MITIGATED NEGATIVE DECLARATION

FILE: P19-0007

PROJECT NAME Devlin Tentative Parcel Map

NAME OF APPLICANT: Michael and Shasta Devlin

ASSESSOR'S PARCEL NO.: 219-190-036 **SECTION:** 28 **T:** 10N **R:** 10E

LOCATION: The project is located on the west side of Farish Road, approximately 0.5 mile east of the intersection with Greenstone Road, in the El Dorado area.

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

☐ **REZONING:** **FROM:** **TO:**

☒ **TENTATIVE PARCEL MAP** To create three parcels ranging from 7.3 to 22.2 acres each from a 39.5 acres parent parcel ☐ **SUBDIVISION:**

SUBDIVISION (NAME):

☐ **SPECIAL USE PERMIT TO ALLOW:**

☐ **OTHER:**

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE REVISED 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 _____ on _____.

_____

Executive Secretary

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Title: P19-0007/Devlin Tentative Parcel Map

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

Contact Person: Matthew Aselage, Assistant Planner | **Phone Number:** (530) 621-5977

Owner's Name and Address: Michael and Shasta Devlin, 4200 Irish Port Lane, Placerville, CA 95667

Applicant's Name and Address: Michael and Shasta Devlin, 4200 Irish Port Lane, Placerville, CA 95667

Project Engineer's Name and Address: Site Consulting, Inc./James Wilson, 3460 Angel Lane, Placerville, CA 95667

Project Location: The project is located on the west side of Farish Road, 0.5 miles east of the intersection with Greenstone Road in the Placerville area.

Assessor's Parcel Number: 319-190-036-000 **Acres:** 39.50 acres

Sections: S:28 **T:** 10N **R:** 10E

General Plan Designation: Low Density Residential (LDR)- Important Biological Corridor (-IBC)

Zoning: Residential Estate Five-Acre (RE-5)

Description of Project: A request for a Tentative Parcel Map to subdivide a 39.50 acre parcel into three parcels of 7.30 acres (Parcel A), 10.00 acres (Parcel B), and 22.20 acres (Parcel C) (Attachment A). The property is developed with one existing single-family dwelling as well as various accessory structures. Access to the existing residence on Parcel C is from a private driveway from Davidson Road, a county maintained road, via Irish Port Road, a private maintained roadway. Access to Parcels A and B is currently provided from a dirt ranch road which connects to Greenstone Road, a county maintained roadway, via Farish Road, a private maintained roadway. Proposed off-site road improvements include six turnouts along Farish Road between the intersection with Greenstone Road and the northwestern boundary line of the subject property. New on-site improvements include the construction of a turnaround at the end of Farish Road and at the entrance of Parcel C. No new residential improvements are proposed at this time; however, any future development would be reviewed at time of building permit issuance.

Environmental Setting: The project site is a 39.50 acre partially developed parcel located in the western slope of the Sierra Nevada Mountains at an elevation of approximately 1,480 feet to 1,650 feet above mean sea level. A knoll along the northern boundary of Parcel C separates the parent parcel into two distinctly different topographies: south of the knoll, the slope gradient averages five percent; north of the knoll, 28.6 percent. The vegetation community on the project site is broadly classified as Blue Oak Woodland, but blue oak is not the dominant oak species on the project site. The dominant oak species on site is interior live oak. The specific vegetation community on Parcel C is blue oak-interior live oak-grass. The specific vegetation community on Parcels A and B is interior live oak woodland. Wetlands surrounding the approximately 9,680 square foot pond on Parcel C support wet meadow vegetation community. An Oak Resources Technical Report was prepared for the project alongside a Biological Resources Report in July 2019 by Ruth A Wilson of Site Consulting, Inc. Biological Services (Attachment B). The pond on Parcel C is fed by three ephemeral drainages, two originating on the south slope of the on-site knoll and the other originating on an off-site knoll east of the project site. A wetland surrounds the pond, and a series of disjunct wetlands are within drainage swales above the pond. The total wetland area associated with the pond is 61,608 square feet. An additional large wetland is found below a dam, west of the existing residence on Parcel C. This wetland area is 51,065 square feet. An ephemeral drainage swale from the east has been bisected by an old roadbed, forming a dam that impounds a temporary pond with an associated wetland east of the road. No residential development is proposed for Parcels A and B at this time. The parcel is located in the Important Biological Corridor; however there were no recorded occurrences of special-status plants or wildlife species within the project area. The project site has three soil types which are Auburn silt loam, 2-30% slopes (AwD), Auburn very rocky silt loam, 30-50% slopes (AxE), and Auburn cobbly clay loam, heavy subsoil variant (AzE). The adjacent-neighboring parcels are single-family residential lots varying in size from five to 26.54 acres. Results of the biological field surveys and recommended mitigation measures are contained within this Initial Study.

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

1. El Dorado County Surveyor
2. El Dorado County Building Services
3. El Dorado County Environmental Management Department
4. El Dorado County Department of Transportation
5. The Diamond Springs - El Dorado Fire District

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, seven Tribes: Colfax-Todds Valley Consolidated Tribe, El Dorado County Wopumnes Nisenan-Mewuk Nation, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, 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 April 2, 2018, the proposed project area contains no prehistoric-period resources and no historic-period cultural resources. Additionally, no cultural resources study reports are on file. Outside of the project area, but within the ¼ mile radius of the geographic area, a broader search area contains no prehistoric-period resources and four historic-period cultural resources. There is moderate potential for locating prehistoric-period cultural resources in the immediate vicinity and high potential for locating historic-period cultural resources in the immediate vicinity. A Cultural Resources Study prepared in December of 2018 found that the project site is not known to contain Tribal Cultural Resources (TCRs). Surviving historic-period resources from the former Vierra Ranch were recorded, but do not appear to be significant resources. The likelihood of finding subsurface archaeological features or artifacts is very likely.

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		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.

Printed Name Matthew Aselage, Assistant Planner For: El Dorado County

Signature: Matt Aselage Date: 11/6/2020

Printed Name Rommel Pabalinas, Current Planning Manager For: El Dorado County

Signature: Date: 11/4/20

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 proposed project would allow for the subdivision of a partially developed 39.50 acre parcel into three parcels ranging in size from 7.30 acres (Parcel A), 10.00 acres (Parcel B), and 22.20 acres (Parcel C).

Throughout this Initial Study, please reference the following Attachments:

Attachment A: Tentative Parcel Map
Attachment B: Biological Resources and Oak Resources Technical Reports
Attachment C: Comments from Department of Transportation
Attachment D: Comments from Diamond Springs - El Dorado Fire District

Detailed Project Description:

A request for a Tentative Parcel Map to subdivide a 39.50 acre parcel into three parcels of 7.30 acres (Parcel A), 10.00 acres (Parcel B), and 22.20 acres (Parcel C) (Attachment A). The property is developed with an existing single-family dwelling of 900 SF which was converted from a garage as well as a barn, three sheds, a workshop, three wells, and one leach field located on Parcel C; a shed and a well on Parcel A; and a shed and a well on Parcel B. Access to the residence on Parcel C is from a private driveway from Davidson Road, a county maintained road, via Irish Port Road, a non-county maintained roadway. Access to both Parcels A and B is currently provided from a dirt ranch road which connects to Greenstone Road, a county maintained roadway, via Farish Road, a non-county maintained roadway. Electricity/utilities services are provided by Pacific Gas & Electric (PG&E). New on-site improvements will be limited to the construction of a turnaround at the end of Farish Road with planned driveway connections to both Parcels A and B. Further, a turnaround will be constructed at the entrance of Parcel C. No new residential improvements are proposed at this time. Any future development would be reviewed at time of building permit issuance. No trees are proposed for removal at this time. An Oak Resources Technical Report was provided, dated July of 2019. The vegetation community on the project site is broadly classified as Blue Oak Woodland, but blue oak is not the dominant oak species on the project site. The dominant oak species is interior live oak. More specifically, the vegetation community on Parcel C is Blue Oak-Interior Live Oak-Grass; on Parcels A and B, Interior Live Oak Woodland. Wetlands surrounding the pond on Parcel C support a Wet Meadow vegetation community. A 55-foot setback from wetlands and ephemeral drainages as well as a 105-foot setback from ponds will be required to minimize any potential impacts.

Site Description:

The project site is a 39.50 acre partially developed parcel located in the western slope of the Sierra Nevada Mountains at an elevation of approximately 1,480 feet to 1,650 feet above mean sea level. A knoll along the northern boundary of Parcel C separates the parent parcel into two distinctly different topographies: south of the knoll, the slope gradient averages five percent; north of the knoll, 28.6 percent. The vegetation community on the project site is broadly classified as Blue Oak Woodland, but blue oak is not the dominant oak species on the project site. The dominant oak species on site is interior live oak. The specific vegetation community on Parcel C is blue oak-interior live oak-grass. The specific vegetation community on Parcels A and B is interior live oak woodland. Wetlands surrounding the approximately 9,680 square foot pond on Parcel C support wet meadow vegetation community. An Oak Resources Technical Report was prepared for the project alongside a Biological Resources Report in July 2019 by Ruth A Wilson of Site Consulting, Inc. Biological Services (Attachment B). The pond on Parcel C is fed by three ephemeral drainages, two originating on the south slope of the on-site knoll and the other originating on an off-site knoll east of the project site. A wetland surrounds the pond, and a series of disjunct wetlands are within drainage swales above the pond. The total wetland area associated with the pond is 61,608 square feet. An additional large wetland is found below a dam, west of the existing residence on Parcel C. This wetland area is 51,065 square feet. An ephemeral drainage swale from the east has been bisected by an old roadbed, forming a dam that impounds a temporary pond with an associated wetland east of the road. A 55-foot setback from

wetlands and ephemeral drainages as well as a 105-foot setback from ponds will be required to minimize any potential impacts. No disturbance is expected on Parcel C as this parcel is developed for residential uses. No residential development is proposed for Parcels A and B at this time. The parcel is located in the Important Biological Corridor; however, there were no recorded occurrences of special-status plants or wildlife species within the project area. The project site has three soil types which are Auburn silt loam, 2-30% slopes (AwD), Auburn very rocky silt loam, 30-50% slopes (AxE), and Auburn cobbly clay loam, heavy subsoil variant (AzE). The adjacent-neighboring parcels are single-family residential lots varying in size from five to 26.54 acres. Results of the biological field surveys and recommended mitigation measures are contained within this Initial Study.

Project Location and Surrounding Land Uses

The project site is located on the west side of Farish Road, 0.5 miles east of the intersection with Greenstone Road in the El Dorado area. The neighboring parcels to the north, east, south, and west are currently developed with residential uses. Properties continuing from the southeastern corner of the site are developed for light industrial uses.

Project Characteristics

1. Transportation/Circulation/Parking

The project was reviewed by the El Dorado County Transportation Division and conditions have been submitted to require the construction of two turn arounds, at the locations shown on the Tentative Parcel Map, to the satisfaction of the responsible fire district (Attachment C). The Diamond Springs - El Dorado Fire Protection District reviewed the project and has recommended conditions for improving access from Farish Road and improving/widening the driveways to Parcels A and B, to be constructed per the current Fire Code, Ordinance and Standards (Attachment D).

2. Utilities and Infrastructure

The El Dorado County Environmental Management Department (EMD) reviewed the project. Each parcel will be served by their own onsite well and wastewater treatment systems. For electricity the parcels would have to connect to service provided by Pacific Gas & Electric (PG&E).

3. Construction Considerations

No construction is proposed as a part of the project; however, proposed residential siting is identified in the tentative parcel map for proposed Parcels A and B. Based upon the identified residential sites, there will be three turnouts constructed along the roadway access to Parcels A and B. A hammerhead turnaround will be constructed at the entrance to Parcel C. Each residence will include driveway designs which provide a turnaround at the terminus of each driveway. The proposed parcels would maintain the current Residential Estate Five-Acre (RE-5) zoning designation, which allows for single-family residential development. Any future construction activities, such as single-family dwelling units and accessory structures, would be completed in conformance with applicable agency requirements, and subject to a building permit from the El Dorado County Building Services.

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 California Environmental Quality Act (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 area surrounded by 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 residential development with accessory structures on each of the currently undeveloped parcels, 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. There would be no impact.

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 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, and no trees are proposed for removal. There would be no impact.

c. **Visual Character:** Each proposed lot would have the capability for single-family residential development. Parcel C is already developed with a residential use. Each lot would be allowed to develop new and additional residential structures, such as a primary dwelling, secondary dwelling and/or accessory structures. However the site is surrounded by other single-family homes on large rural lots and 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 new dwelling units, such as primary and/or secondary dwellings, to be developed in the future, which could produce minimal new light and glare. The property already has one existing residence, a 900 SF home, alongside three sheds, a barn, and a workshop on Parcel C; and a shed on Parcels A and B. Future development would be required to comply with the County lighting ordinance requirements, including the shielding of lights to avoid potential glare, during the building permit process, and therefore any impacts would be less than significant.

FINDING: 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 site is not zoned for agricultural use or located within an Agricultural District. The site is not designated as farm land of local importance. There would be no impact.

b. **Agricultural Uses:** The property is not located within a Williamson Act Contract, nor is it adjacent to lands under a contract. There would be no impact.

c-d. **Loss of Forest land or Conversion of Forest land:** The site is not designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. No trees are proposed for removal as part of the project. There would be no impact.

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-agriculture use. There would be no impact.

FINDING: For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would be anticipated as a result of 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 U.S. National Ambient Air Quality Standards (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 Quality Management District (AQMD) 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, AQMD 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 Quality Management District (AQMD) 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. 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. The potential impacts of the project would be less than significant.

b-c. **Air Quality Standards and Cumulative Impacts:** Construction associated with driveway improvements and fire safe access is proposed as part of the project. There is the potential for future development on the lots for construction of additional residential structures as well as accessory structures. 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 Air Quality Management District (AQMD) reviewed the project and determined that the project is not expected to cause a significant air quality impact. As such, AQMD waived the requirement of an Air Quality Impact Analysis. With full review for consistency with General Plan Policies, any impacts would be less than significant.

d. **Sensitive Receptors:** The CEQAGuidelines (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 any future single family residences, during construction or following construction. The impact would be less than significant.

e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use of the parcels for residential uses as a use known to create objectionable odors. The request to subdivide a 39.5 acre parcel into three parcels would not be a source of objectionable odors. 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, and 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:** The project site is not located within a sensitive natural community of the County, state or federal agency, including but not limited to an Ecological Preserve, or U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries. A biological resources report was prepared in July of 2019, by Ruth A. Willson of Site Consulting, Inc. **Fauna (animal life)**: The Biological Resources Report details habitat for three species of special concern including Western pond turtle, Oak titmouse, and Wrentit. The Biological Resources Report also details potential habitat for twenty-one species of special concern including the Western bumble bee, Coast horned lizard, Cooper's hawk, Grasshopper sparrow, Long-eared owl, Western burrowing owl, Lark sparrow, White-tailed Kite, Merlin, Loggerhead shrike, Fox sparrow, Nuttal's woodpecker, Purple martin, Lawrence's goldfinch, Ringtail, Pallid bat, Townsend's big-eared bat, North American porcupine, Silver-haired bat, Hoary bat, and Yuma myotis bat. Species of special concern are species that are at risk. The BSA provides nesting habitat for birds regulated by State Fish and Game Code and listed under the federal Migratory Bird Treaty Act. The Migratory Bird Treaty Act prohibits the taking of protected bird species. The proposed project is for a Tentative Parcel Map to subdivide a 39.50 acre parcel into three parcels. Future residential development will be conditioned not to involve the taking of any protected species. In order to reduce any possible impacts, the report recommends that project conditions include a required pre-construction survey and avoidance of nests during nesting season as well as enhanced setbacks from all waters and wetlands. **Flora (plant life)**: The project site is located in Rare Plant Mitigation Area 2. Mitigation Area 2 is land outside of the more stringent Mitigation Area 0 and Area 1, but within the EID service area (Ordinance 4500). Development in Mitigation Area 2 shall mitigate impacts by exercising one of two options: pay the appropriate fee in lieu of Ecological Preserve Mitigation for the direct or indirect impacts caused by development on rare plants and rare plant habitat, or participate in a Rare Plant Off-Site Mitigation Program (Section 130.71.060 A. and B.). Driveway improvements will result in no removal of fauna and minimal removal of flora including oak trees along with non-protected annual grass species. Construction alongside Farish Lane will impact less than 25% of the dripline areas of two heritage oaks, which should survive without difficulty. Construction alongside Irish Port Lane will result in the removal of 1081 square feet of oak canopy. Construction on Parcel B will impact the dripline areas of four oaks by less than 11%, which will result in no loss of oak canopy. Although future development could occur on each new parcel, future property owners would be required to comply with all applicable County requirements, and pay the Rare Plant Mitigation Area 2 fee at time of building permit issuance for a new residential dwelling unit. Planning Services would review future building permits to ensure consistency with this requirement. If development would result in ground disturbance, a floristic

survey should be conducted during the blooming period (mid to late May) to determine the presence or absence of the 5 potential species that may occur on the project site: Pine Hill ceanothus, Red Hillsoaproot, El Dorado bedstraw, oval-leaved viburnum, and big-scale balsamroot. With the incorporation of the mitigation measures, any potential impacts to biological resources from future development would be mitigated to a level of less than significant.

MM BIO-1 Pre-Construction Breeding Bird Surveys:

To comply with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, and to avoid and reduce direct and indirect impacts on migratory, non-game breeding birds and their nests, young, and eggs to less than significant levels, the following measures would be implemented:

a) Project activities that would remove or disturb potential nest sites shall be scheduled outside the breeding bird season, if feasible. The breeding bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, usually depending on weather conditions.
b) If project activities that would remove or disturb potential nest sites cannot be avoided during February 15 through September 15, a qualified biologist shall conduct a pre-construction clearance and nesting bird survey to search for all potential nesting areas, breeding birds, and active nests or nest sites within the limits of project disturbance up to 30 days prior to mobilization, staging, and other disturbances.
c) If no breeding birds or active nests are observed during the pre-construction survey(s), or if they are observed and would not be disturbed, then project activities may begin and no further mitigation would be required.
d) If a breeding bird territory or active bird nest is located during the pre-construction survey and potentially would be disturbed, a no-activity buffer zone shall be delineated on maps and marked (flagging or other means) up to 500 feet for special-status avian species or raptors, or 100 feet for non-special status avian species. The limits of the buffer shall be demarked so as not to provide a specific indicator of the location of the nest to predators or people. Materials used to demarcate the nests shall be removed as soon as work is complete or the fledglings have left the nest. The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. The nest and buffer zone shall be field-checked weekly by a qualified biologist. The nest and buffer zone shall not be disturbed until the biologist has determined that the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young would no longer be impacted by project activities.

Monitoring Requirement: Planning Services shall verify completion of the requirement prior to issuance of grading and building permits in coordination with the applicant.

Monitoring Responsibility: El Dorado County Planning and Building Department, Planning Services.

b, c. **Riparian Habitat and Wetlands:** Based on review of the Biological Resources Report prepared for the project by Site Consulting, Inc. in July 2019, which was based on field reviews conducted in December of 2018 as well as January, March, April, May, and June of 2019, indicates that there are large wetland areas on Parcel C. Parcel C has an approximately 9,680 square foot pond, with several associated wetlands. The pond is fed by three ephemeral drainages, two originating on the south slope of the on-site knoll and the other originating on an off-site knoll east of the project site. A wetland surrounds the pond, and a series of disjunct wetlands are within drainage swales above the pond.The total wetland area associated with the pond is 61,608 square feet. A large wetland is found below the dam, west of the existing house on Parcel C. The wetland is 51,065 square feet in size. An ephemeral drainage swale from the east has been bisected by

an old roadbed forming a dam that impounds a temporary pond east of the road. This pond disappears within a week or two after rain events, leaving a wetland with a total area of 6,153 square feet. These wetland areas support wet meadow vegetation covering approximately 2.7 acres. Hydrophytic vegetation found in the wet meadows include ten Obligate wetland plants: Slender woolly marbles, Panicled bulrush, Carter's buttercup, Water chickweed, Mediterranean Rabbit's-foot Grass, Seep monkeyflower, Bractless hedge-hyssop, Water speedwell, California loosestrife, and Hyssop loosestrife; ten Facultative Wetland plants: Stalked popcornflower, Fringed willowherb, Baltic rush, Toad rush, Narrow-leaf willow, Red willow, Tall flatsedge, Rabbitfoot Grass, Curly dock, and Peppermint; and, numerous facultative plant species including, but not limited to: Himalayan blackberry, Perennial ryegrass, and Scarlet pimpernel.

No special-status plants or threatened/endangered wildlife species were identified in the project vicinity during the biological field review; however there is the potential for the occurrence of special-status plants and protected wildlife including the golden eagle, California red-legged frog, and Western spadefoot. Mitigation Measures have been incorporated into the project to avoid and protect these protected species, and potential impacts from residential uses allowed on each parcel would be considered a level of less than significant.

MM BIO-2 Riparian Habitat and Wetland Protection:

a) A 55-foot setback from the ephemeral drainages shall be shown prior to recordation of the final map;
b) A 55-foot setback from all wetlands shall be shown prior to recordation of the final map;
c) A 105-foot setback from all perennial ponds shall be shown prior to recordation of the final map.

Monitoring Requirement: Planning Services shall verify completion of the requirement prior to recordation of the Final Parcel Map.

Monitoring Responsibility: El Dorado County Planning and Building Department, Planning Services.

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. The El Dorado County General Plan does identify the project site as an Important Biological Corridor (IBC). The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. The impacts would be less than significant.

e. **Local Policies:** Local protection of biological resources includes the Important Biological Corridor (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. Review of the Biological Survey Area (BSA) shows that the property is located within the El Dorado County Important Biological Corridors (IBC) overlay area. Oak woodlands, individual native oak trees, or heritage trees, as defined in Section 130.39.030, have not been impacted or removed as a result of the proposed project. Any future tree removal would be required to be in compliance with the Oak Resources Conservation Ordinance of Section 130.39.070.C (Oak Tree and Oak Woodland Removal Permits), which would be reviewed at time of future building permit issuance. The BSA is located within Rare Plant Mitigation Area 2, but outside of the recovery boundary for Pine Hill plants. Per Section 130.71.060 A. and B., future development of each parcel (if a new residence were to be constructed on any of the parcels) would require payment of the Rare Plant Mitigation Area 2 fee. Future development would be required to comply with all applicable County ordinances and policies regarding oak woodland conservation, payment of rare plant mitigation fee, and conditioned to require a pre-construction survey to detect and protect if any nests exist on site. Pursuant to Zoning Ordinance Section 130.30.050, the project will also be conditioned to require all future development to comply with increased setbacks from perennial and intermittent streams and wetlands. Any

future development would need to adhere to the County's setbacks from any intermittent stream or wetland, including any new single-family dwellings, secondary dwellings, and/or accessory structures. Therefore, any potential impacts would be less than significant.

f. **Adopted Plans**: No significant impacts to protected species, habitat, wetlands or oak trees were identified for the proposed project. The project will not conflict with the provisions of an adopted Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The impacts would be less than significant.

Finding: With the incorporation of Mitigation Measures BIO-1 and BIO-2, potential impacts to biological resources from any future residential development would be mitigated. Future residential development is required to comply with applicable County codes and policies which would be reviewed at time of submittal of the grading and building permits. Therefore, potential impacts to Biological Resources as mitigated would be less than significant.

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 unique geologic feature?			**X**	
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-c. **Historic or Archeological Resources.** A Records Search was conducted through the North Central Information Center (NCIC) dated April 2, 2018. According to the NCIC, the proposed project site contains no pre-historic period and no historic-period cultural resources. However, surviving resources from the former Vierra Ranch were recorded, but do not appear to be significant resources. The likelihood of finding subsurface archaeological features or artifacts is very likely. Mitigation measures outlined within the Cultural Resources Study will reduce impacts to be less than significant.

MM CUL-1 Discovery of Historic or Archeological Finds:

If during the course of construction activities within the project area, a previously unidentified or subsurface archaeological site or feature is discovered, work should stop at that location and a qualified cultural resource professional should be contact to examine the discovery and determine its significance.

d. **Human Remains.** A records search was conducted at the North Central Information Center on August 1, 2019. There were no Tribal Cultural Resources (TCRs) identified in the project footprint and the project site is not known to contain any TCRs. In the event of human remains discovery during any future construction if additional structures are built, standard conditions of approval to address accidental discovery of human remains would apply during any grading activities. In accordance with the laws of AB 52, the County notified seven Tribes: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and the Wilton Rancheria, which requested to be notified of proposed projects for consultation in the project area. The Wilton Rancheria provided comments and these have been incorporated into the project as conditions of approval. Impacts would be less than significant.

FINDING: Standard conditions of approval in addition to CUL-1 would apply in the event of discovery of any Tribal Cultural Resources (TCRs) during any future construction, that construction would stop immediately and the Tribes would be notified. Therefore, the proposed project as conditioned would have a less than significant impact on Cultural Resources.

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:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				**X**
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. There would be no impact.

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:** The soils on site are Auburn silt loam (AwD) 2-30% slopes which is a shallow, well-drained, rocky foothill soil underlain by hard metamorphic rocks; Auburn very rocky silt loam (AxE) 30-50% slopes which has a moderately slow permeability; and Auburn cobbly clay loam, heavy subsoil variant (AzE) 9-50% slopes which has a moderately slow permeability. These soils are prominent in the foothills. There could be the potential for erosion, changes in topography during future construction of any primary or accessory structures however these concerns would be addressed during the grading permit process. Any

development activities would need to 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 of 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. Any future construction would require similar review for compliance with the County SWPPP. Impacts would be less than significant. Potential degradation of water quality and soil erosion impacts. If construction will disturb 1 acre or more of soil, the project proponent must obtain a General Permit for discharges of storm water associated with activity from SWRCB. As part of this permit, a SWPPP must be prepared and implemented. The SWPPP must include erosion control measures and construction waste containment measures to ensure that waters of the State are protected during and after project construction. Pursuant to Zoning Ordinance Section 130.30.050, future development would require setbacks from perennial and intermittent streams and wetlands. The project site does not contain blue-line stream, rivers, or lakes; however the site contains a pond and supports wetlands, therefore any future development would need to adhere to the County's setback distance of 50-feet minimum from any intermittent stream or wetland, including single-family dwellings and accessory structures (Biological Resources Assessment, Area West Environmental, Inc., September 2019). The 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. There would be no impact.

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 western portions of the county, including the Auburn soil types, have a low expansiveness rating. 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. There would be no impact.

e. **Septic Capability:** The El Dorado County Environmental Management Department reviewed the project and determined that each proposed parcel meets the requirements for land divisions of parcels to be served by an onsite wastewater treatment system. Each proposed parcel has confirmed adequate soil depth, a soil percolation rate below 120 minutes per inch, and a dispersal area identified. Any future septic development would be required to obtain a septic system permit application, and would have to be compliant with the El Dorado County Standards for the Site Evaluation, Design, and Construction of Onsite Wastewater Treatment Systems (OWTS) Manual. Impacts would be less than significant.

FINDING: A review of the soils and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. All grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion, landslides and other geologic impacts. Future development would be required to comply with the UBC which would address potential seismic related impacts. 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 OR 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 would create three new parcels from a 39.5 acre parcel. The three new parcel sizes would be 7.3 acres (Parcel A), 10.00 acres (Parcel B), and 22.2 acres (Parcel C). Each parcel would be allowed to have a primary residence and secondary dwelling by right, for a total of six residences possible. There is currently one residence on site which is located on Parcel C (currently the main house). The potential for future construction may involve a small increase in household GHG production. However, 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. 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 potential of six households (three primary residences/three secondary dwellings possible), 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: For the Greenhouse Gas Emissions category, there would be no significant adverse environmental effect as a result of the project. Impacts would be less than significant.

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				**X**

the public or the environment?				
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 Section5085[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:

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	

- 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-c. **Hazardous Materials:** The Tentative Parcel Map 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. The project site is located approximately a half mile from a private school, Cedar Springs Waldorf School, which lies outside of the quarter mile zone of concern. Any future construction may involve some hazardous materials temporarily but this is considered to be small scale. Impacts would be less than significant.

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 County Transportation Department for traffic and circulation. The Traffic Impact Study (TIS) - Initial Determination were both waived and no further transportation studies are required. The proposed project would not impair implementation of any emergency response plan or emergency evacuation plan. 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 Environmental Impact Report (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. A Wildland Fire Safe Plan prepared on June 2, 2019 by William F. Draper of CDS Fire Prevention Planning requires the creation and maintenance of fuel hazard reduction zones along all roadways and driveways, a 100 foot fire safe clearance around all residential structures, fire sprinkler systems for each new residence, installation of water storage tanks, and the construction of turnouts along the proposed roadway. The Diamond Springs - El Dorado Fire Department reviewed the project and Wild Fire Safe Plan and signed the Wild Fire Safe Plan on June 27, 2019. Additionally, Darin McFarlin, FC of the California Department of Forestry and Fire Protection signed the Wild Fire Safe Plan on July 8, 2019. Therefore, any potential impacts would be less than significant.

FINDING: For the Hazards and Hazardous Materials category, with the incorporation of recommended conditions of approval and Fire Safe Requirements as approved by the Diamond Springs – El Dorado Fire Department, any potential impacts would be less than significant.

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 generalpermit 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.

<u>Municipal Stormwater Permitting Program</u>

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 the Tentative Parcel Map project. 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. Parcels A and Bcontain one existing well each, with Parcel C containing three. These wells will remain the primary source of water for each parcel. Further, septic systems are proposed for Parcels A and B, with a currently existing septic system on Parcel C. There are no indications of shallow ground water, no slopes greater than 30%, and no wells within 100 feet of proposed sewage disposal areas. For the final map, the applicant would need to prove that all parcels 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:** A grading permit 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. With the application of these standard requirements, 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). There are two dams on site which are unlikely to result in potential hazards related to dam failures in the project area. One of these dams was created by road developments on a portion of Parcel C in 1993, this dam results in the accumulation of water for up to two weeks after heavy rain events. The other of these dams contains drainage control swales- which directs excess flows on a path to the South American Fork River- to prevent dam inundation. The risk of exposure to seiche, tsunami, or mudflows would be remote. Impacts would be less than significant.

FINDING: The project would be required to address any potential changes to the drainage pattern on site during the building permit review process for future construction of single-family residences, second dwellings, or accessory structures. No significant hydrological impacts are expected as a result of such development, and impacts would 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 in a rural region near the Diamond Springs – El Dorado Community Region. The project is surrounded by similar large-lot single family residential development. The Tentative Parcel Map project will result in lots that are consistent with the existing area's development pattern. Therefore, there will be no impacts.

b. **Land Use Consistency:** The parcel has a General Plan Land Use Designation of Low Density Residential (LDR) and a zoning designation of Residential Estate, Five-Acres (RE-5). The LDR land use designation establishes areas for single-family residential development in a rural setting. The maximum allowable density shall be one dwelling unit per 5.0 acres. Parcel size will range from 7.30 to 22.20 acres. As shown on the site plan, the three parcels would range in size from 7.3 acres (Parcel A) to22.2 acres (Parcel C). The proposed project is compatible with the General Plan land use designation and the zone district. 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. Therefore, there will be no impacts.

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. Impacts would be less than significant.

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 recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

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 dBALeq and 100 dBALeq 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. Future construction may require the use of trucks and other equipment, which may result in short-term noise impacts to surrounding neighbors. These activities would require grading and building permits and would be restricted to construction hours pursuant to the General Plan. There could be additional noise associated with potential future residential development. 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:** The site is already developed with one residence. Any future construction may generate short-term ground borne vibration or shaking events during project construction. Impacts would be considered less than significant.

c. **Permanent Noise Increases:** The project does not propose new development; however each parcel by right would have the potential for future residential development (i.e. secondary dwelling). The long term noise associated with additional homes would not be expected to exceed the noise standards contained in the General Plan. Impacts would be considered less than significant.

d. **Short Term Noise:** The construction noise resulting from any future development may result in short-term noise impacts. These activities would require grading and building permits 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 site is not located within an airport land use plan or within two miles of a public airport or public use airport. There would be no impact.

FINDING: With adherence to County Code, no significant direct or indirect impacts to noise levels are expected. Impacts would be less than significant.

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 39.5 acre parcel is currently developed. The proposed project would result in the creation of three parcels, each of which would be allowed a primary residence and a secondary dwelling by right. This potential additional housing and population would not be considered a significant population growth. Impacts would be less than significant.

b. **Housing Displacement:** The 39.5 acre parcel is currently developed. The proposed project would result in the creation of three parcels. No existing housing would be displaced by the project. There would be no impact.

c. **Replacement Housing:** The proposed project could provide up to a total of six residences possible (three primary dwellings/three secondary dwellings). No persons would be displaced by the proposed project necessitating for the construction of housing elsewhere. There would be no impact.

FINDING: The project would not displace housing and there would be no potential for a significant impact due to substantial growth, either directly or indirectly. The impacts would be less than significant.

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 Diamond Springs – El Dorado Fire Protection District provides fire protection to the site. The project must adhere to approved Wild Fire Safe Plan mitigation requirements 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 (EDSO). Any future residential construction would not significantly increase demand for law enforcement protection. Impacts would be less than significant.

c. **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.** Any additional residents from future construction would not substantially increase the local population and therefore 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.

e. **Government Services.** There are no government 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.** Any additional units from future construction 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. 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 program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled)?			**X**	
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d. Result in inadequate emergency access?			**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

The Transportation and Circulation Element of the County General Plan relies on automobile delay and Level of Service (LOS) as performance measures to determine impacts on County-maintained roads and state highways within the unincorporated areas of the county.

County General Plan Policy TC-Xd states that 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 calculated using the methodologies in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There

are some roadway segments that are except from these standards and are allowed to operate at LOS F and are listed in Table TC-2. 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.

Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development under CEQA. Instead, an alternative metric that supports the goals of SB 743 legislation will be required. The use of vehicle miles traveled (VMT) has been recommended by the Governor's Office of Planning and Research (OPR) and is cited in the CEQA Guidelines as the most appropriate measure of transportation impacts (Section 15064.3(a)).

The intent of SB743 is to bring CEQA transportation analysis into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure, instead of LOS, is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor's Office of Planning and Research (OPR) December 2018 publication, Technical Advisory on Evaluating Transportation Impacts in CEQA. This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Government Code Section 65035 ["It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs."].)

OPR's Technical Advisory provides this direction for small projects:

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Per OPR's Technical Advisory, this determination is based on the following:

CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

El Dorado County Department of Transportation (DOT) adopted VMT screening thresholds. Consistent with El Dorado General Plan Policy TC- Xe, cited above, transportation impact studies (TIS) are required of development when development "worsens" travel conditions. The threshold criteria for worsening conditions include 2 percent increase in overall volumes, 100 daily trips, or 10 peak hour trips. The threshold of 100 trips generated by the project is more conservative than the recommended exemption threshold of 110 trips suggested by the OPR.

Further, DOT's current criteria for determining uses that are typically exempt from preparation of a transportation impact study (TIS) include industrial uses with footprints of 10,000 square feet or less, which is reflective of the direction in OPR's Technical Advisory for evaluating traffic impacts for small projects. Access to the project site would be provided by construction of future driveways for each resulting parcel.

Discussion: A substantial adverse effect on Transportation would occur if the implementation of the project would:

- Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Vehicle Miles Traveled); or
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

a. **Conflicts with a Transportation Plan, Policy or Ordinance:** No substantial traffic increases would result from the proposed project, as the total potential new development would be limited to two primary single family residential units and three secondary residential units. Access to the new parcels would be from a private driveway off of Farish Road. The project area is in an area of similar rural large-lot parcels. Trip generation from the project using the ITE Trip Generation Manual, 10th Edition would be 3 trips in the AM and PM Peak hours and 30 trips daily. This is less than the thresholds set by El Dorado County General Plan Policy TC-Xe. The proposed project site is not on a main roadway and there are very low traffic volumes. Construction activities associated with the proposed project would temporarily generate additional vehicle traffic in the project area. Once construction has been completed, traffic is anticipated to increase by 30 trips daily or 3 trips in the peak hour. However, this long term increase will remain below the thresholds discussed above. The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

b. **Vehicle Miles Travelled (VMT):** The proposed project would create three parcels for a total of three primary single-family dwellings. Construction activities associated with the project would temporarily generate additional vehicle traffic in the project area but would not be expected to exceed 100 trips per day during the construction period. Once construction has been completed, long-term traffic is anticipated to increase by 30 trips daily or 3 trips in the peak hour, which is less than the threshold of 100 trips per day or 10 trips in the peak hour as set by El Dorado County General Plan Policy TC-Xe. Therefore, in accordance with DOT's criteria for exemption from requiring a TIS and OPR's direction regarding determining transportation impacts for small projects, this impact is presumed to be less than significant. The El Dorado County Department of Transportation reviewed the project and determined that a Transportation Impact Study (TIS) and On-Site Transportation Review were not required, and both the TIS and OSTR were waived. Impacts would be less than significant.

c. **Design Hazards**: The design and location of the project is not anticipated to create any significant hazards. The existing project site is developed. Any future road or driveway improvements for access to the newly created parcels would require a grading permit. The El Dorado County Department of Transportation reviewed the project and provided comments which will be incorporated as conditions of approval. The impact for design hazards would be less than significant.

d. **Emergency Access:** The existing project site is developed. Future road or driveway improvements for access to the newly created parcels would require a grading permit and would be required to be compliant with fire and building code emergency access requirements. The Diamond Springs – El Dorado Fire Protection District reviewed the project and approved the Wild Fire Safe Plan. The requirements outlined in the Wild Fire Safe Plan will be incorporated as conditions of approval to ensure adequate quantity and quality of water for all uses, including fire protection. Impacts would be less than significant.

FINDING: The project would not conflict with applicable General Plan policies regarding effective operation of the County circulation system and the project would not exceed the level of service thresholds for traffic identified within the General Plan. Further, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (Vehicle Miles Traveled). The project would not create any road hazards or affect road safety and would not result in inadequate emergency access. For this Transportation category, the threshold 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:

a. 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

b. 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 appropriatedignity, 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 County notified eight Tribes: Colfax-Todds Valley Consolidated Tribe, El Dorado County Wopumnes Nisenan-Mewuk Nation, Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and the Wilton Rancheria, which requested to be notified of proposed projects for consultation in the project area. A records search was conducted at the North Central Information Center. There were no Tribal Cultural Resources (TCRs) identified in the project footprint and the project site is not known to contain any TCRs. In the event of TCR discovery during any future construction, the standard conditions of approval would apply to address such discovery to protect and preserve any TCRs. The impacts would be less than significant.

FINDING: No Tribal Cultural Resources (TCRs) are known to exist on the project site and conditions of approval have been included to ensure protection of TCRs if discovered during future construction activities. As a result, the proposed project would not cause a substantial adverse change to any known TCRs. The impacts would be less than significant.

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 increase or expanded demand.

a. **Wastewater Requirements**: The El Dorado County Environmental Management Department reviewed the project and verified that each parcel could be served by an onsite wastewater treatment system. Each parcel has confirmed adequate soil depth, a soil percolation rate below 120 minutes per inch, and a dispersal area identified. Impacts would be less than significant.

b. **Construction of New Facilities:** No development is proposed as a part of the Tentative Parcel Map project and no construction of new facilities is required. Each parcel is required to provide its own wastewater treatment system, connection to public water service or private well, and utilities/electricity services by Pacific Gas & Electric (PG&E). Private well developments for each parcel currently exist. 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:** Water for each parcel would be provided by connection to a private well. The El Dorado County Environmental Management Department reviewed the project and concluded that each parcel meets the requirements for private wells on site, including adequate water supply as demonstrated in two well production reports submitted on January 3, 2019 and May 29, 2019. The impact would be less than significant.

e. **Adequate Wastewater Capacity:** The project would require each parcel to provide its own onsite wastewater treatment system. As discussed in (a.), the Environmental Management Department reviewed the project and confirmed that the parcels can be served by an onsite wastewater treatment system. Each parcel has confirmed adequate soil depth, a soil percolation rate below 120 minutes per inch, and a dispersal area identified. Impacts would be less than significant.

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. Impacts would be less than significant.

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.

SUPPORTING INFORMATION SOURCE LIST

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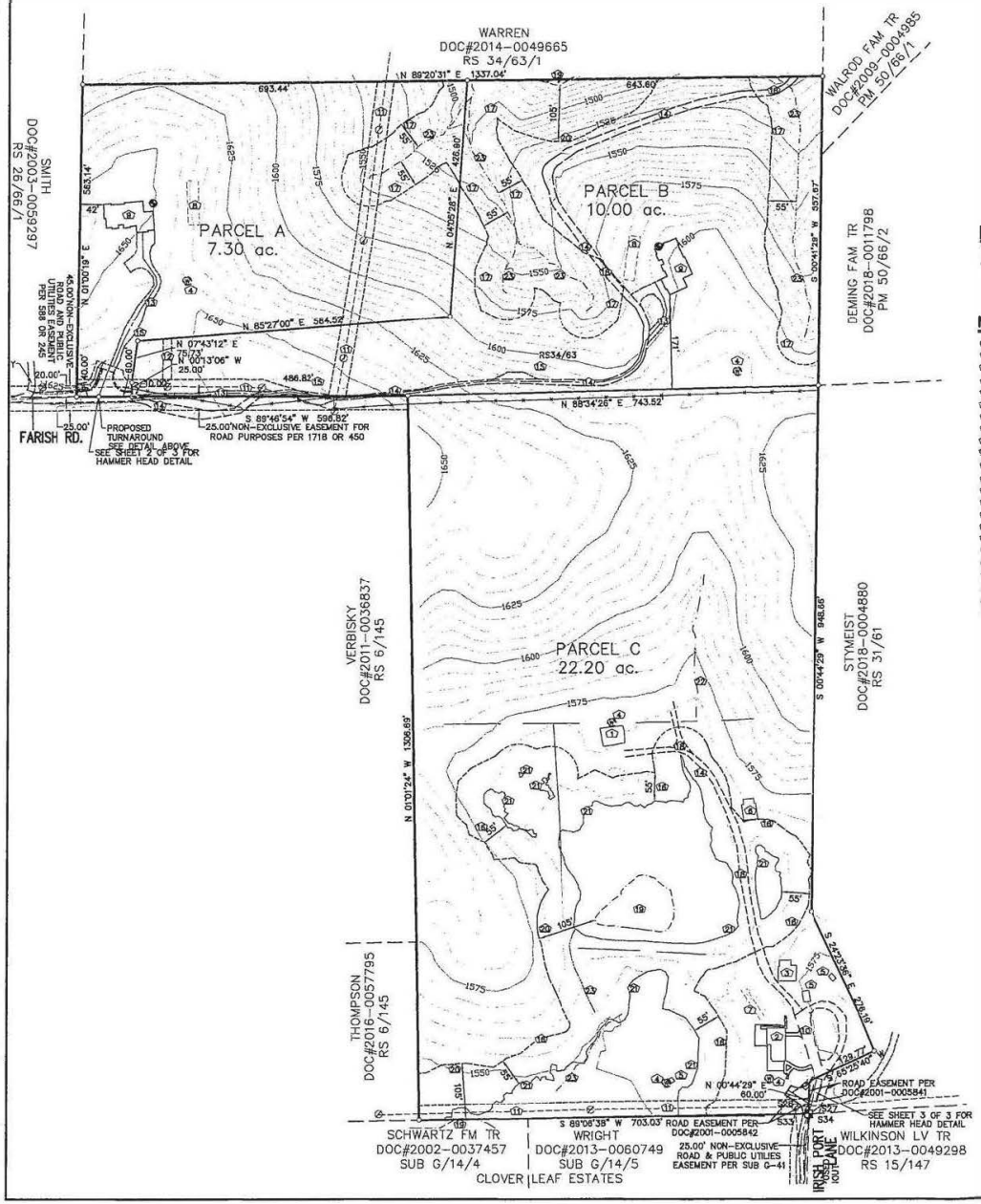
P19-0007 Attachment A

Tentative Parcel Map

A PORTION OF THE SE 1/4 OF SECTION 28 AND A PORTION OF THE SW 1/4 OF SECTION 27 OF T. 10 N., R. 10 E., M.D.M.
COUNTY of EL DORADO STATE of CALIFORNIA
JULY 2019 1"=100'
SHEET 1 of 3

TPM# _____



N

0 100 200
SCALE 1"=100'

LEGEND

- SEPTIC TEST PIT
- EXISTING WELL

NOTES

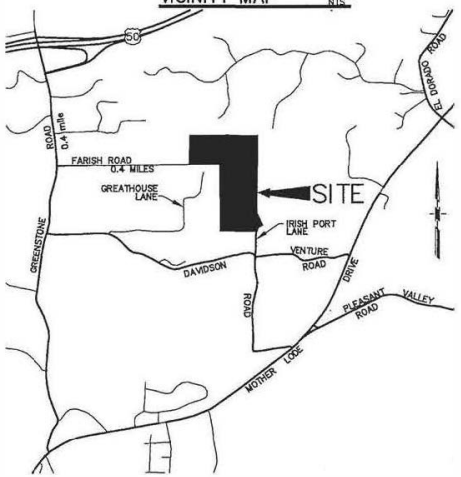
1. EXISTING BARN
2. EXISTING HOUSE (DEMOLITION PERMIT #0307322)
3. EXISTING SDU
4. EXISTING WELL
5. EXISTING SHED
6. EXISTING SHOP
7. EXISTING LEACH FIELD
8. POSSIBLE LEACH FIELD LOCATION
9. POSSIBLE HOUSE LOCATION
10. EXISTING DRIVEWAY
11. EXISTING UTILITIES LINES, PROPOSED 30' PUE.
12. PROPOSED 15' PUE FOR UTILITIES SERVICES
13. POSSIBLE DRIVEWAY LOCATION
14. EXISTING DIRT RANCH ROAD
15. POSSIBLE DRIVEWAY TURNOUTS
16. 55 FOOT BUILDING SETBACK FROM WETLANDS
17. 55 FOOT BUILDING SETBACK FROM SEASONAL DRAINAGES
18. 30 FOOT WDE SETBACK EXCEPTION FOR EXISTING RANCH ROADS
19. EXISTING POND (SEE WETLAND REPORT)
20. 105 FOOT SETBACK FROM POND
21. WETLAND BOUNDARY (SEE WETLAND REPORT)
22. DRAINAGE SWALE (SEE WETLAND REPORT)
23. DRAINAGE CHANNEL (SEE WETLAND REPORT)

OWNER / APPLICANT: MICHAEL DEVLIN TRUSTEE AND SHASTA DEVLIN TRUSTEE OF MICHAEL M. DEVLIN & SHASTA L. DEVLIN REVOCABLE FAMILY TRUST
4200 IRISH PORT LANE
PLACERVILLE, CA 95667

MAP PREPARED BY: JAMES WILLSON, LS
SITE CONSULTING INC
3440 ANGEL LANE
PLACERVILLE, CA 95667
530-622-7014

SCALE:	1"=100'
CONTOUR INTERVAL:	5'
SOURCE OF TOPOGRAPHY:	DRONE AERIAL MAPPING
SECTION, TOWNSHIP, RANGE	SECTION 28 & 27, T. 10 N., R. 10 E. M.D.M.
ASSESSOR'S FEE PARCEL NO.	319-190-036-000
PRESENT ZONING:	RE 5
TOTAL PARCEL AREA:	39.5 ACRES
TOTAL NUMBER OF PARCELS:	(3) THREE
MINIMUM PARCEL AREA:	7.3 ACRES
WATER SUPPLY:	PARCELS A & B EXISTING WELLS PARCEL C EXISTING EID METER
SEWAGE DISPOSAL:	EXISTING AND PROPOSED SEPTIC
STRUCTURAL FIRE PROTECTION:	DIAMOND SPRINGS/EL DORADO FPD
DATE:	MAY 2019
SITE ADDRESS:	4200 IRISH PORT LANE PLACERVILLE, CA

VICINITY MAP NTS



ZONING ADMINISTRATOR: _____

APPROVAL/DENIAL DATE: _____

BOARD OF SUPERVISORS: _____

APPROVAL/DENIAL DATE: _____

P19-0007 Attachment B

Biological Resources Report

for

Assessor' Parcel Number 319-190-036

located at

4200 Irish Port Lane

Placerville, 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
Michael and Shasta Devlin
shastadevlin13@gmail.com

July 2019

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D. California Native Plant Society On-line Inventory of Rare and Endangered Plants, Placerville and Surrounding USGS Quads
E. Evaluation of Special-Status Species with Known Occurrences in Placerville and Surrounding USGS Quads
F. Plant Species Found on the Project Site
G. National Resources Conservation Service Custom Soils Report, Devlin Property

I. Report Summary

A. Special-Status Species

1. Federal and State-Listed Species

No species listed under either the United States or California Environmental Protection Act were found on the project site. Furthermore, no potential habitat for listed species was found on the site.

2. Species of Concern

Three species of concern and one special habitat were found on the project site: Western pond turtle (*Emys marmorata*), Oak titmouse (*Baeolophus inornatus*), and Wrentit (*Chamaea fasciata*). In addition, one special habitat, Sacramento-San Juaquin Foothill/Valley Ephemeral Stream, was found in three ephemeral streams on the project site.

Potential habitat was found for thirty-four species of concern, including one insect: Western bumble bee (*Bombus occidentalis*); one reptile: Coast horned lizard *(Phrynosoma blainvillii);* twelve birds: Cooper's hawk (*Accipiter cooperii*), Grasshopper sparrow (*Ammodramus savannarum*), Long-eared owl (*Asio otus*), Western burrowing owl (*Athene cunicularia*), Lark sparrow (*Chondestes grammacus*), White-tailed kite (*Elanus leucurus*), Merlin (*Falco columbarius*), Loggerhead shrike (*Lanius ludovicianus*), Fox sparrow (*Passerella iliaca*), Nuttall's woodpecker (*Picoides nuttallii*), Purple martin (*Prognes subis*), and Lawrence's goldfinch (*Spinus lawrencei*); seven mammals: Ringtail (*Bassariscus astutus*), Pallid bat (*Antrozous pallidus*),Townsend's big-eared bat (*Corynorhinus townsendii*), North American porcupine (*Erethizon dorsatum*), Silver-haired bat (*Lasionycteris noctivagans*), Hoary bat (*Lasiurus cinereus*), and Yuma myotis bat (*Myotis yumanensis*); and thirteen plants: Big-scale balsamroot (*Balsamorhiza macrolepis*), Watershield (*Brasenia schreberi*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Sierra clarkia (*Clarkia virgata*), American manna grass (*Glyceria grandis*), Dubius pea (*Lathyrus sulphureus* var. *argillaceus*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), Northern bugleweed (*Lycopus uniflorus*), Narrow-petaled rein orchid (*Piperia leptopetala*), Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*), Sanford's arrowhead (*Sagittaria sanfordii*), Slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpina*) and Oval-leaved viburnum (*Viburnum ellipticum*).

3. Special Habitats

One special habitat, Sacramento-San Juaquin Foothill/Valley Ephemeral Stream, was found in three ephemeral streams on the project site. In addition, the site has one pond with associated wetlands, and small portions of two off-site ponds.

4. Mitigation

Enhanced setbacks from waters and wetlands (105 feet from perennial waters and 55 feet from intermittent or ephemeral waters and wetlands) are sufficient to protect those resources on the project site.

Pre-construction surveys for nesting birds, including raptors, conducted no more that 30 days prior to construction activities, is recommended if construction is scheduled during the normal nesting season (February 1-August 31). A 30-foot setback from trees with active nests is recommended for most species. If raptor nests are found on or immediately adjacent to the site, however, consultation with the California Department of Fish and Wildlife (CDFW) must be initiated to determine appropriate avoidance measures. No mitigation should be required if tree removal and grading are not scheduled during the normal nesting season.

B. Oak Woodlands

The vegetation community on the project site is Blue Oak Woodland. Details about the quantity of oaks, proposed oak woodland impacts, and mitigation measures are outlined in the Oak Resources Technical Report, submitted to El Dorado County with this report.

II. Introduction

A. Purpose of Report

A biological resources study was conducted on Assessor's Parcel Number 319-190-036 (Figure 1), in order to determine the suitability of its habitat to support state- or federal-listed special-status wildlife and plant species, and species of concern. Existing oak resources were also noted., and the project was also evaluated for compliance with Important Biological Corridor requirements.

B. Project Location and Description

The project site is located in the SE 1/4 of Section 28 and the SW 1/4 of Section 27, Township 10 North, Range 10 East, M.D.M. The project encompasses a 39.5-acre parcel, Assessor's Parcel Number 319-090-036, located at 4200 Irish Port Lane, Placerville, El Dorado County, California (Figure 1). The proposed parcel map would subdivide the property into three parcels: Parcel A, 7.2 acres; Parcel B, 10.0 acres; and Parcel C, 22.2 acres. The project site has a General Plan designation of LDR with RE 5 zoning, and lies within an Important Biological Corridor (IBC). Surrounding parcels are single-family residential lots varying in size from 5.0 to 26.54 acres.

The parcel has two existing single-family residential structures and two outbuildings, all located on proposed Parcel C. Each parcel has one or more existing wells.

C. Property Owners and Project Engineer

Property Owners
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Placerville, CA 95634
shastadevlin13@gmail.com

Project Engineer
Site Consulting, Inc.
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Placerville, CA 95667
Contact: James Willson
530/306-4086

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.

POR. SEC. 32 & PORS. S 1/2 SEC. 29 & W 1/2 SEC. 33, T.10N., R.10E., M.D.M.

VEY. It is prepared by the El Dorado Co
ernment purposes only. Area calculations
guaranteed. Users should verify items
reage

Acreages Are Estimates

Adjacent Map Pages Shown in Grey Text
Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

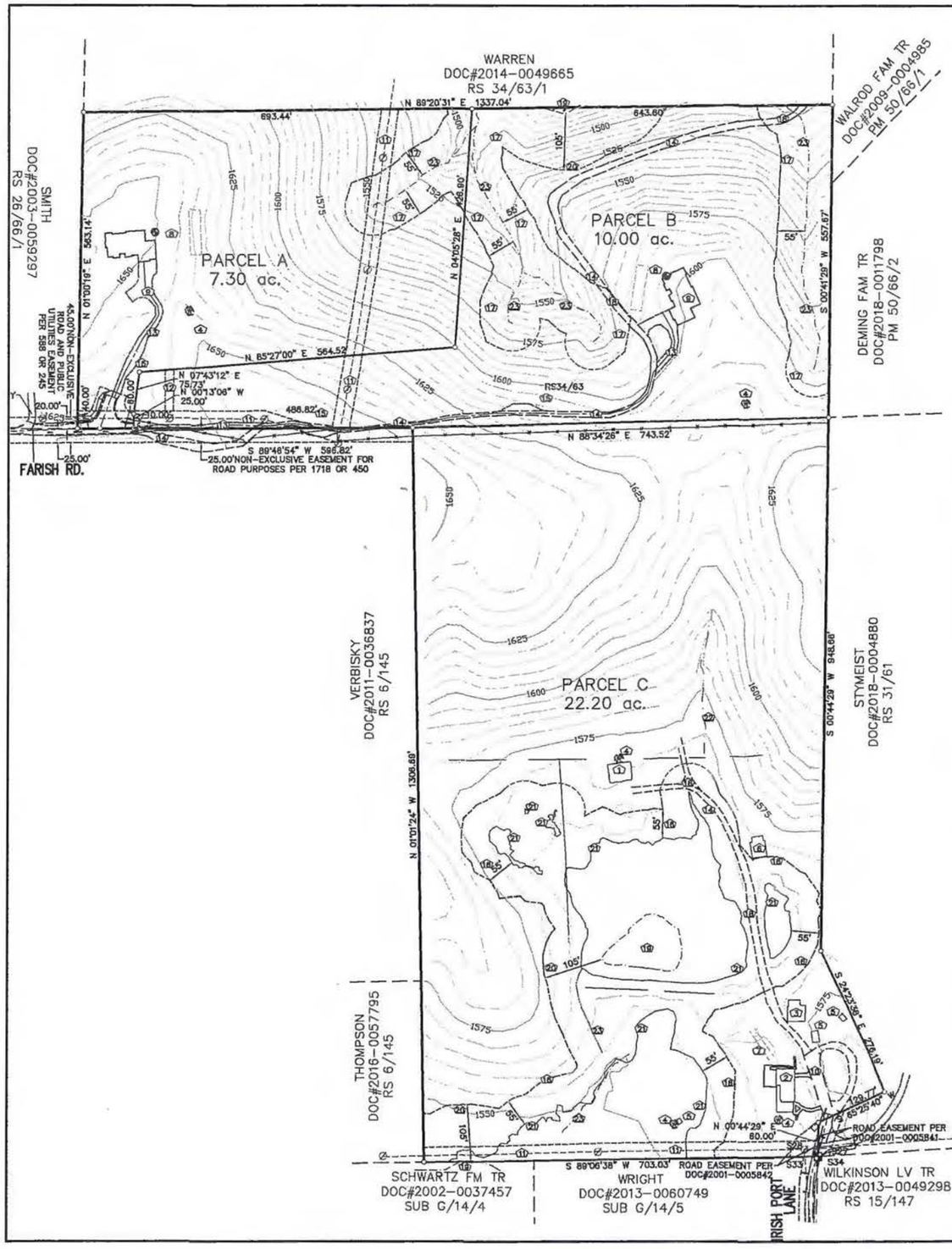
Rev. DEC 2, 2014

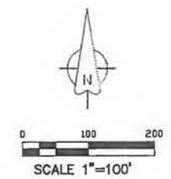
Assessor's Map I
County of El I

Tentative Parcel Map

A PORTION OF THE SE 1/4 OF SECTION 28 AND A PORTION OF THE SW 1/4 OF SECTION 27 OF T. 10 N., R. 10 E., M.D.M.

COUNTY of EL DORADO STATE of CALIFORNIA
JULY 2019 1"=100'
SHEET 1 of 3





NOTES

1. EXISTING BARN
2. EXISTING HOUSE (DEMOLITION PERMIT #0307322)
3. EXISTING SDU
4. EXISTING WELL
5. EXISTING SHED
6. EXISTING SHOP
7. EXISTING LEACH FIELD
8. POSSIBLE LEACH FIELD LOCATION
9. POSSIBLE HOUSE LOCATION
10. EXISTING DRIVEWAY
11. EXISTING UTILITIES LINES, PROPOSED 30' PUE.
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13. POSSIBLE DRIVEWAY LOCATION
14. EXISTING DIRT RANCH ROAD
15. POSSIBLE DRIVEWAY TURNOUTS
16. 55 FOOT BUILDING SETBACK FROM WETLANDS
17. 55 FOOT BUILDING SETBACK FROM SEASONAL DRAINAGES
18. 30 FOOT WIDE SETBACK EXCEPTIDN FOR EXISTING RANCH ROADS
19. EXISTING POND (SEE WETLAND REPORT)
20. 105 FOOT SETBACK FROM POND
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23. DRAINAGE CHANNEL (SEE WETLAND REPORT)

OWNER / APPLICANT: MICHAEL DEVLIN TRUSTEE AND
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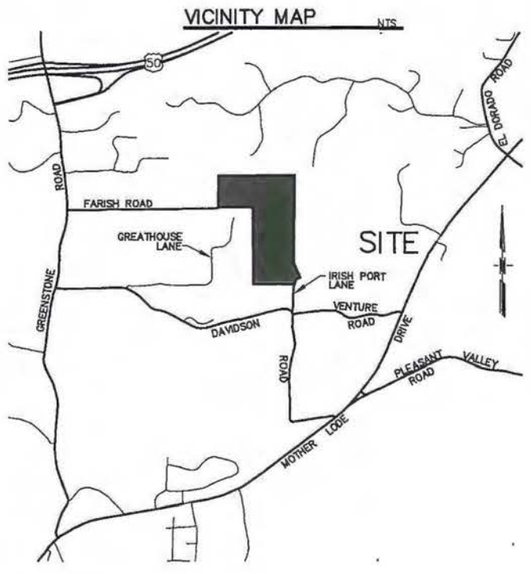
PLACERVILLE, CA 95667

MAP PREPARED BY: JAMES WILSON, LS
SITE CONSULTING INC
3460 ANGEL LANE
PLACERVILLE, CA 95667
530-622-7014

SCALE:	1"=100'
CONTOUR INTERVAL:	5'
SOURCE OF TOPOGRAPHY:	DRONE AERIAL MAPPING
SECTION, TOWNSHIP, RANGE	SECTION 28 & 27, T. 10 N., R. 10 E. M.D.M.
ASSESSOR'S FEE PARCEL NO.	319-190-036-000
PRESENT ZONING:	RE 5
TOTAL PARCEL AREA:	39.5 ACRES
TOTAL NUMBER OF PARCELS:	(3) THREE
MINIMUM PARCEL AREA:	7.3 ACRES
WATER SUPPLY:	PARCELS A & B EXISTING WELLS PARCEL C EXISTING EID METER
SEWAGE DISPOSAL:	EXISTING AND PROPOSED SEPTIC
STRUCTURAL FIRE PROTECTION:	DIAMOND SPRINGS/EL DORADO FPD
DATE:	MAY 2019
SITE ADDRESS:	4200 IRISH PORT LANE PLACERVILLE, CA

VICINITY MAP NTS

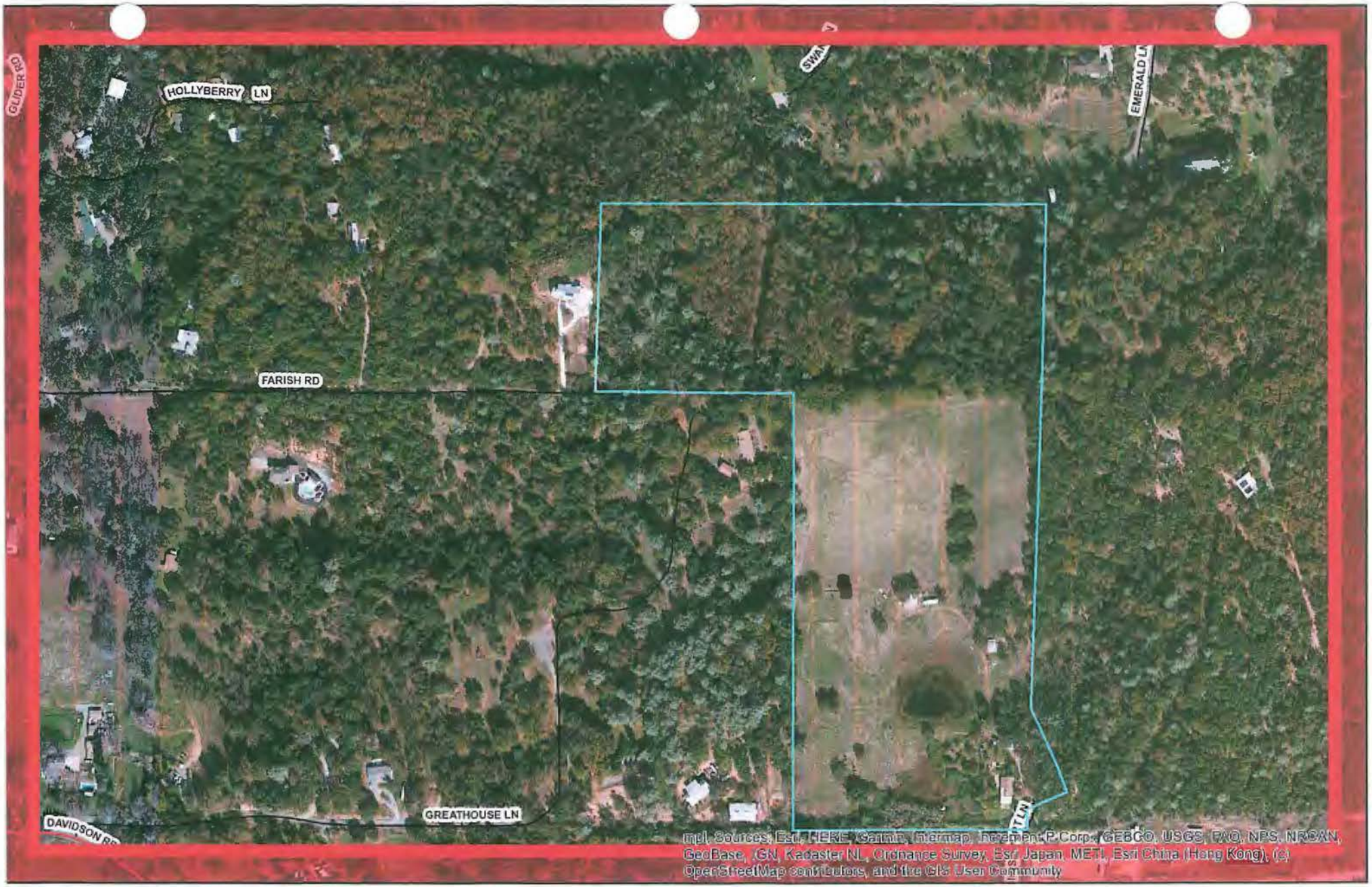


ZONING ADMINISTRATOR

DATE: _____ APPROVAL: _____
DATE: _____ CONDITIONAL APPROVAL: _____
DATE: _____ DISAPPROVAL: _____

BOARD OF SUPERVISORS

DATE: _____ APPROVAL: _____
DATE: _____ CONDITIONAL APPROVAL: _____
DATE: _____ DISAPPROVAL: _____



July 5, 2019

Devlin Property

Search Results: Parcels
Override 1
County Outline

Highway Labels
Highways

Major Roads
Major Roads
Minor Roads

Cities
Red: Band_1
Green: Band_2
Blue: Band_3

N
W
E
S

0 140 280 420 560 Feet

III. Evaluation Methods

A. Field Surveys

The project site was searched for special-status species December 14, 2018; January 23, March 11 and 13, April 1 and 22, May 14 and 29, and June 5, 2019, by Ruth Willson. Plants, animals and vegetation communities were identified in the field. Unknown plants were identified in the office, utilizing Baldwin, et al. 2012 and Jepson 2019.

B. Literature Search

An Official Species List for the project site, obtained from the U.S. Fish and Wildlife Service (USFWS) December 6, 2018 (updated June 6, 2019), served as the main source of data on federal-listed special-status species that could be affected by the project (Appendix A). A USFWS "IPaC Trust Resource Report," generated December 6, 2018, contained a list of species of federal concern (Appendix B). A RareFind 5 report of known occurrences of special-status species in the Placerville and eight surrounding USGS Quads, updated June 1, 2019, was obtained from the California Natural Diversity Database (Appendix C). Other current lists reviewed include the California Department of Fish and Wildlife (CDFW) publications *Endangered, Threatened and Rare Plants of California; Special Vascular Plants, Bryophytes and Lichens*; and *Special Animals,* along with the California Native Plant Society (CNPS) list, *Inventory of Rare and Endangered Plants,* on-line v8-03 0.39, (Appendix D).

C. Vegetation Community Classification

References on the classification of vegetation include Mayer & Laudenslayer (1988), Munz & Keck (1959), Sawyer et al. (2009), Klein et al. (2007) and Allen et al. (1991). Vegetation communities are referenced to those listed in the El Dorado County General Plan, adopted July 19, 2004 (El Dorado County, 2006).

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. Oak Resources Management Plan

The El Dorado County Oak Resources Management plan is found in Ordinance No. 5061. The project's potential impacts to oak resources are evaluated within a separate Oak Resources Technical Report, filed with this Biological Resources Report.

3. General Plan Policy 7.4.2.9, Important Biological Corridor

The study area is within an Important Biological Corridor, as defined in El Dorado County General Plan Policy 7.4.2.9. Guidelines in Policy 7.4.2.9 state, "Lands located within the overlay district shall be subject to the following provisions:

a. Increased minimum parcel size;
b. Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
c. Lower thresholds for grading permits;
d. Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
e. Increased riparian corridor and wetland setbacks;
f. 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 Game);
g. Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
h. Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
i. More stringent standards for lot coverage, floor area ratio and building height;
j. No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement)."

V. Topographic Features

A. Topography

The project study area lies between 1480 and 1650 feet (450 and 503 meters) elevation (Figure 2). A knoll along the north boundary of Parcel C separates the parcel into two distinctly different topographies: south of the knoll, the slope gradient averages 5 percent; north of the knoll, 28.6 percent.

B. Soils

The project site has three soil types (Figure 4): Auburn silt loam (AwD), Auburn very rocky silt loam (AxE) and Auburn cobbly clay loam, heavy subsoil variant (AzE). The two types of Auburn silt loam are derived from hard metamorphic rock, whereas the heavy subsoil variant is derived from vertically tilted schists and slate (USDA 1974). The approximate area of each soil type follows: Auburn silt loam, 26.4 acres; Auburn very rocky silt loam, 11 acres; and Auburn cobbly clay loam, 0.05 acre. (NRCS 2018, Appendix G).

Figure 4. Soils map, generated by El Dorado County GotNet.

AwD =Auburn silt loam, 2-30% slopes
AxE =Auburn very rocky silt loam, 30-50% slopes
AzE = Auburn cobbly clay loam, heavy subsoil variant, 9-50% slopes

VI. Biological Resources

A. Vegetation Communities

The vegetation community on the project site (Figure 5) is broadly classified as Blue Oak Woodland (El Dorado County 2004), but blue oak (*Quercus douglasii*) is not the dominant oak species on the project site; the dominant oak species is interior live oak (*Q. wislizeni*). The specific vegetation community on Parcel C is 71.020.06 Blue Oak-Interior Live Oak-Grass (Allen et.al.1991). The specific vegetation community on Parcels A and B is 71.080.00 Interior Live Oak Woodland (Allen et.al.1991), also described as *Quecus wislizeni.-Quercus kelloggii* Forest Association (Klein, et al. 2007).

Wetlands surrounding the pond on Parcel C support Wet Meadow vegetation community (El Dorado County 2004). Wet meadow vegetation has also been called fresh emergent wetland (Mayer & Laudenslayer 1988).

1. Oak Woodlands and Heritage Oaks

a. Blue Oak-Interior Live Oak-Grass

Blue Oak-Interior Live Oak-Grass consists of scattered trees within a grassland. The trees in that area include both interior live oak and blue oak, along with foothill pine *(Pinus sabiniana)* (Table 1). The savannah contains a mixture of grasses and forbs, including soft chess (*Bromus hordeaceus*), poverty brome (*B. sterilis*), bristly dogtail grass (*Cynosurus echinatus*), barbed goat grass (*Aegilops triuncialis*), filaree (*Erodium* sp.), cat's ear (*Hypochaeris* sp.), rose clover (*Trifolium hirtum*), and subterranean clover (*T. subterraneum*). Italian plumeless thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*) is found beneath many of the oak trees, and Yellow star-thistle (*Centaurea solstitialis*) and Maltese star-thistle (*C. melitenis)* are also found on-site.

Table 1. Percentage of tree species in a representative sample of woodlands on Parcel C.

	Interior Live Oak	Blue Oak	Foothill Pine	Total
Number of Trees	22	4	8	34
Percent of Total Trees	64	12	24	100

b. Interior Live Oak Woodland

Interior Live Oak Woodland vegetation, covering 17.3 acres, is found on Parcels A and B. The dominant oak species on the ridge tops, near the suggested building sites, is Interior live oak, which is replaced by Black oak (*Q. kelloggii*) as the dominant tree on steep, north-facing slopes (Table 2). Both areas have foothill pines (*Pinus sabiniana*) as a subcomponent, and the north slopes also contain ponderosa pines (*P. ponderosa*). On ridge tops, the understory is mostly the grasses and forbs, listed in Subsection 1, above, but also includes Western poison-oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*) and California yerba santa (*Eriodictyon californicum*) in scattered locations. The understory on steep slopes consists of a mixture of shrubs and grasses, predominantly toyon (*Heteromeles arbutifolia*), western poison oak (*Toxicodendron diversilobum*) and blue wild-rye (*Elymus glaucus*).

Table 2. Percentage of tree species near building sites, and in a representative sample of trees on the north slope of Parcels A and B.

	Interior Live Oak	Black Oak	Blue Oak	Valley Oak	Foothill Pine	Ponderosa Pine	Total
Number of trees counted near building sites	111	36	8	2	19	0	176
Percent of total trees	63	20	5	1	11	0	100
Number of trees counted on north slope	3	14	0	0	3	5	25
Percent of total trees	12	56	0	0	12	20	100

c. Heritage Oaks

Oak trees having 36-inch or greater diameter-at-breast-height (dbh), either as a single main trunk or with an aggregate trunk diameter, are defined as Heritage Oakes.[1] Twenty-two heritage oak trees were mapped near proposed road improvements, proposed home sites and associated septic system sites, including one blue oak, eight interior live oaks and thirteen black oaks. Of these, two occur alongside Farish Lane near proposed road widening sites, and nine near an existing dirt driveway that would serve Parcel B. No heritage oaks occur near proposed construction on Parcel A, and no construction is proposed for Parcel C, so no oaks will be impacted there. See the Oak Resources Technical Report, filed with this report, for further details, potential impacts and mitigation.

Table 3. Heritage oaks near proposed construction activities.

	California Black Oak	Interior Live Oak	Blue Oak	Total
Number of Trees	13	8	1	24
Total dbh (in.)	779	397	40	1216
Average dbh (in.)	60	50	40	55

[1] El Dorado County Oak Resources Management Plan, Adopted September 2017, p. 29.

2. Wet Meadows

Wet Meadow vegetation, found in wetlands on Parcel C, covers approximately 2.7 acres. Hydrophytic vegetation found in the wet meadows include ten Obligate (OBL)[2] wetland plants: Slender woolly-marbles (*Psilocarphus tenellus*), Panicled bulrush (*Scirpus microcarpus*), Carter's buttercup (*Ranunculus bonariensis* var. *trisepalus*), Water chickweed (*Montia fontana*), Mediterranean Rabbit's-foot Grass (*Polypogon maritimus*), Seep monkeyflower (*Erythranthe guttata*), Bractless hedge-hyssop (*Gratiola ebracteata*), Water speedwell (*Veronica anagallis-aquatica*), and both California and hyssop loosestrife (*Lythrum californicum* and *L. hyssopifolia*); ten Facultative Wetland (FACW)[3] plants: Stalked popcornflower (*Plagiobothrys stipitatus* var. *micranthus*), Fringed willowherb (*Epilobium ciliatum* ssp. *ciliatum*), Baltic rush (*Juncus balticus* ssp. *ater*), Toad rush (*J. bufonius* var. *bufonius*), Narrow-leaf willow (*Salix exigua*), Red willow (*S. laevigata*), Tall flatsedge (*Cyperus eragrostis*), Rabbitfoot grass (*Polypogon monspeliensis*), Curly dock (*Rumex crispus*),and Peppermint (*Mentha x-piperita*). Numerous Facultative (FAC)[4] plant species were found, including, but not limited to: Himalayan blackberry (*Rubus armeniacus*), Perennial ryegrass (*Festuca perennis*), and Scarlet pimpernel (*Lysimachia arvensis*). The hydrophytic vegetation classification of all plants found on the project site is found in Appendix F.

Wet meadow vegetation west of the pond on Parcel C.

Wet meadow vegetation surrounds the pond on Parcel C.

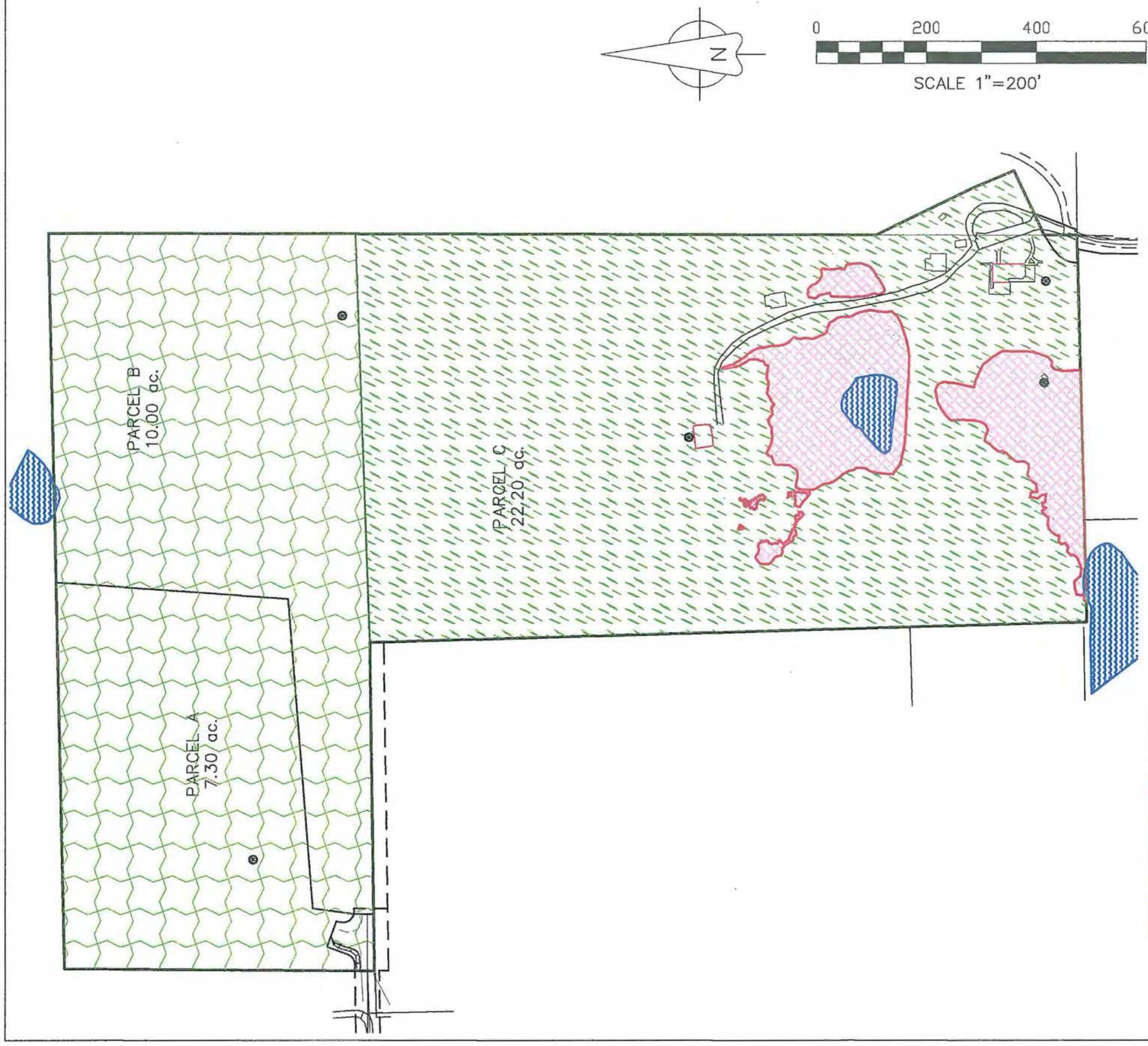
[2]OBL plants almost always occur in wetlands (estimated probability >99%)

[3]FACW plants usually occur in wetlands (est. prob. 67-99%) but occasionally are found in non-wetlands.

[4]FAC plants are equally likely to occur in wetlands or non-wetlands (est. prob. 34-66%)

FIGURE 5
VEGETATION COMMUNITIES MAP

A PORTION OF SE 1/4 OF SEC. 28 AND A PORTION OF THE SW 1/4 SEC. 27, T.10N., R.10E., M.D.M.
EL DORADO COUNTY STATE OF CALIFORNIA
JULY 2019
FOR: MICHAEL & SHASTA DEVLIN
APN: 319-190-036-000



	VEGETATION COMMUNITY	APPROX. AREA
	WET MEADOW	2.7 Ac.
	INTERIOR LIVE OAK WOODLAND	17.3 Ac.
	BLUE OAK-INTERIOR LIVE OAK-GRASS	19.2 Ac.
	POND	0.2 Ac.

B. Wetlands and Waters

Proposed Parcel C has a pond, approximately 9680 ft^2 (0.22 Ac.) in size, with associated wetlands. The pond is fed by three ephemeral drainages, two originating on the south slope of the on-site knoll and the other originating on an off-site knoll east of the project site. A wetland surrounds the pond, and a series of disjunct wetlands are within drainage swales above the pond. The total wetland area associated with the pond is 61,608 ft^2 (1.41 Acres).

A large wetland is found below the dam, west of the existing houses on Parcel C. The wetland is 51,065 ft^2 (1.17 Ac.) in size.

An ephemeral drainage swale from the east has been bisected by an old roadbed, constructed prior to 1993 (Google Earth), forming a dam that impounds a temporary pond east of the road. The pond disappears within a week or two after rain events, leaving a wetland. The total area of the pond/wetland is 6153 ft^2 (0.14 Ac.).

One drainage swale that originates on the south slope of the knoll carries water through the small wetlands northwest of the pond before ending at the pond. The second swale carries water from the knoll southerly to the northeasterly corner of the reservoir, then through the wetland below the reservoir's dam to the south property boundary. The water enters a perennial pond, located mostly off-site near the project site's southwest corner (approximately 200 ft^2 of the pond expands on-site at maximum capacity), and eventually drains into Slate Creek, a perennial stream, about one mile from the project site.

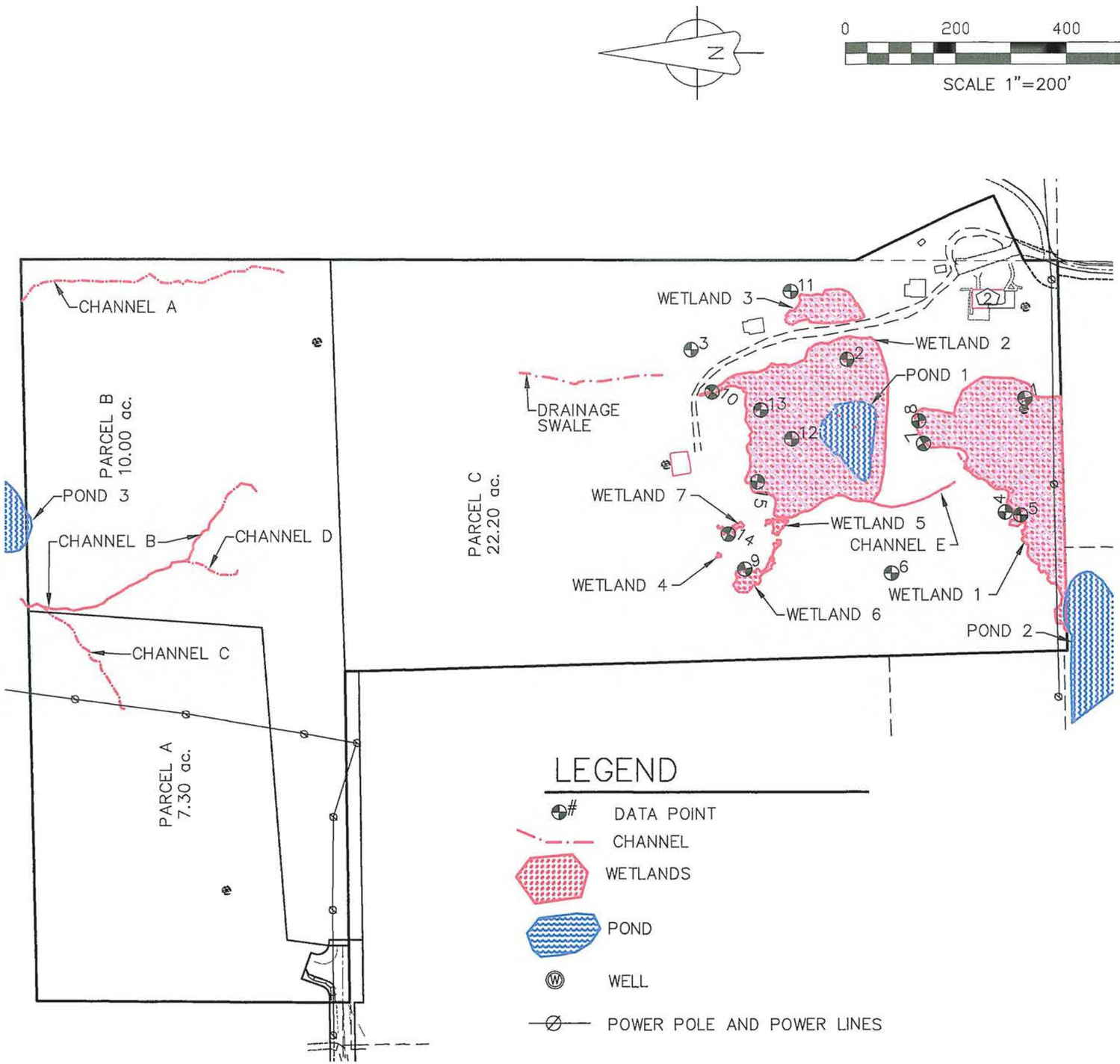
Two unnamed ephemeral ravines carry water north from the knoll to Dry Creek, an intermittent stream, just north of the north property boundary. (Figure 7) Dry Creek passes through a pond located north of Parcel B (approximately 300 ft^2 of the pond expands onto Parcel B when at maximum capacity). From the pond, Dry Creek carries water northerly about two miles, where Slate Creek joins it. Dry Creek continues northwesterly about three miles to its confluence with Weber Creek, which flows northwesterly about four miles to the South Fork American River.

The pond on Parcel C at nearly full capacity.

One of the ravines on Parcel B.

FIGURE 6
WATERS AND WETLANDS

A PORTION OF SE 1/4 OF SEC. 28 AND A PORTION OF THE SW 1/4 SEC. 27, T.10N., R.10E., M.D.M.
EL DORADO COUNTY STATE OF CALIFORNIA
JULY 2019
FOR: MICHAEL & SHASTA DEVLIN
APN: 319-190-036-000



FEATURE ID	CHANNEL LENGTH (ft)	AVERAGE FLOW-LINE WIDTH (ft)	AREA (sq ft)	AREA (acres)
CHANNEL A	510	4	2,040	0.05
CHANNEL B	524	5	2,620	0.06
CHANNEL C	250	4	1,000	0.02
CHANNEL D	106	3	318	0.007
CHANNEL E	160	2	320	0.007
POND 1	–	–	9,680	0.22
POND 2	–	–	200	0.005
POND 3	–	–	300	0.007
TOTAL WATERS:			16,478	0.38
WETLANDS				
WETLAND 1	--	--	51,065	1.17
WETLAND 2	--	--	58,710	1.35
WETLAND 3	--	--	6,153	0.14
WETLAND 4	--	--	40	0.00
WETLAND 5	--	--	535	0.01
WETLAND 6	--	--	1,906	0.04
WETLAND 7	--	--	417	0.01
TOTAL WETLANDS:			118,826	2.72
POTENTIAL JURISDICTIONAL TOTAL:			135,304	3.10

C. Wildlife

Two reptiles were observed on the project site: Western fence lizard (*Sceloporus occidentalis*) and Western pond turtle (*Emys marmorata).* The site has suitable habitat for reptiles not observed during field surveys, including, but not limited to: Western skink (*Plestiodon skiltonianus*), Northern alligator lizard (*Elgaria coerulea*), Sharp-tail snake (*Contia tenuis*), and Western rattlesnake (*Crotalus viridis*).

One amphibian was observed, Pacific tree frog (*Pseudacris egilla*), but the site also has suitable habitat for Western toad (*Anaxyrus boreas*) and American bullfrog (*Lithobates catesbeianus*).

Signs of eight mammals were found at the project study site: Western gray squirrel (*Sciurus griseus*). Black-tailed deer (*Odocoileus hemionus),* Botta's pocket gopher (*Thomomys bottae*), Gray fox (*Urocyon cinereoagenteus*), Striped skunk (*Mephitis mephitis*), California vole (*Microtus californicus*), Dusky-footed woodrat (*Neotoma fuscipes*) and coyote (*Canis latrans*). Other mammals having suitable habitat on-site include California ground squirrel (*Spermophilus beecheyi*), Deer mouse (*Peromyscus* sp.), Ornate shrew (*Sorex ornatus*), and Black-tailed jackrabbit (*Lepus californicus*), along with others not listed.

Several birds were observed during field surveys, including Red-tailed hawk (*Buteo jamaicensis*), Red-shouldered hawk (*Buteo lineatus*) and Turkey vulture (*Cathartes aura*), soaring overhead; Canada goose (*Branta canadensis*), Mallard (*Anas platyrhynchos*), Bufflehead (*Bucephala albeola*), Ring-necked duck (*Aythya collaris*), Brewer's blackbird (*Euphagus cyanocephalus*), Tree or Violet-green swallow (*Tachycineta* sp.) and Killdeer (*Charadrius vociferus*), found in or near the pond; Black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), Lesser goldfinch (*Spinus psaltria*), House finch (*Haemorhous mexicanus*), House sparrow (*Passer domesticus*), Mourning dove (*Zenaida macroura*), Western kingbird (*Tyrannus verticalis*), and White-crowned sparrow (*Zonotrichia leucophrys*), found in open grasslands; American robin (*Turdus migratorius*), Dark-eyed junco (*Junco hyemalis*), Golden-crowned sparrow (*Zonotrichia atricapilla*), American crow (*Corvus brachyrhynchos*), Western bluebird (*Sialia mexicana*), and Anna's hummingbird (*Calypte anna*) in the ecotone between woodland and savannah; and California towhee (*Melozone crissalis*), Spotted towhee (*Pipilio maculatus*), Ruby-crowned kinglet (*Regulus calendula*), Oak titmouse (*Baeolophus inornatus*), Northern mockingbird (*Mimus polyglottos*), Hutton's vireo (*Vireo huttoni*), Western tanager (*Piranga ludoviciana*), Hermit thrush (*Catharus guttatus*), Acorn woodpecker (*Melanerpes formicivorus*), White-breasted nuthatch (*Sitta carolinensis*), Western scrub-jay (*Aphelocoma californica*), Steller's jay (*Cyanocitta stelleri*), California quail *(Callipepla californica*), Wild turkey (*Meleagris gallopavo*), Ash-throated flycatcher (*Myiarchus cinerascens)* and Warbling vireo (*Vireo gilvus*) in woodlands. In addition, the site has suitable habitat for the following species, among others not mentioned: Cooper's hawk (*Accipiter cooperii*), House sparrow (*Passer domesticus*), House finch (*Haemorhous mexicanus*), Pacific-slope flycatcher (*Empidoax difficilis*), Northern flicker (*Colaptes auratus*), Bushtit (*Psaltriparus minimus*) and Yellow-rumped warbler (*Setophaga coronata*).

D. Special-Status Species

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

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

2. Listed and Special-Status Species with Potential Habitat on the Project Site

a. Species Listed in Environmental Protection Acts

No species listed under either the California or Federal Environmental Protection Acts were found on the project site. Furthermore, no potential habitat was found for listed species on the site.

b. Species of Concern

i. Species of Concern Found on the Project Site

Three species of concern and one special habitat were found on the project site: Western pond turtle (*Emys marmorata*), seen one time on the pond on Parcel C; Oak titmouse (*Baeolophus inornatus*), seen in oak trees throughout the project site; and Wrentit (*Chamaea fasciata*), heard singing in brushy areas on steep north slopes of Parcels A and B. In addition, one special habitat, Sacramento-San Juaquin Foothill/Valley Ephemeral Stream, was found in three ephemeral streams on the project site. See Subsection 3, below, for further discussion.

ii. Species of Concern With Potential Habitat on the Project Site

Potential habitat was found for thirty-four species of concern, includinge one insect: Western bumble bee (*Bombus occidentalis*); one reptile: Coast horned lizard *(Phrynosoma blainvillii);* twelve birds: Cooper's hawk (*Accipiter cooperii*), Grasshopper sparrow (*Ammodramus savannarum*), Long-eared owl (*Asio otus*), Western burrowing owl (*Athene cunicularia*), Lark sparrow (*Chondestes grammacus*), White-tailed kite (Elanus leucurus), Merlin (*Falco columbarius*), Loggerhead shrike (*Lanius ludovicianus*), Fox sparrow (*Passerella iliaca*), Nuttall's woodpecker (*Picoides nuttallii*), Purple martin (*Prognes subis*), and Lawrence's goldfinch (*Spinus lawrencei*); seven mammals: Ringtail (*Bassariscus astutus*), Pallid bat (*Antrozous pallidus*),Townsend's big-eared bat (*Corynorhinus townsendii*), North American porcupine (*Erethizon dorsatum*), Silver-haired bat (*Lasionycteris noctivagans*), Hoary bat (*Lasiurus cinereus*), and Yuma myotis bat (*Myotis yumanensis*); and thirteen plants: Big-scale balsamroot (*Balsamorhiza macrolepis*), Watershield (*Brasenia schreberi*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Sierra clarkia (*Clarkia virgata*), American manna grass (*Glyceria grandis*), Dubius pea (*Lathyrus sulphureus* var. *argillaceus*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), Northern bugleweed (*Lycopus uniflorus*), Narrow-petaled rein orchid (*Piperia leptopetala*), Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*), Sanford's arrowhead (*Sagittaria sanfordii*), Slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpina*) and Oval-leaved viburnum (*Viburnum ellipticum*) (Table 4, following three pages). The suitability of the site to support each species is evaluated in Subsection 3, below.

Table 4. Species of Concern with potential habitat on the project site.

Species of Concern	Common Name	Global/State Rank (Other Rank)*	Habitat Quality	Species Found On Project Site?
Insects				
Bombus occidentalis	Western bumble bee	G4? S1S2 (VU)	Suitable	No
Reptiles				
Emys marmorata	Western pond turtle	G3G4 S3 (SSC)	Marginal	Yes
Phrynosoma blainvillii	Coast horned lizard	G3G4 S3S4 (SSC)	Suitable	No
Birds				
Accipiter cooperii	Cooper's hawk (nesting)	G5 S4 (WL)	Suitable	No
Ammodramus savannarum (nesting)	Grasshopper sparrow (nesting)	G5 S2 (SSC)	Suitable	No
Asio otus	Long-eared owl (nesting)	G5 S3? (SSC)	Marginal	No
Athene cunicularia	Western burrowing owl (nesting colony)	G4 S3 (SSC)	Marginal	No
Baeolophus inornatus	Oak titmouse (nesting)	G5 S4 (BCC)	Suitable	Yes
Chondestes grammacus	Lark sparrow (nesting)	G5 S4S5 (LC)	Suitable	No
Elanus leucurus	White-tailed kite	G5 S3S4 (FP)	Suitable	No
Falco columbarius	Merlin (wintering)	G5 S3S4 (WL)	Suitable	No
Lanius ludovicianus	Loggerhead shrike	G4 S4 (SSC)	Marginal	No
Passerella iliaca	Fox sparrow	G5 SNR (LC)	Suitable	No
Picoides nuttallii	Nuttall's woodpecker (nesting)	G4G5 S4S5 (LC)	Suitable	No
Progne subis	Purple martin (nesting)	G5 S3 (SSC)	Suitable	No
Spinus lawrencei	Lawrence's goldfinch (nesting)	G3G4 S3S4 (LC)	Suitable	No
Chamaea fasciata	Wrentit	G5 SNR (LC)	Suitable	Yes

Species of Concern	Common Name	Global/State Rank (Other Rank)*	Habitat Quality	Species Found On Project Site?
Mammals				
Bassariscus astutus	Ringtail	G5 SNR (FP)	Marginal	No
Antrozous pallidus	Pallid bat	G4 S3 (SSC)	Marginal	No
Corynorhinus townsendii	Townsend's big-eared bat	G4 S2 (SSC)	Marginal	No
Erethizon dorsatum	North American porcupine	G5 S3 (LC)	Marginal	No
Lasionycteris noctivagans	Silver-haired bat	G3G4 S3S4 (LC)	Marginal	No
Lasiurus cinereus	Hoary bat	G3G4 S4 (LC)	Suitable	No
Myotis yumanensis	Yuma myotis bat	G5 S4 (LC)	Suitable	No
Plants				
Balsamorhiza macrolepis	Big-scale balsamroot	G2 S2 (1B.2)	Suitable	No
Brasenia schreberi	Watershield	G5 S3 (2B.3)	Suitable	No
Clarkia biloba ssp. *brandegeeae*	Brandegee's clarkia	G4G5T4 S4 (4.2)	Suitable	No
Clarkia virgata	Sierra clarkia	G3 S3 (4.3)	Marginal	No
Glyceria grandis	American manna grass	G5 S3 (2B.3)	Suitable	No
Lathyrus sulphureus var. *argillaceus*	Dubius pea	G5T1T2 S1S2 (3)	Suitable	No
Lilium humboldtii ssp. *humboldtii*	Humboldt lily	G4T3 S3 (4.2)	Suitable	No
Lycopus uniflorus	Northern bugleweed	G5 S4 (4.3)	Suitable	No
Piperia leptopetala	Narrow-petaled rein orchid	G4 S4 (4.3)	Suitable	No
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	G5 S2S3 (2B.2)	Suitable	No

Species of Concern	Common Name	Global/State Rank (Other Rank)*	Habitat Quality	Species Found On Project Site?
Sagittaria sanfordii	Sanford's arrowhead	G3 S3 (1B.2)	Suitable	No
Stuckenia filiformis ssp. *alpina*	Slender-leaved pondweed	G5T5 S2S3 (2B.2)	Suitable	No
Viburnum ellipticum	Oval-leaved viburnum	G4G5 S3? (2B.3)	Suitable	No
Special Habitats				
Sacramento-San Juaquin Foothill/Valley Ephemeral Stream				Yes

***Other Rank** Listing Agencies and Abbreviations:

BCC = U.S. Fish and Wildlife Service (USFWS) - Birds of Conservation Concern.

LC = International Union for Conservation of Nature - Species of Least Concern.

Q = Questionable taxonomy -Taxonomic distinctiveness of this entity at the current level is questionable.

S = US Forest Service - Sensitive Species.

SSC = California Department of Fish & Wildlife - Species of Special Concern.

VU = International Union for Conservation of Nature - Vulnerable Species

WL = CA Dept. Fish & Wildlife (CDFW) - Watch List

? = Inexact or Uncertain---Denotes inexact or uncertain numeric rank.

1B = California Native Plant Society (CNPS) - List of Rare, Threatened or Endangered Plants in California and Elsewhere

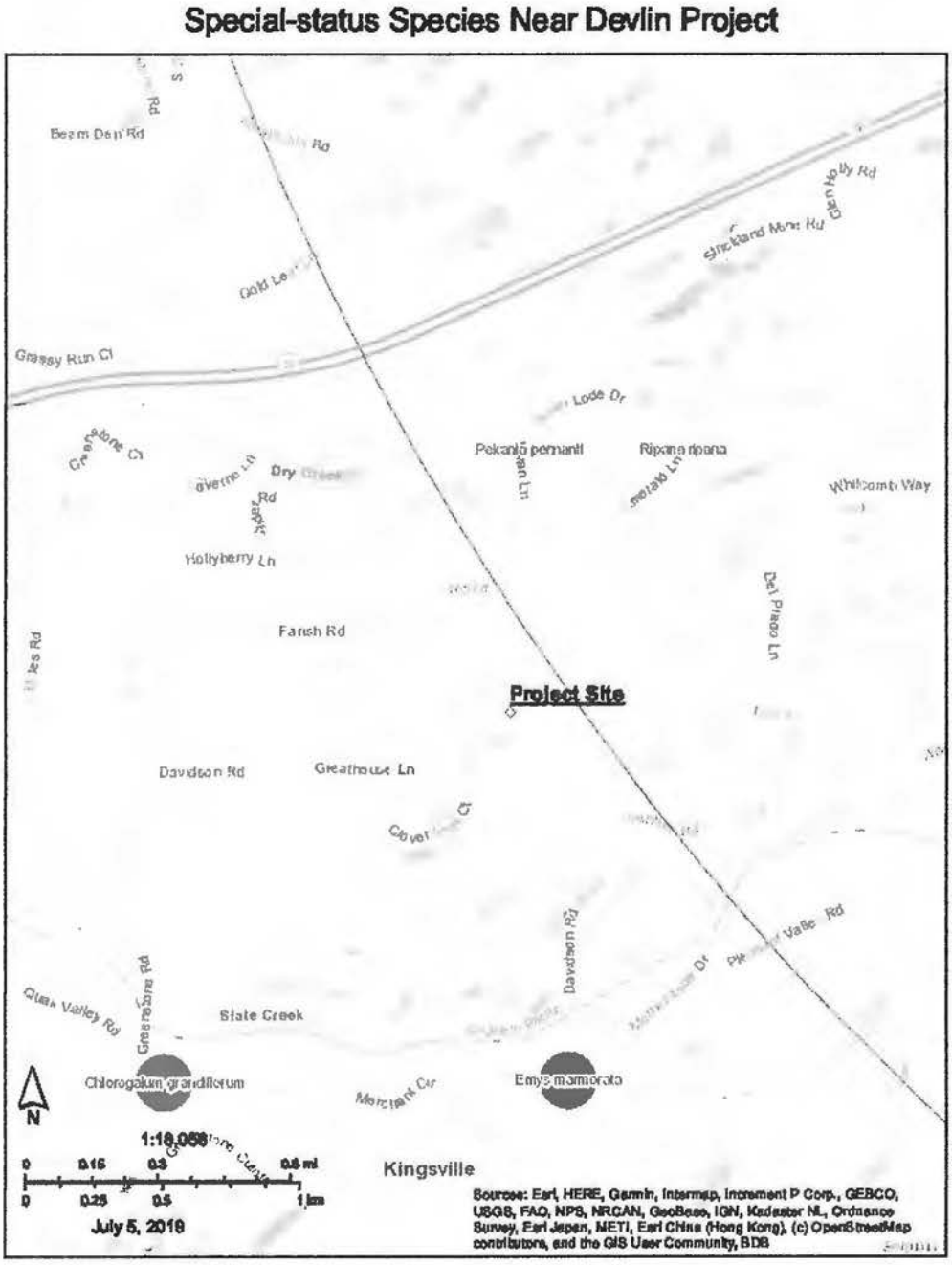
2B = CNPS - List of Rare, Threatened or Endangered Plants in California but More Common Elsewhere

3 = CNPS - List of Plants About Which More Information is Needed - A Review List

4 = CNPS - List of Plants of Limited Distribution

CNPS Code Extensions: .1 = Seriously threatened in California; .2 = Moderately threatened in California;
.3 = Not very 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 Species

a. Insects

Western bumble bee (*Bombus occidentalis*)
Range: Historic range (prior to 1998) included northern California, Oregon, Washington, Alaska, Idaho, Montana, western Nebraska, western North Dakota, western South Dakota, Wyoming, Utah, Colorado, northern Arizona, and New Mexico. Recently, the population has undergone marked reductions. (Xerces Society 2019)
Nearest CNDDB occurrence: Approximately eleven miles NW of the project site, near Cool. (BIOS 2019)
Habitat requirements: Bumble bees require flowers on which to forage, nest sites and overwintering sites. Bumble bees forage on a diverse group of plants (eg. *Phacelia, Ceanothus, Eschscholtzia, Lupinus, Rosa, Asclepias, Agastache, Monardella, Helianthus and Solidago* sp.), and need an abundance of flowers to sustain the colony. Nests are often in underground abandoned rodent burrows, or at ground level in grass tufts, in bird nests or cavities in trees, or under rocks. Only mated queens overwinter in self-dug cavities in soft earth; the rest of the colony dies. (Xerces Society 2012)
Habitat quality on project site: Suitable foraging habitat occurs mainly within on-site grasslands, and suitable nesting habitat is found in dry uplands within the northerly portions of the project site.
Potential impacts: None expected. No new development is proposed within on-site grasslands.

b. Reptiles

Western pond turtle (*Emys marmorata*)
Range: Found in permanent or nearly permanent aquatic habitats throughout California, west of the Sierra-Cascade crest, between sea level and 6000 feet elevation. (CWHR 2019, CNDDB 2019)
Nearest CNDDB occurrence: Approximately 0.6 miles South of the project site in Slate Creek. (BIOS 2019)
Habitat requirements: Ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft. elevation. Require basking sites such as partially submerged logs, rocks, floating vegetation, sandy banks, grassy open fields or open mud banks. Eggs are laid in nests in slow-moving water or in nests dug in high-humidity areas up to 0.5 km from water. (CNDDB 2019)
Habitat quality on project site: Marginal in and around the pond. The pond lacks floating vegetation, but does have open mud banks suitable for basking. A turtle was seen basking at the pond April 22, 2019, but was not seen again during field surveys. The turtle had probably come to the pond from the perennial pond located just south of the project site, and left the site as the pond dried.
Potential impacts: None. Normal setbacks from the pond will protect potential habitat for the species. Furthermore, no new development is proposed for Parcel C, where the pond is located.

Coast horned lizard (*Phrynosoma blainvillii*)
Range: Found in Sierra Nevada foothills from Butte Co. to Kern Co. up to 1200 m elevation, throughout the central and southern California coast, and in the mountains of southern California, up to 1800 m elevation. Found chiefly below 600 m (2000 ft) in the north. (CWHR 2019)
Nearest CNDDB occurrence: Approximately 5 miles southwest at Shingle Springs. (CNDDB 2019)
Habitat requirements: Found in open country with sandy areas such as flood plains, washes, and wind-blown deposits, in habitats including valley foothill hardwood, conifer, riparian, pine-cypress, juniper and annual grassland. Feeds in open areas between shrubs, often near ant nests; consumes insects, especially ants (CWHR 2019). Most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial and abundant ants and other insects (CNDDB 2019).
Habitat quality on project site: Suitable in oak savannah and open areas in on-site oak woodlands.
Potential impacts: Development of buildings and roads would eliminate minimal amounts of potential habitat for the species.
Suggested Mitigation: None required. Clearing of brush, such as for fire control, would create more open areas suitable for the species.

c. Birds

Cooper's hawk (*Accipiter cooperi)* nesting
Range: Breeding resident in most wooded portions of California between sea level and 2700 m elevation. (CWHR 2019)
Nearest CNDDB occurrence: Approximately 17 miles westerly of the project site at Lake Natoma. (BIOS 2019)
Habitat requirements: Dense live oak, riparian deciduous or patchy woodland habitats near water. Feeds on small birds, mammals, reptiles and amphibians. Nests in deciduous trees or conifers, usually near streams (CWHR 2019). Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, in live oaks (CNDDB 2019).
Habitat quality on project site: Suitable nesting habitat is found near Dry Creek in the woodland near the north boundary of the project site.
Potential impacts: Removal of oak trees near the north property boundary could impact 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 construction is scheduled during the normal nesting season (February 1-August 31). If nests are found within or near proposed construction, contact California Department of Fish and Wildlife for oversight.

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 2019)
Nearest CNDDB occurrence: About 16 miles southwest of the project site near Rancho Murieta. (BIOS 2019)
Habitat requirements: Dry or well-drained grassland, especially native grassland with a mix of grasses and forbs for foraging and nesting. Uses scattered shrubs for singing perches. Nests on the ground in a slight depression at the base of overhanging grasses or forbs. (CWHR 2019)
Habitat on project site: Suitable in oak savannah; unsuitable in oak woodlands.
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 (February 1 through August 31). If nests are found within or near proposed construction, a 40-foot radius, fenced protection zone around the nest is recommended.

Long-eared owl (*Asio otus)* nesting
Range: Year-long resident throughout the state, except the Central Valley and Southern California deserts. (CWHR 2019)
Nearest CNDDB occurrence: Approximately 37 miles NNW near Beale Air Force Base. (BIOS 2019)
Habitat requirements: Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Requires adjacent open land, productive of mice, and the presence of old nests of crows, hawks, or magpies for breeding. (CNDDB 2019). Frequents dense, riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats (CWHR 2019).
Habitat quality on project site: Marginal in live oaks along Dry Creek near the north property boundary.
Potential impacts: None expected. On-site nesting habitat is located on ground that is too steep for development.

Western burrowing owl (*Athene cunicularia)* nesting colony

Range: Resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats (CWHR 2019). Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. (CNDDB 2019)
Nearest CNDDB occurrence: Approximately 11 miles southwesterly, south of Folsom. (BIOS 2019)
Habitat requirements: Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. (CNDDB 2019)
Habitat quality on project site: Marginal in grasslands, unsuitable in woodlands. Project site's savannah has rodent burrows, but no ground squirrel burrows were found, and the vegetative cover is likely too tall and dense for the species.
Potential impacts: Loss of potential habitat if development occurs in 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 (February 1 through August 31). If nests are found within or near proposed construction, a 40-foot radius, fenced protection zone around the nest is recommended.

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 2019)
Nearest CNDDB occurrence: Tuolumne County. (BIOS 2019)
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 2019)
Habitat quality on project site: Suitable within oak trees throughout the project site. The species was observed in oaks on each proposed parcel, and the birds were clearly voicing their territorial songs, but the nests were not located.
Potential impacts: Removal of oak trees for construction activities would impact 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 construction is scheduled during the normal nesting season (February 1 through August 31). If nests are found within or near proposed construction, a 40-foot radius, fenced protection zone around the nest is recommended.

Wrentit (*Chamaea fasciata)*

Range: Resident of California chaparral habitat. Also frequents shrub understory of coniferous and woodland habitats from the coast to lower regions of mountains throughout cismontane California. (CWHR 2019)
Nearest CNDDB occurrence: None.
Habitat requirements: Dense shrublands or brushy understory of woodlands (CWHR 2019).
Habitat quality on project site: Suitable in brushy areas within woodlands on the north slope of Parcels A and B. The species was heard singing on-site.
Potential impacts: None expected. Suitable habitat is located on slopes too steep for construction activities.

Lark sparrow *(Chondestes grammacus)* nesting
Range: Resident in lowlands and foothills throughout much of California. (CWHR 2019)
Nearest CNDDB occurrence: None. (BIOS 2019)
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. In woodlands, prefers younger stages and hardwoods (mostly oaks) rather than conifers. (CWHR 2019)
Habitat quality on project site: Suitable in savannah areas on the project site.
Potential impacts: Construction within grasslands would impact 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 construction is scheduled during the normal nesting season (February 1 through August 31). If nests are found within or near proposed construction, a 40-foot radius, fenced protection zone around the nest is recommended.

White-tailed kite *(Elanus leucurus)*
Range: Year-long resident in coastal and valley lowlands; rarely found away from agricultural areas (CWHR 2019).
Nearest CNDDB occurrence: Approximately 12 miles West, near Folsom Lake. (BIOS 2019)
Habitat requirements: Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching (CNDDB 2019).
Habitat quality on project site: Marginal in on-site grasslands, unsuitable in oak woodlands.
Potential impacts: Removal of oak trees near grasslands would impact 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 construction is scheduled during the normal nesting season (February 1 through August 31). If nests are found within or near proposed construction, consultation with California Department of Fish and Wildlife is required.

Merlin *(Falco columbarius)* wintering
Range: Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Occurs in most of the western half of the state below 1500 m (3900 ft). (CWHR 2019)
Nearest CNDDB occurrence: Approximately 17 miles southwesterly, near Lake Natoma, Sacramento County. (BIOS 2019)
Habitat requirements: Winter migrant that utilizes coastlines, open grasslands, open woodlands, lakes, wetlands, edges and early-succession stages. 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 2019)
Habitat quality on project site: Suitable throughout the project site.
Potential impacts: Loss of minimal amounts of potential winter foraging habitat due to construction.
Suggested mitigation: None required. The author of this report has witnessed Merlins foraging on properties as small as one acre. The species seems to adapt to development within its foraging grounds.

Loggerhead shrike *(Lanius ludovicianus)*
Range: Resident and winter visitor in lowlands and foothills throughout California (CWHR 2019).
Nearest CNDDB occurrence: Approximately 64 miles SW near Lathrop, CA. (BIOS 2019)
Habitat requirements: Prefers open habitats with scattered shrubs, trees, 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 (CWHR 2019).
Habitat quality on project site: Marginal in on-site oak woodlands. The project site is near the upper elevation limits of the species' range in the Sierra foothills.
Potential impacts: Construction within oak woodlands would impact 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 construction is scheduled during the normal nesting season (February 1 through August 31). If nests are found within or near proposed construction, a 40-foot radius, fenced protection zone around the nest is recommended.

Fox sparrow *(Passerella iliaca)*
Range: Summer range is in dense montane chaparral and brushy understory of other wooded, montane habitats; winters in brushy habitats in foothills and lowlands (CWHR 2019).
Nearest CNDDB occurrence: None. (CNDDB 2019)
Habitat requirements: Breeds in dense montane chaparral and brushy understory of other montane habitats. (CWHR 2019)
Habitat quality on project site: Suitable in brushy areas on steep slopes of Parcels A and B.
Potential impacts: None expected. Best habitat for the species is on slopes too steep for development.

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 2019).
Nearest CNDDB occurrence: None. (BIOS 2019)
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 2019)
Habitat quality on project site: Marginal nesting habitat in dead oaks within oak woodlands; suitable foraging habitat throughout the oak woodlands.
Potential impacts: Removal of oak trees would impact potential foraging 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 (February 1-August 31). A 40-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 2019)
Nearest CNDDB occurrence: Approximately 21 miles northwesterly in Placer County between Rocklin and Roseville. (CNDDB 2019)
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 2019)
Habitat quality on project site: Suitable forage areas throughout the project site, and suitable nesting habitat in oak woodlands.
Potential impacts: Removal of dead trees would impact potential 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 (February 1-August 31). A 40-foot setback from trees with active nests is recommended.

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 2019)
Nearest CNDDB occurrence: Sutter Buttes. (BIOS 2019)
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 2019)
Habitat quality on project site: Suitable nesting and foraging habitat is found in oak woodlands on the project site.
Potential impacts: Potential habitat will be impacted if trees are removed to facilitate construction.
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 40-foot setback from trees with active nests is recommended.

d. Mammals

Ringtail (*Bassariscus astutus)*
Range: Permanent resident in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. (CWHR 2019)
Nearest CNDDB occurrence: None. (CNDDB 2019)
Habitat requirements: Suitable habitat consists of a mixture of forest and shrubland in close association with rocky areas or riparian habitats. (CWHR 2019) Typically found in rocky areas with cliffs or crevices for daytime shelter; desert scrub, chaparral, pine-oak and conifer woodland. Usually within 0.5 mile of water. Dens usually in rock shelter; also in tree hollow, under tree roots, in burrow dug by other animal, in remote building, under brush pile. Changes dens often.
Habitat quality on project site: Suitable in oak woodlands on Parcels A and B.
Potential impacts: None expected. The best habitat for the species is found near the north property boundary on slopes too steep for development.

Pallid bat (*Antrozous pallidus*)
Range: Occupies grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests (CWHR 2019).
Nearest CNDDB occurrence: Approximately 8 miles northerly, at Coloma. (BIOS 2019)
Habitat requirements: Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites (CNDDB 2019). Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and open buildings (CWHR 2019).
Habitat quality on project site: Marginal. Project site has no caves or mines, but does have outbuildings which may offer roosting habitat; however, the buildings may have too much human disturbance for the species.
Potential impacts: None expected.

Townsend's big-eared bat (*Corynorhinus townsendii*)
Range: Found throughout California except subalpine and alpine habitats. Most abundant in mesic habitats. (CWHR 2019)
Nearest CNDDB occurrence: Approximately 16 miles NNE of the project site, at Auburn State Recreation Area. (BIOS 2019)
Habitat requirements: Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. Hibernation sites are cold, but not below freezing. Maternity roosts are in relatively warm caves, tunnels, mines, and buildings. Small moths are the principal food of this species; captures prey in flight, or gleans from trees or brush. Also feeds along habitat edges. Prefers mesic sites. Extremely sensitive to disturbance of roosting sites; may abandon a site following one disturbance. (CWHR 2019)
Habitat quality on project site: Marginal. Project site has no caves or mines, but does have outbuildings which may offer roosting habitat; however, the buildings may have too much human disturbance.
Potential impacts: None expected.

North American porcupine (*Erethizon dorsatum*)
Range: Found throughout the Sierra Nevada and Cascades from Kern Co. north to the Oregon border, south in the Coast Ranges to Sonoma Co., and from San Mateo Co. south to Los Angeles Co.
Nearest CNDDB occurrence: Approximately six miles NNW, near Chili Bar. (BIOS 2019)
Habitat requirements: Most common in montane conifer, Douglas-fir, alpine dwarf-shrub, and wet meadow habitats. Less common in hardwood, hardwood-conifer, montane and valley-foothill riparian, aspen, pinyon-juniper, low sage, sagebrush, and bitterbrush habitats. Requires forest with a good understory of herbs, grasses, and shrubs. Prefers open stands of conifers. In spring and summer, uses meadows, brushy and riparian habitats for feeding. In winter, restricted to forests. In relatively arid regions, somewhat restricted to riparian habitats. Dens in caves, crevices in rocks, cliffs, hollow logs, snags, burrows of other animals; will use dense foliage in trees if other sites are unavailable (CWHR 2019).
Habitat quality on project site: Marginal in the oak woodlands in the northern portion of the project site. The site is a relatively arid habitat and lacks riparian vegetation, caves and rock outcrops. Species could use hollow logs or dense foliage of on-site trees for dens, and oaks and other vegetation for food.
Potential impacts: None expected. Potential habitat for the species is on steep slopes in the northern portion of the site that are unsuitable fore developent.

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 2019)
Nearest CNDDB occurrence: Approximately 4 miles NE of the project site at Placerville. (BIOS 2019)
Habitat requirements: Lower montane coniferous forest, old-growth, and riparian forest. Summer habitats include coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats. Primarily a coastal and montane forest dweller feeding over streams, ponds and open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes and rarely under rocks. Needs drinking water. (CNDDB 2019)
Habitat quality on project site: Marginal. Project site has no coniferous forest, which is the species' preferred habitat, but does offer suitable foraging areas.
Potential impacts: None expected.

Hoary bat (*Lasiurus cinereus)*
Range: Found throughout California at elevations between sea level and 4125 m (13,200 ft), but distribution is patchy in southeastern deserts. (CWHR 2019)
Nearest CNDDB occurrence: Approximately 21 miles southeasterly at Grizzley Flats. (BIOS 2019)
Habitat requirements: Preferred habitats are open or mosaic sites with access to trees for cover and open areas or habitat edges for feeding. Young are raised at roosts within woodlands and forests with medium to large-size trees and dense foliage. Generally roosts in dense foliage of medium to large trees. Preferred roosts are trees with sites hidden from above but with few branches below, and having ground cover with low reflectivity. Feeds mostly on moths and requires drinking water. (CWHR 2019, CNDDB 2019)
Habitat quality on project site: Suitable roost sites in oak woodlands, and suitable forage areas throughout the project site.
Potential impacts: Removal of oak trees would impact potential habitat for the species.
Suggested mitigation: Replanting any oak trees removed, combined with other requirements of El Dorado County's Oak Resources Conservation Ordinance, would be adequate to mitigate loss of potential habitat for the species.

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 2019)
Nearest CNDDB occurrence: Approximately 7 miles NE of the project site, near Chili Bar. (BIOS 2019)
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 2019)
Habitat quality on project site: Suitable foraging habitat throughout the project site, marginal breeding sites in on-site barns.
Potential impacts: Loss of minimal amounts of potential habitat if trees are removed during project construction.
Suggested mitigation: Replanting oak trees removed, combined with other requirements of El Dorado County's Oak Resources Conservation Ordinance, would be adequate to mitigate loss of potential habitat for the species.

e. Plants

Big-scale balsamroot (*Balsamorhiza macrolepis*)
Range: Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama and Tuolumne counties. (CNPS 2019)
Nearest CNDDB occurrence: Approximately 14 miles NW near Folsom Lake. (BIOS 2019)
Habitat requirements: Found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, between 35 and 1465 meters elevation. (CNDDB 2019)
Habitat quality on project site: Suitable within on-site grasslands.
Potential impacts: No direct impact as the species was not found on-site. Development within grasslands would impact potential habitat for the species.

Watershield (*Brasenia schreberi*)
Range: Butte, El Dorado, Fresno, Kern, Lake, Lassen, Mendocino, Nevada, Plumas, Sacramento, Shasta, Siskiyou, San Joaquin, Sutter, Tehama, Tulare, and Tuolumne counties (CNPS 2019).
Nearest CNDDB occurrence: Approximately 40 miles SW at Stone Lake National Wildlife Refuge. (BIOS 2019)
Habit requirements: Freshwater marshes and swamps, 1-2180 meters elevation. (CNDDB 2019)
Habitat quality on project site: Suitable in the on-site pond.
Potential impacts: No direct impact as the species was not found on-site. Enhanced 105-foot setback from the pond would be sufficient to protect potential habitat for the species.

Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*)
Range: Butte, El Dorado, Nevada, Placer, Sacramento, Sierra and Yuba counties (CNPS 2019); distribution outside California: Alaska, eastern United States (Jepson 2019).
Nearest CNDDB occurrence: Approximately 6 miles north, near Coloma. (CNDDB 2019)
Habitat requirements: Often on roadcuts within chaparral, cismontane woodland and lower montane coniferous forest.; 75-915 meters elevation. (CNPS 2019)
Habitat quality on project site: Suitable on an old roadcut on Parcel B. *Clarkia biloba* ssp. *biloba* was found on-site, but not *C. b.* ssp. *brandegeeae*.
Potential impacts: No direct impacts. The species was not found on the project site.

Sierra clarkia (*Clarkia virgata*)
Range: Amador, Calaveras, El Dorado,Mariposa, Plumas and Tuolumne counties (CNPS 2019).
Nearest CNDDB occurrence: Approximately 50 miles NE along the Truckee River. (CNDDB 2019)
Habitat requirements Lower margin of the montane forest and adjacent oak-grey pine woodland. 400-1615 m.. (CNDDB 2019)
Habitat quality on project site: Marginal. Project site has oak-foothill pine habitat, but is far-removed from the margin of montane forest habitat.
Potential impacts: No direct impacts. The species was not found on the project site.

Ewan's larkspur (*Delphinium hansenii* ssp. *ewanianum*)
Range: Calaveras, Fresno, Kern, Madera, Merced and Tulare counties (CNPS 2019).
Nearest CNDDB occurrence: None (CNDDB 2019)
Habitat requirements: Rocky soils within cismontane woodland and valley and foothill grasslands between 60 and 600 m. elevation (CNDDB 2019).
Habitat quality on project site: Suitable throughout the project site.
Potential impacts: No direct impacts. The species was not found on the project site, and is out of the known range of the species.

American manna grass (*Glyceria grandis*)
Range: El Dorado, Fresno, Humboldt, Mendocino, Mono, Placer and Tulare counties (CNPS 2019); distribution outside California: Alaska, eastern United States (Jepson 2019).
Nearest CNDDB occurrence: Approximately 50 miles NE along the Truckee River. (CNDDB 2019)
Habitat requirements: Bogs and fens, meadows and seeps, marshes and swamps, streambanks and lake margins; 15-1980 meters elevation. (CNPS 2019)
Habitat quality on project site: Suitable on pond margins and within wetlands on the project site.
Potential impacts: No direct impacts. The species was not found on-site, and normal setbacks from the pond and wetlands are sufficient to protect potential habitat for the species.

Dubious pea (*Lathyrus sulphureus* var. *argillaceus*)
Range: Calaveras, El Dorado, Nevada, Placer, Shasta and Tehama counties. (CNPS 2019)
Nearest CNDDB occurrence: Auburn area. (BIOS 2019)
Habitat requirements: Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, between 150 and 930 meters elevation. (CNDDB 2019)
Habitat quality on project site: Suitable within forested areas on Parcels A and B.
Potential impacts: No direct impacts, as the species was not found on-site. Development within oak woodlands would impact potential habitat for the species.

Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*)
Range: Amador, Butte, Calaveras, El Dorado, Fresno, Mariposa, Nevada, Placer, Tehama, Tuolumne and Yuba counties. (CNPS 2019)
Nearest CNDDB occurrence: None. (BIOS 2019)
Habitat requirements: Openings in chaparral, cismontane woodland or lower coniferous forest, between 90 and 1280 meters elevation (CNPS 2019).
Habitat quality on project site: Suitable within oak woodlands on the project site.
Potential impacts: No direct impacts; the species was not found on-site. Development within oak woodlands would impact potential habitat for the species.

Northern bugleweed (*Lycopus uniflorus*)
Range: Del Norte, Humboldt, Lassen, Nevada, Placer, Plumas, Shasta, Siskiyou, and Tuolumne counties (CNPS 2019); distribution outside California: to British Columbia, eastern United States (Jepson 2019).
Nearest CNDDB occurrence: None. (BIOS 2019)
Habitat requirements: Bogs, fens, marshes, swamps and wet places, 5-2000 m. elevation (CNDDB 2019).
Habitat quality on project site: Suitable within on-site wetlands.
Potential impacts: No direct impact as the species was not found on-site. Normal setbacks from wetlands would protect potential habitat for the species.

Narrow-petaled rein orchid (*Piperia leptopetala*)
Range: El Dorado, Fresno, Lake, Los Angeles, Monterey, Mariposa, Nevada, Orange, Plumas, Riverside, San Bernardino, San Benito, Santa Clara, San Diego, Shasta, Siskiyou, San Luis Obispo, Sonoma, and Tulare counties (CNPS 2019).
Nearest CNDDB occurrence: None. (BIOS 2019)
Habitat requirements: Generally dry sites in cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, 380-2225 meters elevation. (Jepson 2019, CNPS 2019)
Habitat quality on project site: Suitable within oak woodlands on Parcels A and B.
Potential impacts: No direct impacts, as the species was not found on-site. Development within oak woodlands would impact potential habitat for the species.

Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)
Range: El Dorado, Madera, Mendocino, Modoc, Mariposa, Placer, Plumas, Shasta and Tuolumne counties (CNPS 2019).
Nearest CNDDB occurrence: Approximately 36 miles ENE at Wrights Lake . (BIOS 2019)
Habitat requirements: Shallow water, ponds, lakes and streams; elevation: 400--1900 m. (Jepson 2019)
Habitat quality on project site: Suitable within on-site pond.
Potential impacts: No direct impacts, as the species was not found on-site. Enhanced 105-foot setback from the pond would be sufficient to protect potential habitat for the species.

Sanford's arrowhead (*Sagittaria sanfordii*)
Range: Butte, Del Norte, El Dorado, Fresno, Mariposa, Merced, Marin, Napa, Orange, Placer, Sacramento, San Bernardino, Shasta, San Juaquin, Solano, Tehama, Tulare, Ventura and Yuba counties. (CNPS 2019)
Nearest CNDDB occurrence: Approximately 12 miles WSW in Sacramento County. (BIOS 2019)
Habitat requirements: In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m (CNDDB 2019).
Habitat quality on project site: Suitable in the pond on the project site..
Potential impacts: No direct impacts; the species was not found on-site. Enhanced 105-foot setback from the pond would be sufficient to protect potential habitat for the species.

Slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpina*)
Range: Alameda, Butte, Contra Costa, El Dorado, Lassen, Merced, Mono, Modoc, Mariposa, Nevada, Placer, Santa Clara, Shasta, Sierra, San Mateo, Solano and Sonoma counties. (CNPS 2019)
Nearest CNDDB occurrence: Approximately 45 miles ENE at Lake Tahoe. (BIOS 2019)
Habitat requirements: Shallow, clear water of lakes and drainage channels; marshes and swamps, 5-2325 m (CNDDB 2019).
Habitat quality on project site: Suitable in the pond on the project site..
Potential impacts: No direct impacts; the species was not found on-site. Enhanced 105-foot setback from the pond would be sufficient to protect potential habitat for the species.

Oval-leaved viburnum (*Viburnum ellipticum*)
Range: Alameda, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Lake, Mendocino, Mariposa, Napa, Placer, Shasta, Solano, Sonoma, and Tehama counties. (CNPS 2019)
Nearest CNDDB occurrence: Placerville, collected in 1901; more recent occurrences near Lake Clementine, Placer County. (BIOS 2019)
Habitat requirements: Found in chaparral, cismontane woodland or lower montane coniferous forest between 215 and 1400 m elevation (CNPS 2019). Generally found on north-facing slopes (Jepson 2019).
Habitat quality on project site: Suitable on north slopes on Parcels A and B.
Potential impacts: No direct impacts, as the species was not found on-site. Suitable habitat is found on slopes too steep for development.

F. Special Habitats

Sacramento-San Juaquin Foothill/Valley Ephemeral Stream
Two ephemeral ravines, tributaries to Dry Creek, were found on north slopes within the on-site oak woodlands, and one ephemeral swale, tributary to Slate Creek, drains the southern portions of the project site. **Potential impacts**: None expected. Normal setbacks from waters, wetlands and channels would be sufficient to protect the ephemeral features found on the project site. In addition, the ravines are on slopes too steep for development.

VII. Important Biological Corridor Evaluation

The study area is within an Important Biological Corridor. El Dorado County General Plan Policy 7.4.2.9. Guidelines are listed below in bold type, and the projects compliance with each point follows.

a. Increased minimum parcel size.
The project site is zoned RE-5, allowing 5-acre minimum parcels. The project would create parcels 7.3 acres or larger.

b. Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands.
Oak canopy retention on each parcel would be more than 99 percent for each parcel.

c. Lower thresholds for grading permits.
See Tentative Parcel Map for limits of grading for this project.

d. Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss.
No wetlands would be impacted by this project.

e. Increased riparian corridor and wetland setbacks.
Setbacks for perennial ponds have been increased to 105 feet, and for wetlands and water channels, 55 feet.

f. 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 Game).
No rare plants were found on the project site.

g. Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities.
The parcels created by the Parcel Map would have a minimum size of 7.3 acres, whereas it is zoned for five acre parcels.

h. Building permits discretionary or some other type of "site review" to ensure that canopy is retained.
This report, together with a Biological Resources report and a Wetland Delineation report are being filed with the tentative map to satisfy this requirement.

i. More stringent standards for lot coverage, floor area ratio and building height.
See Tentative Parcel Map for suggested building areas.

j. No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).
It is suggested that fences be limited to those needed to contain livestock and pets, and to project crops.

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APPENDIX A

United States Fish and Wildlife Service
Official Species List
Generated December 6, 2018
Updated June 6, 2019

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Consultation Code: 08ESMF00-2019-SLI-0540
Event Code: 08ESMF00-2019-E-06775
Project Name: Devlin Parcel Map

June 06, 2019

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2019-SLI-0540

Event Code: 08ESMF00-2019-E-06775

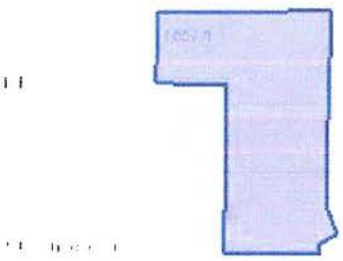
Project Name: Devlin Parcel Map

Project Type: DEVELOPMENT

Project Description: Subdivide 37.45 acre parcel into three single-family residential lots.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.688350807721704N120.8743040098239W



Counties: El Dorado, CA

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Flowering Plants

NAME	STATUS
El Dorado Bedstraw *Galium californicum ssp. sierrae* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5209	Endangered
Layne's Butterweed *Senecio layneae* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4062	Threatened
Pine Hill Ceanothus *Ceanothus roderickii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3293	Endangered
Pine Hill Flannelbush *Fremontodendron californicum ssp. decumbens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4818	Endangered
Stebbins' Morning-glory *Calystegia stebbinsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3991	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX B

United States Fish and Wildlife Service
IpaC Trust Resource Report
Generated December 6, 2018

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

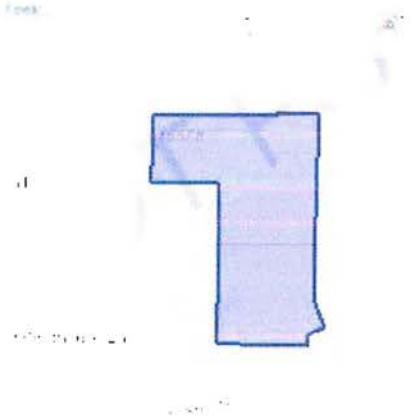
Project information

NAME

Devlin Parcel Map

LOCATION

El Dorado County, California



DESCRIPTION

Subdivide 37.45 acre parcel into three or four single-family residential lots.

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Flowering Plants

NAME	STATUS
El Dorado Bedstraw Galium californicum ssp. sierrae No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5209	Endangered
Layne's Butterweed Senecio layneae No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4062	Threatened
Pine Hill Ceanothus Ceanothus roderickii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3293	Endangered
Pine Hill Flannelbush Fremontodendron californicum ssp. decumbens No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4818	Endangered
Stebbins' Morning-glory Calystegia stebbinsii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3991	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS

ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus — **Breeds Jan 1 to Aug 31**
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

California Thrasher Toxostoma redivivum — **Breeds Jan 1 to Jul 31**
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — **Breeds Apr 15 to Jul 20**
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Wrentit Chamaea fasciata — **Breeds Mar 15 to Aug 10**
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ( )

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

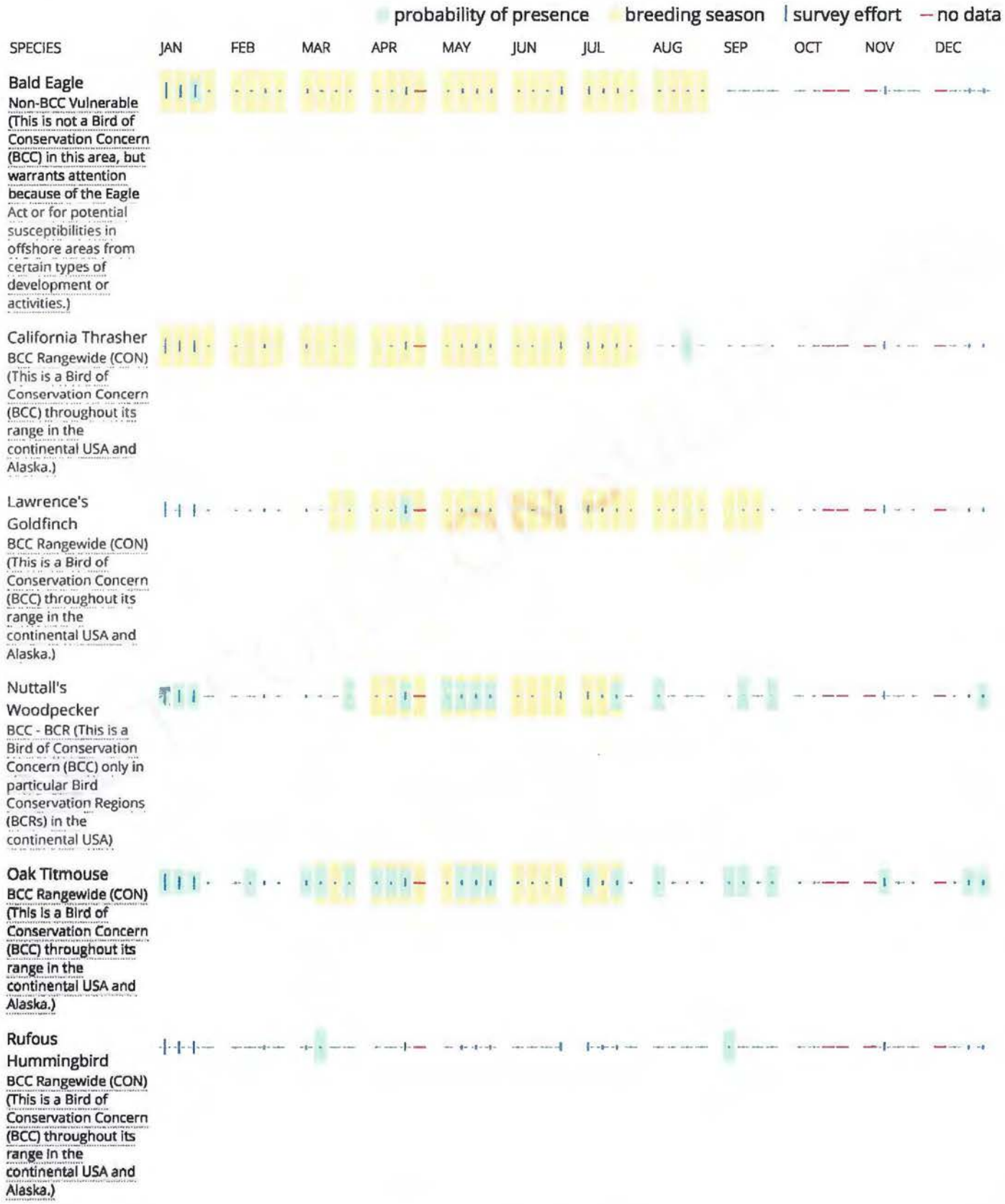
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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.

APPENDIX C

California Department of Fish and Game
Natural Diversity Database RareFind 5 Report
Placerville and Surrounding USGS Quads
Dated June 1, 2019

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Placerville (3812067) OR Garden Valley (3812077) OR Slate Mtn. (3812076) OR Camino (3812066) OR Aukum (3812056) OR Fiddletown (3812057) OR Latrobe (3812058) OR Shingle Springs (3812068) OR Coloma (3812078))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Allium jepsonii Jepson's onion	PMLIL022V0	None	None	G2	S2	1B.2
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
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	
'ombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Calochortus clavatus var. avius Pleasant Valley mariposa-lily	PMLIL0D095	None	None	G4T2	S2	1B.2
Calystegia stebbinsii Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
Calystegia vanzuukiae Van Zuuk's morning-glory	PDCON040Q0	None	None	G2Q	S2	1B.3
Carex cyrtostachya Sierra arching sedge	PMCYP03M00	None	None	G2	S2	1B.2
Carex xerophila chaparral sedge	PMCYP03M60	None	None	G2	S2	1B.2
Ceanothus roderickii Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.1
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Central Valley Drainage Resident Rainbow Trout Stream Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	GNR	SNR	
Chlorogalum grandiflorum Red Hills soaproot	PMLIL0G020	None	None	G3	S3	1B.2
Clarkia biloba ssp. brandegeeae Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cosumnoperla hypocrena Cosumnes stripetail	IIPLE23020	None	None	G2	S2	
Crocanthemum suffrutescens Bisbee Peak rush-rose	PDCIS020F0	None	None	G2?Q	S2?	3.2
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
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
Horkelia parryi Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Packera layneae Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Pekania pennanti fisher - West Coast DPS	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sacramento-San Joaquin Foothill/Valley Ephemeral Stream Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA	None	None	GNR	SNR	
Strix nebulosa great gray owl	ABNSB12040	None	Endangered	G5	S1	
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
Wyethia reticulata El Dorado County mule ears	PDAST9X0D0	None	None	G2	S2	1B.2

Record Count: 37

APPENDIX D

California Native Plant Society
On-line Inventory of Rare and Endangered Plants
Placerville and Surrounding USGS Quads
online v8-03 0.39

CNPS California Native Plant Society

Plant List

41 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1B, 2B, 3, 4], Found in El Dorado County, Elevation is above 1400 or below 1700 feet

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	4.3	S3	G4T3
Allium sanbornii var. sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	4.2	S3S4	G4T3T4
Arctostaphylos mewukka ssp. truei	True's manzanita	Ericaceae	perennial evergreen shrub	Feb-Jul	4.2	S3	G4?T3
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar(Jun)	1B.2	S1	G1
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	2B.3	S3	G5
Calochortus clavatus var. avius	Pleasant Valley mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G4T2
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	1B.1	S1	G1
Calystegia vanzuukiae	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	May-Aug	1B.3	S2	G2Q
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	1B.2	S2	G2
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	May-Aug	4.3	S3	G3
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2?	G2?Q
Epilobium oreganum	Oregon fireweed	Onagraceae	perennial herb	Jun-Sep	1B.2	S2	G2
	northern Sierra daisy	Asteraceae	perennial rhizomatous	Jun-Oct	4.3	S4	G4T4

Erigeron petrophilus var. sierrensis			herb				
Eriogonum tripodum	tripod buckwheat	Polygonaceae	perennial deciduous shrub	May-Jul	4.2	S4	G4
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	3.2	S3	G3Q
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1
Githopsis pulchella ssp. serpentinicola	serpentine bluecup	Campanulaceae	annual herb	May-Jun	4.3	S3	G4T3
Glyceria grandis	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	2B.3	S3	G5
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2
Jepsonia heterandra	foothill jepsonia	Saxifragaceae	perennial herb	Aug-Dec	4.3	S3	G3
Lathyrus sulphureus var. argillaceus	dubious pea	Fabaceae	perennial herb	Apr-May	3	S1S2	G5T1T2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	4.2	S3	G4T3
Monardella candicans	Sierra monardella	Lamiaceae	annual herb	Apr-Jul	4.3	S4	G4
Myrica hartwegii	Sierra sweet bay	Myricaceae	perennial deciduous shrub	May-Jun	4.3	S4	G4
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
Piperia leptopetala	narrow-petaled rein orchid	Orchidaceae	perennial herb	May-Jul	4.3	S4	G4
Poa sierrae	Sierra blue grass	Poaceae	perennial rhizomatous herb	Apr-Jul	1B.3	S3	G3
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul-Sep	2B.2	S2S3	G5
Rhynchospora capitellata	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
Scutellaria galericulata	marsh skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Sep	2B.2	S2	G5
Stuckenia filiformis ssp. alpina	slender-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	2B.2	S2S3	G5T5
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2

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APPENDIX E

Evaluation of Special-Status Species
with Known Occurrences in
Placerville 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 = Critically Imperiled—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 or S2 or T2 = Imperiled—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 or S3 or T3 = Vulnerable—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 or S4 or T4 = Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 or S5 or T5 = Common; widespread and abundant.
GNR = Unranked—Global rank not yet assesse

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

BCC = Birds of Conservation Concern designated by U.S. Fish and Wildlife Service
CDF = California Department of Forestry
S= Sensitive species needing protection during timber operations.
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				
Bombus occidentalis Western bumble bee	— / — (USFS:S)	G2G3 S1	Open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. (CNDDB 2016) Nests in abandoned rodent burrows; overwinters in holes in the ground dug by gravid queens. Generalist forager. (USFS, BLM 2010)	Yes. See text for further discussion.
Cosumnoperla 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 2017)	No. Project site has no intermittent streams.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	T / —	G3T2 S2	Occurs only in the Central Valley of California in association with blue elderberry Sambucus mexicana). (CNDDB 2017)	No. The host plant was not found on the project site.
Fish				
Hypomesus transpacificus **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.
Amphibians				
Rana boylii Foothill yellow-legged frog	— / — (SSC)	G3 S3	Found in or near perennial, rocky streams in a variety of habitats from sea level to 1940 m (6370 ft) elevation. (CWHR 2017) Partly-shaded, shallow streams & riffles with a rocky substrate. (CNDDB 2017)	No. Project site has no perennial streams.
Rana draytonii **California red-legged frog**	**T** / — (SSC)	G2G3 S2S3	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. (CNDDB 2017)	No. The on-site pond lacks suitable emergent vegetation.
Reptiles				
Emys marmorata Western pond turtle	— / — (SSC)	G3G4 S3	Aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and sandy banks or grassy open-field habitat up to 0.5 km from water for egg-laying. (CNDDB 2017)	Yes. See text for further discussion.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Phrynosoma blainvillii Coast horned lizard	— / — (SSC)	G3G4 S34	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Needs open areas for sunning and abundant ants and other insects. (CNDDB 2017)	Yes. See text for further discussion.
Birds				
Accipiter cooperii (nesting) Cooper's hawk	— / — (IUCN:LC)	G5 S4	Nests in deciduous trees in riparian areas, second-growth conifers and live oaks near streams. (CNDDB 2017)	Yes. See text for further discussion.
Accipiter striatus (nesting) Sharp-shinned hawk	— / — (CDFW:WL)	G5 S4	Ponderosa pine, black oak, riparian deciduous, mixed conifer & Jeffrey pine habitats. Prefers riparian areas. Nests usually within 275 ft of water. (CNDDB 2017)	No. Project site has none of the habitats utilized by the species.
Agelaius tricolor (nesting colony) Tricolored blackbird	— / **CE** (SSC)	G2G3 S1S2	Dense thickets of cattail, tule, willow, blackberry, wild rose or tall herbs near or emergent from water (CWHR 2017) Requires open water, protected nesting substrate with foraging area within a few km of nesting colony. (CNNDB 2017)	No. On-site pond lacks suitable emergent vegetation.
Ammodramus savannarum (nesting) Grasshopper sparrow	— / — (SSC)	G5 S2	Summer resident and breeder in dry, dense grasslands with scattered shrubs in foothills and lowlands west of Sierra-Cascade ranges. Uses shrubs for singing perches. (CWHR 2017)	Yes. See text for further discussion.
Aquila chrysaetos (nesting and wintering) Golden eagle	— / — (IUCN:LC)	G5 S3	Nests on cliffs and in large trees in large open areas in rolling foothills, mountains, sage-juniper flats and deserts. Home range in Northern California averages 124 km^2 (48 mi^2). (CWHR 2017, CNDDB 2017)	No. Project site has no large open areas suitable for the species.
Ardea alba (rookery) Great egret	— / — (CDF:S)	G5 S4	Nests in large trees near marshes, tide-flats, irrigated pastures, margins of lakes and rivers. (CWHR 2017)	No. Project site lacks wetlands and waters large enough to support a rookery.
Ardea herodias (rookery) Great blue heron	— / — (CDF:S)	G5 S4	Forages in marshes, lakes margins, tide-flats, rivers, streams, wet meadows. Nests in colonies in tall trees, cliffsides, and marshes near forage sites. Sensitive to human disturbance near nests. (CWHR 2017)	No. Project site lacks wetlands and waters large enough to support a rookery.

Special-status Species Common Name	**Listing Status Federal / State (OTHER)**	**CNDDB Rank Global/State**	**Habitat Requirements**	**Potential to occur on project site?**
Asio otus (nesting) Long-eared owl	— / — (SSC)	G5 S3?	Riparian habitat required; also uses live oak thickets and other dense stands of trees paralleling stream courses having adjacent open lands for foraging. (CNDDB 2017)	Yes. See text for further discussion.
Athene cunicularia (burrow sites) Western burrowing owl	— / — (SSC)	G4 S3	Open, dry grassland and desert habitats; in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Nest sites dependent upon burrowing animals, especially the California ground squirrel (CWHR 2017, CNDDB 2017)	Yes. See text for further discussion.
Baeolophus inornatus (nesting) Oak titmouse	— / — (BCC)	G4 S4	Primarily associated with oaks; prefers open woodlands of oak, pine and oak, juniper and pinyon. Ventures into residential areas. (CWHR 2017)	Yes. See text for further discussion.
Buteo regalis (wintering) Ferruginous hawk	— / — (SSC)	G4 S3S4	Requires large, open tracts of grasslands, sparse shrub, or desert habitats with elevated structures for nesting. (CWHR 2017)	No. Grasslands on-site are not large enough to be suitable for the species..
***Buteo swainsoni* (nesting)** **Swainson's hawk**	— / **T** (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 2017)	No. Project site is not within the range of the species.
Chamaea fasciata Wrentit	— / — ((IUCN:LC)	G5 SNR	Resident in chaparral habitat. Also frequents shrub understory of coniferous habitats from the coast to lower regions of mountains throughout cismontane California. (CWHR 2018)	Yes. Specie was detected on-site. See text for further discussion.
Charadrius montanus (wintering) Mountain plover	— / — (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 2017) Prefers grazed areas and areas with burrowing rodents. (CNDDB 2017)	No. Project site has no short-grass habitat.

Special-status Species Common Name	**Listing Status Federal / State (OTHER)**	**CNDDB Rank Global/State**	**Habitat Requirements**	**Potential to occur on project site?**
Chondestes grammacus (nesting) Lark sparrow	— / — (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 2017)	Yes. See text for further discussion.
Circus cyaneus (nesting) Northern harrier	— / — (SSC)	G5 S3	Frequents meadows, grasslands, open rangelands, desert sinks, wetlands; seldom found in wooded areas. Nests on ground in shrubby vegetation, usually at edge of marsh or along rivers or lakes, up to 1700 m in the Sierra Nevada. (CWHR 2017)	No. Project site lacks suitable vegetation near marshes, lakes or rivers.
Contopus cooperi (nesting) Olive-sided flycatcher	— / — (SSC)	G4 S4	Conifer or mixed hardwood/conifer forests (montane hardwood-conifer). Requires high perches with expansive views (across canyons, meadows, lakes) for singing and hunting. (CWHR 2017)	No. Project site has no montane hardwood-conifer habitat.
Elanus leucurus (=*Elanus caeruleus*) White-tailed kite (=Black-shouldered kite) (nesting)	— / — (CDFW: FP) (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 2017)	Yes. See text for further details.
Empidonax traillii brewsteri (nesting) **Little willow flycatcher**	— / **E**	G5T3T4 S1S2	Wet meadows and montane riparian vegetation, 600-2500 m (2000 to 8000 ft) elevation. Dense willow thickets are required for nesting and roosting. (CWHR 2017)	No. Project site is not within the range of the species and lacks suitable vegetation.
Falco columbarius (wintering) Merlin	— / — (IUCN: LC)	G5 S4	Winter migrant utilizing habitats from grassland to Ponderosa pine and montane hardwood-conifer below 1500 m. Roosts in dense tree stands near water. (CWHR 201)	Yes. See text for further discussion.
Falco mexicanus (nesting) Prairie falcon	— / — (IUCN: LC)	G5 S4	Inhabits dry, open terrain in hills, valleys or plains. Nests on ledge of cliff overlooking open area. (CWHR 2017)	No. Project site has no cliffs required for nesting by the species.
Falco peregrinus anatum **(nesting)** **American peregrine falcon**	**D / D** (IUCN: LC)	G4T3 S3S4	Requires protected cliffs and ledges for cover. Breeds near water on high cliffs, banks, dunes, mounds; occasionally in tree or snag cavities or old nests of other raptors. (CWHR 2017)	No. Project site has no cliffs required for nesting by the species.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Haliaeetus leucocephalus (nesting, wintering) **Bald eagle**	**D / E**	G5 S2	Large bodies of water or free-flowing rivers with abundant fish, and adjacent snags or other perches. Usually nests in ponderosa pin or other open-branchwork tree. (CWHR 2017)	No. Project site has no large water bodies required by the species.
Icteria virens (nesting) Yellow-breasted chat	— / — (SSC)	G5 S3	Nests in dense riparian habitats dominated by willows, blackberry vines and grapevines. (CWHR 2017, CNDDB 2017)	No. Project site lacks suitable riparian vegetation.
Lanius ludovicianus (nesting) Loggerhead shrike	— / — (SSC)	G4 S4	Found in lowlands and foothills of California, within open habitats in valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, desert riparian and Joshua tree habitats. Nests in densely-foliated shrub or tree (CWHR 2017)	Yes. See text for further discussion.
Melanerpes lewis (nesting) Lewis's woodpecker	— / — (IUCN: LC)	G4 S4	Open oak savannah, broken deciduous and coniferous habitats. Nests in Coast Ranges, Modoc Plateau and eastern slope of Sierra Nevada. (CWHR 2017)	No. Project site is outside of the known nesting range of the species. Species may use site in winter.
Melospiza melodia (Modesto population) Modesto song sparrow	— / — (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 outside of the elevation range used for nesting by the species.
Passerella iliaca Fox sparrow	— / — (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 2017)	Yes. See text for further discussion.
Pica nuttallii (nesting and communal roosts) Yellow-billed magpie	— / — (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 2017)	No. Project site is not within 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?**
Picoides nuttallii (nesting) Nuttall's woodpecker	— / — (BCC)	G4G5 S4S5	Permanent resident of low-elevation riparian deciduous and oak habitats. Frequents a mix of deciduous riparian and adjacent oak habitats. Requires snags and dead limbs for nest excavation. (CWHR 2017)	Yes. See text for further discussion.
Pipilo maculatus clementae San Clemente spotted towhee	— / — (BCC)	G5 SNRB	Resident of and endemic to two California Channel Islands. (Shuford & Gardali, 2008)	No. Project site is far-removed from the Channel Islands.
Progne subis (nesting) Purple martin	— / — (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 2017)	Yes. See text for further discussion.
Riparia riparia (nesting) **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 2017)	No. Project site has no vertical banks or cliffs required by the species.
Selasphorus rufus (breeding) Rufous hummingbird	— / — (BCC)	G5 S1S2	Found in foothill and montane habitats that provide nectar-producing flowers, during migration to/from breeding areas in Oregon, Washington & Trinity Mts.	No. Project site is outside the breeding range of the species, but offers suitable migration habitat.
Spinus lawrencei (nesting) Lawrence's goldfinch	— / — (BCC)	G3G4 S3	Breeds in open oak or other arid woodland near water. Prefers to nest in an oak, but also uses chaparral. (CWHR 2017)	Yes. See text for further discussion.
Spizella atrogularis Black-chinned sparrow	— / — (IUCN:LC)	G5 S3	Summer resident inhabiting tall, dense chaparral on dry, often south-facing slopes, also sagebrush and montane chaparral. Associated with chamise, ceanothus, manzanita and sagebrush habitats.	No. Project site has no chaparral habitat.
Strix nebulosa **Great gray owl**	— / **T**	G5 S1	Resident at 1400 to 2300 m (4500-7500 ft) in the Sierra Nevada from the vicinity of Quincy, Plumas Co. south to the Yosemite region. Breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows. (CWHR 2018)	No. Project site is lower in elevation than the known range of the species and lacks suitable conifer habitats.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Toxostoma redivivum California thrasher	— / — (BCC)	G5 SNR	Resident of foothills and lowlands in cismontane California. Occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open valley foothill riparian habitat. Avoids dense tree canopy. (CWHR 2018)	No. Project site has neither chaparral nor riparian habitats utilized by the species.
Mammals				
Antrozous pallidus Pallid bat	— / — (SSC)	G5 S3	Resident in a wide variety of habitats from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. (CWHR 2018)	Yes. See text for further discussion.
Corynorhinus townsendii Townsend's big-eared bat	— / — (SSC)	G3G4 S2	Found throughout California in a wide variety of habitats, except subalpine and alpine habitats. Most common in mesic sites. Extremely sensitive to human disturbance. (CNDDB 2017) Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. (CWHR 2017)	Yes. See text for further discussion.
Erethizon dorsatum North American porcupine	— / — (IUCN: LC)	G5 S3	Species' habitats include: Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest and Upper montane coniferous forest.	Yes. See text for further discussion.
Lasionycteris noctivagans Silver-haired bat	— / — (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 2017)	Yes. See text for further discussion.
Lasiurus cinereus Hoary bat	— / — (IUCN: LC)	G5 S4	Found in broadleaf upland forest, cismontane woodland, lower montane coniferous forest and north coast coniferous forest. Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Requires water. (CNDDB 2017)	Yes. See text for further discussion.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Myotis thysanodes Fringed myotis bat	— / — (IUCN: LC)	G4 S3	Occurs in a wide variety of habitats, except Central Valley and Colorado and Mojave deserts. Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer, generally at 1300-2200 m (4000-7000 ft). Roosts in caves, mines, buildings, and crevices. (CWHR 2017)	No. Project site is lower in elevation than the usual range of the species.
Myotis yumanensis Yuma myotis	— / — (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 2017)	Yes. See text for further discussion.
Pekania pennanti Fisher–West Coast DPS (Distinct Population Segment)	**CT / CT** (SSC)	G5T2T3Q S2S3	Suitable habitat is large areas of mature, dense coniferous forest stands or deciduous-riparian habitats with ≥50% canopy closure. Feeds on lagomorphs, rodents, shrews, birds, burit and carrion (CWHR 2017). Needs large areas of mature, dense forest. (CNDDB 2017)	No. Project site lacks both coniferous forest, and riparian habitats required by the species.
Plants				
Allium jepsonii Jepson's onion	— / — (1B.2)	G2 S2	In Sierra foothills, found on serpentine soils within chaparral, cismontane woodland and lower montane coniferous forest, 355-1130 m elevation. (CNDDB 2017)	No. Project site has no serpentine soils.
Allium sanbornii var. *congdonii* Congondon's onion	— / — (4.3)	G3T3 S3	Chaparral or cismontane woodland on serpentine or volcanic soils, 300-990 m. elevation. (CNPS 2017)	No. Project site has neither serpentine nor volcanic-derived soils.
Allium sanbornii var. *sanbornii* Sanborn's onion	— / — (4.3)	G3T4? S4?	Chaparral, cismontane woodland or lower montane coniferous forest, usually on gravelly serpentine soils, 260-1510 m. elevation. (CNPS 2017)	No. Project site has no serpentine soils.
Arctostaphylos mewukka ssp. *truei* True's manzanita	— / — (4.2)	G4?T3 S3 — / — (4.3)	Chaparral or lower montane coniferous forest, 425-1390 m. elevation. (CNPS 2017)	No. Project site lacks both chaparral and lower montane coniferous forest habitats where the species is found.
Arctostaphylos nissenana Nissenan manzanita	— / — (1B.2)	G1 S1	Open rocky ridges in chaparral or closed-cone coniferous forest, usually on metamorphic soils, between 465-1610 m elevation. (CNDDB 2017)	No. Project site has neither rocky ridge nor closed-cone coniferous forest habitat.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Balsamorhiza macrolepis Big-scale balsamroot	— / — (1B.2)	G2 S2	Chaparral, cismontane woodland and valley and foothill grassland, sometimes on serpentine soils, 35-1465 m elevation. (CNDDB 2017)	Yes. See text for further discussion.
Bolandra californica Sierra bolandra	— / — (4.3)	G4 S4	Mesic, rocky sites, lower and upper montane coniferous forest. 975-2450 m. (CNDDB 2019)	No. Project site is lower in elevation than the known range of the species.
Brasenia schreberi Watershield	— / — (2B.3)	G5 S3	Freshwater marshes, swamps, ponds and slow streams, 30-2200 m elevation. (CNPS 2017, Jepson 2017)	Yes. See text for further discussion.
Calochortus clavatus var. *avius* Pleasant Valley mariposa-lily	— / — (1B.2)	G4T2 S2	Lower montane coniferous forest on Josephine silt loam or volcanically-derived soil; often in rocky areas. 300-1710 m. elevation. (CNDDB 2017)	No. Project site has neither Josephine nor volcanically-derived soils.
Calystegia stebbinsii Stebbin's morning-glory	**E / E** (1B.1)	G1 S1	Open areas in chaparral or cismontane woodland on gabbro or serpentine soils, 300-725 m elevation. (CNDDB 2017)	No. Project site has neither gabbro nor serpentine soils.
Calystegia vanzuukiae Van Zuuk's morning-glory	— / — (1B.3)	G2Q S2	Chaparral or cismontane woodland on gabbro or serpentine soils, 500-1180 m elevation. (CNDDB 2017)	No. Project site has neither gabbro nor serpentine soils.
Carex cyrtostachya Sierra arching sedge	— / — (1B.2)	G2 S2	Wet meadows, seeps, marshes and swamps in lower montane coniferous forest and riparian forests, 605-1390 m elevation. (CNDDB 2017)	No. Project site is lower in elevation than the range of the species.
Carex xerophila Chaparral sedge	— / — (1B.2)	G2 S2	Chaparral, cismontane woodland and lower montane coniferous forest on serpentine or gabbro soils, 275-770 m elevation. (CNDDB 2017) Dry gabbro or serpentine soils in open forest, scrub, thicket edges, chaparral, often with MacNab cypress *(Hesperocyparis macnabiana)*. (Jepson 2017)	No. Project site has neither gabbro nor serpentine soils.
Ceanothus fresnensis Fresno ceanothus	— / — (4.3)	G4 S4	Openings in cismontane woodland and lower montane coniferous forest, 900-2105 m elevation. (CNDDB 2019)	No. Project site is lower in elevation than the known range of the species.
Ceanothus roderickii Pine Hill ceanothus	**R / E** (1B.1)	G1 S1	Chaparral or cismontane woodland on serpentine or gabbro soils, 260-630 m elevation. (CNDDB 2017)	No. Project site has neither gabbro nor serpentine soils.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Chlorogalum grandiflorum Red Hills soaproot	— / — (1B.2)	G2 S32	Cismontane woodland, chaparral and lower montane coniferous forest, frequently on serpentine or gabbro soils, but also on non-ultramafic substrates; often on "historically disturbed" sites. 245-1240 m. (CNDDB 2017)	No. Project site has neither gabbro nor serpentine soils. CNDDB occurrences on metamorphic soils are on dry, rocky outcrops, which are not found on the project site.
Clarkia biloba ssp. *brandegeeae* Brandegee's clarkia	— / — (4.2)	G4G5T4 S4	Often on roadcuts or canyon slopes within chaparral, cismontane woodland or lower montane coniferous forest, 75-915 m elevation. (CNPS 2017)	Yes. See text for more discussion.
Clarkia virgata Sierra clarkia	— / — (4.3)	G3 S3	Cismontane woodland, lower montane coniferous forest, 400-1615 m elevation (CNPS 2017). Lower margin of montane forest and adjacent oak-grey pine woodland (CNDDB 2017).	Yes. See text for further discussion.
Claytonia parviflora ssp. *grandiflora* Streambank spring beauty	— / — (4.2)	G5T3 S3	Cismontane woodland on rocky soils, 250-1200 m elevation. (CNPS 2017) Generally restricted to scree slopes, rock ledges and decomposing granite outcrops, including roadcuts (NatureServe 2017) Vernally moist, often disturbed sites. (Jepson 2017)	No. Project site has no rocky soils or ledges, scree-slopes, or decomposing granite habitats.
Crocanthemum suffrutescens Bisbee Peak rush-rose	— / — (3.2)	G2Q S2	Openings in chaparral on serpentine, gabbro or Ione soils, 45-840 m elevation. (CNDDB 2017)	No. Project site has neither gabbro nor serpentine soils.
Delphinium hanseniissp. ewanianum Ewan's larkspur	— / — (4.2)	G4T3 S3	Rocky soils in cismontane woodland, valley and foothill grassland, 60-600 m. elevation. (CNDDB 2019)	Yes. See text for further discussion.
Epilobium oreganum Oregon fireweed	— / — (1B.2)	G2 S2	Bogs, fens, meadows, seeps in lower and upper montane coniferous forest, 500-2240 m elevation. (CNPS 2017)	No. Project site has neither suitable wetland habitats nor montane coniferous forest habitat.
Erigeron miser Starved daisy	— / — (IB.3)	G3? S3?	Rocky granitic outcrops in upper montane coniferous forest, 1550-2775 m. elevation. (CNDDB 2019)	No. Project site is much lower in elevation than 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?**
Erigeron petrophilus var. *sierrensis* Northern Sierra daisy	— / — (4.3)	G4T4 S4	Rocky foothills to montane forest, sometimes on serpentine, 300-1900 m elevation (Jepson 2019)Cismontane woodland, lower and upper montane coniferous fores, sometimes on serpentine soils, 300-2073 m elevation. (CNPS 2017)	No. Project site has no rocky substrate suitable for the species.
Eriogonum tripodum Tripod buckwheat	— / — (4.2)	G4 S4	Chaparral and cismontane woodland, often on serpentine soils, 200-1600 m elevation. (CNPS 2017) Gravelly slopes and flats, often on serpentine, 200-1600 m. (CNDDB 2018)	No. Project site has no serpentine soils and no gravelly slopes or flats.
Fremontodendron decumbens Pine Hill flannelbush	**E / R** (1B.2)	G1 S1	Chaparral or cismontane woodland on rocky gabbro or serpentine soils, 425-760 m elevation. (CNPS 2017)	No. Project site has neither gabbro nor serpentine soils.
Fritillaria eastwoodiae Butte County fritillary	— / — (3.2)	G3 S3	Chaparral, cismontane woodland or lower montane coniferous forest, usually on dry slopes but sometimes in wet places; serpentine, red clay or sandy soils (CNDDB 2017). 50-1500 m elevation (CNPS 2017)	No. Project site has none of the soil types required by the species.
Galium californicum ssp. *sierrae* El Dorado bedstraw	**E / R** (1B.2)	G5T1 S1	Restricted to gabbroic or serpentine soils in pine-oak woodland or chaparral, 130-585 m elevation. (CNDDB 2018)	No. Project site has neither gabbroic nor serpentine soils.
Githopsis pulchella ssp. *serpentinicola* Serpentine bluecup	— / — (4.3)	G4T3 S3	Cismontane woodland on serpentine or Ione soils, 320-610 m elevation. (CNPS 2017)	No. Project site has neither Ione nor serpentine soils.
Glyceria grandis American manna grass	— / — (2B.3)	G5 S3	Wet meadows, ditches, streams, and ponds in valleys and lower elevations in the mountains. 60-2045 m. elevation (CNDDB 2017)	Yes. See text for further discussion.
Horkelia parryi Parry's horkelia	— / — (1B.2)	G2 S2	Openings in chaparral and cismontane woodland, on Ione or limestone soils, between 85-1115 m. elevation. (CNDDB 2017)	No. Project site lacks suitable soils for the species.
Jepsonia heterandra Foothill jepsonia	— / — (4.3)	G3 S3	Crevices, especially in slate-like rock. 50-500 m., in cismontane woodland or lower montane coniferous forest. (CNDDB 2018)	No. Project site lacks suitable slate-like rock crevices.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Lathyrus sulphureus var. *argillaceus* Dubious pea	— / — (CNPS: 4.3)	G5T1T2 S1S2	Cismontane woodland, lower and upper coniferous forest, 150-305 meters elevation. (CNDDB 2017)	Yes. See text for further discussion.
Lilium humboldtii ssp. *humboldtii* Humboldt lily	— / — (4.2)	G4T3 S3	Openings in chaparral, cismontane woodland and lower montane coniferous forest, 90-1280 m elevation. (CNPS 2017)	Yes. See text for further discussion.
Lycopus uniflorus Northern bugleweed	— / — (4.3)	G5 S4	Bogs, fens, marshes, swamps and wet places, 5-2000 m. elevation (CNDDB 2019)	Yes. See text for further discussion.
Monardella candicans Sierra monardella	— / — (4.3)	G4 S4	Sandy or gravelly soils within chaparral, cismontane woodland, lower montane coniferous forest, 150-800 m elevation. (CNPS 2017)	No. Project site has no gravelly or sandy soils.
Myrica hartwegii Sierra sweet bay	— / — (4.3)	G4T3 S4	Cismontane woodland, lower montane coniferous forest and riparian forest, 150-1750 m elevation. Usually on streamsides. (CNPS 2017) Streambanks, moist places in foothills or low montane yellow-pine forest. (Jepson 2017)	No. Project site has no streambank habitat.
Navarretia prolifera ssp. *lutea* Yellow bur navarretia	— / — (4.3)	G4T3 S3	Open areas of well-drained soils on primarily south exposures within chaparral or cismontane woodland, 850-1405 m. elevation.	No. Project site is lower in elevation than the known range of the species.
Packera layneae Layne's ragwort	**T / R** (1B.2)	G2 S2	Serpentine or gabbro soils within chaparral or cismontane woodland, 200-1085 m elevation. (CNDDB 2017)	No. Project site has neither serpentine nor gabbro soils.
Piperia leptopetala Narrow-petaled rein orchid	— / — (4.3)	G4 S4	Generally dry sites in cismontane woodland, lower and upper montane coniferous forest, 380-2225 m elevation. (Jepson 2017, CNPS 2017)	Yes. See text for further discussion.
Poa sierrae Sierra bluegrass	— / — (1B.3)	G3 S3	Shady, moist, rocky slopes in lower montane coniferous forest; often in canyons. 365-1500 m. (CNDDB 2017)	No. Project site lacks montane coniferous forest habitat.
Potamogeton epihydrus Nuttall's ribbon-leaved pondweed	— / — (2B.2)	G5 S2S3	Shallow water marshes, swamps, ponds, lakes, streams, irrigation ditches. 295-2640 m. (CNDDB 2017)	Yes. See text for further discussion.

Special-status Species Common Name	Listing Status Federal / State (OTHER)	CNDDB Rank Global/State	Habitat Requirements	Potential to occur on project site?
Rhynchospora capitellata Brownish beaked-rush	— / — (2B.2)	G3 S1	Marshes, swamps, meadows & seeps in lower and upper montane coniferous forest. (CNDDB 2018)	No. Project site has no coniferous forest habitat.
Sagittaria sanfordii Sanford's arrowhead	— / — (1B.2)	G3 S3	In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m. elevation (CNDDB 2018)	Yes. See text for further discussion.
Scutellaria galericlata Marsh skullcap	— / — (2B.2)	G5 S2	Marshes, swamps, meadows & seeps in lower montane coniferous forest. (CNDDB 2018)	No. Project site has no montane forest habitat.
Stuckenia filiformis ssp. alpina Slender-leaved pondweed	— / — (2B.2)	G5T5 S2S3	Marshes and swamps, shallow clear-water lake and drainage channels, 5-2325 m. elevation. (CNDDB 2018)	Yes. See text for further discussion.
Trichostema rubisepalum Hernandez bluecurls	— / — (4.3)	G4 S4	Volcanic or serpentine substrates within broadleafed upland forest, chaparral, cismontane woodland, lower montane woodland, vernal pools. 300-1435 m. elevation.	No. Project site lacks volcanic or serpentine soils required by the species.
Viburnum ellipticum Oval-leaved viburnum	— / — (2B.3)	G4G5 S3?	Chaparral, cismontane woodland, lower montane coniferous forest, 215-1400 m elevation. (CNDDB 2017) Generally on north-facing slopes. (Jepson 2017)	Yes. See text for further discussion.
Wyethia reticulata El Dorado County mule-ears	— / — (1B.2)	G2 S2	Stony red clay and gabbroic soils in chaparral, cismontane woodland or lower montane coniferous forest; often in openings in gabbro chaparral. 185-630 m. elevation. (CNDDB 2017)	No. Project site lacks suitable soils for the species.
Special Habitats				
Sacramento-San Juaquin Foothill/Valley Ephemeral Stream	— / —	GNR SNR		Yes. See text for further discussion
Central Valley Drainage Resident Rainbow Trout Stream	— / —	GNR SNR		No. Project site has no perennial streams.
Central Valley Drainage Hardhead/Squawfish Stream	— / —	GNR SNR		No. Project site has no perennial streams.

APPENDIX F

Plant Species Found on the Project Site

December 14, 2018;
January 23, March 11 &13, April 1 & 22
May 14, & 29, and June 5, 2019

Plant Species Found on the Project Site
December 14, 2018; January 23, March 11 &13, April 1 & 22, May 14, & 29, and June 5, 2019
Hydrophytic vegetation classification[5] shown in red; plants without indicator are upland plants

Agavaceae
Chlorogalum pomeridianum (DC.) Kunth var. *minus* Hoover, **Common soaproot**

Anacardiaceae
Toxicodendron diversilobum (Torr. & A. Gray) Greene, **Western poison oak** FACU

Apiaceae
Scandix pecten-veneris L., **Venus' needle**
Sanicula sp., **Sanicle**

Apocynaceae
Vinca major L., **Greater periwinkle**

Aristolochiaceae
Aristolochia californica Torr., **Pipevine**

Asteraceae
Agoseris heterophylla (Nutt.) Greene var. *heterophylla*, **Annual mountain dandelion**
Anthemis arvensis L., **Corn camomile**
Artemisia douglasiana Besser, **Mugwort** FAC
Baccharis pilularis ssp. *consanguinea* (DC.) C.B. Wolf, **Coyote brush**
Carduus pycnocephalus L. subsp. *pycnocephalus*, **Italian plumeless thistle**
Centaurea melitensis L., **Tocalote, Maltese star-thistle**
Centaurea solstitialis L., **Yellow star-thistle**
Cirsium vulgare (Savi) Ten., **Bull thistle** FACU
Ericameria arborescens (A.Gray) Greene, **Golden-fleece**
Erigeron canadensis L., **Horseweed** FACU
Eriophyllum lanatum (Pursh) J. Forbes, **Woolly sunflower***Hypochaeris glabra* L., **Smooth cat's ear**
Hypochaeris radicata L., **Hairy cat's ear** FACU
Lactuca serriola L., **Prickly lettuce** FACU
Leontodon saxatilis Lam. **Hawkbit** FACU
Logfia gallica (L.) Coss. & Germ., **Daggerleaf cottonrose**
Madia gracilis (Sm.) D.D.Keck & J.C.Clausen ex Applegate, **Slender tarweed**
Matricaria chamomilla L., **German chamomile**
Matricaria discoidea DC., **Pineapple weed** FACU
Microseris douglasii (DC.) Sch. Bip., ssp. *douglasii* FACU
Pentachaeta exilis(A.Gray) A. Gray ssp. *exilis* , **Meager pygmy daisy**
Phalaris minor Retz., **Little-seeded canary grass**
Pseudognaphalium californicum (D.C.) Anderb., **California everlasting**
Psilocarphus tenellus Nutt., **Slender woolly-marbles** OBL

Asteraceae (continued)
Senecio vulgaris L., **Common groundsel** FACU
Silybum marianum (L.) Gaertn., Milk thistle
Soliva sessilis Ruiz & Pav. **Common soliva** FACU
Sonchus asper (L.) Hill ssp. *asper*, **Prickly sow thistle**
Sonchus oleraceus L., **Common sow thistle**
Torilis arvensis (Huds.) Link, **Tall sock-destroyer**
Taraxicum officinale F.H. Wigg., **Common dandelion** FACU
Tragopogon dubius Scop., **Western goat's beard**
Wyethia helenoides (DC.) Nutt., **Gray mule-ears**

Boraginaceae
Amsinckia menziesii)Lehm.) A. Nelson & J.F. Macbr. **Common fiddleneck; Small-flowered fiddleneck**
Eriodictyon californicum (Hook. & Arn.) Torr., **California Yerba Santa**
Myosotis discolor Pers., **Changing forget-me-not** FAC
Nemophila heterophylla Fisch. & C.A. Mey., **White nemophila**
Pectocarya pusilla (A.DC.) A.Gray, **Little pectocarya**
Plagiobothrys canescens Benth. *var. canescens* **Valley popcornflower**
Plagiobothrys stipitatus var. *micranthus* (Piper) I.M. Johnst., **Stalked popcornflower** FACW
Plagiobothrys tenellis (Nutt. Ex Hook.) A. Gray, **Pacific popcornflower**

Brassicaceae
Brassica nigra (L.) W. D. J. Koch, **Black mustard**
Capsella bursa-pastoris (L.) Medik., **Shepherd's purse** FACU
Hirschfeldia incana (L.) Lagr.-Fossat, **Shortpod mustard**

Caprifoliaceae
Lonicera hispidula (Lindl.) Torr. & A.Gray, **Hairy honeysuckle**

Caryophyllaceae
Cerastium glomeratum Thuill., **Sticky mouse-ear chickweed**
Petrorhagia dubia (Raf.) G.Lopez & Romo, **Hairypink**
Stellaria media (L.) Vill., **Common chickweed** FACU

Celastraceae
Euonymus sp.

Convolvulaceae
Convolvulus arvensis L., **Field bindweed**

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[5], R.W Lichvar, et al. 2016. OBL plants almost always occur in wetlands (estimated probability >99%); FACW plants usually occur in wetlands (est. prob. 67-99%) but occasionally are found in non-wetlands; FAC plants are equally likely to occur in wetlands or non-wetlands (est. prob. 34-66%);FACU plants usually occur in non-wetlands (est. prob. 67% – 99%), but occasionally found in wetlands.

Cupressaceae
Calocedrus decurrens (Torr.) Forin, **Incense-cedar**

Cyperaceae
Carex tumulicola Mack., **Foothill sedge** FACU
Cyperus eragrostis Lam., **Tall flatsedge** FACW
Scirpus microcarpus J. Presl & C. Presl, Panicled bulrush OBL

Ericaceae
Arctostaphylos viscida Parry subsp. *viscida*, Whiteleaf manzanita

Fabaceae
Acmispon parviflorus (Benth.) D.D.Sokolof, **Deer vetch**
Acmispon brachycarpus (Benth.) D.D. Sokoloff, **Hill lotus**
Lathyrus latifolius L., **Perennial sweetpea**
Lotus corniculatus L., Bird's-foot trefoil FAC
Lupinus bicolor Lindl., **Miniature lupine**
Lupinus microcarpus Sims var. *microcarpus*, **Chick lupine**

Fabaceae (continued)
Medicago polymorpha L., **Bur-clover** FACU
Trifolium dubium Sibth., **Little hop clover**
Trifolium hirtum All., **Rose clover**
Trifolium repens L., **White clover**
Trifolium subterraneum L., **Subterranean clover**
Vicia sp., **Vetch**

Fagaceae
Quercus chrysolepis Liebm., **Canyon live oak**
Quercus douglasii Hook. & Arn., **Blue oak**
Quercus kelloggii Newb.., **Black oak**
Quercus lobata Nee, **Valley oak** FACU
Quercus wislizeni A.DC., **Interior live oak**

Geraniaceae
Erodium sp. **Filaree**
Geranium carolinianum **L.**
Geranium dissectum L., **Cutleaf geranium**
Geranium molle L., **Woodland geranium**

Gentianaceae
Centaurium tenuiflorum (Hoffmanns. & Link) Janch., **Slender centaury**

Hypericaceae
Hypericum perforatum L. ssp. *perforatum* **klamathweed** FACU

Juglandaceae
Juglans californica S. Watson, **California black walnut** FACU

Juncaceae
Juncus balticus Willd., ssp. *ater* (Rydb.) Shogerup, **Baltic rush** FACW
Juncus bufonius L. var. *bufonius*, **Toad rush** FACW
Juncus triloculatis Zika. **Foothill rush** FAC
Luzula comosa E. Mey. var. *comosa*, **Hairy woodrush** FAC

Lamiaceae
Lamium amplexicaule L., **Henbit**
Marrubium vulgare L., **Horehound** FACU
Mentha x-piperita L., **Peppermint** FACW
Monardella odoratissima Benth., **Coyote-mint** FACU

Liliaceae
Calochortus albus (Benth.) Benth., **Fairy-lantern**

Linaceae
Linum bienne Mill., **Pale flax**

Lythraceae
Lythrum californicum Torr. & A.Gray, **California loosestrife** OBL
Lythrum hyssopifolia L., **Hyssop loosestrife** OBL

Malvaceae
Malva parviflora L., **Cheeseweed**
Sidalcea asprella Greene, ssp. *asprella* **Sierra foothills checkerbloom**

Montiaceae
Claytonia perfoliata Willd., ssp. *perfoliata*, **Miner's lettuce** FAC
Montia fontana L., **Water chickweed, blinks** OBL

Myrsinaceae
Lysimachia arvensis (L.) U. Manns & Anderb., **Pimpernel** FAC

Oleaceae
Ligustrum sp., **Privet** FACU

Onagraceae
Clarkia biloba (Durand) A. Nelson & J.F. Macbr. ssp. *biloba*, **Two-lobed clarkia**
Clarkia purpurea ssp. *quadrivulnera* (Lindl.) H. Lewis & M. Lewis, **Four-spot**
Epilobium ciliatum Raf. ssp. *ciliatum*, **Fringed willowherb** FACW

Orobanchaceae
Castilleja attenuata (A. Gray) T.I. Chuang & Heckard, **Valley tassels**
Cordylanthus pilosus A.Gray ssp. *hansenii* (Ferris) T.I. Chuang & Heckard **Hansen's birds-beak**
Triphysaria pusilla (Benth.) T.I. Chuang & Heckard, **Dwarf owl's clover**

Papaveraceae
Eschscholzia californica Cham., **California poppy**

Phrymaceae
Diplacus aurantiacus (Curtis) Jeps., **Orange bush Monkeyflower** FACU
Erythranthe guttata (DC) G.L.Nesom., **Seep monkeyflower** OBL

Pinaceae
Cedrus deodara (Roxb.) G. Don
Pinus ponderosa Douglas ex Lawson & C. Lawson, **Ponderosa pine** FACU
Pinus sabiniana D.Don, **Foothill pine**

Plantaginaceae
Collinsia heterophylla Buist ex Graham var. *heterophylla,* **Chinese houses**
Gratiola ebracteata A.DC., **Bractless hedge-hyssop** OBL
Plantago erecta E. Morris, **Foothill plantain**
Plantago lanceolata L., **English plantain** FAC
Veronica anagallis-aquatica L., **Water speedwell** OBL
Veronica arvensis L., **Common speedwell** FACU
Veronica peregrina L., ssp. *ixalapensis* (Kunth) Pennell, **Neckweed** FAC

Poaceae
Aegilops triuncialis L.. **Barbed goat grass**
Aira caryophyllea L., **Silver hair grass** FACU
Arrhenathemum elatius (L.) J. Presl & C. Presl, **Tall oatgrass**
Avena sp., **Wild oats**
Briza minor L., **Annual quaking grass** FAC
Bromus hordeaceus L., **Soft chess** FACU
Bromus sterilis L., **Poverty brome**
Bromus tectorum L., **Cheat grass**
Cynodon dactylon (L.) Pers., **Bermuda grass** FACU
Cynosurus echinatus L., **Bristly dogtail grass**
Danthonia californica Bol., **California oatgrass** FAC
Elymus caput-medusae L., **Medusa-head**
Elymus glaucus Buckley, **Blue wild-rye** FACU
Festuca perennis (L.) Columbus & J.P. Sm., **Rye grass** FAC
Gastridium phleoides (Nees & Meyen) C.E. Hubb., **Nit grass**
Hordeum murinum L., **Foxtail barley** FACU
Hordeum vulgare L. **Cultivated barley**
Melica imperfecta Trin., **Little California melica**
Phyllostachys aurea Riviere & C. Riviere, **Bamboo**
Poa annua L., **Annual blue grass** FAC
Polypogon monspeliensis (L.) Desf., **Rabbitfoot grass** FACW
Sphenopholis obtusata (Michx) Scribn., **Prairie wedgegrass** FAC

Polemoniaceae
Leptosiphon bicolor Nutt. **True babystars**
Leptosiphon parviflorus Benth., **Variable linanthus**

Polygonaceae
Rumex crispus L., **Curly dock** FAC

Pteridaceae
Pentagramma triangularis (Kaulf.) Yatskl, Windham & E. Wollenw., **Goldback fern**

Ranunculaceae
Ranunculus bonariensis var. *trisepalus,* **Carter's buttercup** OBL
Ranunculus canus Benth., **Buttercup** FAC
Ranunculus occidentalis Nutt. var. occidentalis, **Buttercup** FAC

Rhamnaceae
Ceanothus cuneatus (Hook.) Nutt. var. *cuneatus,* **Buck brush**
Frangula californica (Eschsch.) A. Gray, ssp. *tomentella* **California coffeeberry**
Rhamnus ilicifolia Kellogg, **Hollyleaf redberry**

Rosaceae
Aphanes occidentalis (Nutt.) Rydb.
Adenostoma fasciculatum Hook. & Arn., **Chamise**
Chaenomeles sp., **Flowering quince**
Drymocallis glandulosa (Lindl.) Rydb., **Sticky cinquefoil** FAC
Heteromeles arbutifolia (Lindl.) M.Roem., **Toyon**
Poterium sanguisorba L., **Garden burnet** FACU
Prunus cerasifera Ehrh., **Cherry plum**
Pyrus sp., **Pear**
Rubus armeniacus Focke, **Himalayan blackberry** FAC

Rubiaceae
Galium aparine L., **Goose grass** FACU
Galium bolanderi A. Gray., **Bolander's bedstraw**
Galium porrigens Dempster, **Climbing bedstraw**
Galium murale (L.) All., **Tiny bedstraw**
Sherardia arvensis L., **Field madder**

Salicaceae
Salix laevigata Bebb., **Red willow** FACW
Salix exigua Nutt., **Narrow-leaf willow** FACW

Saxifragaceae
Lithophragma bolanderi A.Gray., Woodland star

Scrophulariaceae
Verbascum blattaria L., **Moth mullein**
Verbascum thapsus L., **Woolly mullein** FACU

Themidaceae
Brodiaea minor (Benth.) S. Watson, ***Small brodiaea***
Dichelostemma capitatum (Benth.) Alph. Wood, **Blue Dicks** FACU
Dichelostemma multiflorum (Benth.) A. Heller, **Wild hyacinth**
Dichelostemma volubile (Kellogg) A. Heller, **Twining brodiaea**
Triteleia hyacinthina (Lindl.) Greene, **White brodiaea** FAC
Triteleia laxa Benth., **Ithurels spear**

Viscaceae
Phoradendron leucarpum ssp. *tomentosum* (DC.) J.R. Abbot & R.L. Thomps., **Mistletoe**

APPENDIX G

Natural Resources Conservation Service

Custom Soil Resource Report for
El Dorado Area, California

Devlin Property

United States Department of Agriculture

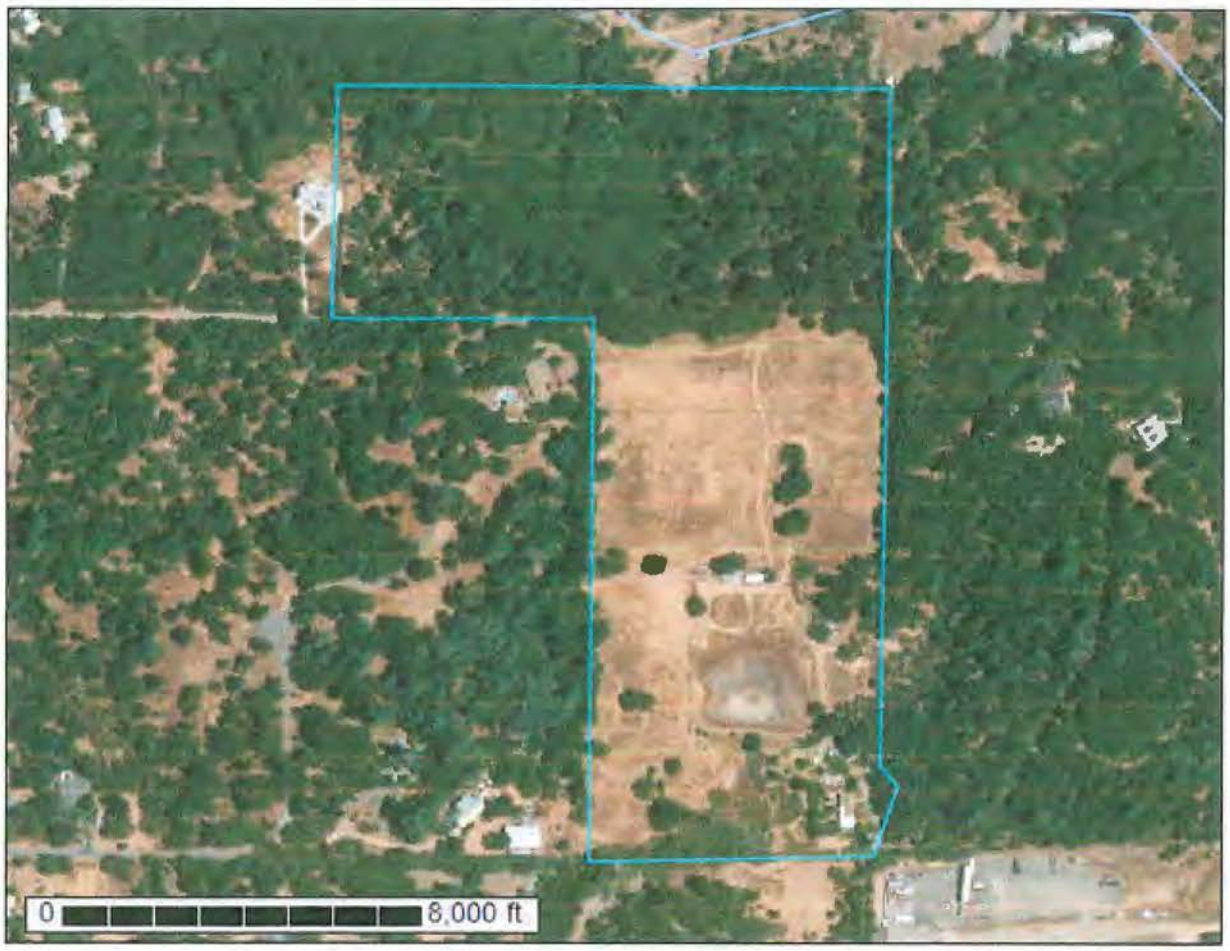
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for El Dorado Area, California

Devlin Property



December 31, 2018

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,360 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 10, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Nov 6, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AwD	Auburn silt loam, 2 to 30 percent slopes	27.7	71.2%
AxE	Auburn very rocky silt loam, 30 to 50 percent slopes	11.2	28.7%
AzE	Auburn cobbly clay loam, heavy subsoil variant, 9 to 50 percent slopes	0.1	0.1%
Totals for Area of Interest		**38.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series.* Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases.* Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas.* Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

El Dorado Area, California

AwD—Auburn silt loam, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: hhyq
Elevation: 120 to 3,000 feet
Mean annual precipitation: 20 to 40 inches
Mean annual air temperature: 55 to 63 degrees F
Frost-free period: 175 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Auburn and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auburn

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from basic igneous rock and/or basic residuum weathered from metamorphic rock

Typical profile

H1 - 0 to 14 inches: silt loam
H2 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: 14 to 18 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: Low Elevation Foothills 18-25 PZ (F018XI200CA)
Hydric soil rating: No

Minor Components

Argonaut

Percent of map unit: 4 percent
Landform: Ridges

Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Perkins

Percent of map unit: 4 percent
Hydric soil rating: No

Sobrante

Percent of map unit: 4 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Rock outcrop

Percent of map unit: 3 percent
Hydric soil rating: No

AxE—Auburn very rocky silt loam, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hhys
Elevation: 120 to 3,000 feet
Mean annual precipitation: 20 to 40 inches
Mean annual air temperature: 55 to 63 degrees F
Frost-free period: 175 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Auburn and similar soils: 75 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auburn

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from basic igneous rock and/or basic residuum weathered from metamorphic rock

Typical profile

H1 - 0 to 14 inches: silt loam
H2 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 14 to 18 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: Low Elevation Foothills 18-25 PZ (F018XI200CA)
Hydric soil rating: No

Description of Rock Outcrop

Setting

Parent material: Metamorphic rock

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Boomer

Percent of map unit: 5 percent
Landform: Hillslopes, mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Unnamed

Percent of map unit: 5 percent
Hydric soil rating: No

AzE—Auburn cobbly clay loam, heavy subsoil variant, 9 to 50 percent slopes

Map Unit Setting

National map unit symbol: hhyv
Elevation: 1,000 to 1,700 feet
Mean annual precipitation: 30 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 170 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Auburn, variant, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auburn, Variant

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum weathered from metamorphic rock

Typical profile

H1 - 0 to 4 inches: gravelly clay loam
H2 - 4 to 13 inches: cobbly clay loam
H3 - 13 to 27 inches: very cobbly clay loam
H4 - 27 to 31 inches: unweathered bedrock

Properties and qualities

Slope: 9 to 50 percent
Depth to restrictive feature: 27 to 31 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C

Ecological site: Thermic Foothills 22-31 PZ (F018XI201CA)
Hydric soil rating: No

Minor Components

Auburn

Percent of map unit: 8 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Rock outcrop

Percent of map unit: 7 percent
Hydric soil rating: No

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COMMUNITY DEVELOPMENT
DEPARTMENT OF TRANSPORTATION

https://www.edcgov.us/Government/DOT

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Date: 18 December 2019

To: Tom Purciel, Project Planner

From: Dave Spiegelberg, Transportation

Subject: **P19-0007, Devlin**

Project Location: West side of Farish Road, approximately 0.5 mile east of the intersection with Greenstone Road, in the Placerville area.

APN: **319-190-036**

Project Description: A proposed Tentative Parcel Map to create three single family lots ranging in size from approximately 7.3 acres to approximately 22.2 acres from the existing 39.5 acres.

Site Plans: The following conditions are based on Department of Transportation (DOT) review of the Tentative Map and Supporting documentation dated May 2018.

Traffic: The project proposes the creation of four or fewer lots, therefore, a Traffic Impact Study (TIS) is not required (General Plan Policies TC-Xe and TC-Xf). The On Site Transportation Review was also waived, as no on site transportation issues were identified.

Access: Parcels A and B are proposing to take access from Greenstone Road (a County-maintained road via Farish Road, and Parcel C has existing access from Davidson Road (a County-Maintained road) via Irish Port Lane.

Grading: Minor grading associated with home and driveway construction can be expected when each parcel is built upon.

Drainage: Due to the large parcel sizes, no drainage analysis is required.

PROJECT-SPECIFIC TD CONDITIONS:

1. **On-Site Road Improvments:** Construct the two turn arounds, at the locations shown on the Tentative Parcel Map, to the satisfaction of the responsible Fire District.

TD STANDARD CONDITIONS

2. **Consistency with County Codes and Standards:** Obtain approval of project improvement plans and cost estimates consistent with the Subdivision Design and Improvement Standards Manual (as may be modified by these Conditions of Approval or by approved Design Waivers) from DOT and pay all applicable fees prior to filing of the final map.

   Ensure the project improvement plans and grading plans conform to the County *Grading, Erosion and Sediment Control Ordinance, Grading Design Manual, the Drainage Manual, Storm Water Ordinance (Ord. No. 5022), Off-Street Parking and Loading Ordinance, all applicable State of California Water Quality Orders, the State of California Handicapped Accessibility Standards, and the California Manual on Uniform Traffic Control Devices* (MUTCD).

3. **Stormwater Management:** Comply with the West Slope Development and Redevelopment Standards and Post Construction Storm Water Plan.

4. **Regulatory Permits and Documents:** Incorporate all regulatory permits and agreements between the project and any State or Federal Agency into the Project Grading and Improvement Plans prior to the start of construction of improvements.

   Grading or Improvement plans for any phase may be approved prior to obtaining regulatory permits or agreements for that phase, but grading/construction of improvements may not proceed until the appropriate permits or agreements are obtained and the grading/improvement plans reflect any necessary changes or modifications to reflect such permits or agreements.

   Project conditions of approval shall be incorporated into the Project Improvement Plans when submitted for review.

Diamond Springs / El Dorado Fire Protection District
Fire Prevention Division

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www.diamondfire.org

P19-0007 Attachment D

January 8, 2020

Tom Purciel, Project Planner
El Dorado County Planning Department
2850 Fair Lane
Placerville, CA 95667

Re: P19-0007 Devlin Tentative Parcel Map **– FIRE COMMENTS - SUBDIVISION**

Dear Mr. Puricel:

The Diamond Springs-El Dorado Fire Protection District (DSP) has reviewed the above referenced project Utilizing the 2016 California Code of Regulations (CCR), the 2020 Title 24, Parts 2, 2.5, and 9 as well as CCR Title 14, Division 1.5, Chapter 7, Subchapter 2 "SRA Fire Safe Regulations" (Title 14), and submits the following comments regarding the ability to provide this site with fire and emergency medical services consistent with the El Dorado County General Plan, State Fire Safe Regulations, as adopted by El Dorado County and the California Fire Code as amended locally. **The fire department reserves the right to update the following comments to comply with all current Codes, Standards, Local Ordinances, and Laws in respect to the official documented time of project application and/or building application to the County.** Any omissions and/or errors in respect to this letter, as it relates to the aforementioned codes, regulations and plans, shall not be valid, and does not constitute a waiver to the responsible party of the project from complying as required with all Codes, Standards, Local Ordinances, and Laws.

1. **Annexation:** Community Facilities District
   Approval of the subject project is conditioned on meeting the public safety and fire protection requirements of the County of El Dorado General Plan, which shall include the provision of a financing mechanism for said services[1]. The financing mechanism shall include inclusion within, or annexation into, a Community Facilities District (CFD) established under the Mello-Roos Community Facilities Act of 1982 (Government Code § 53311 et seq.), established by the Diamond Springs / El Dorado Fire Protection District (District) for the provision of public services permitted under Government Code § 53313, including fire suppression services, emergency medical services, fire prevention activities and other services (collectively Public Services), for which proceedings are under consideration, and as such, shall be subject to the special tax approved with the formation of such CFD with the Tract's inclusion or annexation into the CFD.

   1. County of El Dorado General Plan Policy 5.1.2 and Policy 6.2.3

2. **Fire Flow:** This project has a closest fire hydrant that is .2 miles from the proposed location on Farish Road. Due to the distance from the nearest hydrant, each new residence shall have a water storage tank to meet the demands for domestic use and fire protection, for both the residential fire sprinkler system and wildland fire suppression. The tank size is determined by the square footage of the residence and based on NFPA 1142 and the El Dorado County Fire Prevention Officer's Standard D-003.

3. **Sprinklers:** The building(s) shall have fire sprinklers installed in accordance with NFPA 13D (R-3 single family residential use), including all Building Department and Fire Department requirements.

4. **Fire Department Access**: Approved fire apparatus access roads and driveways shall be provided for every facility, building, or a portion of a building. The fire apparatus access roads and driveways shall comply with the requirements of Section 503 of DSP as well as State Fire Safe Regulations as stated below (but not limited to):

    a. Each dead-end road shall have a turnaround constructed at its terminus.

    b. The fire apparatus access roads and driveways shall extend to within 150 feet of all portions of each facility and all portions of the exterior of the first story of the building as measured by an approved route around the exterior of the building or facility.

    c. Driveways and roadways shall have an unobstructed vertical clearance of 15' and a horizontal clearance providing a minimum 2' on each side of the required driveway or roadway width.

5. **Roadways:** Roadways shall be designed to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide all-weather driving conditions. All-weather surfaces shall be asphalt, concrete or other approved driving surface. Project proponent shall provide engineering specifications to support design, if request by the local AHJ. All roadways shall meet El Dorado County DOT and CA Fire Code requirements.

6. **Roadway Grades:** The grade for all roads, streets, private lanes and driveways shall not exceed 16%.

7. **Traffic Calming:** This development shall be prohibited from installing any type of traffic calming device that utilizes a raised bump/dip section of roadway. All other proposed traffic calming devices shall require approval by the fire code official.

8. **Turning Radius:** The required turning radius of a fire apparatus access road/driveway shall be determined by the fire code official. Current requirements are 40' inside and 56' outside.

9. **Gates:** All gates shall meet the DSP/El Dorado County Fire Prevention Officer's Gate Standard B-002.

10. **Fire Access During Construction**: In order to provide this development with adequate fire and emergency medical response during construction, all access roadways and fire suppression water storage tanks shall be installed and in service prior to combustibles being brought onto the site as specified by the Fire Department, Standard B-003.

11. **Wildland Fire Safe Plan:** This development shall be conditioned 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 approval of the Tentative Map.

12. **Setbacks:** Any parcels shall conform to State Fire Safe Regulations requirements for setbacks (minimum 30' setback for buildings and accessory buildings from all property lines).

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13. **Vegetative Fire Clearances:** Before June 1st each year, there shall be vegetation clearance around all EVA's (Emergency Vehicle Access), buildings, up to the property line as stated in Public Resources Code Section 4291, Title 19 as referenced in the CA Fire Code, and the conditioned Wildland Fire Safe Plan.

14. **Addressing:** Approved numbers or addresses shall be provided for all new and existing residential buildings in such a position as to be visible and legible from the street or road fronting the property, as per El Dorado County Fire Prevention Officer's Standard B-001 and CCR Title 14

Contact Deputy Chief Ken Earle at the Diamond Springs-El Dorado Fire Protection District with any questions at 530-306-8101

Sincerely,

Kenneth R. Earle
Deputy Chief, Fire Marshal
kearle@diamondfire.org
Cell: (530) 306-8101