temperatures. (CWHR 2015) | Yes. See text for further discussion. |
| *Lasionycteris noctivagans*<br>Silver-haired bat | — / —<br>( IUCN: LC) | G5 S3S4 | Primarily found in coastal and montane forests, but also valley foothill woodlands and riparian areas. Feeds over ponds, streams and open brushy areas. Roosts in hollow trees, beneath loose bark, in abandoned woodpecker holes; rarely under rocks. Requires drinking water. (CWHR 2015) | Yes. See text for further discussion. |
| *Pekania pennanti*<br>Fisher–West Coast DPS (Distinct Population Segment) | **T / CT**<br>(SSC) | G5T2T3Q S2S3 | Suitable habitat is large areas of mature, dense coniferous forest stands or deciduous-riparian habitats with ≥50% canopy closure (CWHR 2013). | No. Project site lacks conifer and deciduous-riparian habitats. |
| *Myotis yumanensis*<br>Yuma myotis | — / —<br>( IUCN: LC) | G5 S4 | Many habitats from sea level to 2400 m. in Sierras, roosting in caves, mines, buildings, bridges, crevices. Forages for insects over water bodies. (CWHR 2013) | Yes. See text for further discussion. |
| **Plants** | | | | |
| *Allium jepsonii*<br>Jepson's onion | — / —<br>(1B.2) | G1 S1 | Chaparral, cismontane woodland or lower montane coniferous forest on serpentine or volcanic soils, 300-1320 meters elevation. (CNPS 2015) On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. on slopes and flats, usually in an open area. (CNDDB 2015) | No. Project site has neither serpentine nor volcanic soils. |
| *Arctostaphylos myrtifolia*<br>Ione manzanita | **T** / —<br>(1B.2) | G2 S2 | Chaparral, cismontane woodland on Ione clay with chaparral associates, 75-560 m elevation. | No. Project site has no Ione soils. |
| *Arctostaphylos nissenana*<br>Nissenan manzanita | — / —<br>(1B.2) | G1 S1 | Open rocky ridges in chaparral or closed-cone coniferous forest between 450-1100 m elevation. (CNDDB 2015) | No. Project site has neither chaparral nor closed-cone coniferous forest habitats and is below the known elevation range of the species. |
| *Balsamorhiza macrolepis var. macrolepis*<br>Big-scale balsamroot | — / —<br>(1B.2) | G2 S2 | Open grassy or rocky slopes and valleys in Sierra Nevada foothills, Sacramento Valley and eastern San Francisco Bay area. (Jepson 2015) Sometimes found on Serpentine soils. 90-1555 m elevation (CNDDB 2015) | Yes. See text for further discussion. |

| | | | | |
|---|---|---|---|---|
| ***Calystegia stebbinsii*** **Stebbins's morning-glory** | **E / E (1B.1)** | G1 S1.1 | Chaparral on gabbro or serpentine soils. (USFWS 2002) Usually absent from areas with understory dominated by grasses (Wilson 1986, Hunter and Horenstein 1991); 185-1090 m. elevation (CNPS 2015) | No. Project site has neither chaparral vegetation nor gabbro or serpentine soils. |
| ***Ceanothus roderickii*** **Pine Hill ceanothus** | **E / R (1B.2)** | G1 S1 | Openings or disturbed areas in chaparral or cismontane woodland on gabbro or serpentine soils (USFWS 2002, CNPS 2015) Usually absent from areas with understory dominated by grasses (Wilson 1986, Hunter and Horenstein 1991). 245-1090 m. elevation (CNPS 2015) | No. Project site has neither gabbro nor serpentine soils. |
| *Chlorogalum grandiflorum* Red Hills soaproot | — / — (1B.2) | G3 S3 | Open chaparral on gabbro or serpentine soils. (Hunter and Horenstein 1991) Chaparral, cismontane woodland, lower coniferous forest, 245-1240 m elevation (CNPS 2015). | No. Project site has neither chaparral vegetation nor suitable soils. |
| *Clarkia biloba* ssp. *brandegeeae* Brandegee's clarkia | — / — (4.2) | G4G5T4 S4 | Chaparral, cismontane woodland, often on road cuts, 75-915 m. elevation. (CNDDB 2015) | Yes. See text for further discussion. |
| *Crocanthemum suffrutescens* Bisbee Peak rush-rose | — / — (3.2) | G2Q S2 | Chaparral on gabbro soils in El Dorado County or on serpentine or Ione soils elsewhere (Wilson 1986, CNPS 2015); 45-840 m. elevation (CNDDB 2015). | No. Project site has no chaparral habitat. |
| *Downingia pusilla* Dwarf downingia | — / — (2B.2) | GU S2 | Vernal pools and wetlands in valley and foothill grasslands, 1-445 m. elevation. (CNDDB 2015) | Yes. See text for further discussion. |
| *Erigeron miser* Starved daisy | — / — (1B.3) | G2 S2 | Upper montane coniferous forest, 1080-2620 m elevation. (CNPS 2015) Rocky, granitic outcrops (CNDDB 2015) | No. Project site is too low in elevation for the species. |
| *Eriogonum apricum* var. *apricum* Ione buckwheat | E / E 1B.1 | G2T1 S1 | Gravelly openings within chaparral on Ione soils, 60-145 m elevation. (CNDDB 2015) | No. Project site has no Ione soils. |
| *Eriogonum apricum* var. *prostratum* Irish Hill buckwheat | E / E 1B.1 | G2T1 S1 | Gravelly openings within chaparral on Ione soils, 90-120 m elevation. (CNDDB 2015) | No. Project site has no Ione soils. |
| *Eryngium pinnatisectum* Tuolumne button-celery | — / — (1B.2) | G2 S2 | Vernal pools and mesic sites in cismontane woodland and lower coniferous forest habitats on volcanic soils between 250-450 m. elevation. (CNDDB 2015) | No. Project site has no volcanic soils. |
| ***Fremontodendron decumbens*** **Pine Hill flannelbush** | **E / R (1B.2)** | G1 S1 | On scattered rocky outcrops in chaparral or cismontane woodland, gabbro or serpentine soils, 425-760 m. elevation. (CNDDB 2015) | No. Project site has neither gabbro nor serpentine soils. |
| ***Galium californicum* ssp. *sierrae*** **El Dorado bedstraw** | **E / R (1B.2)** | G5T1 S1 | Oak woodland on gabbro soils. (USFWS 2002) Absent from areas with understory dominated by grasses (Wilson 1986, Hunter and Horenstein 1991); 100-585 m. elevation (CNDDB 2015). | No. Project site has no gabbro soils. |
| *Horkelia parryi* Parry's horkelia | — / — (1B.2) | G2 S2 | Chaparral and cismontane woodland, on Ione or limestone soils, between 80-1035 m. elevation. (CNDDB 2015) | No. Neither Ione nor limestone soils, required by the species, are found on the project site. |

| | | | | |
|---|---|---|---|---|
| ***Legenere limosa***<br>**Legenere** | — / —<br>**(1B.1)** | G2 S2 | In beds of vernal pools, 1-880 m elevation. (CNDDB 2015) Known occurrences limited to Sacramento and Solano cos.; presumed extant in Alameda, Santa Clara, Sonoma, Lake, Napa, Placer, San Joaquin, San Mateo, Shasta, Tehama, and Yuba cos. (USFWS 2015) | No. Project site has no suitable vernal pools; species is not known in El Dorado County. |
| *Navarretia myersii* ssp. *myersii*<br>Pincushion navarretia | — / —<br>(1B.1) | G1T1 S1 | Vernal pools on clay soils within non-native grassland, 20-330 m elevation. (CNDDB 2015) Known from Amador, Calaveras, Merced, Placer and Sacramento cos. (CNPS 2015) | No. Project site has no suitable vernal pool habitat. |
| ***Orcuttia viscida***<br>**Sacramento orcutt grass** | E / E<br>(1B.1) | G1 S1 | Vernal pools, 30-100 m elevation. (CNDDB 3015) | No. Project site is too high in elevation and has no suitable vernal pool habitat. |
| ***Packera layneae (=Senecio layneae)***<br>**Layne's butterwort** | T / R<br>(1B.2) | G2 S2 | Open rocky areas in chaparral or cismontane woodland on gabbro or serpentine soils (USFWS 2002b); 200-1000 m. elevation (CNDDB 2013). | No. Project site has neither gabbro nor serpentine soils. |
| *Sagittaria sanfordii*<br>Sanford's arrowhead | — / —<br>(1B.2) | G3 S3 | Emergent from shallow, standing, fresh water within marshes, ponds and ditches, 0-650 m. elevation. (CNDDB 2015) | Yes. See text for further discussion. |
| *Viburnum ellipticum*<br>Oval-leaved viburnum | — / —<br>(2B.3) | G5 S3 | Chaparral, cismontane woodland or lower montane coniferous forest between 215-1400 m. elevation (CNDDB 2015) | No. Chaparral vegetation is not found on the project site. |
| *Wyethia reticulata*<br>El Dorado mule-ears | — / —<br>(1B.2) | G2 S2 | Occurs in chaparral, cismontane woodland and lower montane coniferous forest on stony red clay and gabbro soils (USFWS 2002b); 185-630 m. (CNDDB 2015) | No. Project site has no stony red clay or gabbro soil types. |
| **Special Habitats** | | | | |
| Central Valley Drainage Hardhead/Squawfish Stream | — / — | GNR / SNR | Small to large perennial streams within the Sacramento-San Joaquin, Pajaro-Salinas, Russian, Clear Lake and upper Pit River drainages in California. (UC Davis 2014) | No. Project site has no perennial streams. |
| Northern Hardpan Vernal Pool | — / — | G3 S3.1 | Northern Hardpan vernal pools are formed on alluvial terraces with silicate-cement soil layers. These pool types are on acidic soils and exhibit well-developed mima mound topography found on the eastern margins of the Central Valley. | No. Project site has no vernal pool/mima mound topography. |

# APPENDIX E

## Plant Species Found on the Project Site
## May 13, 18, 20 and June 17, 2015

**Plant Species Found on the Project Site**
**May 13, 18, 20 and June 20, 2015**

**Amaranthaceae**
*Amaranthus* sp. **Pigweed**
**Apiaceae**
*Daucus pusillus* Michx., **Queen Ann's lace**
*Torilis arvensis* (Huds.) Link, **Tall sock-destroyer**
*Sanicula* sp., **Sanicle**
*Scandix pecten-veneris* L., **Venus' needle**
**Asteraceae**
*Achillea millefolium* L., **Yarrow**
*Anthemis cotula* L., **Mayweed**
*Carduus pycnocephalus* L., **Italian plumeless thistle**
*Chondrilla juncea* L., **Skeleton weed**
*Hypochaeris radicata* L., **Rough cat's-ear**
*Lacttuca serriola* L., **Prickly lettuce**
*Leontodon saxatilis* Lam., **Hairy hawkbit**
*Logfia filaginoides* (Hook. & Arn.) Morefield, **California cottonrose**
*Pseudognaphalium luteoalbum* Hilliard & B.L. Burtt, **Red-tipped rabbit-tobacco**
*Senecio vulgaris* L., **Common groundsel**
*Silybum marianum* (L.) Gaertn., **Milk thistle**
*Sonchus asper* (L.) Hill, subsp. *asper,* **Prickly sow thistle**
**Boraginaceae**
*Amsinckia* sp. **Fiddleneck**
*Heliotropium europaeum* L., **European heliotrope**
*Plagiobothrys tenellus* (Hook.) A. Gray, **Pacific popcornflower**
**Brassicaceae**
*Brassica nigra* (L.) W.D.J. Koch, **Black mustard**
*Capsella bursa-pastoris* (L.) Medik, **Shepherd's purse.**
*Nasturtium officiale* W.T. Aiton, **Water cress**
**Cyperaceae**
*Cyperus eragrostis* Lam., **Tall flatsedge**
*Eleocharis palustris* (L.)Roemer & J.A. Schultes, **Common spikerush**
**Chenopodiaceae**
*Chenopodium album* L., **Lamb's quarters**
**Euphorbiaceae**
*Croton setiger* Hook., **Turkey-mullein**
**Fabaceae**
*Acmispon brachycarpus* (Benth.) D.D. Sokoloff, **Deerweed**
*Lupinus nanus* Benth., **Sky lupine**
*Medicago* sp., **Bur-clover**
*Trifolium dubium* Sibth., **Little hop clover**
*Trifolium hirtum* All., **Rose clover**
*Trifolium subterraneum* L., **Subterranean clover**
*Vicia* sp., **Vetch**
**Fagaceae**
*Quercus douglasii* Hook & Arn., **Blue oak**
*Quercus lobata* Nee, **Valley oak**
**Geraniaceae**
*Erodium* sp., **Filaree**
*Geranium molle* L.
**Gentianaceae**
*Zeltnera venusta* (A.Gray) G. Mans., **California centaury**
**Hypericaceae**
*Hypericum perforatum* L. ssp. *perforatum* **klamathweed**
**Juncaceae**
*Juncus bufonius* L., **Toad rush**
**Liliaceae**
*Chlorogalum pomeridianum* (DC.) Kunth var. *pomeridianum*, **Common soaproot**
**Linaceae**
*Linum biennne* Mill., **Flax**
**Lythraceae**
*Lythrum hyssopifolia* L., **Hyssop loosestrife**
**Malvaceae**
*Malva parviflora* L., **Cheeseweed**
**Myrsinaceae**
*Anagallis arvensis* L., **Scarlet pimpernel**
**Onagraceae**
*Epilobium torreyi* (S. Watson) Hoch & P.H. Raven, **Torrey's willowherb**
**Phrymaceae**
*Mimulus guttatus* DC., **Seep monkeyflower**
**Plantaginaceae**
*Kickxia* sp., **Fluellin**
*Plantago lanceolata* L., **Italian plantain**
**Poaceae**
*Aegilops triuncialis* L., **Barbed goat grass**
*Aira caryophyllea* L., **Silver hair grass**
*Avena barbata* Link., **Slender wild oat**
*Briza minor* L., **Annual quaking grass**
*Bromus hordeaceus* L., **Soft chess**
*Bromus madritensis* L., **Foxtail chess**
*Bromus tectorum* L., **Cheat grass**
*Cynodon dactylon* (L.) Pers., **Bermuda grass**
*Cynosurus echinatus* L., **Hedgehog dogtail**
*Elymus caput-medusae* L., **Medusa head**
*Festuca perennis* (L.) Columbus & J.P.Sm., **Ryegrass**
*Hordeum* sp., **Barley**
*Polypogon monspeliensis* (L.) Desf., **Annual beard grass, rabbitfoot grass**
**Polemoniaceae**
*Navarretia intertexta* (Benth.) Hook., **Needleleaf navarretia**
**Polygonaceae**
*Rumex congleratus* Murray., **Clustered dock**
**Ranunculaceae**
*Ranunculus canus* Benth., var. *canus*, Sacramento Valley buttercup
**Rubiaceae**
*Galium paresiense* L., **Wall bedstraw**
*Sherardia arvensis* L., **Field madder**
**Scrophulariaceae**
*Verbascum blattaria* L., **Moth mullein**
**Solanaceae**
*Datura* sp., **Jimson weed**
*Nicotiana attenuata* S. Watson, **Coyote tobacco**
**Themidaceae**
*Dichelostemma capitatum* (Benth.) Alph. Wood, **Blue Dicks**
*Triteleia hyacinthina* (Lindl.) Greene, **White brodiaea**
*Triteleia laxa* Benth., **Ithuriel's spear**
**Viscaceae**
*Phoradendron villosum* (Nutt.) Nutt., **Oak mistletoe**
**Zygophyllaceae**
*Tribulus terrestris* L., **Puncture vine**

# APPENDIX F

## Oak Tree Assessments

| TREE NO. | COMMON NAME | SCIENTIFIC NAME *Quercus* sp. | DBH in. | DRIP RADIUS ft | HEALTH | | | STRUCTURE | | | OVERALL CONDITION[7] | DEFECTS[8] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | GOOD | FAIR | POOR | GOOD | FAIR | POOR | | |
| 100 | Blue oak | *Quercus douglasii* | 27 | 31 | ✔ | | | ✔ | | | 4 | 11, 14 |
| 101 | Blue oak | *Q. douglasii* | 28 | 37 | ✔ | | | ✔ | | | 4.5 | 11 |
| 102 | Blue oak | *Q. douglasii* | 21 | 24 | ✔ | | | ✔ | | | 4.5 | 11 |
| 103 | Blue oak | *Q. douglasii* | 21 | 18 | ✔ | | | | ✔ | | 4 | 11, 13 |
| 104 | Blue oak | *Q. douglasii* | 20 | 32 | ✔ | | | ✔ | | | 4.5 | 11 |
| 105 | Blue oak | *Q. douglasii* | 8 | 16 | ✔ | | | ✔ | | | 4.5 | 11 |
| 106 | Blue oak | *Q. douglasii* | 16 | 29 | ✔ | | | ✔ | | | 5 | |
| 107 | Blue oak | *Q. douglasii* | 12 | 21 | ✔ | | | ✔ | | | 4 | 11, 13 |
| 108 | Blue oak | *Q. douglasii* | 11.5 | 22 | ✔ | | | | ✔ | | 3 | 3, 11, 13 |
| 109 | Blue oak | *Q. douglasii* | 15 | 23 | ✔ | | | | ✔ | | 3 | 3, 11, 13 |
| 110 | Blue oak | *Q. douglasii* | 18 | 24 | ✔ | | | ✔ | | | 4.5 | 11 |
| 111 | Blue oak | *Q. douglasii* | 21 | 23 | | ✔ | | | ✔ | | 4.5 | 11 |
| 112 | Blue oak | *Q. douglasii* | 20 | 20 | ✔ | | | ✔ | | | 4 | 11 |
| 113 | Blue oak | *Q. douglasii* | 17 | 25 | ✔ | | | | ✔ | | 4 | 11 |
| 114 | Blue oak | *Q. douglasii* | 21 | 33 | ✔ | | | ✔ | | | 4 | 11 |
| 115 | Blue oak | *Q. douglasii* | 14 | 17 | ✔ | | | ✔ | | | 4.5 | 11 |
| 116 | Blue oak | *Q. douglasii* | 19 | 20 | ✔ | | | | ✔ | | 4 | 2, 11 |
| 117 | Blue oak | *Q. douglasii* | 18 | 21 | ✔ | | | | ✔ | | 3 | 11, 13 |
| 118 | Blue oak | *Q. douglasii* | 12 | 16 | ✔ | | | | ✔ | | 4 | 11, 13 |
| 119 | Blue oak | *Q. douglasii* | 11 | 19 | ✔ | | | | ✔ | | 4 | 11, 13 |
| 120 | Blue oak | *Q. douglasii* | 12.5 | 17 | ✔ | | | | ✔ | | 4 | 3, 11, 13 |
| 121 | Blue oak | *Q. douglasii* | 14 | 17 | ✔ | | | ✔ | | | 4.5 | 11 |
| 122 | Blue oak | *Q. douglasii* | 16.5 | 24 | ✔ | | | ✔ | | | 4.5 | 11 |
| 123 | Blue oak | *Q. douglasii* | 25.5 | 27 | | ✔ | | | ✔ | | 3 | 3, 11, 14 |
| 124 | Blue oak | *Q. douglasii* | 21 | 29 | ✔ | | | | ✔ | | 4 | 11, 13 |

[7] 0 = Dead, 1 = Severe decline, 2 = Declining, 3 = Fair, 4 = Good, 5 = Excellent

[8] 1=Co-dominant stem without included bark; 2=Co-dominant stem with included bark; 3=Leaning tree; 4= cavities; 5=many suckers; 6=multiple trunks; 7=wire in trunk; 8= growing beneath utility lines, 9= large wound, 10=rot, 11=dead limbs, 12=mostly dead; 13=tree shaded by others so that all limbs spread in one direction; 14=many healed wounds or loose bark; possible internal rot.; 15=dieback of branches indicates health decline.

| TREE NO. | COMMON NAME | SCIENTIFIC NAME *Quercus* sp. | DBH in. | DRIP RADIUS ft | HEALTH | | | STRUCTURE | | | OVERALL CONDITION[9] | DEFECTS[10] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | GOOD | FAIR | POOR | GOOD | FAIR | POOR | | |
| 125 | Blue oak | *Q. douglasii* | 15 | 27 | ✔ | | | | ✔ | | 4 | 11, 13 |
| 126 | Blue oak | *Q. douglasii* | 15.5 | 19 | ✔ | | | ✔ | | | 4.5 | 11 |
| 127 | Blue oak | *Q. douglasii* | 27 | 35 | | ✔ | | | ✔ | | 3 | 11, 14 |
| 128 | Blue oak | *Q. douglasii* | 22 | 24 | | ✔ | | ✔ | | | 4 | 11 |
| 129 | Blue oak | *Q. douglasii* | 33 | 32 | ✔ | | | | | ✔ | 3 | 2, 4, 9, 11 |
| 130 | Blue oak | *Q. douglasii* | 24 | 29 | ✔ | | | ✔ | | | 4 | 11 |
| 131 | Blue oak | *Q. douglasii* | 29 | 28 | ✔ | | | ✔ | | | 4.5 | 11 |
| 132 | Blue oak | *Q. douglasii* | 32 | | ✔ | | | | ✔ | | 4 | 2, 11 |
| 133 | Blue oak | *Q. douglasii* | 27 | 29 | ✔ | | | | ✔ | | 4 | 1, 11 |
| 134 | Blue oak | *Q. douglasii* | 26.5 | 29 | ✔ | | | | ✔ | | 4 | 2, 11 |
| 135 | Blue oak | *Q. douglasii* | 20 | 20 | ✔ | | | ✔ | | | 4.5 | 11 |
| 136 | Blue oak | *Q. douglasii* | 25.5 | 31 | ✔ | | | ✔ | | | 4 | 11 |
| 137 | Blue oak | *Q. douglasii* | 20.5 | 20 | ✔ | | | ✔ | | | 4.5 | 11 |
| 138 | Blue oak | *Q. douglasii* | 15 | 19 | ✔ | | | ✔ | | | 4.5 | 11 |
| 139 | Blue oak | *Q. douglasii* | 23 | 22 | ✔ | | | | ✔ | | 4 | 2, 3, 11 |
| 140 | Blue oak | *Q. douglasii* | 17 | 23 | ✔ | | | ✔ | | | 4.5 | 11 |
| 141 | Blue oak | *Q. douglasii* | 29 | 34 | ✔ | | | | ✔ | | 4 | 3, 11 |
| 142 | Blue oak | *Q. douglasii* | 28 | 33 | ✔ | | | ✔ | | | 4.5 | 11 |
| 143 | Blue oak | *Q. douglasii* | 26.5 | 27 | | ✔ | | | ✔ | | 3 | 11, 14 |
| 144 | Blue oak | *Q. douglasii* | 20 | 26 | | ✔ | | | ✔ | | 3 | 4, 11, 14 |
| 145 | Blue oak | *Q. douglasii* | 25 | 33 | ✔ | | | ✔ | | | 4.5 | 11 |

[9] 0 = Dead, 1 = Severe decline, 2 = Declining, 3 = Fair, 4 = Good, 5 = Excellent

[10] 1=Co-dominant stem without included bark; 2=Co-dominant stem with included bark; 3=Leaning tree; 4= cavities; 5=many suckers; 6=multiple trunks; 7=wire in trunk; 8= growing beneath utility lines, 9= large wound, 10=rot, 11=dead limbs, 12=mostly dead; 13=tree shaded by others so that all limbs spread in one direction; 14=many healed wounds or loose bark; possible internal rot.; 15=dieback of branches indicates health decline.

| TREE NO. | COMMON NAME | SCIENTIFIC NAME *Quercus* sp. | DBH in. | DRIP RADIUS ft | HEALTH | | | STRUCTURE | | | OVERALL CONDITION[11] | DEFECTS[12] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | GOOD | FAIR | POOR | GOOD | FAIR | POOR | | |
| 146 | Valley oak | *Q. lobata* | 32 | 44 | ✔ | | | ✔ | | | 4.8 | 11 |
| 147 | Blue oak | *Q. douglasii* | 20 | 24 | ✔ | | | ✔ | | | 4 | 4, 11 |
| 148 | Blue oak | *Q. douglasii* | 22 | 29 | ✔ | | | ✔ | | | 4 | 11 |
| 149 | Blue oak | *Q. douglasii* | 34.5 | 38 | ✔ | | | ✔ | | | 4.5 | 11 |
| 150 | Valley oak | *Q. lobata* | 39 | 35 | | ✔ | | ✔ | | | 4.5 | 11 |
| 151 | Blue oak | *Q. douglasii* | 31 | 30 | ✔ | | | ✔ | | | 4 | 11 |
| 152 | Blue oak | *Q. douglasii* | 25 | 38 | ✔ | | | | ✔ | | 4 | 11, 13 |
| 153 | Valley oak | *Q. lobata* | 20 | 33 | ✔ | | | ✔ | | | 5 | |
| 154 | Valley oak | *Q. lobata* | 69* | 41 | ✔ | | | | ✔ | | 4 | 1, 11 |
| 155 | Blue oak | *Q. douglasii* | 26 | 23 | ✔ | | | | ✔ | | 4 | 1, 11 |
| 156 | Blue oak | *Q. douglasii* | 15 | 28 | ✔ | | | | ✔ | | 3 | 3, 11, 13, 14 |
| 157 | Blue oak | *Q. douglasii* | 23 | 16 | ✔ | | | | ✔ | | 3 | 3, 11, 13 |
| 158 | Valley oak | *Q. lobata* | 36 | 47 | ✔ | | | ✔ | | | 4.5 | 11 |
| 159 | Blue oak | *Q. douglasii* | 30 | 30 | ✔ | | | ✔ | | | 4.5 | 11 |
| 160 | Blue oak | *Q. douglasii* | 38 | 37 | ✔ | | | | ✔ | | 3.5 | 2, 4, 11 |
| 161 | Valley oak | *Q. lobata* | 31 | 38 | ✔ | | | | ✔ | | 4 | 2, 11 |
| 162 | Valley oak | *Q. lobata* | 36 | 40 | | ✔ | | ✔ | | | 2.5 | 11, 15 |
| 163 | Blue oak | *Q. douglasii* | 26 | 33 | ✔ | | | ✔ | | | 3.5 | 11, 15 |
| 164 | Blue oak | *Q. douglasii* | 33 | 33 | ✔ | | | ✔ | | | 4.5 | 8, 11 |
| 165 | Blue oak | *Q. douglasii* | 27 | 34 | ✔ | | | | ✔ | | 4 | 1, 8, 11 |

[11] 0 = Dead, 1 = Severe decline, 2 = Declining, 3 = Fair, 4 = Good, 5 = Excellent

[12] 1=Co-dominant stem without included bark; 2=Co-dominant stem with included bark; 3=Leaning tree; 4= cavities; 5=many suckers; 6=multiple trunks; 7=wire in trunk; 8= growing beneath utility lines, 9= large wound, 10=rot, 11=dead limbs, 12=mostly dead; 13=tree shaded by others so that all limbs spread in one direction; 14=many healed wounds or loose bark; possible internal rot. 15=dieback of branches indicates health decline.

* Tree 154 has two trunks, one with 34" dbh and the other 34" dbh.

| TREE NO. | COMMON NAME | SCIENTIFIC NAME *Quercus* sp. | DBH in. | DRIP RADIUS ft | HEALTH | | | STRUCTURE | | | OVERALL CONDITION[13] | DEFECTS[14] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | GOOD | FAIR | POOR | GOOD | FAIR | POOR | | |
| 166 | Blue oak | *Q. douglasii* | 27 | 27 | ✔ | | | | ✔ | | 4 | 1, 8, 11 |
| 167 | Valley oak | *Q. lobata* | 36 | 40 | ✔ | | | ✔ | | | 4.5 | 1, 8, 11 |
| 168 | Valley oak | *Q. lobata* | 33 | 29 | ✔ | | | ✔ | | | 4.5 | 1, 8, 11 |
| 169 | Blue oak | *Q. douglasii* | 14 | 22 | | ✔ | | | ✔ | | 3 | 11, 13 |
| 170 | Blue oak | *Q. douglasii* | 29 | 32 | ✔ | | | ✔ | | | 4.5 | 11 |
| 171 | Valley oak | *Q. lobata* | 32 | 36 | ✔ | | | ✔ | | | 4.5 | 11 |
| 172 | Valley oak | *Q. lobata* | 33 | 40 | ✔ | | | ✔ | | | 4.5 | 11 |
| 173 | Valley oak | *Q. lobata* | 38 | 42 | | ✔ | | ✔ | | | 3 | 3, 11, 15 |
| 174 | Blue oak | *Q. douglasii* | 35.5 | 33 | ✔ | | | ✔ | | | 4 | 6, 11 |
| 175 | Blue oak | *Q. douglasii* | 32 | 37 | | ✔ | | ✔ | | | 2.5 | 11, 14, 15 |
| 176 | Valley oak | *Q. lobata* | 31 | 40 | ✔ | | | ✔ | | | 4.5 | 11 |
| 177* | Valley oak | *Q. lobata* | 38 | — | | | | | | | 0 | |
| 178 | Blue oak | *Q. douglasii* | 32 | 36 | | ✔ | | ✔ | | | 3.5 | 11, 15 |
| 179 | Valley oak | *Q. lobata* | 42 | 34 | | ✔ | | | ✔ | | 3 | 2, 11 |
| 180 | Valley oak | *Q. lobata* | 43 | 44 | ✔ | | | | ✔ | | 4 | 11 |
| 181 | Blue oak | *Q. douglasii* | 28.5 | 33 | | ✔ | | ✔ | | | 4 | 11 |

[13] 0 = Dead, 1 = Severe decline, 2 = Declining, 3 = Fair, 4 = Good, 5 = Excellent

[14] 1=Co-dominant stem without included bark; 2=Co-dominant stem with included bark; 3=Leaning tree; 4= cavities; 5=many suckers; 6=multiple trunks; 7=wire in trunk; 8= growing beneath utility lines, 9= large wound, 10=rot, 11=dead limbs, 12=mostly dead; 13=tree shaded by others so that all limbs spread in one direction; 14=many healed wounds or loose bark; possible internal rot. 15=dieback of branches indicates health decline.

* Tree 177 is a dead snag with some woodpecker holes and loose bark that could harbor bats. It is a potential wildlife tree that is recommended to be retained.

# APPENDIX G

El Dorado County
Oak Canopy Site Assessment Report

# El Dorado County

## OAK/CANOPY SITE ASSESSMENT FORM

| | |
|---|---|
| **Qualified Professional & Contact Information:** *(attach qualifications)* | Ruth Willson, 3460 Angel Lane, Placerville, CA 95667; 530/622-7014; ruthwillson@comcast.net |
| **Property Owner's Name/APN(s):** | Allen J. Hansen; Assessor' Parcel Number 087-021-05 |
| **Address:** | Physical address: 6740 South Shingle Road, Latrobe; mailing address: P.O. Box 2163, Shingle Springs, CA 95682 |
| **General Plan Designation:** | RR |
| **Zoning:** | AE |
| **Project Description:** *(attach site photos)* | The project would subdivide the parcel into four single-family residential lots, 10.1 to 13.4 acres. |

| **Would the project, directly or indirectly, have the potential to cause any impact, conflict with, or disturbance to:** | **YES** | **NO** |
|---|---|---|
| a) Individual landmark or heritage trees (of any species) subject to review under General Plan Policy 7.4.5.2? | ☐ | ☑ |
| c) Oak woodland corridor continuity (General Plan Policy 7.4.4.5)? | ☐ | ☑ |
| d) Sensitive or important oak woodland habitat as defined in the Guidelines? | ☐ | ☑ |
| e) Movement of Wildlife and/or Any Wildlife Migration Corridor? | ☐ | ☑ |
| f) Any Candidate, Listed or Special Status Plant or Animal Species observed or expected to occur on or adjacent to the project site? | ☐ | ☑ |
| | | |
| g) Is the affected area of oak canopy within or directly adjacent to an Important Biological Corridor or Ecological Preserve overlay? | ☐ | ☑ |
| h) Does the removal of oak canopy comply with the retention requirements of Policy 7.4.4.4? | ☑ | ☐ |
| i) Was project subject to prior County approval? (If yes, provide Tentative Map # and environmental documents if available) | ☐ | ☑ |
| j) For Discretionary Projects, would the project have the potential to cause a significant environmental impact on biological resources? | ☐ | ☑ |

***I affirm that all of the information contained in this document is true and correct to the best of my knowledge and I acknowledge and agree that any material misinformation in this document can result in the denial or revocation of any permits or County approvals for this project.***

**Qualified Professional:**_____ **Date:** June 30, 2015

**Applicant/Owner:**_____ **Date:**_____

**Required Attachments: 1) Qualified Professional Qualifications; 2) Site Photos; 3) Required Tree Survey, Preservation, and Replacement Plan *or* Biological Resources Study and Important Habitat Mitigation Program (see Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 Option A)**

Existing improvements on the project site include a single-family dwelling within grasslands on Parcel 1 (left), and a barn and corrals on Parcel 2 (right).

Bryant Cemetery occupies oak woodland on Parcel 3 (left and right).

Oak woodland on Parcel 3 (left and right), is typical of woodland found on Parcel 4.

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## Professional Qualifications

Ruth A. Willson, M.A., Biology, California State University, Fresno, has been preparing biological reports in El Dorado County since 1992. Her educational and experiential background includes proficiency in botany, entomology, ornithology, wildlife biology and ecology. She is an ISA Certified Arborist, No. WE-8335A.