# PLANNING AND BUILDING DEPARTMENT

## PLANNING DIVISION

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**NOTICE OF INTENT TO ADOPT A**
**MITIGATED NEGATIVE DECLARATION**

**NOTICE IS HEREBY GIVEN** that the County of El Dorado, as lead agency, has prepared a Mitigated Negative Declaration (MND) for the below referenced Project. The Draft MND analyzes the potential environmental effects associated with the proposed Project in accordance with the California Environmental Quality Act (CEQA). This Notice of Intent (NOI) is to provide responsible agencies and other interested parties with notice of the availability of the Draft MND and solicit comments and concerns regarding the environmental issues associated with the proposed Project.

**LEAD AGENCY:** County of El Dorado, 2850 Fairlane Court, Placerville, CA 95667

**CONTACT:** County Planner: Bianca Dinkler, 530-621-5875

**PROJECT:** Z21-0010/WAC21-0003 Indian Rock Tree Farm (Hyder)

**PROJECT LOCATION:** The property, identified by Assessor's Parcel Number 085-540-003, consists of a 33.22-acre parcel, located on the south side of North Canyon Road, approximately 1.5 miles northwest of the intersection with Larsen Drive in the Camino area, Supervisorial District 4.

**PROJECT DESCRIPTION:** A Zone Change from Timber Production Zone (TPZ) to Planned Agricultural (PA), and a request for a Williamson Act Contract (Agricultural Preserve) for an established Christmas tree farm, Indian Rock Tree Farm. The proposed project does not consist of any physical construction on the existing tree farm, and thus this Initial Study is not required to evaluate the physical environmental effects of construction of new facilities. Rather, this Initial Study appropriately evaluates the reasonably foreseeable consequences of the rezone, in particular, any operations activities that would be allowed "by-right" without further environmental review. These net new by-right activities could consist of ranch marketing uses such as a bake shop, commercial kitchen, food preparation on-site, handicraft sales, marketing/promotional events, and special events such as weddings. The proposed project is requesting 15 special events per year with up to 75 guests per event. As required by the current Ranch Marketing and Wineries Ordinance a Special Event Notice shall be submitted to the County's Department of Agriculture for all special events. The project site would be served by an existing private well for both potable water and emergency water supply and served by an existing private on-site septic system. Electric service would be provided from an existing connection to PG&E infrastructure.

**PUBLIC REVIEW PERIOD:** The public review period for the Draft MND set forth in CEQA for this project is **30** days, beginning **September 23, 2024**, and ending **October 22, 2024**. Any written comments must be received within the public review period. Copies of the Draft MND for this project may be reviewed and/or obtained in the County of El Dorado Planning and Building Department, 2850 Fairlane Court, Placerville, CA 95667, during normal business hours or online at https://edc-trk.aspgov.com/etrakit/. In order to view attachments, please login or create an E-Trakit account and search the project name or application file number in the search box.

Please direct your comments to: County of El Dorado, Planning and Building Department, County Planner: Bianca Dinkler, 2850 Fairlane Court, Placerville, CA 95667 or EMAIL: planning@edcgov.us

**PUBLIC HEARING:** The public hearing for the MND is tentatively scheduled to be heard at the November 14, 2024 Planning Commission meeting. Please check the Planning Commission agenda at https://eldorado.legistar.com/Calendar.aspx for changes to this tentatively scheduled hearing date.

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
KAREN L. GARNER, Director
September 20, 2024

# DRAFT MITIGATED NEGATIVE DECLARATION

**FILE:** Z21-0010/WAC21-0003 Indian Rock Tree Farm (Hyder)

**PROJECT NAME** Rezone/Williamson Act Contract (Agricultural Preserve) Indian Rock Tree Farm (Hyder)

**NAME OF APPLICANT:** Raymond L. Hyder & Geraldine F. Hyder 1994 Trust/Sam Rumbaugh & Karen Hyder

**ASSESSOR'S PARCEL NO.:** 085-540-003 **SECTION:** 36 **T:** 11N **R:** 11E

**LOCATION:** The project is located on the south side of North Canyon Road, 1.5 miles northwest of the intersection with Larsen Drive in the Camino area.

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

☒ **REZONING:** **FROM:** Timber Production Zone (TPZ) **TO:** Planned Agricultural (PA)

☐ **TENTATIVE PARCEL MAP**

☐ **SUBDIVISION:**

**SUBDIVISION (NAME):**

☐ **SPECIAL USE PERMIT TO ALLOW:**

☒ **OTHER:** A Zone Change from Timber Production Zone (TPZ) to Planned Agricultural (PA), and a request for a Williamson Act Contract (Agricultural Preserve) for an established Christmas tree farm, Indian Rock Tree Farm. The proposed project does not consist of any physical construction on the existing tree farm, and thus this Initial Study is not required to evaluate the physical environmental effects of construction of new facilities. Rather, this Initial Study appropriately evaluates the reasonably foreseeable consequences of the rezone, in particular, any operations activities that would be allowed "by-right" without further environmental review. These net new by-right activities could consist of ranch marketing uses such as a bake shop, commercial kitchen, food preparation on-site, handicraft sales, marketing/promotional events, and special events such as weddings. The proposed project is requesting 15 special events per year with up to 75 guests per event. As required by the current Ranch Marketing and Wineries Ordinance a Special Event Notice shall be submitted to the County's Department of Agriculture for all special events. The project site would be served by an existing private well for both potable water and emergency water supply and served by an existing private on-site septic system. Electric service would be provided from an existing connection to PG&E infrastructure.

**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 *Hearing Body* on *Date*.

_____

Executive Secretary

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

**Project Title:** Zone Change Z21-0010, Williamson Act Contract WAC21-0003 Indian Rock Tree Farm (Hyder)

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

**Contact Person:** Bianca Dinkler, Senior Planner | **Phone Number:** (530) 621-5875

**Owner's Name and Address:** Raymond L. Hyder and Geraldine F. Hyder 1994 Trust, 3800 North Canyon Road, Camino, CA 95709

**Applicant's Name and Address:** Sam Rumbaugh and Karen Hyder, 3800 North Canyon Road, Camino, CA 95709

**Project Licensed Land Surveyor's Name and Address:** James Wilson, 3460 Angel Lane, Placerville, CA 95667

**Project Location:** The project is located on the south side of North Canyon Road, 1.5 miles northwest of the intersection with Larsen Drive in the Camino area.

**Assessor's Parcel Number:** 085-540-003 **Acres:** 33.22-acres

**Sections: S:** 36 **T:** 11N **R:** 11E

**General Plan Designation:** Agricultural Lands (AL) within an Agricultural District

**Zoning:** Timber Production Zone (TPZ)

**Project Description:** A request for a Zone Change from Timber Production Zone (TPZ) to Planned Agricultural (PA), and a request for a Williamson Act Contract (Agricultural Preserve) for an established Christmas tree farm, Indian Rock Tree Farm. The proposed project does not consist of any physical construction on the existing tree farm, and thus this Initial Study is not required to evaluate the physical environmental effects of construction of new facilities. Rather, this Initial Study appropriately evaluates the reasonably foreseeable consequences of the rezone, in particular, any operations activities that would be allowed "by-right" without further environmental review. These net new by-right activities could consist of ranch marketing uses such as a bake shop, commercial kitchen, food preparation on-site, handicraft sales, marketing/promotional events, and special events such as weddings. The proposed project is requesting 15 special events per year with up to 75 guests per event. As required by the current Ranch Marketing and Wineries Ordinance a Special Event Notice shall be submitted to the County's Department of Agriculture for all special events. The project site would be served by an existing private well for both potable water and emergency water supply and served by an existing private on-site septic system. Electric service would be provided from an existing connection to PG&E infrastructure in the project vicinity. (Attachment 7).

**Environmental Setting:** The project site is a 33.22-acre parcel developed with the property owners existing residence, an Accessory Dwelling Unit (ADU), ancillary structures, and an established Christmas tree farm, Indian Rock Tree Farm, on approximately 17.0-acres of the 33.22-acre property. Access to the project site is from an existing private driveway from North Canyon Road, approximately 400-feet west of the intersection with Sky Ranch Road. North Canyon Road is a County-maintained roadway. The project site is located at an elevation of approximately 2,600 to 2,850 feet above mean sea level. Soil types include Musick sandy loam (MrC 9%-15% slopes), Musick sandy loam (MrD 15%-30% slopes), Sites loam (SkC 9%-15% slopes), Sites loam (SkD 15%-30% slopes), and Sites loam (SkE 30%-50% slopes). Vegetation consists of Sierran Mixed Conifer Forest with Ponderosa pine, incense cedar, Douglas-fir, madrone, and mountain dogwood. The shrub layer is mostly absent due to careful forest management; however, there are scattered shrubs, including California rose. The ground layer includes mountain misery, blue-wild rye, dog-tail grass, and Pacific starflower. The tree farm grows varieties of trees such as Silvertip fir, White fir, blue spruce, and specialty firs. A perennial stream, North Canyon Creek, flows northwesterly through the property with a five percent (5%) gradient. The creek collects water from intermittent and ephemeral sources upstream of Larsen Reservoir, which is located one-half mile upstream. The creek flows through the property and exits at the western boundary and flows towards the South Fork of the American River. The creek provides fly-fishing recreation. South of the creek consists of northerly and westerly slopes from the knoll on the property's south boundary to the creek with a gradient of approximately 22 percent (22%). The topography north of the creek consists of a southeasterly slope from the knoll to the creek, with 20 percent (20%) gradient. A Biological Resources Report, Special-Status Species Survey, and Wetland

Delineation Report was prepared by Ruth A. Willson of Site Consulting, Inc., Biological Services, reports dated September 2022 (Attachments 8 and 9). Further discussion and analysis of these topics 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 Agricultural Department
2. El Dorado County Environmental Management Department
3. El Dorado County Building Services
4. El Dorado County Department of Transportation
5. El Dorado County Fire Protection 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, seven Tribes have requested to be notified of proposed projects in El Dorado County: Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), Washoe Tribe of Nevada and California, and Wilton Rancheria. These Tribes were notified of the proposed project by certified mail on June 27, 2023. Further discussion is included in the Tribal Cultural Resources section of this Initial Study.

## 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 | | Energy |
| | Geology and Soils | | Greenhouse Gas Emissions | | Hazards and Hazardous Materials |
| | Hydrology and Water Quality | | Land Use and Planning | | Mineral Resources |
| | Noise | | Population and Housing | | Public Services |
| | Recreation | | Transportation | | Tribal Cultural Resources |
| | Utilities and Service Systems | | Wildfire | | Mandatory Findings of Significance |

## DETERMINATION

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

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

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

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

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

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

Signature: Bianca Dinkler Date: 8/26/24

Printed Name: Bianca Dinkler, Senior Planner For: El Dorado County

Signature: Date: 8/27/2024

Printed Name: Ande Flower, Planning Manager For: El Dorado County

## PROJECT DESCRIPTION

Introduction

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project.

Throughout this Initial Study, please reference the following Attachments:

Attachment 1: Location Map
Attachment 2: Aerial Map
Attachment 3: Assessor's Parcel Page
Attachment 4: General Plan Land Use Map
Attachment 5: Zoning Map
Attachment 6: Agricultural District Boundary Map
Attachment 7: Site Plan
Attachment 8: Biological Resources Report Special Status Species Survey
Attachment 9: Wetland Delineation Report
Attachment 10: Acoustical Analysis
Attachment 11: Vehicle Miles Traveled Analysis (VMT)
Attachment 12: Wildland Fire Safe Plan

Project Description: A request for a Zone Change from Timber Production Zone (TPZ) to Planned Agricultural (PA), and a request for a Williamson Act Contract (Agricultural Preserve) for an established Christmas tree farm, Indian Rock Tree Farm. The proposed project does not consist of any physical construction on the existing tree farm, and thus this Initial Study is not required to evaluate the physical environmental effects of construction of new facilities. Rather, this Initial Study appropriately evaluates the reasonably foreseeable consequences of the rezone, in particular, any operations activities that would be allowed "by-right" without further environmental review. These net new by-right activities could consist of ranch marketing uses such as a bake shop, commercial kitchen, food preparation on-site, handicraft sales, marketing/promotional events, and special events such as weddings. The proposed project is requesting 15 special events per year with up to 75 guests per event. As required by the current Ranch Marketing and Wineries Ordinance a Special Event Notice shall be submitted to the County's Department of Agriculture for all special events. The project site would be served by an existing private well for both potable water and emergency water supply and served by an existing private on-site septic system. Electric service would be provided from an existing connection to PG&E infrastructure in the project vicinity. (Attachment 7).

Site Description: The project site is a 33.22-acre parcel developed with the property owners existing residence, an Accessory Dwelling Unit (ADU), ancillary structures, and an established Christmas tree farm, Indian Rock Tree Farm, on approximately 17.0-acres of the 33.22-acre property. Access to the project site is from an existing private driveway from North Canyon Road, approximately 400-feet west of the intersection with Sky Ranch Road. North Canyon Road is a County-maintained roadway. The project site is located at an elevation of approximately 2,600 to 2,850 feet above mean sea level. Soil types include Musick sandy loam (MrC 9%-15% slopes), Musick sandy loam (MrD 15%-30% slopes), Sites loam (SkC 9%-15% slopes), Sites loam (SkD 15%-30% slopes), and Sites loam (SkE 30%-50% slopes). Vegetation consists of Sierran Mixed Conifer Forest with Ponderosa pine, incense cedar, Douglas-fir, madrone, and mountain dogwood. The shrub layer is mostly absent due to careful forest management; however, there are scattered shrubs, including California rose. The ground layer includes mountain misery, blue-wild rye, dog-tail grass, and Pacific starflower. The tree farm grows varieties of trees such as Silvertip fir, White fir, blue spruce, and specialty firs. A perennial stream, North Canyon Creek, flows northwesterly through the property with a five percent (5%) gradient. The creek collects water from intermittent and ephemeral sources upstream of Larsen Reservoir, which is located one-half mile upstream. The creek flows through the property and exits at the western boundary and flows towards the South Fork of the American River. The creek provides fly-fishing recreation. South of the creek consists of northerly and westerly slopes from the knoll on the property's south boundary to the creek with a gradient of approximately 22 percent (22%). The topography north of the creek consists of a southeasterly slope from the knoll to the creek, with 20 percent (20%) gradient. A Biological Resources Report, Special-Status Species Survey, and Wetland Delineation Report was prepared by Ruth A. Willson of Site

Consulting, Inc., Biological Services, reports dated September 2022 (Attachments 8 and 9). Further discussion and analysis of these topics are contained within this Initial Study. Further discussion and analysis of these topics are contained within this Initial Study.

Project Location and Surrounding Uses:

The project site is 33.22-acres and located within the Camino Rural Region. The adjacent parcels are zoned Planned Agricultural, Twenty-acre (PA-20) to the north and west, Rural Lands, Ten-acre (RL-10) to the north, and Residential, Two-acre (R2A) to the north, east, and south; have a General Plan land use designation of Agricultural Lands (AL) to the north and west, and Medium Density Residential (MDR) to the north, east, and south; and developed with agricultural and residential uses to the north and west, and with a residential subdivision to the east and south. The subject parcel and adjacent parcels are located within an established Agricultural District.

Project Characteristics:

1. Transportation/Circulation/Parking/Fire Protection:

The project was reviewed by the El Dorado County Department of Transportation (DOT). Based on review of the Traffic Impact Study - Initial Determination Form (TIS-ID), a Vehicle Miles Traveled (VMT) Analysis was required and was prepared by Traffic Engineer, Tom Kear, with final report dated January 9, 2024 (Attachment 11). Recommendations of the report are further discussed in the Transportation section of this Initial Study. Access to the project site would be from an existing private driveway from North Canyon Road, a County-maintained roadway. No grading would be necessary for the proposed project. Any future driveway improvements may be subject to a grading and/or encroachment permit and would be reviewed at that time.

Additionally, the project was reviewed by the El Dorado County Fire Protection District (EDCFPD). EDCFPD provided comments pertaining to compliance with Title 14 Fire Safe Regulations, which would be required for future applications for Special Events, in cooperation with applicable Agencies, including County Environmental Management Department (EMD), the Planning Division and Agricultural Department. EDCFPD comments are incorporated into the project as conditions of approval.

2. Utilities and Infrastructure:

The proposed project would be served by an existing private well, for both potable and emergency water supply, and by an existing private, septic system. The El Dorado County Environmental Management Department (EMD) reviewed the project and provided comments which are incorporated as conditions of approval. Future Special Events that would be allowed by right in PA zone would be subject to the current requirements from EMD, as applicable.

Electric service for the proposed project would be provided from the existing service from Pacific Gas & Electric (PG&E).

3. Construction Considerations:

No construction or grading is proposed. Any future construction activities would be completed in conformance with applicable agency requirements and subject to grading and building permits from the El Dorado County Building Services.

4. Zone Change:

The proposed project includes a request for a Zone Change from Timber Production Zone (TPZ) to Planned Agricultural (PA). The proposed Zone Change to PA would allow “by-right” activities without further environmental review. These net new by-right activities could consist of ranch marketing uses such as a bake shop, commercial kitchen, food preparation on-site, handicraft sales, marketing/promotional events, and special events such as weddings. The proposed project is requesting 15 special events per year with up to 75 guests per event.

An application for a Zone Change can apply to a specific parcel or group of parcels. Changes must be consistent with the General Plan land use map. If they are not, a request for a General Plan Amendment must accompany the Zone Change request. The Zone Change application is also used in those instances where an applicant wishes to propose a change to the text of the Zoning Ordinance. Zone Change requests, even when they are consistent with the General Plan land use map, may still be denied if they are determined to be untimely due to lack of infrastructure or due to other potential unmitigated significant impacts on the environment. Please see the required findings which follow including consistency with Policy 2.2.5.3 of the General Plan. Like the General Plan Amendment, this is a legislative action which provides the County with substantial latitude in its discretion to approve or deny an application.

Required Findings for Zone Change:

In accordance with State law, a request for a Zone Change can only occur when the requested change conforms to the County General Plan land use map designation for the property and applicable General Plan policies.
General Plan Policy 2.2.5.3 provides further direction on Zone Change applications, specifying 19 matters which must be considered by the County when evaluating Zone Change requests.

General Policy 2.2.5.3 states the County shall evaluate future rezoning: (1) To be based on the General Plan's general direction as to minimum parcel size or maximum allowable density; and (2) To assess whether changes in conditions that would support a higher density or intensity zoning district. The specific criteria to be considered include, but are not limited to, the following:

1. Availability of an adequate public water source or an approved Capital Improvement Project to increase service for existing land use demands;
2. Availability and capacity of public-treated water system;
3. Availability and capacity of public waste water treatment system;
4. Distance to and capacity of the serving elementary and high schools;
5. Response time from nearest fire station handling structure fires;
6. Distance to nearest Community Region or Rural Center;
7. Erosion hazard;
8. Septic and leach field capability;
9. Groundwater capability to support wells;
10. Critical flora and fauna habitat areas;
11. Important timber production areas;
12. Important agricultural areas;
13. Important mineral resource areas;
14. Capacity of the transportation system serving the area;
15. Existing land use pattern;
16. Proximity to perennial water course;
17. Important historical/archeological sites;
18. Seismic hazards and presence of active faults; and
19. Consistency with existing Conditions, Covenants, and Restrictions (Vista Cielo CC&Rs).

Each of the criteria are analyzed and discussed within this Initial Study.

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 the Mitigated Negative Declaration (MND) will be adopted 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 would 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. "Mitigated 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. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | | **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, 2022). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

***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.

**Environmental Setting:**

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 Draft EIR* (El Dorado County 2003:5.3-3). 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. There are no officially designated state scenic corridors in the vicinity of the project site (Caltrans 2018).

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 United States Forest Service (USFS), which oversees rivers or river sections identified as Wild and Scenic under the Wild and Scenic Rivers Act. 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 occur if the project 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:** No scenic vistas, as designated by the County General Plan, are located in the vicinity of the site (El Dorado County 2003, 5.3-3 through 5.3-5). The project site is not adjacent to or visible from the portion of U.S. 50 that is designated a State Scenic Highway. Any new structures would require permits for construction and would be required to comply with the General Plan and the Zoning Ordinance. No new construction is proposed as part of the project. 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, 2018). 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. There would be no impact.

c. **Visual Character:** The property is currently developed with a primary residence, a secondary residence, ancillary structures, and an established Christmas tree farm, Indian Rock Tree Farm. The project site is adjacent to similar residential and agricultural development. The proposed project does not involve any development which could have the potential to affect the visual character or quality of the site or surrounding area. There would be no impact.

d. **Light and Glare:** The proposed project does not include any new construction or any substantial new light sources. Temporary lighting could be included for Special Events however would need to comply with the County lighting ordinance requirements. Any future development, such as accessory structures, would be required to comply with the County lighting ordinance requirements, including the shielding of lights downward to avoid potential glare which would be reviewed during the building permit process. The impacts would be less than significant.

**FINDING:** With adherence to El Dorado County Code of Ordinances for this Aesthetics category, impacts would be anticipated to be less than significant.

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

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

**Regulatory Setting:**

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

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

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

Farmland Mapping and Monitoring Program

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

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

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

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

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

California Land Conservation Act of 1965 (Williamson Act)

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

Z'berg-Nejedly Forest Practice Act

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

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

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

a. **Farmland Mapping and Monitoring Program:** The project site is designated as Farmland of Local Importance and Unique Farmland as shown on the County GIS map database. The proposed project does not require a Monitoring Program. The proposed project would not negatively impact farmland, it would preserve farmland. The impacts would be less than significant.

b. **Agricultural Uses:** The proposed project is a Zone Change from TPZ to PA, and request for Williamson Act Contract for an established Christmas tree farm, Indian Rock Tree Farm, on approximately 17.0-acres of the 33.22-acre property. The property is adjacent to lands under an existing Williamson Act Contract, located north of the project site. Further, the County Agricultural Commission has reviewed the proposed project on October 11, 2023, and recommended approval. The impacts would be less than significant.

c.-d. **Loss of Forest Land or Conversion of Forest Land:** The project site is currently zoned Timber Production Zone (TPZ). The proposed Zone Change is from TPZ to Planned Agricultural (PA). Farmed trees (Christmas trees) are not considered timber production, so the current zone, TPZ, is not the correct zone. The proposed Zone Change to PA would be the correct zone for farmed trees as they are considered an agricultural product. The property is located within an area with established agricultural uses including orchards, wineries, and farmed trees. The General Plan land use designation is Agricultural Lands (AL). The PA zone would be compatible with the AL land use designation. Additionally, the proposed project includes a request for a Williamson Act Contract to further ensure preservation of the Christmas tree farm. There would be no loss of forest land or conversion of forest land as a result of the project. The impacts would be less than significant.

e. **Conversion of Prime Farmland or Forest Land:** The project would not convert prime farmland or forest land to non-agriculture use. The impacts would be less than significant.

**FINDING:** For this Agricultural Resources category, there would be less than significant impacts.

| **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. 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** | |
| c. Expose sensitive receptors to substantial pollutant concentrations? | | | **X** | |
| d. 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:** The El Dorado County Air Quality Management District (EDCAQMD) has adopted Rules and Regulations 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 proposed project would not conflict with or obstruct implementation of either plan. The impacts would be less than significant.

b. **Air Quality Standards and Cumulative Impacts:** No grading or construction is proposed. The project would not result in exceedance of any air quality standards or a cumulatively considerable net increase of any criteria pollutant. 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 (EDCAQMD) reviewed the project and provided comments that would be incorporated into the project as conditions of approval. The impacts would be less than significant.

c. **Sensitive Receptors:** The CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The project site is not located adjacent to sensitive receptors and no sources of substantial pollutant concentrations would be emitted by the project. The impacts would be less than significant.

d. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use of the parcel as a use known to create objectionable odors. A Zone Change and Williamson Act Contract to preserve the existing Christmas tree farm would not be a source of objectionable odors. The impacts would be less than significant.

**FINDING:** The proposed project would not affect the implementation of regional air quality regulations or management plans. With conditions of approval, 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 |

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

**Regulatory Setting:**

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

Endangered Species Act

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

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

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

Migratory Bird Treaty Act

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

Bald and Golden Eagle Protection Act

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

Clean Water Act

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

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

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

California Fish and Game Code

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

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

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

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

Streambed Alteration Agreement

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

California Native Plant Protection Act

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

Forest Practice Act

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

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

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

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

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

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

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

a. **Special Status Species:** A Biological Resources Report, Special-Status Species Survey, and Wetland Delineation Report was prepared by Ruth A. Willson, of Site Consulting, Inc., Biological Services, reports dated September 2022 (Attachments 8 and 9). Based on the reports, no special status plant species were observed during focused botanical surveys and special status plant species are presumed absent from the site. Vegetation consists of Sierran Mixed Conifer Forest with Ponderosa pine, incense cedar, Douglas-fir, madrone, and mountain dogwood. The shrub layer is mostly absent due to careful forest management; however, there are scattered shrubs, including California rose. The ground layer includes mountain misery, blue-wild rye, dog-tail grass, and Pacific starflower. The Christmas tree farm features Silvertip fir, White fir, blue spruce, and specialty firs. A perennial stream, North Canyon Creek, flows northwesterly through the property with a five percent (5%) gradient. The creek collects water from intermittent and ephemeral sources upstream of Larsen Reservoir, which is located one-half mile upstream. The creek flows through the property and exits at the western boundary and flows towards the South Fork of the American River. The creek provides seasonal fly-fishing recreation. An off-channel pond is north of the creek near the northeast corner of the property. A wetland was found within the pond footprint. Setbacks from waters and wetlands of 100-feet from North Canyon Creek and the off-channel pond would be sufficient to protect features and resources associated with them. The property is in Mitigation Area 2 which are lands within the El Dorado Irrigation (EID) service area boundary. Although the survey did not identify any special status plant species, and although no development or construction is proposed, the property owner would pay the ecological preserve impact fee at the time of future building permit, if applicable. 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. No special status wildlife species were observed during the surveys; however, the project site does provide potential nesting and foraging habitat. Although no active bird nests were observed during the surveys, nesting habitat for common raptors, migratory birds, and other native birds is present throughout the site. Implementing the following mitigation measure strategies would reduce potential impacts to a level of less than significant:

**MM BIO-1 Special Status Wildlife - Nesting and Foraging Habitat, Raptors and Migratory Birds, Preconstruction Survey**

Future development would be subject to the following mitigation measure that shall be implemented to avoid impacts to special status species:

a) If development activities occur during the nesting season (February 1-August 31), then a qualified biologist should conduct a nesting bird survey prior to initiation to determine the presence of any active nests within the study area. The nesting bird survey should be conducted within 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows there is no evidence of active nests, then a letter report should be prepared to document the survey and be provided to the project proponent and no additional measures are recommended. If development does not commence within 14-days of the nesting bird survey, or halts for more than 14

days, then an additional survey is required prior to starting or resuming work within the nesting season. If active nests are found, then a qualified biologist should establish a species-specific buffer to prohibit development activities near the nest to minimize nest disturbance until the young have successfully fledged or the biologist determines that the nest is no longer active. Nest monitoring may also be warranted during certain phases of construction to ensure nesting birds are not adversely impacted. If active nests are found within any trees slated for removal, then an appropriate buffer should be established around the tree and all trees within the buffer and should not be removed until a qualified biologist determines that the nest has successfully fledged and/or is no longer active.

Monitoring Requirement: Planning Division 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 Division.

b. **Riparian Habitat and Wetlands:** A Wetland Delineation Report was prepared by Ruth A. Willson of Site Consulting, Inc., Biological Services, report dated September 2022. A perennial stream, North Canyon Creek, flows northwesterly through the property with a five percent (5%) gradient. The creek collects water from intermittent and ephemeral sources upstream of Larsen Reservoir, which is located one-half mile upstream. The creek flows through the property and exits at the western boundary and flows towards the South Fork of the American River. The creek provides seasonal fly-fishing recreation. An off-channel pond is north of the creek near the northeast corner of the property. A wetland was found within the pond footprint. Setbacks from waters and wetlands of 100-feet from North Canyon Creek and the off-channel pond would be sufficient to protect features and resources associated with them. No development is proposed for this project. Any future development would be subject to Zoning Ordinance Section 130.30.050 - Setback Requirements and Exceptions which requires minimum setbacks from streams, wetland, or sensitive riparian habitat, which would apply to any future development permits. With adherence to established setbacks, the impacts would be less than significant.

c. **Federally Protected Wetlands:** The project site is not located in federally protected wetlands and would not 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. Any activity causing direct adverse impacts to any existing water on-site could require resource permits from the Army Corps of Engineers, the Regional Water Quality Control Board (401; WDR), and/or the California Department of Fish & Wildlife (1602). Further, Zoning Ordinance Section 130.30.050 - Setback Requirements and Exceptions would require setbacks from streams, wetland, or sensitive riparian habitat, which would apply to any future development permit. The impacts would be less than significant.

d. **Migration Corridors:** Review of the California Department of Fish and Wildlife Migratory Deer Herd Maps and General Plan DEIR Exhibit 5.12-7 indicate that the deer herd migration corridor does not extend over the project site. The El Dorado County General Plan does not identify the project site within an Important Biological Corridor (IBC). The proposed 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. Based on review of technical reports prepared for the project, no impacts to sensitive natural resources are anticipated. No oak trees are proposed for removal. Any future tree removal of oak woodlands, individual native oak trees, or heritage trees, as defined in Section 130.39.030, would be required to comply with Oak Resources Conservation Ordinance of Section 130.39.070.C (Oak Tree and Oak Woodland Removal Permits), which would be reviewed at time of grading and building permit submittal.

The project site is not located within an Important Biological Corridor (IBC) overlay area and is not located within an Ecological Preserve (EP) overlay area. No construction or grading is proposed. Any future development would be required to comply with applicable County ordinances and policies, including oak woodland conservation, payment of rare plant mitigation fee, as applicable. Further, a Mitigation Measure (MM BIO-1) is included to require a pre-construction survey to detect and protect if any special-status wildlife species. Future development would need to adhere to the County's setbacks from any streams, wetlands, or riparian habitat. With implementation of the mitigation measure and development standards, the impacts would be less than significant.

f. **Adopted Plans**: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan. The impacts would be less than significant.

**Finding:** With the implementation of Mitigation Measure BIO-1 and upholding a 100-foot setback on each side of North Canyon Creek and existing pond, potential impacts to biological resources from the proposed project would be mitigated. Future development would be required to comply with applicable County Codes and Policies which would be reviewed at time of submittal of 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. 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:

A. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
B. Are associated with the lives of persons important in our past;
C. 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
D. 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, Archeological Resources, Human Remains.** A record search was prepared by the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) in Sacramento with report dated June 24, 2022. Based on results of the record search, a Cultural Resources Study was prepared by Dana E. Supernowicz, report dated August 2022. One precontact archaeological site was identified with the project and recorded as Hyder Grinding Rocks. The grinding rocks lie within the margins of a stream channel and riparian zone. Thus, preservation or protection of the site can be addressed with standard non-building setback or easement on either side of the drainage. No grading or construction is proposed. In the event that a concentration of artifacts or culturally modified soil deposits should be encountered at any time during future ground disturbing activities, all work must stop until a qualified archaeologist, and Tribes, would be notified to view the finds to make an evaluation. If warranted, further archaeological work in the discovery area would be performed. Further, the project is subject to the Cultural Resources provisions of CEQA Assembly Bill 52 (AB52), which requires Native American outreach. Pursuant to AB52, the County solicited input from Native American organizations and representatives listed with the Native American Heritage Commission to identify cultural resources and properties of concern to the Native American Community. At the time of the initial review consultation, seven Tribes have requested to be notified of proposed projects in El Dorado County: Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), Washoe Tribe of Nevada and California, and Wilton Rancheria. These Tribes were notified of the proposed project by certified mail on June 27, 2023. The Shingle Springs Band of Miwok Indians responded within 30 days to initiate consultation. Staff provided the tribe with the Cultural Resources record search results and Cultural Resources Study for their review. No further comments were received from the Tribe. Staff confirmed conclusion of consultation via email on November 1, 2023. Standard protective conditions of approval are incorporated with the project. The impacts would be less than significant.

**FINDING:** Standard conditions of approval 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. ENERGY.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| a. Result in potential significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | **X** | |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | **X** | |

**Regulatory Setting**

***Federal Energy Policy Act of 2005***

The Federal Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy efficient homes, production or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHG).

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

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation's first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code), and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The next update to the Title 24 energy efficiency standards will occur in 2016 and take effect in 2017. The California Building Code applies to all new development, and there are no substantive waivers available that would exempt development from its energy efficiency requirements. The California Building Code is revised on a regular basis, with each revision increasing the required level of energy efficiency.

Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve nonrenewable

fossil fuel resources by generated a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an Updated Model Water Efficient Landscape Ordinance (MWELO) and local agencies to adopt DWR's MWELO or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

Senate Bill X7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). This statute applies to both El Dorado Irrigation District (EID) and the Georgetown Divide Public Utilities District (GDPUD). EID has incorporated this mandate into its water supply planning, as represented in its Urban Water Management Plan 2010 Update (El Dorado Irrigation District 2011) and all subsequent water supply plans. Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

Assembly Bill 2076, Reducing Dependence on Petroleum

The CEC and Air Resources Board (ARB) are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

Senate Bill 375—Sustainable Communities Strategy

SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of their regional transportation plan (RTP) to meet the region's GHG emissions reduction target, as set by the California Air Resources Board. The Sacramento Area Council of Governments (SACOG) is the MPO for the Sacramento region, including the western slope of El Dorado County. SACOG adopted its SB 375-compliant Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 in April 2012.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 rule-making)

AB 1493 required the ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

CEQA and CEQA Guidelines

Section 15126.2(b) of the CEQA Guidelines requires detailed analysis of a project's energy impacts. If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the environmental document shall prescribe mitigation for those impacts. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.

CEQA Guidelines, Appendix F: Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, Energy Conservation, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places

"particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy," and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be "considered in an EIR to the extent relevant and applicable to the project." Mitigation for potential significant energy impacts (if required) could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

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

The County General Plan Public Services and Utilities Element includes goals, objectives, and policies related to energy conservation associated with the County's future growth and development. Among these are is Objective 5.6.2

(Encourage Energy-Efficient Development) which applies to energy-efficient buildings, subdivisions, development and landscape designs. Associated with Objective 5.6.2 are two policies specifically addressing energy conservation:

> Policy 5.6.2.1: Requires energy conserving landscaping plans for all projects requiring design review or other discretionary approval.
>
> Policy 5.6.2.2: All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Further, the County has other goals and policies that would conserve energy even though not being specifically drafted for energy conservation purposes (e.g., Objective 6.7.2, Policy 6.7.2.3).

**Discussion:**

**a. Unnecessary Consumption:** No grading or construction is proposed. Any future construction would conform to building codes and other state and local energy conservation measures and would require a building permit that would be reviewed for consistency with applicable energy legislation, policies, and standards for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy). The impacts would be less than significant.

**b. Conflict with Energy Plans:** The proposed project would not conflict with applicable state and local plans for renewable energy or energy efficiency and would not obstruct implementation of applicable energy plans. The impacts would be less than significant.

**FINDING:** The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation as no construction is proposed. Any future construction would be reviewed for consistency with all applicable state and local plans for renewable energy or energy efficiency. For this Energy category, potential impacts would be less than significant.

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

| **VII. GEOLOGY AND SOILS.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
| 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** | |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | **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 prepared 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 is 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, the impacts would be less than significant.

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). No construction is proposed. Any future construction would be built to meet the construction standards of the UBC for the appropriate seismic zone. The impacts would be less than significant.

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

iv) No construction is proposed. Any future grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impacts would be less than significant.

b. **Soil Erosion:** No construction is proposed for the project. Any future construction could have potential for erosion, or changes in topography that would be reviewed during the grading permit process. 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. If construction would 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. Any future development would need to be located at sufficient distances away from any natural water features and would need to adhere to the County's setback distances from any intermittent stream or wetland, including single-family dwellings, accessory dwelling units (ADU), and/or accessory structures. 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. Any future grading activities would need to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. The impacts would be less than significant.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The western portions of the county, including the Auburn soil types, have a low expansiveness rating. Any future development 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. The impacts would be less than significant.

e. **Septic Capability:** The project site has an existing private on-site septic system. The El Dorado County Environmental Management Department (EMD) reviewed the project and provided comments which are incorporated as conditions of approval. With the incorporation of conditions of approval, the impacts would be less than significant.

f. **Paleontological Resources:** The proposed project area is not located in an area that is considered likely to have paleontological resources present. Fossils of plants, animals, or other organisms of paleontological significance have not been discovered within the project area. In this context, the project would not result in impacts to paleontological resources or unique geologic features. In the event subsurface paleontological sites are disturbed during grading activities in the site, standard conditions of approval requiring that all work activities shall be stopped in the event of an unanticipated discovery would ensure that impacts are less than significant.

**FINDING:** No grading or construction is proposed. Any future development would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance, which would address any potential impacts related to soil erosion, landslides and other geologic impacts, and required to comply with the Uniform Building Code (UBC), which would address any potential seismic related impacts, and the LAMP requirements from EMD. The impacts would be less than significant.

| **VIII. 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.

***State 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 the County's AQMD *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, the County's AQMD 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 Sacramento Metropolitan Air Quality Management District (SMAQMD) to determine the significance of GHG emissions.

The SMAQMD has 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. For projects below the threshold, no further GHG analysis is required.

a. The proposed project would rezone from TPZ to PA which would be the appropriate zone for the parcel which is surrounded by similarly zoned parcels that have existing agricultural development. The current zone, TPZ, is designated for forest timber production, not farmed trees. No grading or construction is proposed so the proposed project would have a negligible contribution towards statewide GHG inventories. The impacts would be less than significant.

b. No construction or grading is proposed. GHG emissions from the proposed project 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 SMAQMD screening table, the GHG emissions from this project are estimated at less than 1,100 $MTCO_2e$/yr. Cumulative GHG emissions impacts would be less than significant. The impacts would be less than significant.

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

| **IX. HAZARDS AND HAZARDOUS MATERIALS.** *Would the project:* | | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |

| **IX. HAZARDS AND HAZARDOUS MATERIALS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | **X** |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | **X** |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | **X** |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | **X** |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | **X** |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | **X** | |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | **X** | |

**Regulatory Setting:**

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

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

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous

materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

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

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

Energy Policy Act of 2005

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

Spill Prevention, Control, and Countermeasure Rule

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

Occupational Safety and Health Administration

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

Federal Communications Commission Requirements

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

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

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

Code of Federal Regulations (14 CFR) Part 77

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

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

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

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

The Unified Program

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

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

Hazardous Materials Business Plans

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

CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

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

California Accidental Release Prevention

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

California Department of Forestry and Fire Protection Wildland Fire Management

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

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

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

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

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as

described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

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

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

a.-c. **Hazardous Materials:** The proposed 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. There would be no impact.

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

e. **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.

f. **Emergency Plan:** Access to the proposed parcels would be from an existing private driveway from North Canyon Road, a County-maintained roadway. The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are included as conditions of approval. As conditioned, the proposed project would not impair implementation of any emergency response plan or emergency evacuation plan. The impacts would be less than significant.

g. **Wildfire Hazards:** The project site is in an area of Very High Fire Hazard for wildland as shown on Figure HS-1 of the Fire Hazard Rating in the El Dorado County General Plan (2015), and California Department of Forestry and Fire Protection CALFIRE (January 2020). The El Dorado County General Plan Safety Element precludes development in areas of high/very 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 Urban Interface Fire Protection Plan Fire Safe Plan (WFSP) was prepared for the project by CDS Fire Prevention Planning, William F. Draper, Registered Professional Forester, report dated October 21, 2022 (Attachment 12). As stated in the report, any new building shall comply with Title 24. Annual maintenance of hazardous vegetation and removal prior to start of fire season and maintained throughout the fire season is critical for establishing and keeping a fire safe environment. The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are incorporated into the project as conditions of approval. Further, EDCFPD would review future applications for Special Events in cooperation with other Agencies, including the County EMD, Planning Division, and Agricultural Department, to ensure compliance with applicable policies and fire safe regulations. As conditioned, the impacts would be less than significant.

**FINDING:** For the Hazards and Hazardous Materials category, with the incorporation of the conditions of approval from the El Dorado County Fire Protection District (EDCFPD), the impacts would be less than significant.

| **X. 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 or otherwise substantially degrade surface or ground water quality? | | | **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, or through the addition of impervious surfaces, in a manner which would: | | | | |
| i. result in substantial erosion or siltation on- or off-site; | | | **X** | |
| ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | | | **X** | |
| iii. 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; or | | | **X** | |
| iv. impede or redirect flood flows? | | | **X** | |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | **X** | |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | **X** | |

**Regulatory Setting:**

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

Clean Water Act

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

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

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

*Section 402—NPDES Permits for Stormwater Discharge*

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

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

Municipal Stormwater Permitting Program

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

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

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

National Flood Insurance Program

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

elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

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

Porter–Cologne Water Quality Control Act

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

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

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

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

a. **Water Quality Standards:** No grading or construction is proposed. Erosion control measures would be required as part of any future grading and building permits. 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 expected to violate water quality standards. The 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. The project is not anticipated to affect potential groundwater supplies above pre-project levels. The impacts would be less than significant.

c. **Drainage Patterns:** No grading or construction is proposed. A grading permit would be required to address any future 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. The impacts would be less than significant.

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

**FINDING:** No grading or construction is proposed. Any future construction would be required to address any potential changes to the drainage pattern on-site during the grading and building permit review process. No significant hydrological impacts are expected. The impacts would be less than significant.

| **XI. 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. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | **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 site is located within the Camino Rural Region and within an Agricultural District. The property is surrounded by similar residential and agricultural development. The proposed project would not conflict with the existing land use pattern in the area or physically divide an established community. The impacts would be less than significant.

b. **Land Use Consistency:** The project site is located within the Camino Rural Region and within an Agricultural District. The proposed project is a Zone Change from TPZ to PA, and a Williamson Act Contract. Farmed trees (Christmas trees) are considered an agricultural product, not timber. The

surrounding area has similar established agricultural uses including farmed trees (Christmas trees), vineyards and wineries, and orchards. Additionally, pursuant to General Plan Policy 2.2.1.1., *Table 2-1 - Planning Concept Areas and Land Use Designation Consistency Matrix*, the proposed Zone Change to PA would be consistent with the existing General Plan land use designation of Agricultural Lands (AL). An application for a Zone Change must be consistent with the General Plan land use map. Zone Change requests, even when they are consistent with the General Plan land use map, may still be denied if they are determined to be untimely due to lack of infrastructure or due to other potential unmitigated significant impacts on the environment. There are 19 findings required including consistency with General Plan Policy 2.2.5.3. Like a General Plan amendment (which this project does not include) a Zone Change is a legislative action which provides the County with substantial latitude in its discretion to approve or deny an application.

Required Findings for Zone Change:

In accordance with State law, a request for a Zone Change can only occur when the requested change conforms to the County General Plan land use map designation for the property and applicable General Plan policies.

General Plan Policy 2.2.5.3 provides further direction on Zone Change applications, specifying 19 matters which must be considered by the County when evaluating Zone Change requests.

General Policy 2.2.5.3 states the County shall evaluate future rezoning: (1) To be based on the General Plan's general direction as to minimum parcel size or maximum allowable density; and (2) To assess whether changes in conditions that would support a higher density or intensity zoning district. The specific criteria to be considered include, but are not limited to, the following:

1) Availability of an adequate public water source or an approved Capital Improvement Project to increase service for existing land use demands;
2) Availability and capacity of public-treated water system;
3) Availability and capacity of public waste water treatment system;
4) Distance to and capacity of the serving elementary and high schools;
5) Response time from nearest fire station handling structure fires;
6) Distance to nearest Community Region or Rural Center;
7) Erosion hazard;
8) Septic and leach field capability;
9) Groundwater capability to support wells;
10) Critical flora and fauna habitat areas;
11) Important timber production areas;
12) Important agricultural areas;
13) Important mineral resource areas;
14) Capacity of the transportation system serving the area;
15) Existing land use pattern;
16) Proximity to perennial water course;
17) Important historical/archeological sites;
18) Seismic hazards and presence of active faults; and
19) Consistency with existing Conditions, Covenants, and Restrictions.

The proposed Zone Change from TPZ to PA would meet the required criteria as discussed in more detail throughout each section of this Initial Study. The proposed Zone Change to PA would be compatible with the existing General Plan land use designation of AL. Further, with incorporation of conditions of approval, the impacts for land use planning would be less than significant.

**FINDING:** The proposed project would be consistent with the uses allowed in the Camino Rural Region, with the County General Plan, and with the Zoning Ordinance. The impacts to land use would be less than significant.

| **XII. 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:** For this Mineral Resources category, no impacts to mineral resources are expected, either directly or indirectly. There would be no impact.

| **XIII. NOISE.** *Would the project result in:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | **X** | |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | | | **X** | |
| c. For a project located within the vicinity of a private airstrip or 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** |

**Regulatory Setting:**

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

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

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

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

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

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

a. **Noise Exposures:** The proposed rezone to PA would allow all uses allowed by right in the PA zone, including Ranch Marketing, Wineries, and Special Events. Pursuant to Zoning Ordinance 130.44.104 (B)(5), a total of 24 Special Events per calendar year would be allowed in PA. Special Events could expose the adjacent neighboring properties to noise. An Acoustical Analysis was required and prepared for the project by RNS Acoustics, report dated May 17, 2023. Based on review and summary of the report, noise levels from the project would not be at levels in excess of the standards established in the General Plan or Zoning Ordinance. Further, Special Events would require permitting and monitoring from County Agencies, including the Agricultural Department, Planning Division, Environmental Management Department, and the local Fire Department. Future Special Events would need to comply with the requirements set forth by County Ordinance No. 5177 - Adopted Revisions to the Ranch Marketing Ordinance and the Winery Ordinance, with General Plan Objective 6.5.1 Protection of Noise-Sensitive Development, and performance standards of the County Zoning Ordinance, Chapter 130.37 - Noise Standards. As conditioned, the impacts would be less than significant.

b. **Groundborne Vibration:** The property is developed with residential uses and an established tree farm (Indian Rock Tree Farm). No grading or construction is proposed. Any future construction could generate short-term ground borne vibration or shaking during construction; however, would be temporary in nature. The impacts would be less than significant.

c. **Aircraft Noise:** The project site is not located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport. There would be no impact.

**FINDING:** With incorporation of conditions of approval, and adherence to County Code, no significant direct or indirect impacts to noise levels are expected. The impacts would be less than significant.

| **XIV. 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 (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | **X** |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | **X** |

**Regulatory Setting:**

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

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

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

a. **Population Growth:** The proposed project which would not generate population growth. There would be no impact.

b. **Housing Displacement:** The proposed project would not displace housing. There would be no impact.

**FINDING:** The project would not induce substantial population growth or displace housing. There would be no impacts.

| **XV. PUBLIC SERVICES.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

| **XV. PUBLIC SERVICES.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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: | | | | |
| a. Fire protection? | | | **X** | |
| b. Police protection? | | | **X** | |
| c. Schools? | | | | **X** |
| d. Parks? | | | | **X** |
| e. Government Services? | | | **X** | |

**Regulatory Setting:**

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

California Fire Code

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

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

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

a. **Fire Protection:** The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are incorporated as conditions of approval. The project must adhere to applicable requirements to ensure adequate emergency access, evacuation routes, and emergency water supply. As stated in their comments, EDCFPD will review future permit applications to ensure the ability

to provide the 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 their comments to comply with all current Codes, Standards, Local Ordinances, and Laws in respect to official documented time of project application and/or building application to the County. Any omissions and/or errors in respect to the EDCFPD 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. For any future development or changes other than the current development, the project shall meet El Dorado County Fire requirements, as stated above. With incorporation of EDCFPD comments as conditions of approval, the impacts would be less than significant.

b. **Police Protection:** Police services would be provided by the El Dorado County Sheriff's Department (EDSO). Future applications for Special Events could require providing notice to the local law enforcement agency; however, would not significantly increase demand for law enforcement protection. The impacts would be less than significant.

c. **Schools:** Payment of school impact fees are collected at time of residential building permit issuance; however, no grading or construction is proposed. There would be no impact to schools.

d. **Parks.** A residential building permit requires payment of park impact fees at time of building permit issuance; however, no grading or construction is proposed. The impacts from the proposed project would not increase the population substantially and therefore would not substantially increase the use of parks and recreational facilities. There would be no impact to parks.

e. **Government Services.** There are no government services that would be significantly impacted because of the proposed project. The impacts would be less than significant.

**FINDING:** The project would not result in a significant increase of public services to the project. The impacts would be less than significant.

| **XVI. RECREATION.** *Would the project:* | 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.** The proposed project would not 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. There would be no impacts.

b. **Recreational Services.** The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. There would be no impacts.

**FINDING:** No significant impacts to parks or recreation facilities would result from the proposed project. The proposed project would not result in the need for the construction or expansion of new recreation facilities. There would be no impacts to parks and recreational services.

| **XVII. TRANSPORTATION.** *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.

On October 6, 2020 El Dorado County Board of Supervisors adopted Resolution 141-2020 setting thresholds of significance for VMT resulting from proposed development projects.

**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:** The County Department of Transportation (DOT) reviewed the project and determined that the project would not conflict with a Transportation plan, policy, or ordinance. Based on review of the project description, a full Transportation Impact Study (TIS) was not required as the majority of project trips, on average, resulting from special events and not anticipated to occur regularly/daily and will mostly occur on weekends or outside weekday peak hours, and would not exceed thresholds described in General Plan Policy TC-Xe. Approval of the project would not necessitate construction of road improvements to meet or maintain General Plan policy level of service standards. The impacts would be less than significant.

b. **Vehicle Miles Travelled (VMT):** The proposed project includes a rezone from TPZ to PA which would allow special events by right. A Vehicle Miles Traveled (VMT) Analysis was prepared by T. Kear Transportation Planning and Management, Inc., dated January 9, 2024 (Attachment 11). The VMT Analysis report was reviewed by County DOT for content and compliance. The project is anticipated to generate an average of approximately 37 trips daily. Per Resolution 141-2020, there is a presumption of less than significant impacts for the projects that generate or attract less than 100 trips per day. Therefore, in accordance with Resolution 141-2020 and OPR's direction regarding determining transportation impacts for land use projects, this impact is presumed to be less than significant, and no further improvements were required. The impacts would be less than significant.

c. **Design Hazards**: Access to the project site would be from an existing, private driveway from North Canyon Road, a County-maintained roadway. DOT reviewed the project and provided comments, which are incorporated as conditions of approval. The impacts would be less than significant.

d. **Emergency Access:** The proposed Zone Change to PA would allow Special Events and Ranch Marketing. Future applications for Special Events would be reviewed by applicable Agencies, including DOT and the local Fire Department, to ensure compliance with applicable requirements, including emergency access requirements.

The project site is in an area of Very High Fire Hazard for wildland as shown on Figure HS-1 of the Fire Hazard Rating in the El Dorado County General Plan (2015), and California Department of Forestry and Fire Protection CALFIRE (January 2020). The El Dorado County General Plan Safety Element precludes development in areas of high/very 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 Urban Interface Fire Protection Plan Fire Safe Plan (WFSP) was prepared for the project by CDS Fire Prevention Planning, William F. Draper, Registered Professional Forester, report dated October 21, 2022 (Attachment 12). As stated in the report, any new building shall comply with Title 24. Annual maintenance of hazardous vegetation and removal prior to start of fire season and maintained throughout the fire season is critical for establishing and keeping a fire safe environment. The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are incorporated into the project as conditions of approval. Further, EDCFPD would review future applications for Special Events in cooperation with other Agencies, including the County EMD, Planning Division, and Agricultural Department, to ensure compliance with applicable policies and fire safe regulations. As conditioned, the 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.

| **XVIII. 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 appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

**Discussion:**

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

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

a,-b. **Tribal Cultural Resources:** A record search was prepared by the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) in Sacramento with a results summary dated June 24, 2022. Based on results of the record search, a Cultural Resources Study was prepared by Dana E. Supernowicz, dated August 2022. No significant prehistoric or historic archaeological sites, features, or artifacts were identified, nor were there any historic buildings, structures, or objects identified within the project area, and no further archaeological work was recommended. Further, the project is subject to the Cultural Resources provisions of CEQA Assembly Bill 52 (AB52), which requires Native American outreach. Pursuant to AB52, the County solicited input from Native American organizations and representatives listed with the Native American Heritage Commission to identify cultural resources and properties of concern to the Native American Community. At the time of the initial review consultation, seven Tribes have requested to be notified of proposed projects in El Dorado County: Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), Washoe Tribe of Nevada and California, and Wilton Rancheria. These Tribes were notified of the proposed project by certified mail on June 27, 2023. The Shingle Springs Band of Miwok Indians responded within 30 days to initiate consultation. Staff provided the Tribe with the Cultural Resources record search results and Cultural Resources Study for their review. Staff confirmed conclusion of consultation via email on November 1, 2023. Standard protective conditions of approval are incorporated with the project. The impacts would be less than significant.

**FINDING:** Standard conditions of approval 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 Tribal Cultural Resources.

| **XIX. UTILITIES AND SERVICE SYSTEMS.** *Would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects? | | | **X** | |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? | | | **X** | |
| c. 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** | |
| d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | **X** | |
| e. Comply with federal, state, and local statutes and regulations related to solid waste? | | | **X** | |

**Regulatory Setting:**

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

Energy Policy Act of 2005

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

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

California Integrated Waste Management Act of 1989

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

California Solid Waste Reuse and Recycling Access Act of 1991

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

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and

provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24–Building Energy Efficiency Standards

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

Urban Water Management Planning Act

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

***Other Standards and Guidelines***

Leadership in Energy & Environmental Design

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

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

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a. **New Stormwater Facilities or Construction of New Facilities:** No grading or construction is proposed therefore the proposed project would not result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. The impacts would be less than significant.

b. **Sufficient Water Supply:** The project site is served by an existing, private well. Future applications for Special Events would be reviewed by the County Environmental Management Department (EMD), and El Dorado County Fire Protection District (EDCFPD), to verify adequate potable water and emergency water supply availability, and compliance with applicable requirements. EMD and EDCFPD reviewed the project and provided comments, which are incorporated as conditions of approval. As conditioned, the impacts would be less than significant.

c. **Wastewater Requirements**: The project site is served by an existing, private septic-system. The County Environmental Management Department (EMD) reviewed the project and provided comments, which are incorporated as conditions of approval. Future applications for Special Events would be reviewed by EMD to ensure compliance with EMD requirements, including the County's Local Agency Management Plan (LAMP) standards, as applicable. As conditioned, the impacts would be less than significant.

d. **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. The impacts would be less than significant.

e. **Adequate Wastewater Capacity:** The project site is served by an existing, private septic-system. The County Environmental Management Department (EMD) reviewed the project and provided comments, which are incorporated as conditions of approval. Future applications for Special Events would be reviewed by EMD to ensure compliance with applicable requirements, including the County's Local Agency Management Plan (LAMP) standards. As conditioned, the impacts would be less than significant.

**FINDING:** For the Utilities and Service Systems category, no significant utility and service system impacts would be expected from the project, either directly or indirectly. The impacts would be less than significant.

**XX. WILDFIRE.** *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*

| | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | **X** | |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | **X** | |

| **XX. WILDFIRE.** *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | **X** | |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | **X** | |

**Discussion:**

a. The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan, alter any roadways, access points, or otherwise degrade traffic operations and access to the area in such a way as to interfere with an emergency response or evacuation plan. The project site is in an area of Very High Fire Hazard for wildland as shown on Figure HS-1 of the Fire Hazard Rating in the El Dorado County General Plan (2015), and California Department of Forestry and Fire Protection CALFIRE (January 2020). The El Dorado County General Plan Safety Element precludes development in areas of high/very 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 Urban Interface Fire Protection Plan Fire Safe Plan (WFSP) was prepared for the project by CDS Fire Prevention Planning, William F. Draper, Registered Professional Forester, report dated October 21, 2022 (Attachment 12). As stated in the report, any new building shall comply with Title 24. Annual maintenance of hazardous vegetation and removal prior to start of fire season and maintained throughout the fire season is critical for establishing and keeping a fire safe environment. The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are incorporated into the project as conditions of approval. Further, EDCFPD would review future applications for Special Events in cooperation with other Agencies, including the County EMD, Planning Division, and Agricultural Department, to ensure compliance with applicable policies and fire safe regulations. As conditioned, the impacts would be less than significant.

b. The proposed project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The Zone Change from TPZ to PA would allow Ranch Marketing, Wineries, and Special Events. Special Events would require review from County Agencies, including the El Dorado County Fire Protection District (EDCFPD), and would be required to adhere to all fire prevention and protection requirements and regulations of El Dorado County, including the El Dorado County Fire Hazard Ordinance and the Uniform Fire Code, as applicable. Pertinent measures may include a site plan showing ingress/egress, parking areas, and compliance with defensible space requirements as specified under Objective 6.2.1 of the Safety Element of the El Dorado County General Plan. With adherence to County Code of Ordinances and EDCFPD requirements, the impacts would be less than significant.

c. The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The project site is in an area of Very High Fire Hazard for wildland as shown on Figure HS-1 of the Fire Hazard Rating in the El Dorado County General Plan (2015), and California Department of Forestry and Fire Protection CALFIRE (January 2020). The El Dorado County General Plan Safety Element precludes development in areas of high/very 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 Urban Interface Fire Protection Plan Fire Safe Plan (WFSP) was prepared for the project by CDS Fire Prevention Planning, William F. Draper, Registered Professional Forester, report dated October 21, 2022 (Attachment 12). As stated in the report, any new building shall comply with Title 24. Annual maintenance of hazardous vegetation and removal prior to start of fire season and maintained throughout the fire season is critical for establishing and keeping a fire safe environment. The El Dorado County Fire Protection District (EDCFPD) reviewed the project and provided comments which are incorporated into the project as conditions of approval. Further, EDCFPD would review future applications for Special Events in cooperation with other Agencies, including the County EMD, Planning Division, and Agricultural Department, to ensure compliance with applicable policies and fire safe regulations. As conditioned, the impacts would be less than significant.

d. The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The 33.22-acre parcel does have areas of steep and sloping terrain, particularly the farmed trees (Christmas trees); however, no grading or construction is proposed. Any future construction would require compliance with applicable requirements of the County Code, Building Code, and Fire Safe Regulations, which would be reviewed at time of any grading and/or building permits. The impacts would be less than significant.

**FINDING:** As conditioned, and with adherence to El Dorado County Code of Ordinances and requirements of the El Dorado County Fire Protection District (EDCFPD), potential impacts would be less than significant.

| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE.** *Does the project:* | Potentially Significant Impact | Less than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

| **XXI. 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 substantially 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, substantially 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 and mitigated (MM BIO-1), 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.

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 proposed project and site-specific environmental conditions of approval, which have been disclosed in the Project Description and analyzed in Items I through XXI, show there would be no significant impacts anticipated related to aesthetics, agriculture/forest resources, air quality, biological resources, cultural resources, energy, geology/soils, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, land use planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, tribal cultural resources, utilities/service systems, or wildfire, that would combine with similar effects such that the project's contribution would be cumulatively considerable. For all categories (except biological resources which have incorporated mitigation measures MM BIO-1), a determination of either less than significant impacts or no 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 of approval 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

CAPCOA Guide (August 2010): http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-QuantificationReport-9-14-Final.pdf

California Air Resources Board (CARB). (2008). *Climate Change Scoping Plan.* Available at: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf

California Attorney General's Office. (2010). Addressing Climate Change at the Project Level. Available at: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf

California Department of Conservation (CDC). (2008). *Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008*. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf.

California Department of Conservation (CDC). (2013a). Important Farmland Categories webpage. Available online at: www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/ map_categories.aspx.

California Department of Conservation (CDC). (2013b). The Land Conservation Act. Available online at: www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.

California Department of Toxic Substances Control (DTSC). (2015). *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. Retrieved April 15, 2015 from http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

California Energy Commission. (2006). *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, *Staff Final Report*. Publication CEC-600-2006-013-SF.

California Department of Transportation (Caltrans). (2015). Scenic Highway Program FAQs: Caltrans Landscape Architecture Program. Retrieved February 27, 2015 from www.dot.ca.gov/hq/ LandArch/scenic/faq.htm.

California Department of Transportation (Caltrans). (2013). *California Scenic Highway Program, Officially Designated State Scenic Highways*. Retrieved April 8, 2015 from http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm.

California Geological Survey. (2016). Alquist-Priolo Earthquake Fault Zone Maps. Retrieved October 4, 2016 from http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. (2013). Seismic Hazards Zonation Program. Retrieved April 15, 2015 from http://www.conservation.ca.gov/cgs/shzp/Pages/affected.aspx.

California Code of Regulations. *Guidelines for Implementation of the California Environmental Quality Act.* Title 14, Section 15000, et seq. 14 CCR 15000

California Office of Emergency Services. 2015. Business Plan/EPCRA 312. Available online at: www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan.

El Dorado County. (2003). *El Dorado County General Plan Draft Environmental Impact Report*. State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2015). *El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief*. Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2005, July 21). Asbestos Review Areas, Western Slope, El Dorado County, California. Available at: < http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx>.

El Dorado County Air Quality Management District (AQMD). (2000). *Rules and Regulations of the El Dorado County Air Quality Management District*. Retrieved April 15, 2015 from http://www.arb.ca.gov/DRDB/ED/CURHTML/R101.HTM.

El Dorado County Air Quality Management District (AQMD). (2002). *Guide to Air Quality Assessment: Determining the Significance of Air Quality Impacts Under the California Environmental Quality Act*. Retrieved from http://www.edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx.

El Dorado County Geographic Information System (GIS) Data. Placerville, CA: Esri ArcGIS. Available: El Dorado County controlled access data GISDATA\LIBRARIES.

El Dorado County Transportation Commission. (2012). *El Dorado County Airport Land Use Compatibility Plan*. Retrieved from http://www.edctc.org/2/Airports.html.

Federal Emergency Management Agency (FEMA). (2008). FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated area, no. 06017C1025E. Available at: http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=94926033&IFIT=1.

Governor's Office of Planning and Research (OPR). (2008, June 19). *Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act Review*. Available at: Sacramento, CA. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.

Sacramento Metropolitan Air Quality Management District (SMAQMD). (2010). Construction GHG Emissions Reductions. Available at: http://airquality.org/ceqa/cequguideupdate/Ch6FinalConstructionGHGReductions.pdf

State Water Resources Control Board (SWRCB). (2013). Storm Water Program, Municipal Program. Available online at: www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml.

National Earthquake Hazards Reduction Program (NEHRP). (2009). Background and History. Available online at: www.nehrp.gov/about/history.htm.

San Luis Obispo County Air Pollution Control District (SLOAPCD). (2012, April). A Guide for Assessing The Air Quality Impacts For Projects Subject To CEQA Review. Available at http://www.slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf.

United States Department of Agriculture (USDA) Soil Conservation Service and Soil Service. (1974). *Soil Survey of El Dorado Area, California*. Retrieved April 10, 2015 from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/el_doradoCA1974/EDA.pdf

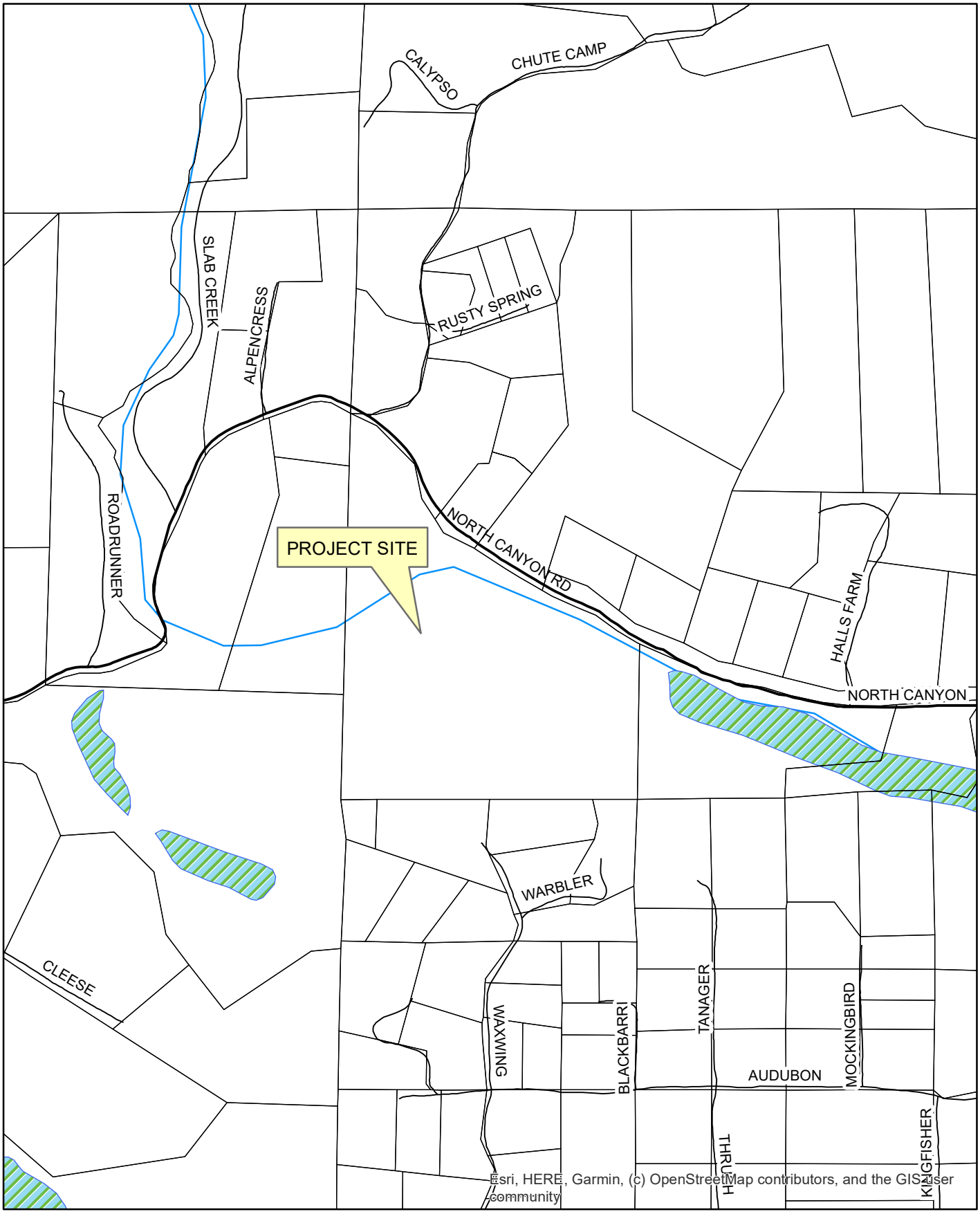
U.S. Environmental Protection Agency. (2014). Summary of the Energy Policy Act. Available online at: www2.epa.gov/laws-regulations/summary-energy-policy-act.

U.S. Environmental Protection Agency. (2015). The Green Book Nonattainment Areas for Criteria Pollutants. Available online at: www.epa.gov/airquality/greenbook.

U.S. Green Building Council (USGBC). (2014). LEED v4 for Building Design and Construction Addenda. Updated October 1, 2014. Available online at: www.usgbc.org/resources/leed-v4-building-design-and-construction-redline-current-version.

U.S. Green Building Council (USGBC). (2015). LEED Overview. Available online at: www.usgbc.org/leed.

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
## ATTACHMENT 1 - LOCATION MAP




0 185 370 740 1,110 1,480
Feet

Scale

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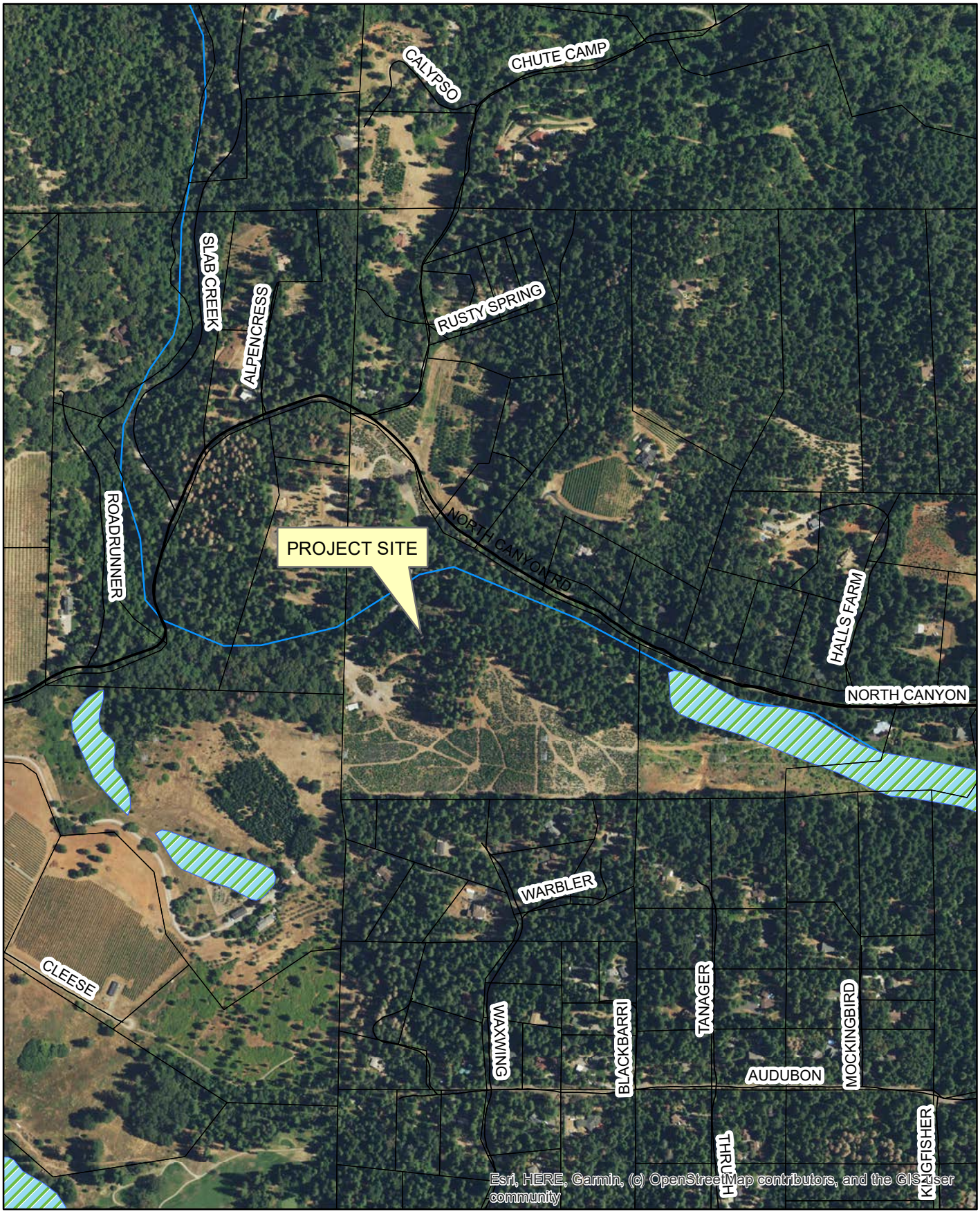
Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
ATTACHMENT 2 - AERIAL MAP

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Feet

Scale

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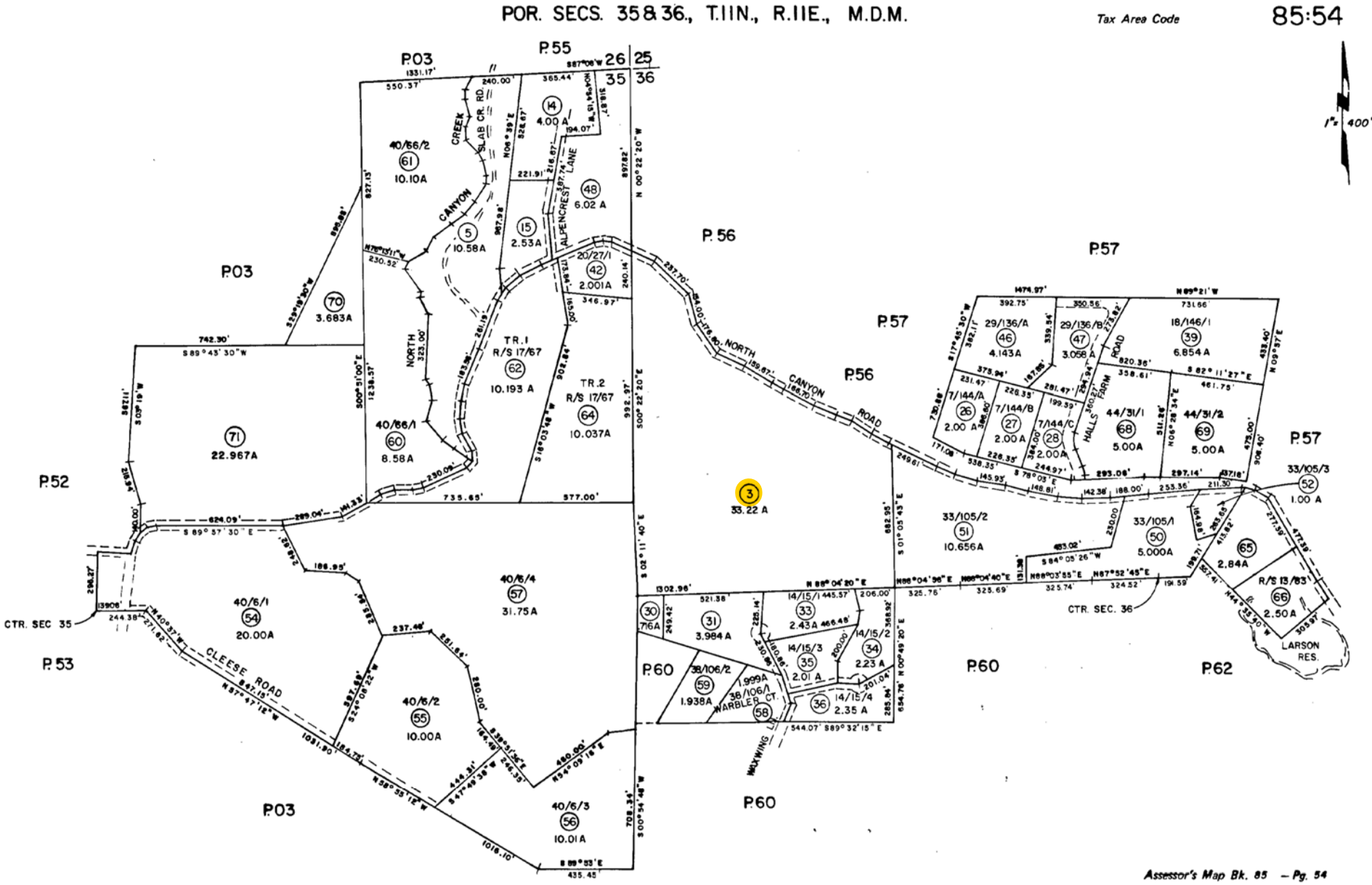
# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 3 - ASSESSOR'S PARCEL PAGE



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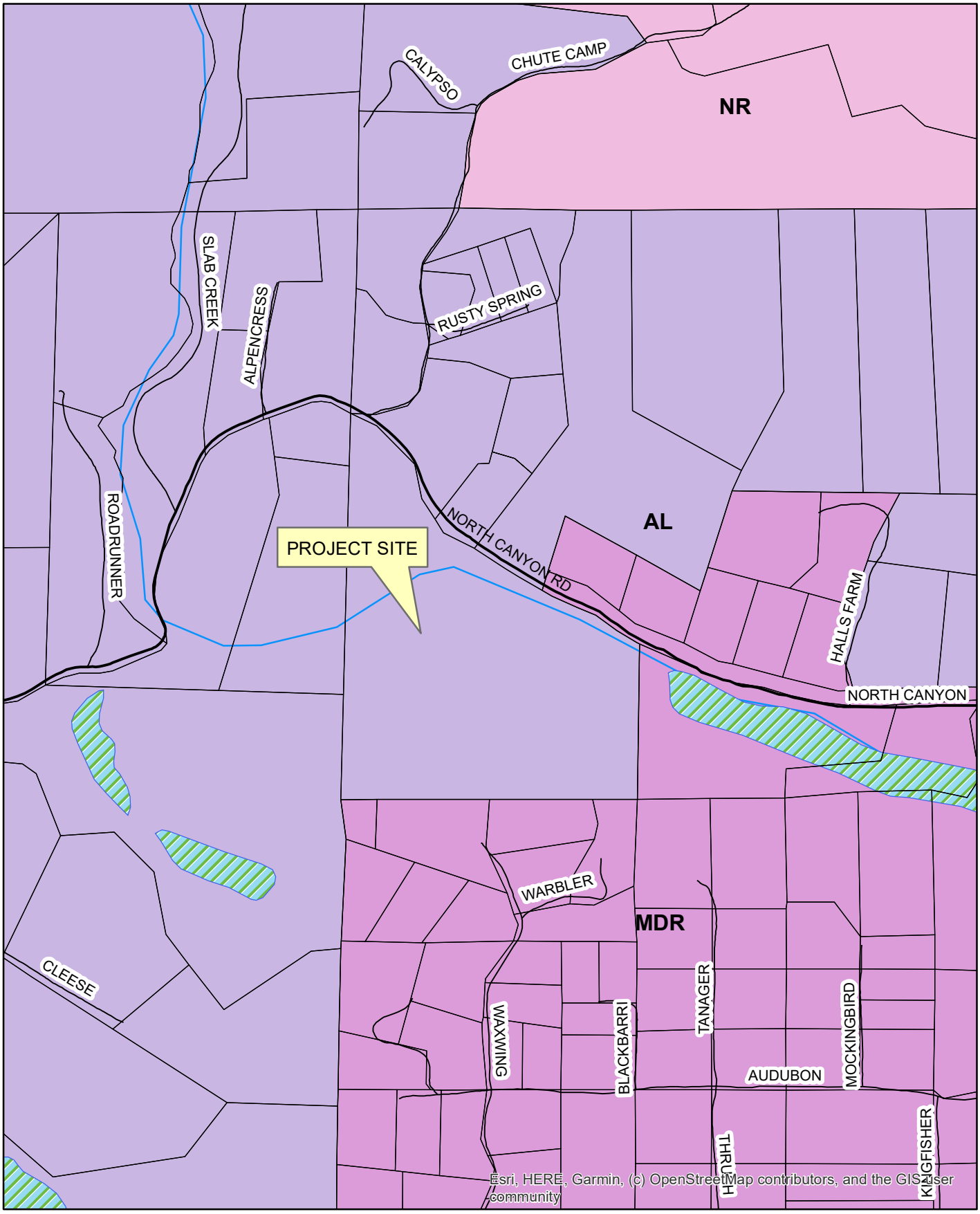
## ATTACHMENT 4 - GENERAL PLAN LAND USE MAP




0 185 370 740 1,110 1,480
Feet

Scale

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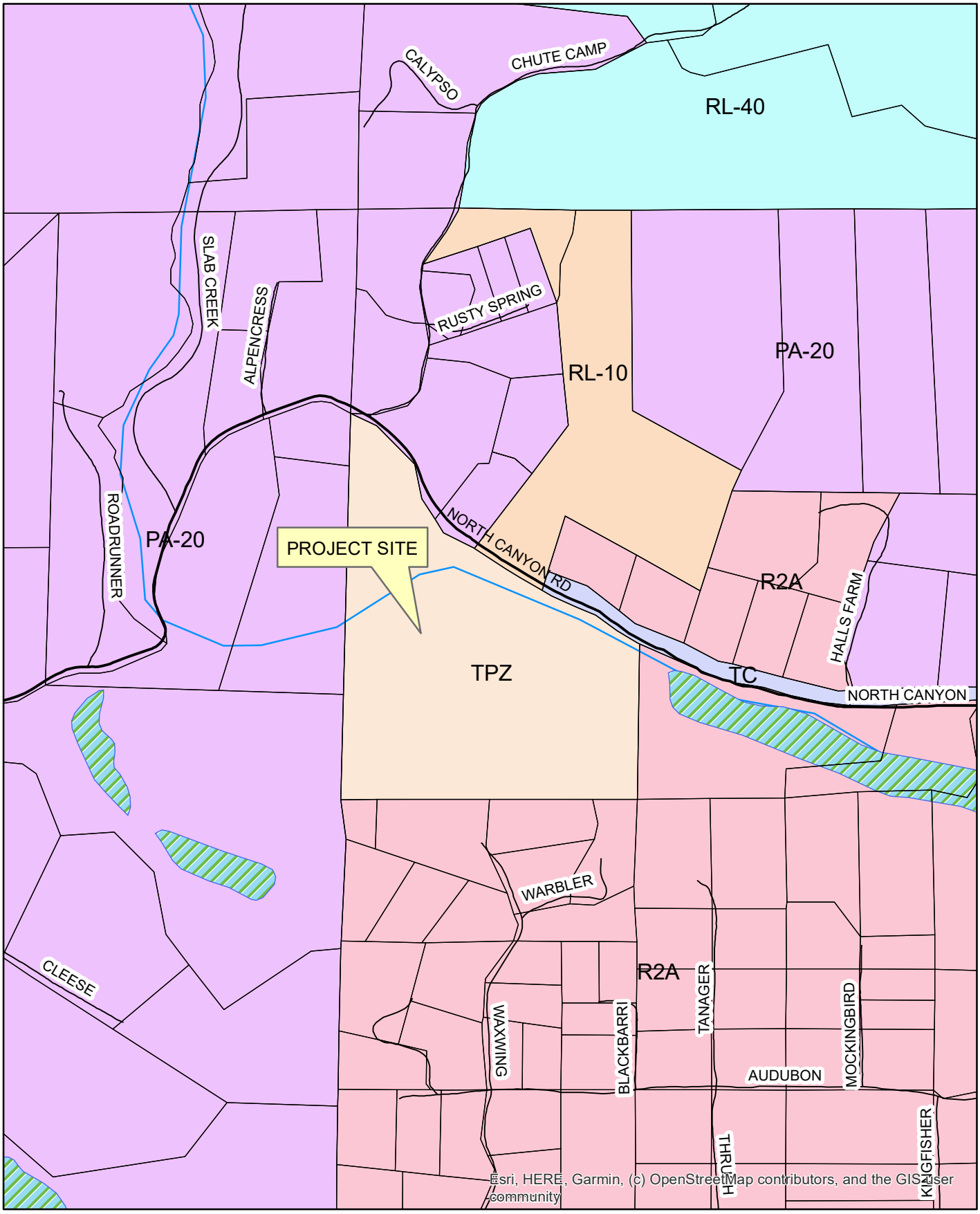
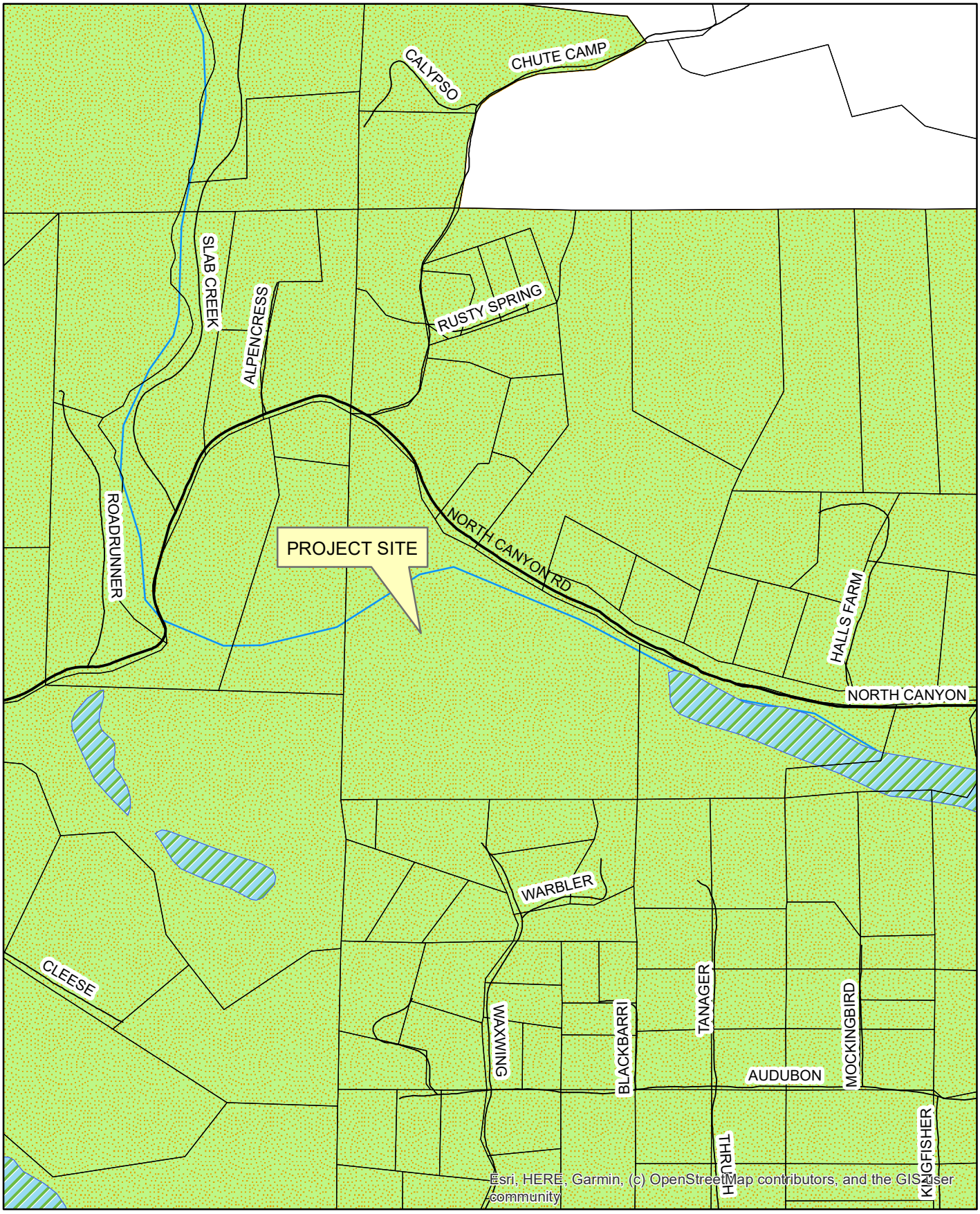
# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
## ATTACHMENT 5 - ZONING MAP (CURRENT)



# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
## ATTACHMENT 6 - AGRICULTURAL DISTRICT BOUNDARY MAP




0 185 370 740 1,110 1,480
Feet

Scale

N

## WATER SOURCE

EXISTING WELL

## WASTE WATER DISPOSAL

EXISTING SEPTIC SYSTEM

## SITE NOTES

1. EXISTING HOUSE
2. EXISTING SEPTIC AREA
3. EXISTING DRIVEWAY
4. EXISTING WELL
5. EXISTING STORAGE SHED
6. EXISTING GREETING KEYOS
7. EXISTING POLE BARN
8. EXISTING SALES OFFICE
9. EXISTING GIFT SHOP
10. EXISTING PARKING AREA
11. EXISTING RANCH ROADS
12. EXISTING CHRISTMAS TREE PLANTATIONS
13. EXISTING TIMBER LANDS
14. EXISTING BRIDGE
15. EXISTING FOOT BRIDGE
16. EXISTING POND

## OWNER/APPLICANT

APN 085-540-003-000
GERALDINE F. HYDER TRUSTEE OF
THE RAYMOND L. HYDER AND
GERALDINE F. HYDER 1994 TRUST
3800 NORTH CANYON RD.
CAMINO, CA 95709

# REZONE SITE MAP

**RECEIVED**
JAN 13 2023
EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

A PORTION OF THE NORTHWEST 1/4 OF
SECTION 36 T. 11 N., R. 11 E., M. D. M.
BEING TRACT 1 OF RS 38/05
COUNTY OF EL DORADO STATE OF CALIFORNIA

AUGUST 2022

0 60 120 180
SCALE 1" = 60'
CONTOUR INTERVAL = 10'

**FILE COPY**

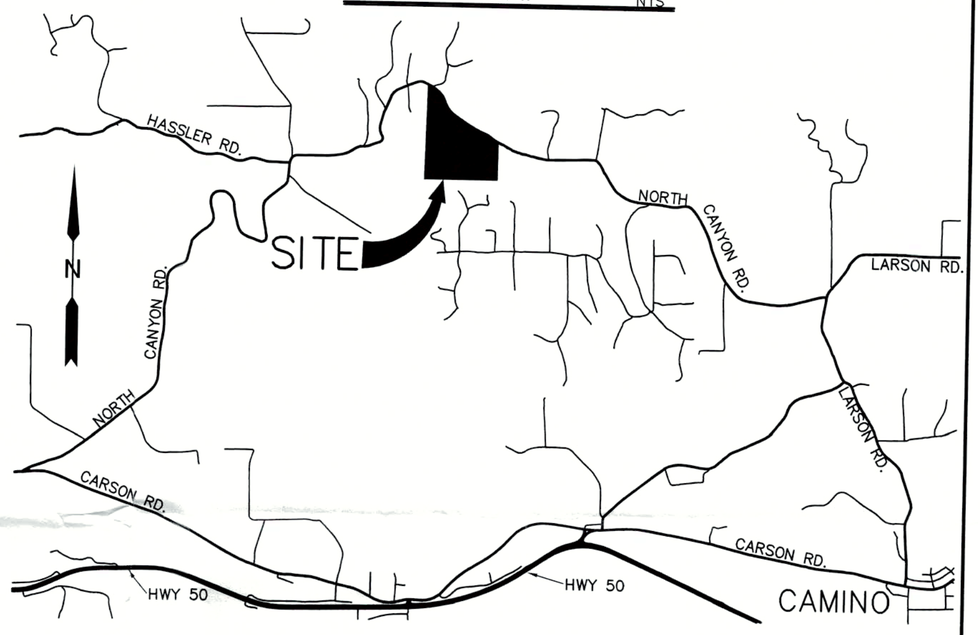
## MAP PREPARED BY

JAMES WILLSON, LS 4663
SITE CONSULTING INC
LAND SURVEYING SERVICES - BIOLOGICAL SERVICES
3460 ANGEL LANE
PLACERVILLE, CA 95667

LICENSED LAND SURVEYOR
JAMES C. WILLSON
NO. 4663
Exp. 9/30/2024
STATE OF CALIFORNIA

## VICINITY MAP

NTS




APN: 085-540-048
2008-0009146

APN: 085-560-007
2018-0039636

APN: 085-540-042
PM 20/27
PARCEL 1

S 64°32'55" E 126.47'

APN: 085-560-010
PARCEL 4
PM 3/168

S 44°41'55" E 237.70'

S 11°57'55" E 154.00'

NORTH CANYON ROAD

S 32°26'55" E 176.80'

APN: 085-560-022
PM 47/106
PARCEL B

S 62°45'55" E 156.00'

S 57°10'05" E 159.67'

S 58°14'35" E
70.00'

S 60°05'05" E 166.70'

S 65°34'35" E 124.00'

S 66°55'05" E
85.50'

S 54°45'05" E 116.14'

S 58°49'35" E
102.00'

S 62°26'35" E
12.12'

APN: 085-560-019
2018-0029654

APN: 085-560-016

APN: 085-570-009
PM 10/107
PARCEL 1

APN: 085-540-064
RS 17/67
TRACT 2

100' SETBACK LINE

NORTH CANYON CREEK

100' SETBACK LINE

N 01°25'53" E 1696.46'

APN: 085-540-003
THE RAYMOND L. HYDER AND
GERALDINE F. HYDER 1994 TRUST
4408/184
TRACT 1 RS 38/5

APN: 085-540-057
PARCEL 4 PM 40/76

50.00' WIDE SMUD POWER LINE EASEMENT PER 779/402

150.00' WIDE SMUD POWER LINE EASEMENT PER467/454

100.00' PG&E POWER LINE EASEMENT PER 96/46

APN: 085-540-051
PARCEL 2 PM 33/105

S 00°42'33" W 682.08'

S36

S35

S 89°53'12" W 1303.42'

APN: 085-540-030
2013-0057400

APN: 085-540-031
2015-0055954

APN: 085-540-033
PM 14/15
PARCEL 1

APN: 085-540-034
PM 14/15
PARCEL 2

APN: 085-600-071
2013-0061153

**Z21-0010/WAC21-0003**

# Biological Resources Report

**including**

## Special-Status Species Survey

**for**

**Assessor' Parcel Number 085-540-003-000**

**3800 North Canyon Road**

**Camino, 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
***Geraldine Hyder***
Contact
**Karen Hyder**
Phone: 530-391-9056

September 2022

# Table of Contents

# Table of Figures, Tables and Appendices

## Figures



## Tables



## Appendices

# I. Report Summary

## A. Special-Status Species and Special Habitats

### 1. Special-status species

**No state- or federal-listed species were found on the project site.** Marginal potential habitat was found for two state- or federal-listed species: California red-legged frog (*Rana draytonii)* and Bald eagle (*Haliaeetus leucocephalus*) (Table 1).

**No species of concern were found on the project site.** Potential habitat was found for twenty-six species of concern, including two insects: Western bumble bee (*Bombus occidentalis*) and Wawona riffle beetle (*Atractelmis wawona*); one amphibian: Foothill yellow-legged frog (*Rana boylii*); five birds: Oak titmouse (*Baeollophus inornatus*), Cassin's finch (*Carpocacus cassinii*), Evening grossbeak (*Coccothraustes vesperina*), Olive-sided flycatcher (*Contopus cooperi*), Black-throated gray warbler (*Dendroica nigrescens*); seven mammals: Pallid bat (*Antrozous pallidus)*, Ringtail (*Bassariscus astutus*), Townsend's big-eared bat (*Corynorhinus townsendii*), Porcupine (*Erethizon dorsatum*), Silver-haired bat (*Lasionycteris noctivagans*), Long-legged myotis bat (*Myotis volans*), and Yuma myotis bat (*Myotis yumanensis*); and eleven plants: Sierra arching sedge (*Carex cyrtostachya*), Stebbin's phacelia (*Phacelia stebbinsii*), Sierra blue grass (*Poa sierrae*), Oval-leaved viburnum (*Viburnum ellipticum*), True's manzanita (*Arctostaphylos mewukka* ssp. *truei*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Sierra clarkia (*Clarkia virgata*), Northern Sierra daisy (*Erigeron petrophilus* var. *sierrensis*), Humboldt's lily (*Lilium humboldtii* ssp. *humboldtii*), Sierra sweet bay (*Myrica hartwegii*), and Long-fruited jewelflower (*Streptanthus longisiliquus*). See pages 21-27 for more details.

### 2. Special Habitats

**One special habitat was found on the project site:** Central Valley Drainage Resident Rainbow Trout Stream (Table 1).

**Table 1.** State- or federal-listed species having potential habitat on the project site, and a special habitat found on the project site.

| Special-status Species | Common Name | Legal Status[1] Federal/ State | Species or Special Habitat Found On Site? | Habitat Quality |
|---|---|---|---|---|
| **State- or Federal-listed Species** | | | | |
| *Rana draytonii* | California red-legged frog | T / | No | Marginal |
| *Haliaeetus leucocephalus* | Bald eagle | D / E | No | Very Marginal |
| **Special Habitat** | | | | |
| Central Valley Drainage Resident Rainbow Trout Stream | | | Yes | Suitable |

[1]**Legal Status**: **E** = Endangered **D** = Delisted **T** = Threatened

### B. Suggested Mitigation

No state- or federal-listed species were found on the project site, so no mitigation is required for them. No mitigation should be required for species of concern not found on the project site.

Normal setbacks from waters and wetlands (100 feet from North Canyon Creek and the off-channel pond) would be sufficient to protect features and resources associated with them.

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.

## II. Introduction

### A. Purpose of Report

A biological resources study was conducted on Assessor's Parcel Number 085-540-003-000 (Figure 1), a 33.22 acre parcel, in order to determine the suitability of its habitat to support state- or federal-listed special-status wildlife and plant species. The site was also searched for special-status wildlife and plant species and special habitats which might occur there. The report is part of submittal information for a zone change from TPZ to PA.

### B. Property Location and Description

The project site is in the west half of Section 36, Township 11 North, Range 11 East, M.D.M. The parcel is located at 3800 North Canyon Road, Camino, El Dorado County, CA. (Figures 2 and 3).

The project site has General Plan designation of Agricultural Land (AL, District A) with TPZ, zoning. It is bounded by properties varying in size from 0.716 to 31.75 acres.

### C. Property Owner and Project Manager

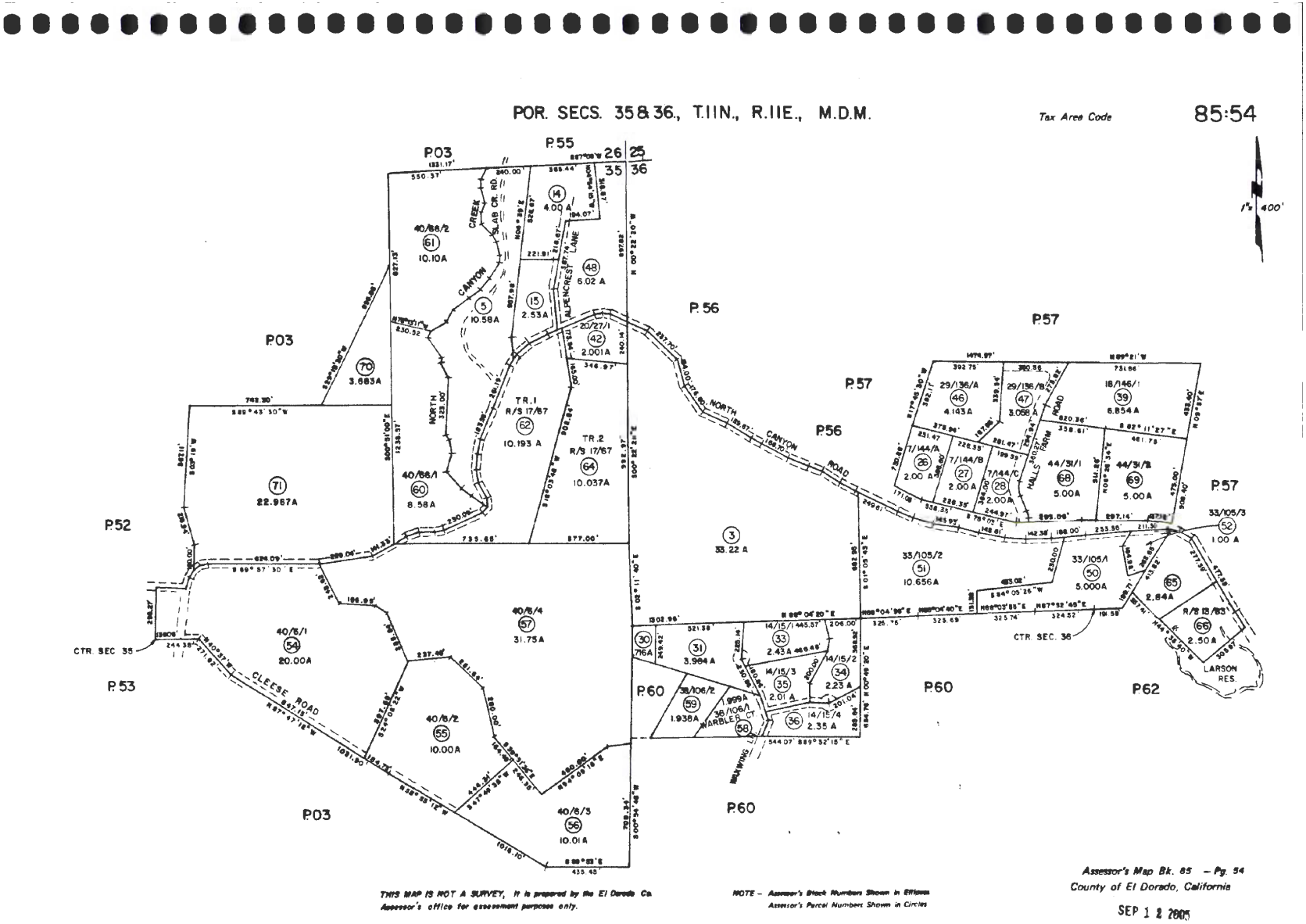
**Property Owner**
Raymond L. Hyder and Geraldine
F. Hyder 1994 Trust
3800 North Canyon Road
Camino, CA 95709

**Project Manager**
Karen Hyder
Phone: 530-391-9056

### 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.

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



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SCALE 1" = 200'


FIGURE 2. AERIAL PHOTO

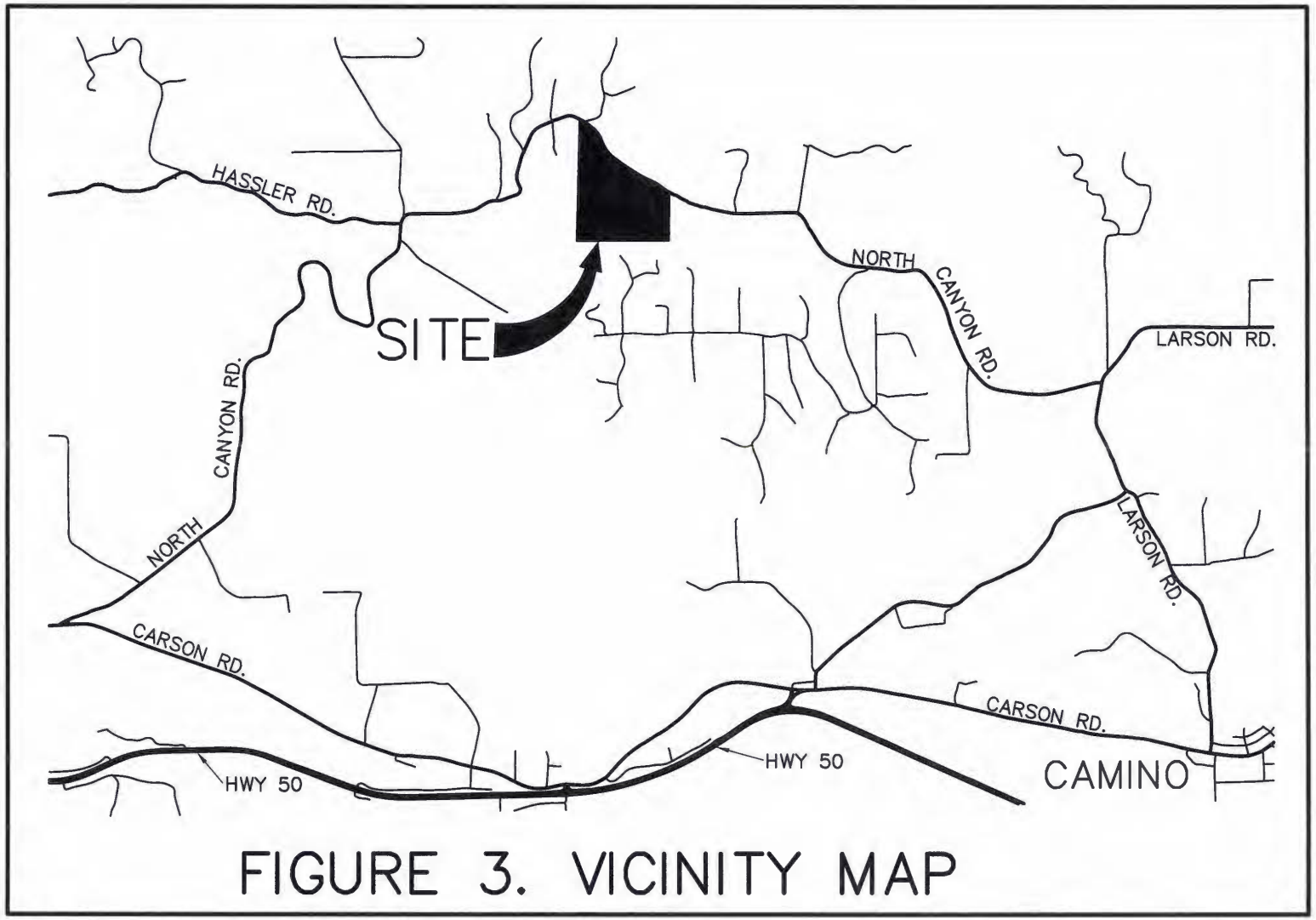



FIGURE 3. VICINITY MAP

# III. Evaluation Methods

### A. Field Surveys

The project site was searched for special-status species during field surveys conducted July 27, August 9, and September 1, 2022, by Ruth Willson. Field searches were conducted around the perimeter of the parcel, along all roads and on transects about 50 feet apart in forested areas and Christmas tree plantations.

Plants were identified in the field whenever possible. Samples of unknown plants were taken with identification achieved in the office through the use of Jepson Flora Project (2022). Vegetation communities were identified in the field and mapped utilizing aerial photos.

### B. Literature Search

The U.S. Fish and Wildlife Service (USFWS) Official Species List (Appendix A) and a USFWS IPaC Trust Resource Report (Appendix B), both dated July 14, 2022, served as the main sources of data on federal-listed species and migratory birds that could be affected by the project. A report of known occurrences of special-status species in the Slate Mountain and eight surrounding USGS Quads, dated July1, 2022, was obtained from the California Natural Diversity Database (Appendix C). Other current lists reviewed include the California Department of Fish and Wildlife (DFW) publications *State and Federally Listed Endangered, Threatened and Rare Plants of California* and *Special Vascular Plants, Bryophytes and Lichens,* along with the California Native Plant Society (CNPS) list, *Inventory of Rare and Endangered Plants,* online edition, v9-01 0.39, accessed July 14, 2022 (Appendix D).

### C. Vegetation Community Classification

References on the classification of vegetation include Mayer & Laudenslayer (1988), Munz & Keck (1959) and Sawyer et al. (2009). Vegetation communities are referenced to major habitat types 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 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. Waters and Wetlands

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

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 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act or any part of such migratory non-game bird, except as provided by the Secretary of the Interior under provisions of the Migratory Treaty Act.

### C. El Dorado County Regulations

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

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

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

#### 2. El Dorado County Ordinance 17.71

Mitigation for projects in Rare Plant Mitigation Areas 1 and 2 are outlined Ordinance 17.71, with a strong emphasis on use of an Ecological Preserve Fee or participation in the Off-site Mitigation Program as the preferred mitigation options. Use of the Ecological Preserve Fee as mitigation can no longer be done, due to the ruling of the California Appellate Court in *California Native Plant Society v. El Dorado County [170 Cal. App.4th 1026 (2009)]*, and El Dorado County does not currently have an Off-site Mitigation Program. The only remaining mitigation option, On-site Mitigation, is outlined in Section 17.71.020:

1. Development within Mitigation Area 0 will continue to address mitigation for impacts to rare plants on an individual basis. Within Mitigation Area 0, on-site mitigation is strongly encouraged. Developments within Mitigation Area 0 shall mitigate impacts by exercising one of the following three (3) options:

   a. Set aside a part of the property and dedicate a perpetual conservation easement for habitat protection; or

   b. Cluster development in the least environmentally sensitive portion of the property according to the implementation strategy adopted by the County in March 1993 and receive in appropriate cases a density bonus in return for dedication of a perpetual conservation easement over the remainder of the property; or

   c. Provide an independent mitigation plan that meets CEQA requirements, such as the purpose of long-term protection of an amount of habitat in the same ecological preserve and as close to the development site as feasible, equal to at least 1.5 times the acreage developed.

2. Option 1.b. of this Section shall apply only to properties greater than five (5) acres in area.

## V. Topographic Features

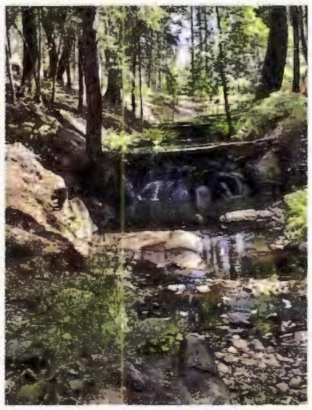
### A. Topography

The project site lies between 2600 and 2850 feet (790 and 870 meters) elevation. North Canyon Creek, a perennial stream, flows westerly through the parcel; the creek's gradient is about 5 percent. The topography south of the creek primarily consists of northerly and westerly slopes from a knoll on the south boundary to the creek. The gradient of that slope is approximately 22 percent. The topography north of the creek consists of a southeasterly slope from a knoll to the creek with a gradient of about 20 percent (Figure 5, next page).

**Figure 4.** Photos of the project site.

Christmas tree plantation.

Forest land.



North Canyon Creek.

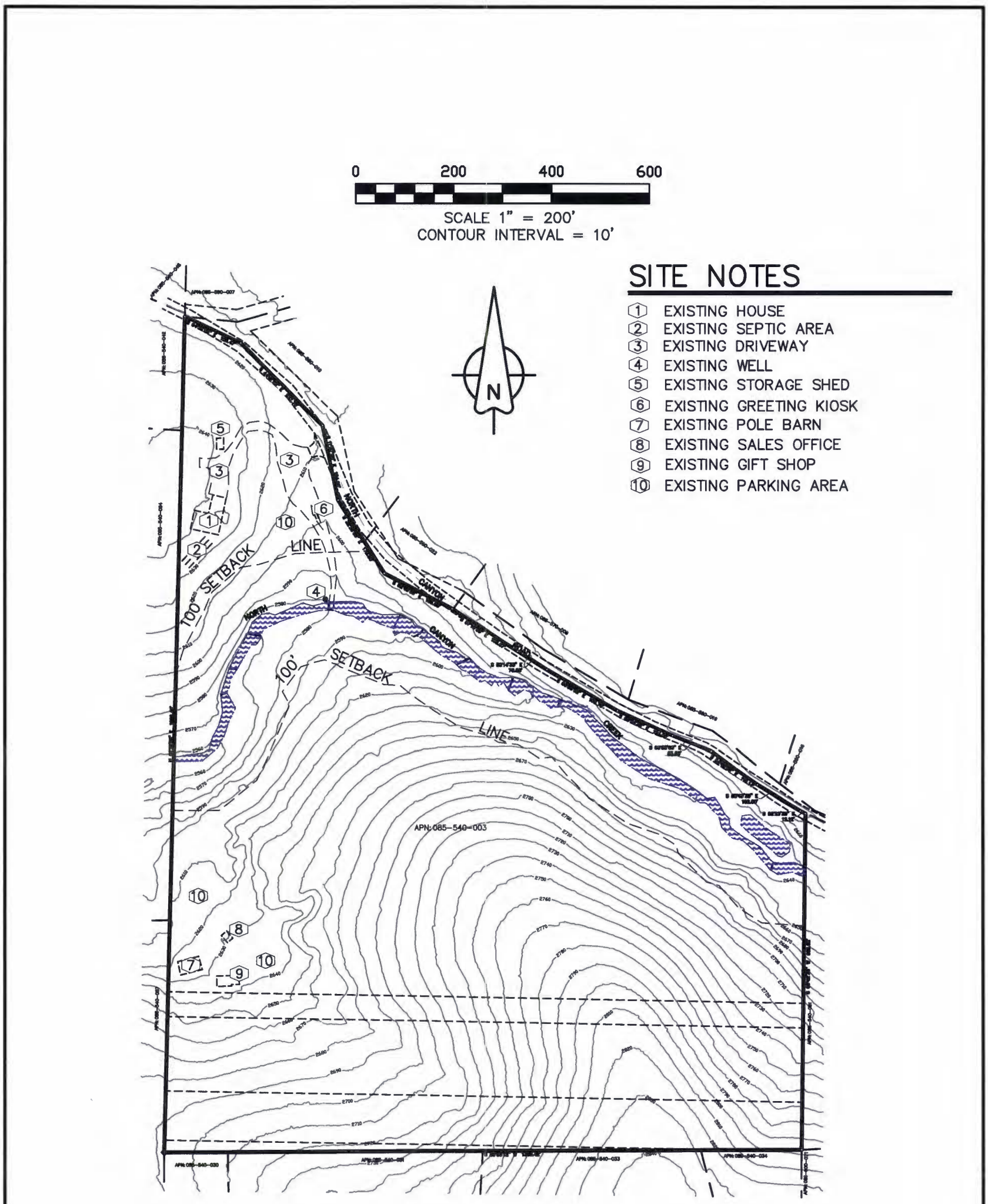



FIGURE 5. TOPOGRAPHIC MAP

**B. Soils**

Soils on the project site (Figure 6) include (counterclockwise from northwest to northeast) Musick sandy loam, 9 to 15 percent slopes (MrC), Musick sandy loam, 15 to 30 percent slopes (MrD), Sites loam, 15 to 30 percent slopes (SkD), Sites loam 15 to 30 percent slopes (SkE), and Sites loam, 9 to 15 percent slopes (SkC). Musick sandy loam covers about 22 acres and Sites loam covers about 11 acres of the project site (USDA, NRCS 2022).

**Figure 6.** Soils map from National Resource Conservation Service.

# VI. Biological Resources

## A. Vegetation Communities

Vegetation communities on the project site include Sierran Mixed Conifer Forest, Riparian and Agricultural Land (Figure 8, next page).

### 1. Sierran Mixed Conifer Forest

Sierran mixed conifer forest (Mayer & Laudenslayer 1988; El Dorado County 2004) covers about 15.6 acres of the project site. **Another name for this vegetation type is Lower montane coniferous forest, which is utilized by the California Natural Diversity Database and California Native Plant Society references herein.** The most abundant species is ponderosa pine *(Pinus ponderosa)*, followed by incense cedar (*Calocedrus decurrens*) and Douglas-fir (*Pseudotsuga menziesii*). Madrone (*Arbutus menziesii)*, mountain dogwood (*Cornus nuttallii*), and California nutmeg (*Torreya californica*) are also found in the tree canopy. The shrub layer is mostly absent, due to careful forest management through the years (prescribed burning and shrub removal), but scattered shrubs include Oregon grape (*Berberis aquifolium*), toyon (*Heteromeles arbutifolia*), Western poison-oak (*Toxicodendron diversiloba*) and California rose (*Rosa californica*). The ground layer includes mountain misery (*Chamaebatia foliolosa*), blue wild-rye (*Elymus glaucus ),* dogtail grass (*Cynosurus echinatus)*, Pacific starflower (*Lysimachia latifolia*), hairy wood-rush (*Luzula comosa*), American lotus (*Acmisphon americanus*) and Klamathweed *(Hypericum perforatum ).* A complete list of plants found on-site is presented in Appendix F.

### 2. Riparian

Riparian vegetation, occurring along the banks of North Canyon Creek, covers about 1.6 acres. Riparian trees include big-leaf maple (*Acer macrophyllum*) and white alder (*Alnus rrhombifolia*). Shrubs found alongside the stream include Himalayan blackberry (*Rubus armeniacus*) and cutleaf blackberry (*R. laciniatus*). The creek supports a large variety of herbaceous species, including common horsetail (*Equisetum arvense*), big-leaf sedge (*Carex amplifolia*), Thompkin's sedge *(C. tompkinsii)*, lovegrass sedge (*Cyperus eragrostis*), panicled bulrush (*Scirpus microcarpus*), water iris (*Iris pseudacorus*), Baltic rush (*Juncus balticus*), common velvet grass (*Holcus lanatus*) and clustered dock (*Rumex conglomeratus*), among others.

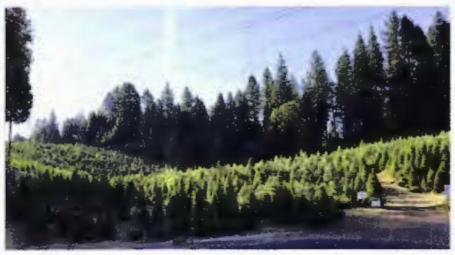
### 3. Agricultural land

Approximately 15.2 acres of the project site is utilized as a choose-and-cut Christmas tree farm. The plantations include Douglas-fir, silvertip fir (*Abies magnifica*), white fir (*Abies concolor*), blue spruce (*Picea pungens*) and various specialty firs. The plantations have been managed to suppress competing vegetation, so the ground layer is largely absent.

**Figure 7.** Vegetation communities photos.

Sierran Mixed Conifer Forest

Riparian



Agricultural land: Christmas tree plantation.

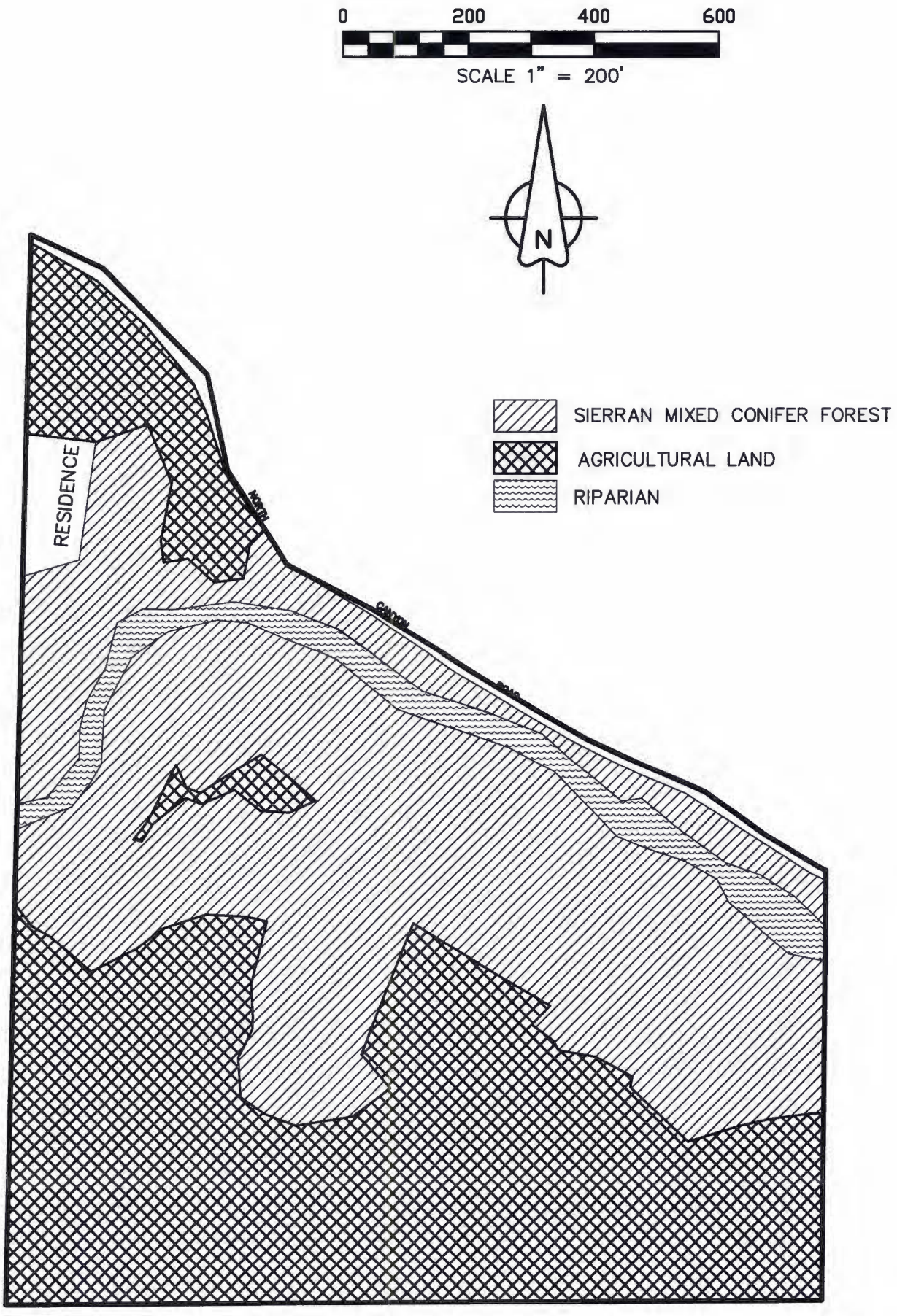



FIGURE 8. VEGETATION COMMUNITIES

### B. Waters and Wetlands

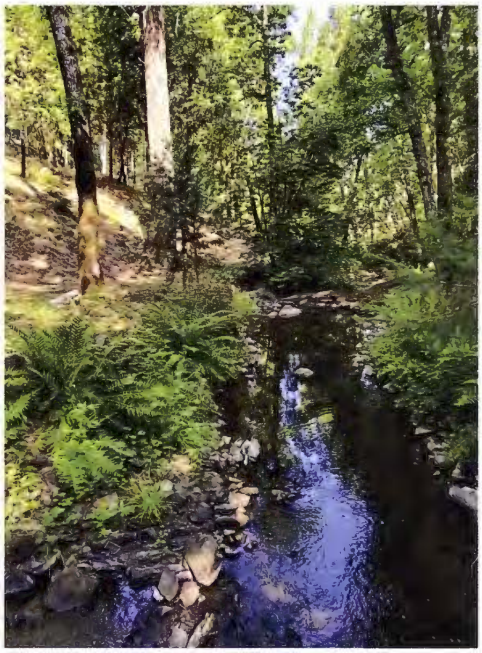
North Canyon Creek, a perennial stream (Figures 9 and 10), flows westerly through the northern portion of the project site. The gradients of the slopes above the creek (22% to 24%) are too steep to support wetlands along its bank.

An off-channel pond, dug decades ago, is found north of the creek near the northeast corner of the property. A wetland is found within the pond footprint; its area is included within the waters calculation. Total area of waters on the project site is 35,019 ft.$^2$ (0.78 Ac.).

### C. Mine Habitat

The project site has a mine located near the main plantation parking area (photo at left and one on page 23). The mine is currently used as a feature for Christmas tree customers to enjoy, and the customers are encouraged to sign their names on its beams. It has too much human use to be utilized as hibernation habitat for bats, although small amounts of bat guano were found in the mine. No bats were found in the mine during field surveys, but it is possible that bats had accessed the area above the mine's ceiling through cracks, and could not be seen.

**Figure 9.** Photos of waters and wetlands on the project site.



North Canyon Creek.

The off-channel pond near the northeast corner of the project site.

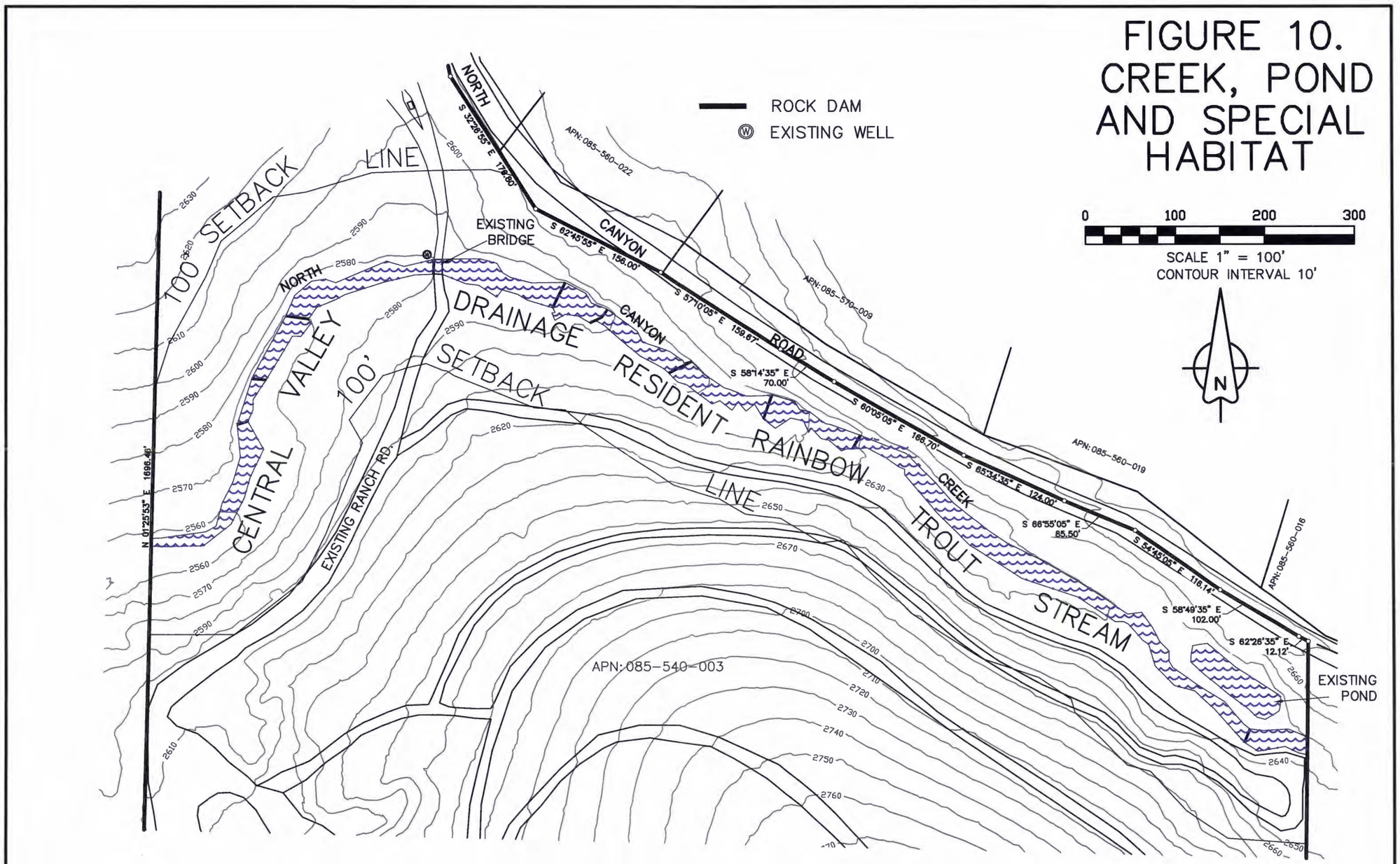


FIGURE 10.
CREEK, POND AND SPECIAL HABITAT
ROCK DAM
EXISTING WELL
0 100 200 300
SCALE 1" = 100'
CONTOUR INTERVAL 10'
N
NORTH CANYON
S 32°29'55" E 179.60'
APN: 085-560-022
EXISTING BRIDGE
S 62°45'55" E 156.00'
CANYON
S 57°10'05" E 159.87'
ROAD
S 58°14'35" E 70.00'
S 60°05'05" E 166.70'
APN: 085-570-009
APN: 085-560-019
S 65°34'35" E 124.00'
S 66°55'05" E 85.50'
S 54°45'05" E 118.14'
APN: 085-560-018
S 58°49'35" E 102.00'
S 62°26'35" E 12.12'
EXISTING POND
100' SETBACK LINE
NORTH VALLEY CENTRAL DRAINAGE
100' SETBACK
EXISTING RANCH RD.
RESIDENT - RAINBOW TROUT CREEK
STREAM
APN: 085-540-003
N 01°25'53" E 1696.46'

### D. Wildlife

Two reptile species were observed on the project site: Western fence lizard (*Sceloporus occidentalis*) and Western skink (*Plestiodon skiltonianus*). The site has suitable habitat for additional reptiles not observed during field surveys, including, but not limited to, common king snake (*Lampropeltis getula*), gopher snake (*Pituophis catenifer*), Western skink (*Plestiodon skiltonianus*), Northern alligator lizard (*Elgaria coerulea*), sharp-tail snake (*Contia tenuis*), and Western rattlesnake (*Crotalus viridis*).

No amphibians were observed, but the site has suitable habitat for Pacific tree frog (*Pseudacris egilla*),. California slender salamander (*Batrachoseps attenuatus*), Western toad (*Anaxyrus boreas*), and ensatina (*Ensatina eschscholtzii*), among others not mentioned.

Mammals observed on the project site include Western gray squirrel (*Sciurus griseus*) and black-tailed deer (*Odocoileus hemionus)*. Evidence of other mammals on the project site include coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), black bear (*Ursus americanus*), California ground squirrel (*Spermophilus beecheyi*), Botta's Pocket Gopher (*Thomomys bottae*) and black-tailed jackrabbit (*Lepus californicus)*. Not observed, but having suitable habitat on-site, are the following mammals, among others not mentioned: North American deer mouse (*Peromyscus mephitis*), California vole (*Microtus californicus*), broad-footed mole (*Scapanus latimanus*), raccoon (*Procyon lotor*), Northern river otter (*Lontra canadensis*) and ringtail (*Bassariscus astutus*).

Several bird species were found on or near the project site, including turkey vulture (*Cathartes aura*), red-tailed Hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus* ), mourning dove (*Zenaida macroura*), American robin (*Turdus migratorius*), Anna's hummingbird (*Calypte anna*), red-breasted nuthatch (*Sitta canadensis*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Spinus psaltria*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), wild turkey (*Meleagris gallopavo*), and dark-eyed junco (*Junco hyemalis*).

The site has suitable habitat for several bird species not observed during field surveys, including, but not limited to, the following: Stellar's jay (*Cyanocitta stelleri),* Band-tailed pigeon (*Patagioenas fasciata*), Northern flicker (*Colaptes auratus*), and Pine siskin (*Carduelis pinus*).

### E. Special-Status Species

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

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

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

The property was searched for special-status species during field surveys conducted July 27, August 9, and September 1, 2022. No species protected by the state or federal Endangered Species Acts were found; however, potential habitat was found for two such species: California red-legged frog (*Rana draytonii)* and Bald eagle (*Haliaeetus leucocephalus*). No species of concern were found on-site; however, potential habitat for twenty-five species of concern was found (Table 2). In addition, one special habitat was found: Central Valley Drainage Resident Rainbow Trout Stream. The suitability of the site to support each species is evaluated in Subsection 3, below.

**Table 2.** Special-status species with potential habitat on the project site.

| | Common Name | Listing Status[1] Federal/ State (Other) | Habitat Quality | Species Found On Site? |
|---|---|---|---|---|
| **State- or Federal-Listed Species** | | | | |
| ***Rana draytonii*** | **California red-legged frog** | **T / —** | Marginal | No |
| *Haliaeetus leucocephalus* | **Bald eagle** | D / E | Very Marginal | No |
| **Species of Concern** | | | | |
| **Invertebrates** | | | | |
| *Atractelmis wawona* | Wawona riffle beetle | — / — | Suitable | No |
| *Bombus occidentalis* | Western bumble bee | — / — | Marginal | No |
| **Birds** | | | | |
| *Baeolophus inornatus* (nesting) | Oak titmouse | — / — (BCC) | Marginal | No |
| *Carpocacus cassinii (=Haemorhous cassini)* | Cassin's finch | — / — (IUCN: LC) | Suitable | No |
| *Coccothraustes vesperinus* | Evening grossbeak | — / — (IUCN: LC) | Suitable | No |
| *Contopus cooperi* (nesting) | Olive-sided flycatcher | — / — (SSC) | Suitable | No |
| *Dendroica nigrescens* (=*Setophaga nigrescens*) | Black-throated gray warbler | — / — (SSC) | Marginal | No |

[1]**E** = Endangered; **R** = Rare; **T** = Threatened; **SSC**=Ca. Dept. Fish & Wildlife Species of Special Concern; **IUCN**= World Conservation Union; **LC** = World Conservation Union list of species of least concern; **BCC**= U.S. Fish & Wildlife Service Birds of Conservation Concern; **FP**=Fully protected species

| Special-status Species | Common Name | Legal Status[2] Federal/ State (Other) | Habitat Quality | Species Found On Site? |
|---|---|---|---|---|
| **Mammals** | | | | |
| *Antrozous pallidus* | Pallid bat | — / — (SSC) | Suitable | No |
| *Bassariscus astutus* | Ringtail | — / — (FP) | Suitable | No |
| *Corynorhinus townsendii* | Townsend's big-eared bat | — / — (SSC) | Suitable | No |
| *Erethizon dorsatum* | North American porcupine | — / — (IUCN: LC) | Suitable | No |
| *Lasionycteris noctivagans* | Silver-haired bat | — / — (IUCN: LC) | Suitable | No |
| *Myotis volans* | Long-legged myotis bat | — / — (IUCN: LC) | Marginal | No |
| *Myotis yumanensis* | Yuma myotis bat | — / — (IUCN: LC) | Suitable | No |
| **Plants** | | | | |
| **CNPS Group 1 Plants[3]** | | | | |
| *Carex cyrtostachya* | Sierra arching sedge | — / — (CNPS:1B.2) | Suitable | No |
| *Phacelia stebbinsii* | Stebbin's phacelia | — / — (CNPS: 1B.2) | Suitable | No |
| *Poa sierrae* | Sierra blue grass | — / — (CNPS: 1B.3) | Suitable | No |
| **CNPS Group 2 Plants[3]** | | | | |
| *Viburnum ellipticum* | Oval-leaved viburnum | — / — (CNPS: 2B.3) | Suitable | No |

[3]**CNPS**= California Native Plant Society; **CNPS:1B**= CNPS list of rare, threatened or endangered plants in California and elsewhere. **CNPS:2B**= CNPS list of rare, threatened or endangered plants in California but more common elsewhere. **CNPS Threat Ranks: 0.1**= Seriously threatened in California (over 80% of occurrences threatened); **0.2**= Moderately threatened in California(20-80% of occurrences threatened); **0.3**= Not very threatened in California (<20% of occurrences threatened)

| Special-status Species | Common Name | Legal Status[3] Federal/ State (Other) | Habitat Quality | Species Found On Site? |
|---|---|---|---|---|
| **CNPS Group 4 Plants[4]** | | | | |
| *Arctostaphylos mewukka ssp. truei* | True's manzanita | — / — (CNPS:4.2) | Suitable | No |
| *Clarkia biloba* ssp. *brandegeeae* | Brandegee's clarkia | — / — (CNPS:4.2) | Suitable | No |
| *Clarkia virgata* | Sierra clarkia | — / — (CNPS:4.3) | Marginal | No |
| *Erigeron petrophilus* var. *sierrensis* | Northern Sierra daisy | — / — (CNPS:4.3) | Suitable | No |
| *Lilium humboldtii* ssp. *humboldtii* | Humboldt's lily | — / — (CNPS:4.2) | Suitable | No |
| *Myrica hartwegii* | Sierra sweet bay | — / — (CNPS:4.3) | Suitable | No |
| *Streptanthus longisiliquus* | Long-fruited jewelflower | — / — (CNPS:4.3) | Suitable | No |
| **Special Habitats** | | | | |
| Central Valley Drainage Resident Rainbow Trout Stream | | | Suitable | Yes |

[4]**CNPS**= California Native Plant Society; **CNPS:4**= CNPS list of plants with limited distribution.
**CNPS Threat Ranks: 0.1**= Seriously threatened in California (over 80% of occurrences threatened); **0.2**= Moderately threatened in California(20-80% of occurrences threatened); **0.3**= Not very threatened in California (<20% of occurrences threatened)

### 3. Evaluation of Special-Status Species

#### a. Federal- or State-listed Species

**California red-legged frog (CRLF) (*Rana draytonii*)**
**Range:** Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1200 m (3936 ft). (CWHR 2022)
**Nearest CNDDB occurrence**: Approximately 4.5 miles ESE of the project site in Weber Creek (BIOS 2022).
**Habitat requirements:** Quiet pools of streams, marshes, and occasionally ponds. Prefers shorelines with extensive vegetation. (CWHR 2022).
**Habitat on project site:** Marginal. North Canyon Creek has many small pools throughout the project site, but lacks overhanging vegetation preferred by the species. Furthermore, although close in air miles to a known occurrence of CRLF, there are no waterways connecting North Canyon Creek to Weber Creek, except South Fork American River. North Canyon Creek drains into South Fork American River more than 28 miles upstream from the confluence of Weber Creek with the river; thus, it is unlikely that CRLF from the Weber Creek occurrence would be found in North Canyon Creek.

**Bald eagle (*Haliaeetus leucocephalus*)**
**Range:** Occurs in suitable habitat in the Coast ranges, Cascades ranges, the Sierra Nevada, Southern California mountains and Central Valley. (BIOS 2022)
**Nearest CNDDB occurrence**: Approximately 19 miles NE of the project site at Union Valley Reservoir (BIOS 2022).
**Habitat requirements:** Requires large bodies of water or free flowing rivers with abundant fish, and adjacent snags or other perches. In California, 87% of nest sites were within 1.6 km (1 mi) of water. (CWHR 2022).
**Habitat on project site:** Marginal. The project site less than one mile from Slab Creek Reservoir within the South Fork American River, which could provide suitable foraging habitat, so it provides potential nest habitat for the species. North Canyon Creek, flowing through the project site, is too small to provide foraging habitat. As a Christmas tree farm with year-round cultivation practices, the project site probably has too much human interference for nesting by the species.

#### b. Species of Concern

##### i. Invertebrates

**Wawona riffle beetle (*Atractelmis wawona)***
**Range:** Found in scattered coastal mountain streams from Del Norte to San Diego counties and in the Sierra Nevada, with most occurrences from Mariposa County north. (BIOS 2022)
**Nearest CNDDB occurrence:** Approximately six miles NW of the project site. (BIOS 2022)
**Habitat requirements:** Aquatic; found in riffles of rapid, small to medium clear mountain streams; 2000-5000 ft elev., having a strong preference for inhabiting submerged aquatic mosses. (CNDDB 2022)
**Habitat on project site:** Suitable is riffles between pools within North Canyon Creek on the project site.

**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 2022)
**Nearest CNDDB occurrence:** Over eight miles north of the project site. (BIOS 2022)
**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, or in bird nests, tree cavities or under rocks. Only mated queens overwinter in self-dug cavities in soft earth; the rest of the colony dies. (Xerces Society 2022)
**Habitat on project site:** Marginal. Suitable forage plants are limited on the project site.

### ii. Amphibians

**Foothill yellow-legged frog (*Rana boylii)***
**Range:** Occurs in the Coast Ranges from the Oregon border south to the Transverse Mountains in Los Angeles Co., in most of northern California west of the Cascade crest, and along the western flank of the Sierra south to Kern Co. Its elevation range extends from near sea level to 1940 m (6370 ft) in the Sierra (CWHR 2022)
**Nearest CNDDB occurrence:** Approximately four miles northwest of the project site. (BIOS 2022)
**Habitat requirements:** Foothill yellow-legged frogs are found in or near rocky streams in a variety of habitats. Rarely encountered far from permanent water. Tadpoles require water for at least three or four months while completing their aquatic development. (CWHR 2022)
**Habitat on project site:** Suitable within North Canyon Creek.

### iii. Birds

**Oak titmouse (*Baeolophus inornatus)* nesting**
**Range:** Resident in cismontane California, from the Mexican border to Humboldt Co. Range encircles San Joaquin Valley, extending east from the coast through Kern Co. onto the western slope of the Sierra Nevada north to Shasta Co. Scattered and local populations north of Humboldt Co. near the coast, and locally in Siskiyou Co. (CWHR 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Primarily associated with oaks. Prefers open woodlands of oak, and pine and oak. (CWHR 2022).
**Habitat quality on project site:** Marginal. Project site has few oak trees.

**Cassin's finch (*Carpocacus cassinii)***
**Range:** Common montane resident. Occurs regularly in Cascade Range and Sierra Nevada, Great Basin ranges south to Inyo Mts., inner coastal ranges south to Mendocino Co., and southern California ranges south to Santa Rosa Mts., Riverside Co. (CWHR 2022)
**Nearest CNDDB occurrence:** None. (BIOS 2020)
**Habitat requirements:** Breeds in most higher mountain ranges in California. Prefers tall, open coniferous forests, in lodgepole pine, red fir, and subalpine conifer habitats, particularly in breeding season. Most numerous near wet meadows and grassy openings; also frequents semi-arid forests. (CWHR 2022)
**Habitat on project site:** Unsuitable as breeding habitat, but suitable winter habitat.

**Evening grossbeak (*Coccothraustes vesperinus)***
**Range:** Resident of Cascade Range, Sierra Nevada, Warner, Siskiyou, and Trinity Mts., breeding mostly in mixed conifer and red fir habitats. (CWHR 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Breeds and forages in fairly dense, mature mixed-conifer and red fir forests; also forages in oaks, willows, and aspens. In nonbreeding season, occurs in a variety of habitats with ample food supplies, which include fruits and seeds of a variety of trees and shrubs and, in summer, considerable numbers of insects. (CWHR 2022)
**Habitat on project site:** Suitable.

**Olive-sided flycatcher (*Contopus cooperi*)** nesting
**Range:** Summer resident in a wide variety of forest and woodland habitats below 2800 m (9000 ft) throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins.(CWHR 2022).
**Nearest CNNDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Requires large, tall trees, usually conifers, for nesting and roosting sites; also lofty perches, typically the dead tips or uppermost branches of the tallest trees in vicinity, for singing posts and hunting perches. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. (CWHR 2022)
**Habitat quality on project site:** Suitable.

**Black-throated gray warbler (*Dendroica nigrescens)***
**Range:** Resident in dry, open woodlands and brushy understory of forests in foothills and mountains throughout much of California. Absent from Central Valley and deserts. (CWHR 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Ponderosa pine, valley foothill hardwood-conifer, montane hardwood, and pinyon-juniper habitats. Frequents brushy understory. (CWHR 2022)
**Habitat on project site:** Marginal. Project site has relatively little brushy understory within its forest.

### iv. Mammals

**Pallid bat (*Antrozous pallidus)***
**Range:** Occurs in various riparian habitat, grasslands, shrublands, woodlands, and forests at low to middle elevations (CWHR 2022).
**Nearest CNDDB occurrence:** Approximately 11 miles WNW, at Coloma. (BIOS 2022)
**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 2022). 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 2022).
**Habitat quality on project site:** Suitable within on-site forest. The mine has too much human activity during Christmas tree season for successful hibernation by the species.

Broken Handle Mine

**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.
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Suitable habitat for ringtails consists of a mixture of forest and shrubland in close association with rocky areas or riparian habitats. Usually not found more than 1 km (0.6 mi) from permanent water. (CWHR 2022)
**Habitat quality on project site:** Suitable throughout the project site.

**Townsend's big-eared bat (*Corynorhinus townsendii*)**
Range: Throughout California in a wide variety of habitats. Most common in mesic sites. (CNDDB 2022).
**Nearest CNNDB occurrence:** Approximately 11 miles north off Wentworth Springs Road, El Dorado County. (BIOS 2022)
**Habitat requirements:** Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. Prefers mesic habitats; requires drinking water. Gleans insects from brush or trees or feeds along habitat edges. (CWHR 2022). Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance (CNDDB 2022).
**Habitat quality on project site:** Suitable within the on-site mine tunnel and outbuildings.

**North American porcupine (*Erethizon dorsatum*)**
**Range:** Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.(CNDDB 2022)
**Nearest CNDDB occurrence:** Near Garden Valley. Last sighted 1983. Sightings near Placerville were in 1873 and 1916. (BIOS 2020)
**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 2022).
**Habitat quality on project site:** Suitable. Although the forested portion of the project site has relatively little understory of herbs, grasses and shrubs, the Christmas tree plantations could provide forage on the trees.

**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 recorded in Sacramento, Stanislaus, Monterey and Yolo counties. Known as a migrant throughout California. The species likely winters in Mexico. (CWHR 2022)
**Nearest CNDDB occurrence:** About four miles east of the project site, near Pollock Pines. (BIOS 2022)
**Habitat requirements:** Summer habitats include coastal and montane coniferous forest, valley foothill woodlands, pinyon-juniper woodlands and valley foothill and montane riparian habitats below 2750 m elevation. Feeds over forest streams, ponds and open brushy areas. Requires drinking water. Roosts in hollow trees, snags, buildings, rock crevices, caves and under bark. Nurseries are located in dense foliage or hollow trees. (CWHR 2022)
**Habitat on project site:** Suitable throughout the project site.

**Long-legged myotis bat (*Myotis volans*)**
**Range:** Occurs in the coastal ranges from Oregon to Mexico, the Cascade/Sierra Nevada ranges to southern California, most of the Great Basin region, and in several Mojave Desert mountain ranges; absent only from the Central Valley, the Colorado and Mojave deserts (except in mountain ranges), and from eastern Lassen and Modoc counties. (CWHR 2022)
**Nearest CNDDB occurrence:** About 12 miles SE near Camp Creek, south of Jenkinson Reservoir. (BIOS 2022)
**Habitat requirements:** Most common in woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts. Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings. (CNDDB 2022) Feeds over water, and over open habitats, using denser woodlands and forests for cover and reproduction. (CWHR 2022)
**Habitat on project site:** Marginal. Project site offers suitable feeding and roosting habitat, but at less than 2900 feet elevation, the project site is lower in elevation than the species' preferred elevation range.

**Yuma myotis bat (*Myotis yumanensis)***
**Range:** Widespread in California from sea level to 11,000 feet elevation, but uncommon to rare above 2560 m (8000 ft). Uncommon in desert regions, except the mountain ranges bordering the Colorado River Valley. (CWHR 2022)
**Nearest CNDDB occurrence:** Less than a mile north of the project site, at Slab Creek Reservoir. (BIOS 2022)
**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 are found in warm, dark buildings, caves, mines and under bridges. (CWHR 2022)
**Habitat on project site:** Suitable forage habitat over North Canyon Creek, and suitable roosting and maternity colony habitat in forest, buildings and mine tunnel on the project site.

### v. Plants

#### (1) CNPS List 1 Plants[4]

**Sierra arching sedge (*Caryx cyrtostachya)***
**Range:** Butte, El Dorado, Placer and Yuba counties. (CNPS 2022)
**Nearest CNDDB occurrence:** About ten miles NW of the project site, between Garden Valley and Georgetown. (BIOS 2022)
**Habitat requirements:** Mesic places in lower montane coniferous forest; also riparian forest, marshes and swamps, meadows and seeps. (CNDDB 2022)
**Habitat on project site:** Suitable on banks of North Canyon Creek.

**Stebbin's phacelia (*Phacelia stebbinsii)***
**Range:** El Dorado, Nevada and Placer and counties. (CNPS 2022)
**Nearest CNDDB occurrence:** Poho Ridge area about 6 miles northeast of the project site, north of Pollock Pines. (BIOS 2022)
**Habitat requirements:** Among rocks and rubble on metamorphic rock benches within lower montane coniferous forest, cismontane woodland, meadows and seeps. 605-2320 m. elevation. (CNDDB 2022)
**Habitat on project site:** Suitable but limited habitat is found on slopes above North Canyon Creek.

[4]CNPS List 1B= California Native Plant Society list of Rare, Threatened or Endangered Plants in California and Elsewhere

**Sierra blue grass (*Poa sierrae*)**
**Range:** Butte, El Dorado, Nevada, Placer, Plumas and Shasta counties. (CNPS 2022)
**Nearest CNDDB occurrence:** Approximately 13 miles NE of the project site, NE of Stumpy Meadows Reservoir. (BIOS 2022)
**Habitat requirements:** Found in shady, moist, rocky slopes within lower montane coniferous forest. Often in canyons. 365-1915 meters elevation. (CNPS 2020)
**Habitat on project site:** Suitable on slopes above North Canyon Creek.

**(2) CNPS List 2 Plants[5]**

**Oval-leaved viburnum (*Viburnum ellipticum*)**
**Range:** Alameda, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Lake, Marin, Mendocino, Napa, Placer, Shasta, Solano, Sonoma, and Tehama counties. (CNPS 2022)
**Nearest CNDDB occurrence:** Reported in Placerville in 1901; more recent occurrences are south of Lake Clementine, Placer County. (BIOS 2022)
**Habitat requirements:** Found in chaparral, cismontane woodland or lower montane coniferous forest between 215 and 1400 m elevation (CNDDB 2022). Generally found on north-facing slopes (Jepson 2022).
**Habitat on site:** Suitable in forested areas of the project site.

**(3) CNPS List 4 Plants[6]**

**True's manzanita (*Arctostaphylos mewukka* ssp. *truei*)**
**Range:** Butte, El Dorado, Nevada, Placer, Plumas and Yuba counties.(CNPS 2022).
**Nearest CNNDB occurrence:** None (BIOS 2022)
**Habitat requirements:** Chaparral and openings in cismontane woodland; 425-1390 m. elevation. (CNDDB 2022, Jepson 2022)
**Habitat quality on project site:** Suitable in openings within forested areas of the project site.

**Brandegee's clarkia (*Clarkia biloba* ssp. *brandageeae*)**
**Range:** Butte, El Dorado, Nevada, Placer, Sacramento, Sierra, and Yuba Counties. (CNPS 2022)
**Nearest CNDDB occurrence:** About three miles southwest of the project site, near Smith Flat. (BIOS 2022)
**Habitat requirements:** Chaparral, cismontane woodland, and lower montane coniferous forest, often on roadcuts, 75-915 m elevation. (CNPS 2022)
**Habitat on project site:** Suitable on slopes and road-cuts in forested areas of the project site.

**Sierra clarkia (*Clarkia virgata*)**
**Range:** Amador, Calaveras, El Dorado, Mariposa, Plumas, Tuolumne and Yuba counties. (CNPS 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Cismontane woodland or lower montane coniferous forest, between 400 and 1615 meters elevation (CNPS 2022). Lower margin of montane forest and adjacent oak-grey pine woodland (CNDDB 2022).
**Habitat on project site:** Marginal. Project site is above the oak-grey pine ecotone.

[5]California Native Plant Society list of rare, threatened or endangered plants in California, but more common elsewhere.

[6]California Native Plant Society list of plants of limited distribution.

**Northern Sierra daisy (*Erigeron petrophilus* var. *sierrensis*)**
**Range:** Butte, El Dorado, Nevada, Placer, Plumas, Sierra and Yuba counties. (CNPS 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Rocky foothills to montane forest, sometimes on serpentine; 300–1900 meters elevation (Jepson 2020). Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, 300-2073 meters elevation (CNPS 2022).
**Habitat on project site:** Suitable within forested areas on the project site.

**Humboldt's lily (*Lilium humboldtii* ssp. *humboldtii*)**
**Range:** Amador, Butte, Calaveras, El Dorado, Los Angeles, Nevada, Placer, Plumas, San Diego, Santa Barbara, Sierra, Tehama, and Yuba counties. (CNPS 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Openings in chaparral, cismontane woodland or lower coniferous forest, between 90 and 1280 meters elevation (CNPS 2022); openings in yellow-pine forest or open forest (CNDDB 2022).
**Habitat on project site:** Suitable within forested areas of the project site.

**Sierra sweet bay (*Myrica hartwegii*)**
**Range:** Calaveras, El Dorado, Mariposa Nevada, Placer and Tuolumne counties. (CNPS 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Streambanks, moist places in foothills or lower montane yellow-pine forest; 300–1800 m. elevation (Jepson 2022). Cismontane woodland, lower montane coniferous forest, riparian forest, 150-1750 m. elevation (CNPS 2022). Riparian forest, cismontane woodland, lower montane coniferous forest. Usually on streamsides. 150-1750 m. (CNDDB 2022)
**Habitat on project site:** Suitable along North Canyon Creek.

**Long-fruited jewelflower (*Streptanthus longisiliquus*)**
**Range:** Butte, El Dorado, Nevada, Placer, Shasta and Tehama counties. (CNPS 2022)
**Nearest CNDDB occurrence:** None. (CNDDB 2022)
**Habitat requirements:** Openings in lower montane coniferous forest and cismontane woodland, 715-1500 meters elevation.
**Habitat on project site:** Suitable within forested areas of the project site.

### vi. Special Habitat

**Central Valley Drainage Resident Rainbow Trout Stream**
**Nearest CNDDB occurrence:** Over seven miles SSE in Camp Creek.
**Habitat requirements:** Clear cold water; a silt-free substrate in riffle-run areas; approximately 1:1 pool-to-riffle ratio with areas of slow, deep water; well-vegetated stream banks; abundant in-stream cover; and relatively stable water flow, temperature regimes and stream banks. Pools are important to trout as a refuge from adverse conditions. (Raleigh et. al, 1984)
**Habitat on project site:** Suitable. The North Canyon Creek, within the boundaries of the project site, has been managed as a catch-and-release trout stream for decades, and has a stable, self-propagating trout population (Figure 10).

## VII. References

Baldwin, B.G, D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti and D.H. Wilken (eds). 2012. The Jepson Manual, Vascular Plants of California, Second Edition. Berkeley: University of California Press.

California Department of Fish & Wildlife. 2022. Delta Smelt *Hypomesus transpacificus.* https://wildlife.ca.gov/Conservation/Fishes/Delta-Smelt.

California Department of Fish & Wildlife, Biogeographic Data Branch. 2022. California Natural Diversity Database *within* Biogeographic Information and Observation System (BIOS). https://apps.wildlife.ca.gov/bios

California Department of Fish & Wildlife. 2022. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. file:///C:/Users/user/Downloads/2018%20Protocols%2013%20rev1.pdf

California Native Plant Society, Rare Plant Program. 2022. Inventory of Rare Plants Inventory (online edition, v9-01 1.5). https://www.rareplants.cnps.org

California Natural Diversity Data Base, Department of Fish and Wildlife. 2020. *Rarefind 5,* Commercial edition. https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx

California Natural Diversity Database, Department of Fish and Game. 2020. *State and Federally Listed Endangered, Threatened, and Rare Plants of California.* file:///C:/Users/user/Downloads/CNDDB_Endangered_Threatened_and_Rare_Plants_List%20(1).pdf

El Dorado County. 2004. El Dorado County General Plan. Placerville, California: El Dorado County Planning Department.

Elias, Thomas S. 1987. *Conservation and Management of Rare and Endangered Plants.* Sacramento: California Native Plant Society.

Jepson Flora Project (eds.) 2022. Jepson eFlora. https://ucjeps.berkeley.edu/eflora

Klein, A., J. Crawford, J. Evens, T. Keeler-Wolfe and D. Hickson. 2007. Classification of the Vegetative Alliances of the Northern Sierra Nevada Foothills; Report prepared for California Department of Fish and Game. Sacramento: California Native Plant Society.

Mayer, K.E. and W.F. Laudenslayer, Jr. 1988. A guide to wildlife habitats of California. Sacramento: California Dept. of Fish and Game.

McGinnis, S.M. 1984. *Freshwater fishes of California. California Natural History Guides (49).* Berkeley: University California Press.

Moyle, P.B., R.M. Yoshiyama, J.E. Williams and E.D. Wikramanayake. 1995. Fish species of special concern in California, Second Edition. University of California, Davis, Department of Wildlife and Fisheries Biology.

NatureServe. 2022. NatureServe Explorer: An online encyclopedia of life [web application].NatureServe, Arlington, Virginia. http://explorer.natureserve.org

National Geographic Maps. 2002. California: Seamless USGS topographic maps on CD-ROM. San Francisco, California.

Raleigh, R.F., T. Hickman, R.C. Soloman and P.C. Nelson. 1984. Habitat suitability information: Rainbow trout. U.S. Fish Wildl. Serv. FWS/OBS-82/10.60. 64 pp.

Sawyer, J.O., T. Keeler-Wolf and J.M. Evans. 2009. *A manual of California vegetation*, *2nd ed.* Sacramento: California Native Plant Society.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Natural Resources Conservation Service, United States Department of Agriculture. 2022. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov.

Toren, D and K. Heise. 2009. *Bryum chryseum* Mitt. (Musci: Bryaceae) new to North America North of Mexico. Evansia 26(3): 98-101. http://www.bioone.org/doi/abs/10.1639/0747-9859-26.3.98

U.S. Army Corps of Engineers. 2020. Western Mountains, Valley and Coast Wetland Plant List. efaidnbmnnnibpcajpcglclefindmkaj/https://wetland-plants.usace.army.mil/nwpl_static/data/DOC/lists_2020/Regions/pdf/reg_AW_2020v1.pdf

United States Department of Agriculture, Soil Conservation Service (USDA). 1974. Soil Survey of El Dorado Area, California. Washington, D.C.: U.S. Government Printing Office.

United States Fish and Wildlife Service. 2022. IpaC trust report and official species list. https://www.fws.gov/office/sacramento-fish-and-wildlife

Verner, J and A.S. Boss, technical coordinators. 1980. California wildlife and their habitats: western Sierra Nevada. Gen. Tech. Rep. PSW-37, 439p., illus. Pacific Southwest Forest and Range Exp. Stn., Forest Serv., U.S. Dep. Agric., Berkeley, Calif.

Williams, P., R. Thorp, L. Richardson and S. Colla. 2014. Bumble Bees of North America, An Identification Guide. Princeton University Press.

Xerces Society for Invertebrate Conservation. 2022. Bumble bees: western bumble bee (*Bombus occidentalis*). https://www.xerces.org/bumblebees

# APPENDIX A

**United States Fish and Wildlife Service**
**Official Species List**
**dated**
**July 14, 2022**

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:
Project Code: 2022-0063948
Project Name: Indian Rock Tree Farm

July 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location 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, 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 U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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 Code 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".

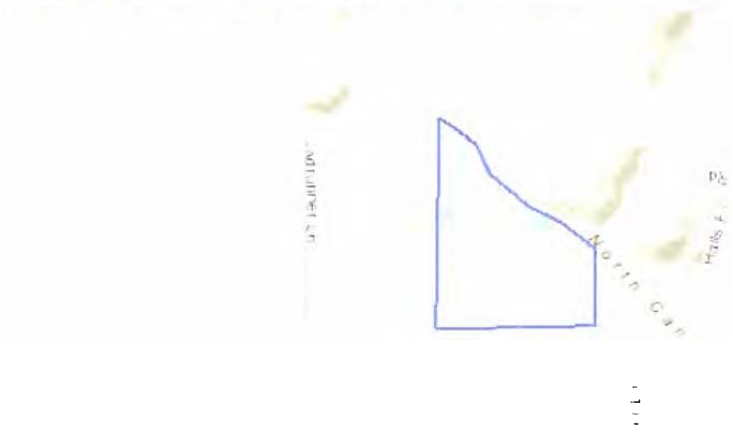
This species list is provided by:

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

## Project Summary

Project Code: 2022-0063948
Event Code: None
Project Name: Indian Rock Tree Farm
Project Type: Planting / Silviculture
Project Description: Zone change.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.7605421,-120.70492988457917,14z



Counties: El Dorado County, California

## Endangered Species Act Species

There is a total of 3 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.

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* | Threatened |

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2891

### Fishes

| NAME | STATUS |
|---|---|
| Delta Smelt *Hypomesus transpacificus* | Threatened |

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/321

### Insects

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus* | Candidate |

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

### Critical habitats

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

## IPaC User Contact Information

Agency: County of El Dorado
Name: Ruth Willson
Address: 3460 Angel Lane
City: Placerville
State: CA
Zip: 95667
Email ruthwillson@comcast.net
Phone: 5306227014

# APPENDIX B

**United States Fish and Wildlife Service**
**IpaC Trust Resources Report**
**dated**
**July 14, 2022**

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

Indian Rock Tree Farm

LOCATION

El Dorado County, California


DESCRIPTION

Some(Zone change.)

## 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. IPaC only shows species that are regulated by USFWS (see FAQ).
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
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2891

## Fishes

| NAME | STATUS |
|---|---|
| Delta Smelt Hypomesus transpacificus | Threatened |

Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/321

## Insects

| NAME | STATUS |
|---|---|
| Monarch Butterfly Danaus plexippus | Candidate |

Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

## 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 https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.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<br>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.<br>https://ecos.fws.gov/ecp/species/1626 | Breeds Jan 1 to Aug 31 |
| **Black-throated Gray Warbler** Dendroica nigrescens<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds May 1 to Jul 20 |

- 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.
- Cassin's Finch Carpodacus cassinii — Breeds May 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/9462
- Evening Grosbeak Coccothraustes vespertinus — Breeds May 15 to Aug 10
  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
- Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
  https://ecos.fws.gov/ecp/species/9408
- 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
- Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
  https://ecos.fws.gov/ecp/species/3914
- 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.

# 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.

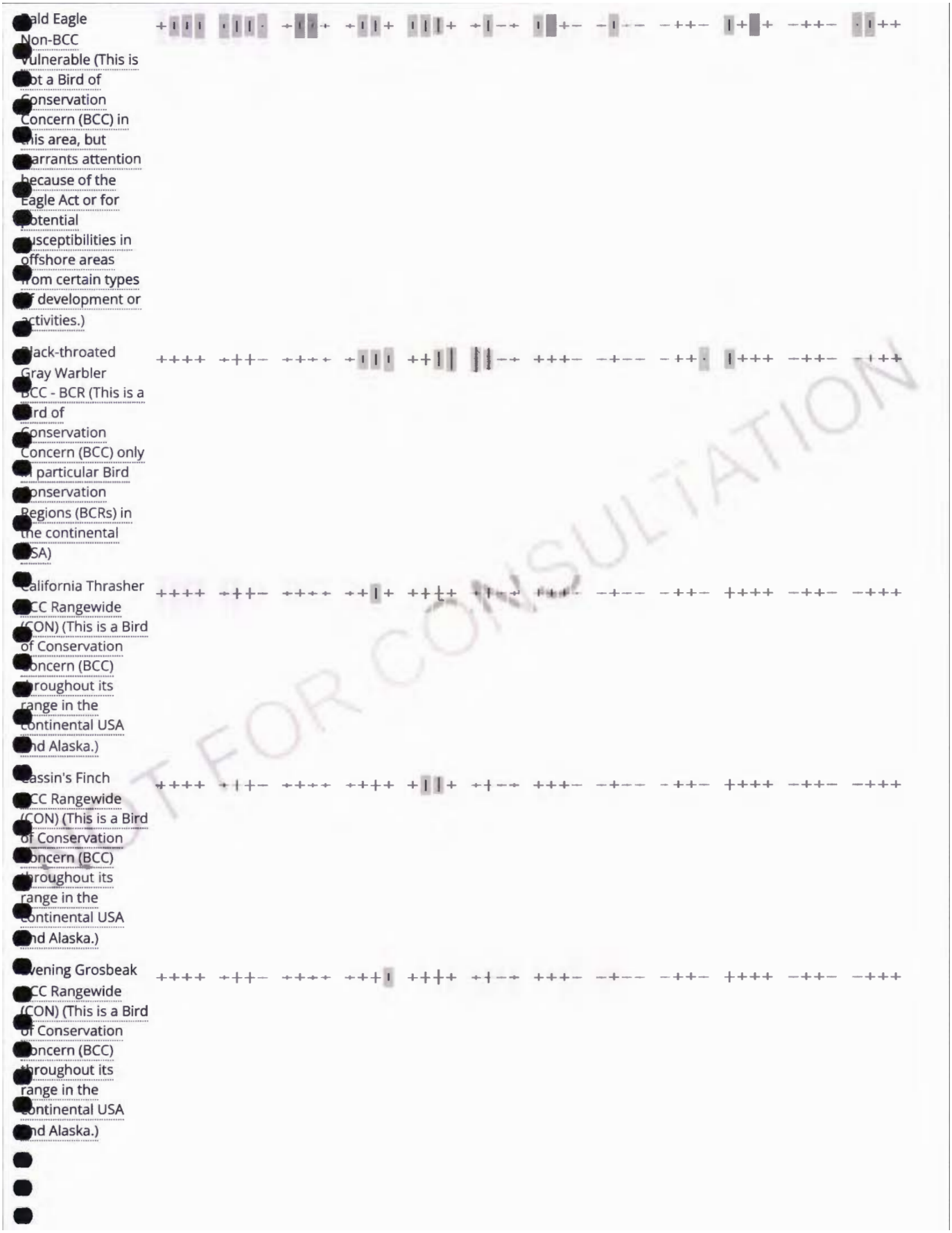
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

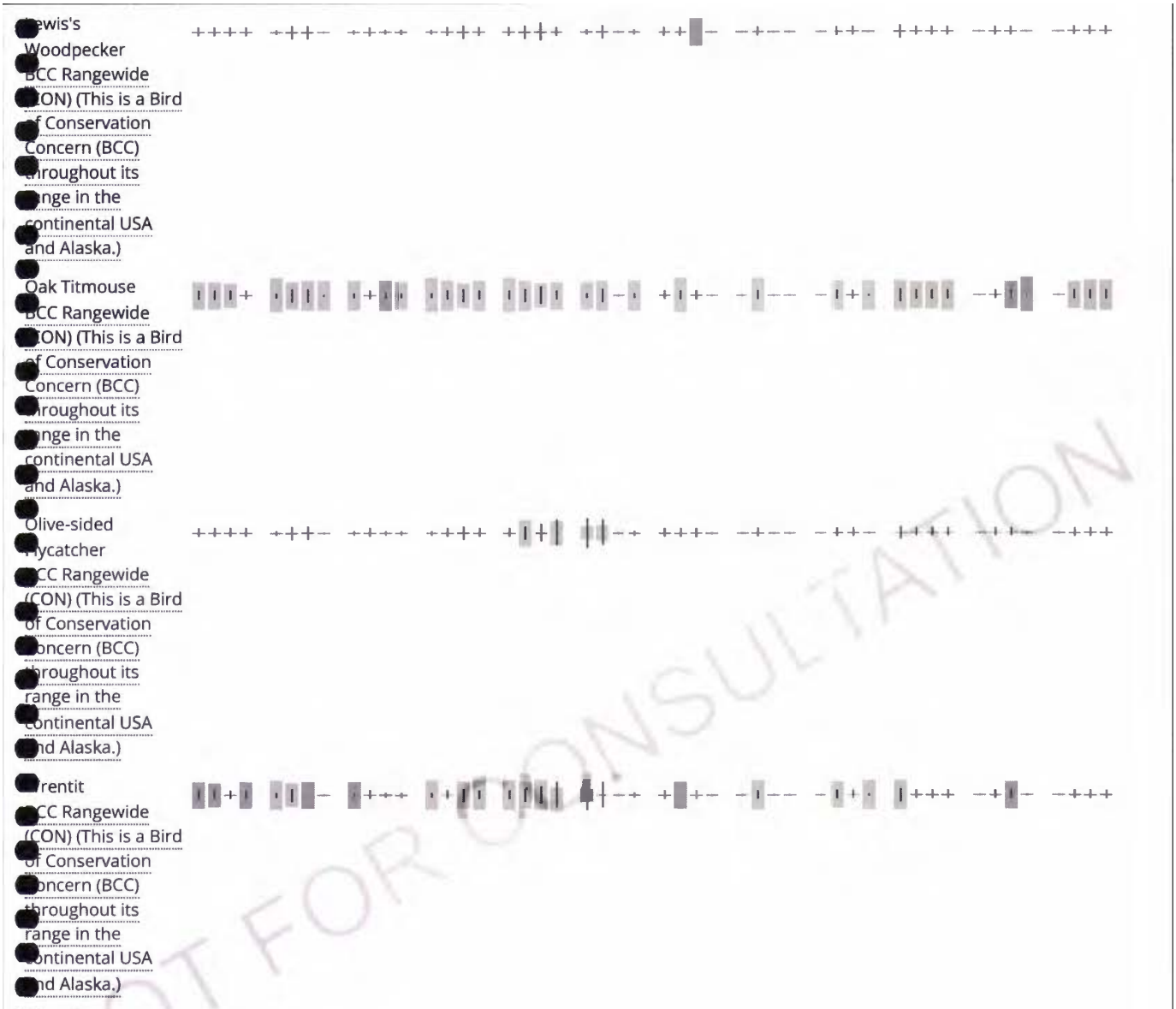
**No Data** (–)
A week is marked as having no data if there were no survey events for that week.

**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.

■ probability of presence  breeding season  | survey effort  – no data

| SPECIES | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|








**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 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 AKN Phenology 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.

# Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

**Data limitations**

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

**Data exclusions**

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

# 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.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND
- Palustrine

A full description for each wetland code can be found at the National Wetlands Inventory website

**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**
**Slate Mountain and Surrounding USGS Quads**
**dated July 1, 2022**

## Selected Elements by Scientific Name

### California Department of Fish and Wildlife

### California Natural Diversity Database

**Query Criteria:** Quad IS (Devil Peak (3812085) OR Slate Mtn. (3812076) OR Tunnel Hill (3812086) OR Pollock Pines (3812075) OR Sly Park (3812065) OR Camino (3812066) OR Placerville (3812067) OR Garden Valley (3812077) OR Georgetown (3812087))

| 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 | G1G2 | S1S2 | SSC |
| ***Aplodontia rufa californica*** Sierra Nevada mountain beaver | AMAFA01013 | None | None | G5T3T4 | S2S3 | SSC |
| ***Arctostaphylos nissenana*** Nissenan manzanita | PDERI040V0 | None | None | G1 | S1 | 1B.2 |
| ***Ardea alba*** great egret | ABNGA04040 | None | None | G5 | S4 | |
| ***Atractelmis wawona*** Wawona riffle beetle | IICOL58010 | None | None | G3 | S1S2 | |
| ***Bombus 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 vanzuukiae*** Van Zuuk's morning-glory | PDCON040Q0 | None | None | G2Q | S2 | 1B.3 |
| ***Campylopodiella stenocarpa*** flagella-like atractylocarpus | NBMUS84010 | None | None | G5 | S1? | 2B.2 |
| ***Carex cyrtostachya*** Sierra arching sedge | PMCYP03M00 | None | None | G2 | S2 | 1B.2 |
| ***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 |
| ***Corynorhinus townsendii*** Townsend's big-eared bat | AMACC08010 | None | None | G4 | S2 | SSC |
| ***Cosumnoperla hypocrena*** Cosumnes stripetail | IIPLE23020 | None | None | G2 | S2 | |
| ***Emys marmorata*** western pond turtle | ARAAD02030 | None | None | G3G4 | S3 | SSC |

## Selected Elements by Scientific Name

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Erethizon dorsatum*** North American porcupine | AMAFJ01010 | None | None | G5 | S3 | |
| ***Horkelia parryi*** Parry's horkelia | PDROS0W0C0 | None | None | G2 | S2 | 1B.2 |
| ***Lasionycteris noctivagans*** silver-haired bat | AMACC02010 | None | None | G3G4 | S3S4 | |
| ***Lewisia serrata*** saw-toothed lewisia | PDPOR040E0 | None | None | G2 | S2 | 1B.1 |
| ***Myotis thysanodes*** fringed myotis | AMACC01090 | None | None | G4 | S3 | |
| ***Myotis volans*** long-legged myotis | AMACC01110 | None | None | G4G5 | S3 | |
| ***Myotis yumanensis*** Yuma myotis | AMACC01020 | None | None | G5 | S4 | |
| ***Nebria darlingtoni*** South Forks ground beetle | IICOL6L100 | None | None | G1 | S1 | |
| ***Packera layneae*** Layne's ragwort | PDAST8H1V0 | Threatened | Rare | G2 | S2 | 1B.2 |
| ***Pekania pennanti*** Fisher | AMAJF01020 | None | None | G5 | S2S3 | SSC |
| ***Phacelia stebbinsii*** Stebbins' phacelia | PDHYD0C4D0 | None | None | G3 | S3 | 1B.2 |
| ***Poa sierrae*** Sierra blue grass | PMPOA4Z310 | None | None | G3 | S3 | 1B.3 |
| ***Rana boylii*** foothill yellow-legged frog | AAABH01050 | None | Endangered | G3 | S3 | SSC |
| ***Rana draytonii*** California red-legged frog | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| ***Rhynchospora capitellata*** brownish beaked-rush | PMCYP0N080 | None | None | G5 | S1 | 2B.2 |
| ***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 | |
| ***Sphagnum Bog*** Sphagnum Bog | CTT51110CA | None | None | G3 | S1.2 | |
| ***Stygobromus grahami*** Graham's Cave amphipod | ICMAL05920 | None | None | G2 | S2 | |
| ***Viburnum ellipticum*** oval-leaved viburnum | PDCPR07080 | None | None | G4G5 | S3? | 2B.3 |

**Record Count: 38**

# APPENDIX D

**California Native Plant Society**
*Inventory of Rare and Endangered Plants,*
online edition, v9-01 0.39
accessed July 14, 2022

| SCIENTIFIC NAME | COMMON NAME | FAMILY | LIFEFORM |
|---|---|---|---|
| *Arctostaphylos nissenana* | Nissenan manzanita | Ericaceae | perennial evergreen shrub |
| *Campylopodiella stenocarpa* | flagella-like atractylocarpus | Dicranaceae | moss |
| *Chlorogalum grandiflorum* | Red Hills soaproot | Agavaceae | perennial bulbiferou herb |
| *Clarkia biloba* ssp. *brandegeeae* | Brandegee's clarkia | Onagraceae | annual herb |
| *Clarkia virgata* | Sierra clarkia | Onagraceae | annual herb |
| *Githopsis pulchella* ssp. *serpentinicola* | serpentine bluecup | Campanulaceae | annual herb |
| *Horkelia parryi* | Parry's horkelia | Rosaceae | perennial herb |
| *Navarretia prolifera* ssp. *lutea* | yellow bur navarretia | Polemoniaceae | annual herb |
| *Phacelia stebbinsii* | Stebbins' phacelia | Hydrophyllaceae | annual herb |

Showing 1 to 9 of 9 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org

# APPENDIX E

**Evaluation of Special-Status Species
with Known Occurrences in
Slate Mountain and Surrounding USGS Quads**

## Notations, Symbols and Abbreviations

**Species printed in bold type** 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

**Conservation Ranks** are shorthand formulas that provide information on the rarity of species in their global range (G1 to G5) and within the state (S1 to S5). Status of subspecies is also ranked (T1 to T5).

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

### Other Notations

G1G2 = 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
H = Historic community, presumed eliminated; possibly extinct
NR = Not ranked
N = Non-breeder

### Abbreviations

**BCC** = U.S. Fish & Wildlife Service Birds of Conservation Concern
**CC** = Species of conservation concern to the scientific community; no state or federal protected status
**CDFW** = California Department of Fish and Wildlife
**CITGW** = CDFW California Interagency Wildlife Task Group
**CNPS** = California Native Plant Socicty
**CNPS:1B** = CNPS list of rare, threatened or endangered plants in California and elsewhere
**CNPS:2** = CNPS list of rare, threatened or endangered plants in California, but more common elsewhere
**CNPS:3** = CNPS review list of plants with limited distribution information or problematic taxonomy
**.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)
**SSC** = CDFW Species of Special Concern
**FP** = Fully Protected Species
**HCPB** = CDFW Habitat Conservation Planning Branch
**IUCN** = 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
**Watch list** = USBC list of threatened and declining species
**USFWS** = United States Fish and Wildlife Service

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



| Special-status Species<br>Common Name | Listing Status<br>Federal / State<br>(OTHER) | CNDDB Rank<br>Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| **Invertebrates** | | | | |
| *Atractelmis wawona*<br>Wawona riffle beetle | / — | G3 S1S2 | Aquatic; found in riffles of rapid, small to medium clear mountain streams, usually in submerged aquatic mosses; 2000-5000 ft elev. (CNDDB 2022) | Yes. See text for further discussion. |
| *Bombus occidentalis*<br>Western bumble bee | — / | G2G3 S1 | Typically nests underground in abandoned rodent burrows or other cavities, but also reported from above-ground locations (in logs or railroad ties). Generalist forager of flowering plants; does not depend on any one flower type. (Hatfield, et al. 2015) | Yes. See text for further discussion. |
| *Cosumnoperla hypocrena*<br>Cosumnes stripetail stonefly | — / — | G2 S2 | Intermittent streams on western slope of Central Sierra Nevada foothills in American and Cosumnes river watersheds (CNDDB 2022) | No. Project site has no intermittent streams. |
| *Danaus plexippus*<br>Monarch butterfly<br>(Overwintering) | C / | G4T2T3 S2S3 | Winter roost sites in closed-cone coniferous forests along the coast from northern Mendocino to Baja California, Mexico. (CNDDB 2022) | No. Project site is in the Sierra Nevada mountains, not coastal, as required by the species. |
| *Nebria darlingtoni*<br>South Forks ground beetle | — / — | G1 S1 | Restricted to the canyon of the South Fork American River. Known only from 5 collections, all between Pacific House and Kyburz.. (CNDDB 2022) | No. Project site is lower in elevation than the known range of the species. |
| *Stygobromus grahami*<br>Graham's Cave amphipod | — / | G2 S2 | Known only from caves in Central California. (CNDDB 2022) | No. Project site has no caves. |
| **Fish** | | | | |
| ***Hypomesus transpacificus***<br>**Delta smelt** | **T / E** | G1 S1 | California endemic species that only occurs in the San Francisco estuary. (CDFW 2022) | No. Project site is outside of the range of the species. |

| **Special-status Species**<br>**Common Name** | **Listing Status**<br>**Federal / State**<br>**(OTHER)** | **CNDDB Rank**<br>**Global/State** | **Habitat Requirements** | **Potential to occur on project site?** |
|---|---|---|---|---|
| **Amphibians** | | | | |
| *Rana boylii*<br>Foothill yellow-legged frog | — /<br>(SSC) | G3 S3 | Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats..Needs at least some cobble-sized substrate fore egg-laying, and requires at least 15 weeks to attain metamorphosis. (CNDDB 2022) | Yes. See text for further discussion. |
| ***Rana draytonii***<br>**California red-legged frog** | **T** / —<br>(SSC) | G2G3 S2S3 | Quiet pools of streams, marshes, occasionally ponds; A highly aquatic species with little movement away from streamside habitats. Intermittent streams must retain surface water in pools year-round for frog survival. (CWHR 2022) Permanent deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development, and access to estivation habitat. (CNDDB 2022) | Yes. See text for further discussion. |
| **Reptiles** | | | | |
| *Emys marmorata*<br>Western pond turtle | — / —<br>(SSC) | G3G4 S3 | Associated with permanent or nearly permanent water in a wide variety of habitat types below 6000 ft. elevation. Requires basking sites, and sandy banks or grassy open fields within 0.5 km of water for egg laying. (CNDDB 2022) | No. Project site lacks basking sites suitable for the species. |
| **Birds** | | | | |
| *Accipiter gentilis* (nesting)<br>Northern goshawk | — / —<br>(SSC) | G5 S3 | Nests in mature, dense conifer forest, usually on north slopes near water. Red fir, lodgepole pine, Jeffrey pine and aspens are typical nest trees found in North coast coniferous forest Subalpine coniferous forest and Upper montane coniferous forest habitats. (CNDDB 2022) | No. Project site has no suitable forest habitat: lacks preferred nest tree species. |

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Agelaius tricolor* (nesting colony) Tricolored blackbird | — / T (SSC) | G1G2 S1S2 | Dense thickets of cattail, tule, willow, blackberry, wild rose or tall herbs near or emergent from water. (CWHR 2022) Suitable habitats include freshwater marshes, swamps and wetlands. (CNDDB 2022) | No. Project site has swamps, marshes or wetlands. |
| *Ardea alba* (rookery) Great egret | — / (CDF:S) | G5 S4 | Fresh and saline emergent wetlands, margins of lakes, estuaries, other wetlands and irrigated pastures. Nests in large trees near marshes, tide-flats, irrigated pastures, margins of lakes and rivers. Nesting colonies must be isolated from human activities, or parents may abandon nests. (CWHR 2022) | No. Project site lacks suitable wetland habitats. |
| *Asio otus* (nesting) Long-eared owl | — / — (SSC) | G5 S3 | Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. (CNDDB 2022) | No. Project site has no riparian bottomland habitat. |
| *Bacolophus 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 2022) | Yes. See text for further discussion. |
| *Carpocacus cassinii(=Haemorhous cassinii)* Cassin's Finch | — / — (IUCN: LC) | G5 SNR | A common montane resident; breeds in most higher mountain ranges in California. Prefers tall, open coniferous forests, in lodgepole pine, red fir, and subalpine conifer habitats, Most numerous near wet meadows and grassy openings; also frequents semi-arid forests. (CWHR 2022) | Yes, as a winter visitor, but project site is lower in elevation than the preferred breeding area. See text for further discussion. |
| *Chamaea fasciata* Wrentit | — / (IUCN: LC) | G5 SNR | Chaparral and brushy areas, from the coast to lower reaches of mountains . Also occurs in suburban gardens and parks. (NatureServe 2022, CWHR 2022) | No. Project site has no chaparral or brushy understory required by the species. |

| **Special-status Species**<br>**Common Name** | **Listing Status**<br>**Federal / State**<br>**(OTHER)** | **CNDDB Rank**<br>**Global/State** | **Habitat Requirements** | **Potential to occur on project site?** |
|---|---|---|---|---|
| *Coccothraustes vespertinus*<br>Evening Grosbeak | — / | G5 SNR | Resident of Cascade Range, Sierra Nevada, Warner, Siskiyou, and Trinity Mts., breeding mostly in mixed conifer and red fir habitats. Feeds on seeds of fir, pine, and other conifers, and buds of hardwoods such as aspen, willow, oak, and maple. Also eats fruits and seeds of a variety of trees and shrubs and, in summer, considerable numbers of insects. (CWHR 2022) | Yes. See text for further discussion. |
| *Contopus cooperi* (nesting)<br>Olive-sided flycatcher | — /<br>(SSC) | G4 S43 | Conifer or mixed hardwood/conifer forests (montane hardwood-conifer). Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. (CWHR 2022) | Yes. See text for further discussion. |
| *Dendroica nigrescens* (=*Setophaga nigrescens*)<br>Black-throated Gray Warbler | — / | G5 SNR | Summer resident in dry, open woodlands and brushy understory of forests in foothills and mountains throughout much of California. Absent from Central Valley and deserts. Frequents ponderosa pine, valley foothill hardwood-conifer, montane hardwood, and pinyon-juniper habitats. (CWHR 2022) | Yes. See text for further discussion. |
| ***Haliaeetus leucocephalus*** (nesting, wintering)<br>**Bald eagle** | **D / E**<br>(FP) | G5 S3 | Large bodies of water or free-flowing rivers with abundant fish, and adjacent snags or other perches. (CWHR 2022) | Yes. See text for further discussion. |
| *Melanerpes lewis* (nesting)<br>Lewis's woodpecker | /<br>(BCC) | G4 S4 | Winters in open oak savannah, broken deciduous and coniferous habitats. Nests in Coast Ranges, Modoc Plateau and eastern slope of Sierra Nevada. (CWHR 2020) | No. Project site is out of the nesting range of the species, but has suitable winter forage habitat. |
| ***Riparia riparia*** (nesting)<br>**Bank swallow** | — / **T** | G5 S2 | Open riparian areas, brushland, grassland and cropland. Nests in vertical banks and cliffs with fine-textured/sandy soils near water. (CWHR 2020) | No. Project site lacks suitable bank or cliff nesting habitat, and is out of the known range of the species. |
| *Toxostoma redivivum*<br>California thrasher | — /<br>(IUCN: LC) | G5 SNR | Moderate to dense chaparral habitats in foothills and lowlands in cismontane CA.; less commonly, extensive thickets in young or open valley foothill riparian habitat. (CWHR 2020) | No. Project site has neither chaparral nor dense riparian habitat required 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? |
|---|---|---|---|---|
| **Mammals** | | | | |
| *Antrozous pallidus*<br>Pallid bat | / —<br>(SSC) | G4 / S3 | Deserts, grasslands, shrublands, woodlands and forests. 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. | Yes. See text for further discussion. |
| *Aplodontia rufa californica*<br>Sierra Nevada Mountain Beaver | — / —<br>(SSC) | G5T3T4 S2S3 | Occurs in dense riparian-deciduous and open, brushy stages of most forest types. Typical habitat in the Sierra Nevada is montane riparian. Frequents open and intermediate canopy coverage with a dense understory near water. Deep, friable soils are required for burrowing, along with a cool, moist microclimate. (CWHR 2022) | No. Project site lacks dense understory shrubs near water required by the species. |
| *Bassariscus astutus*<br>Ringtail | — / —<br>(FP) | G5 SNR | Resident in habitats with a mixture of forest and shrubland in close association with rocky areas within 1 km of permanent water. (CWHR 2022) | Yes. See text for further discussion. |
| *Corynorhinus townsendii*<br>Townsend's big-eared bat | — / —<br>(SSC) | G4 S2 | Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. Prefers mesic habitats. Gleans from brush or trees or feeds along habitat edges. (CWHR 2022) | Yes. See text for further discussion. |
| *Erethizon dorsatum*<br>North American porcupine | — /<br>(IUCN: LC) | G5 S3 | Wide variety of coniferous and mixed woodland habitats: Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest. (CNDDB 2022) | Yes. See text for further discussion. |
| *Lasionycteris noctivagans*<br>Silver-haired bat | — / —<br>(IUCN: LC) | G3G4 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 2022) | Yes. See text for further discussion. |

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



| **Special-status Species**<br>**Common Name** | **Listing Status**<br>**Federal / State**<br>**(OTHER)** | **CNDDB Rank**<br>**Global/State** | **Habitat Requirements** | **Potential to occur on project site?** |
|---|---|---|---|---|
| *Myotis thysanodes*<br>Fringed myotis | — / —<br>(BLM: S) | G4 S3 | 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. Easily disturbed at roosting sites. (CWHR 2022) | No. Project site is lower in elevation than the known range of the species. |
| *Myotis yumanensis*<br>Yuma myotis | — / —<br>(BLM: S) | G5 S4 | Many habitats from sea level to 2400 m. in Sierras, roosting in caves, mines, buildings, bridges, crevices. Distribution is closely tied to bodies of water, over which it forages for insects. (CWHR 2022) | Yes. See text for further discussion. |
| *Myotis volans*<br>Long-legged myotis | — / —<br>(IUCN: LC) | G4G5 S3 | Occurs throughout CA, absent only from the Central Valley, the Colorado and Mojave deserts (except in mountain ranges), and from eastern Lassen and Modoc cos. Most common in woodland and forest habitats above 1200 m (4000 ft). (CWHR 2022) | Yes. See text for further discussion. |
| *Pekania pennanti*<br>Fisher | — / —<br>(SSC) | G5 S2S3 | Suitable habitat is large areas of mature, dense coniferous forest stands or deciduous-riparian habitats with ≥50% canopy closure close to water (CWHR 2022). | No. Forest on the project site has been managed, with selective logging and prescribed burns during the recent half-century. It is also within Apple Hill, with more cultivated fruit tree acreage than mature, dense forests. |
| **Plants** | | | | |
| *Allium sanbornii* var.congdonii<br>Congdon's onion | — / —<br>(CNPS: 4.3) | G3T3 S3 | Ultramafic barrens or volcanic soils with scattered grey pines. 300-990 m. (CNDDB 2022) | No. Project site lacks both ultramafic barrens and volcanic soils. |
| *Allium sanbornii* var. *sanbornii*<br>Sanborn's onion | — /<br>(CNPS: 4.2) | G4T3T4 S3S4 | Chaparral, cismontane woodland and lower montane coniferous forest, usually on gravelly serpentine soils. (CNPS 2016) 260-1510 m. elevation. (CNDDB 2022) | No. Project site lacks suitable gravelly serpentine soils. |
| *Arctostaphylos mewukka* ssp. *truei*<br>True's manzanita | — / —<br>(CNPS: 4.2) | G4?T3 S3 | Chaparral and lower montane coniferous forest, 425-1390 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



| **Special-status Species**<br>**Common Name** | **Listing Status**<br>**Federal / State**<br>**(OTHER)** | **CNDDB Rank**<br>**Global/State** | **Habitat Requirements** | **Potential to occur on project site?** |
|---|---|---|---|---|
| *Arctostaphylos nissenana*<br>Nissenan manzanita | / —<br>(CNPS:1B.2) | G1 S1 | Open rocky ridges in chaparral or closed-cone coniferous forest between 465-1100 m elevation. (CNDDB 2020) | No. Project site has neither chaparral nor closed-cone coniferous forest, which are the known habitats for the species. |
| *Bolandra californica*<br>Sierra bolandra | – / —<br>(CNPS: 4.3) | G4 S4 | Mesic, rocky sites in lower and upper montane coniferous forest, 975-2450 m. elevation. (CNDDB 2022) | No. Project site is lower in elevation than the known range of the species. |
| *Calochortus clavatus* var. *avius*<br>Pleasant Valley mariposa-lily | /<br>(CNPS: 1B.2) | G4T2 S2 | Josephine silt loam and volcanically derived soil; often in rocky areas, in lower montane coniferous forest. 300-1710 m. (CNDDB 2022) | No. Project site lacks suitable soils. |
| *Calystegia vanzuukiae*<br>Van Zuuk's morning-glory | – / —<br>(CNPS: 1B.3) | G2? S2 | Chaparral on gabbro or serpentine soils, 700-1160 m. elevation. (CNDDB 2022) | No. Project site is lower in elevation than the known range of the species and lacks suitable soils. |
| *Campylopodiella stenocarpa*<br>Flagella-like atractylocarpus | / —<br>(CNPS: 2B.2) | G5 S1? | Roadsides within cismontane woodland, 285-430 m elevation (CNDDB 2022) | No. Project site has no cismontane woodland habitat and is higher in elevation than the known range of the species. |
| *Carex cyrtostachya*<br>Sierra arching sedge | — / —<br>(CNPS: 1B.2) | G2 S2 | Mesic sites within lower montane coniferous forest, riparian forest, marshes, swamps, meadows and seeps between 605-1390 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Ceanothus fresnensis*<br>Fresno ceanothus | / —<br>(CNPS: 4.3) | G4 S4 | Openings in cismontane woodland, lower montane coniferous forest, 900-2105 m elevation. (CNDDB 2022) | No, Project site is lower in elevation than the known range of the species. |
| *Chlorogalum grandiflorum*<br>Red Hills soaproot | / —<br>(CNPS: 1B.2) | G3 S3 | Open chaparral on gabbro or serpentine soils. (Hunter and Horenstein 1991); sometimes on non-ultramafic substrates, 240-760 m. elevation. (CNDDB 2022) | No. Project site lacks chaparral vegetation and suitable soils, and is higher in elevation than the known range of the species. |
| *Clarkia biloba* ssp. *brandegeeae*<br>Brandegee's clarkia | — / —<br>(CNPS: 4.2) | G4G5T4 S4 | Chaparral, cismontane woodland, lower montane coniferous forest, often on road cuts, 75-915 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |

| **Special-status Species**<br>**Common Name** | **Listing Status**<br>**Federal / State**<br>**(OTHER)** | **CNDDB Rank**<br>**Global/State** | **Habitat Requirements** | **Potential to occur on project site?** |
|---|---|---|---|---|
| *Clarkia virgata*<br>Sierra clarkia | — / —<br>(CNPS: 4.3) | G3 S3 | Cismontane woodland and lower margin of montane coniferous forest, 400-1615 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Claytonia parviflora* ssp. *grandiflora*<br>Streambank spring beauty | — / —<br>(CNPS: 4.2) | G5T3 S3 | Pine/blue oak (cismontane) woodlands in the Sierra foothills. 250-1200 m. elevation. (CNDDB 2022) | No. Project site has lower montane woodland vegetation, not cismontane woodland vegetation where the species has been found. |
| *Delphinium hansenii* ssp. *ewanianum*<br>Ewan's larkspur | — / —<br>(CNPS: 4.2) | G4T3 S3 | Rocky soils within cismontane woodland, and valley and foothill grassland. 60-600 m. elevation. (CNDDB 2022) | No. Project site has neither cismontane woodland nor grassland habitats required by the species. |
| *Erigeron petrophilus* var. *sierrensis*<br>Northern Sierra daisy | — / —<br>(CNPS: 4.3) | G4T4 S4 | Rocky soils, sometimes on serpentine; cismontane woodland, lower and upper montane coniferous forest, 300-2075 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Eriogonum tripodum*<br>Tripod buckwheat | — / —<br>(CNPS: 4.2) | G4 S4 | Gravelly slopes and flats, often on serpentine, in cismontane woodland and chaparral, 200-1600 m. elevation. (CNDDB 2022) | No. Project site has lacks suitable substrate required by the species. |
| *Githopsis pulchella* ssp. *serpentinicola*<br>Serpentine bluecup | — / —<br>(CNPS: 4.3) | G4T3 S3 | Serpentine or Ione soils within cismontane woodland, 320-610 m. elevation. (CNDDB 2022) | No. Project site has neither cismontane woodland habitat nor suitable soils for the species. |
| *Hesperocyparis bakeri*<br>Baker cypress | — / —<br>(CNPS: 4.2) | G3 S3 | Mixed-evergreen forests, open slopes, flats, on serpentine or volcanic substrates. 820-1995 m. (CNDDB 2022) | No. Project site lacks suitable soils required by the species. |
| *Horkelia parryi*<br>Parry's horkelia | — / —<br>(CNPS: 1B.2) | G2 S2 | Chaparral and cismontane woodland, on Ione or limestone soils, between 80-1035 m. elevation. (CNDDB 2022) | No. Neither Ione nor limestone soils, required by the species, are found on the project site. |
| *Jensia yosemitana*<br>Yosemite tarplant | — / —<br>(CNPS: 3.2) | G3 S3 | Meadows and seeps, lower montane coniferous forest on granite, 1200-2300 m elevation. (CNDDB 2022) | No. Project site is lower in elevation than the known range of the species. |

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 8 - BIOLOGICAL RESOURCES REPORT
# SPECIAL STATUS SPECIES SURVEY



| Special-status Species Common Name | Listing Status Federal / State (OTHER) | CNDDB Rank Global/State | Habitat Requirements | Potential to occur on project site? |
|---|---|---|---|---|
| *Juncus digitatus* Finger Rush | — / (CNPS: 1B.1 | G1 S1 | Openings in cismontane woodland and lower montane coniferous forest; vernal pools. In full sun, in the vernally damp ground of seeps, vernal pools and swales on gentle slopes over volcanic bedrock. 700-800 m. (CNDDB 2022) | No. Project site lacks vernal pools and seeps. Wet areas on the project site are shaded. |
| *Lewisia serrata* Saw-toothed lewisia | / — (CNPS: 1B.2) | G2 S2 | Shaded, north-facing moss-covered, metamorphic rock cliffs. 800-1435 m. | No. Project site has not rock cliffs. |
| *Lilium humboldtii* ssp. *humboldtii* Humboldt lily | / — (CNPS: 4.2) | G4T3 S3 | Openings in chaparral, lower montane coniferous forest, cismontane woodland, 90-1280 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Myrica hartwegii* Sierra sweet bay | — / — (CNPS: 4.3) | G4 S4 | Usually on streamsides in riparian forest, cismontane woodland, lower montane coniferous forest, 150-1750 m. elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Navarretia prolifera* ssp. *lutea* Yellow bur navarretia | — / — (CNPS: 4.3 | G4T3 S3 | Chaparral, cismontane woodland. Open areas of well-drained soils on primarily south exposures. 850-1405 m. (CNDDB 2022) | No. Project site has neither chaparral nor cismontane woodland habitat and lacks south exposures. |
| ***Packera layneae (=Senecio layneae)*** **Layne's butterwort** | **T / R** (CNPS: 1B.2) | G2 S2 | Chaparral, cismontane woodland on serpentine or gabbro soils, 205-1060 m. elevation (CNDDB 2022). | No. Project site has neither serpentine nor gabbro soils required by the species. |
| *Peltigera gowardii* Western waterfan lichen | — / — (CNPS: 4.2) | G4? S3 | Upper montane coniferous forest, 1795-2195 m. elevation. | No. Project site is lower in elevation that the known range of the species. |
| *Phacelia stebbinsii* Stebbin's phacelia | — / – (CNPS: 1B.2 | G3 S3 | Lower montane coniferous forest, cismontane woodland, meadows and seeps. Among rocks and rubble on metamorphic rock benches. 605-2320 m. (CNDDB 2022) | Yes. See text for further discussion. |
| *Poa sierrae* Sierra blue grass | / — (CNPS: 1B.3 | G3 S3 | Lower montane coniferous forest. Shady, moist, rocky slopes. Often in canyons. 365-1915 m. (CNDDB 2022) | 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? |
|---|---|---|---|---|
| *Pseudostellaria sierrae* Sierra starwort | — / — (CNPS: 4.2) | G3G4 S3 | Chaparral, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, 1225-2195 m elevation. (CNDDB 2022) | No. Project site is lower in elevation than the known range of the species. |
| *Rhynchospora capitellata* Brownish beaked-rush | — / — (CNPS: 1B.2) | G5 S1 | Mesic sites in upper and lower montane coniferous forest, meadows and seeps, marshes and swaps; 45-1710 m elevation. (CNDDB 2022) | No. Project site has no meadows, marshes or swamps. |
| *Streptanthus longisiliquus* Long-fruit jewelflower | / — (CNPS: 4.3) | G3 S3 | Openings in lower montane coniferous forest and cismontane woodland, 715-1500 m elevation. (CNDDB 2022) | Yes. See text for further discussion. |
| *Viburnum ellipticum* Oval-leaved viburnum | – / — (CNPS: 2B.3) | G4G5 S3? | Chaparral, cismontane woodland or lower montane coniferous forest between 215-1400 m. elevation (CNDDB 2022) | Yes. See text for further discussion. |
| **Special Habitats** | | | | |
| Central Valley Drainage Hardhead/Squawfish Stream | — / — | GNR / SNR | Small to large perennial streams within the Sacramento-San Joaquin, Pajaro-Salinas, Russian, Clear Lake and upper Pit River drainages in California. Hardhead are typically found in undisturbed areas of larger middle- and low elevation streams 10-1,450 m elevation, and Hardhead are always found in association with Sacramento squawfish. They tend to be absent from streams where introduced species, especially centrarchids, predominate or streams that have been severely altered by human activity (Moyle 1995) | No. North Canyon Creek, within the boundaries of the project site, has been managed for the natural propagation of rainbow trout, with shallow dams installed to create deeper water for trout to survive summer heat (ie. altered by human activity, making it unsuitable for hardhead/squawfish habitat). |
| Central Valley Drainage Resident Rainbow Trout Stream | — / — | GNR / SNR | Perennial streams that support resident (non-anadromous) rainbow trout populations. | Yes. See text for further discussion. |
| Sacramenyo-San Juaquin Foothill/Valley Ephemrral Stream | — / — | GNR / SNR | An ephemeral stream flows briefly due to run-off, and has no groundwater contribution. | No. Project site has no ephemeral steams. |
| Sphagnum Bog | — / — | G3 / S1.2 | Bog & fen, wetland. (CNDDB 2022) | No. Project site has no bogs, fens or wetlands. |

# APPENDIX F

**Plant Species Found on the Project site**

July 27, August 9, and September 1, 2022.

**Plant Species Found on the Project Site**
July 27, August 9, and September 1, 2022.

**Agavaceae**
*Chlorogalum pomeridianum* (DC.) Kunth var. *pomeridianum*, **Soaproot**

**Amaranthaceae**
*Amaranthus* sp., **Pigweed**

**Anacardiaceae**
*Rhus aromatica* Aiton, **Skunk bush**
*Toxicodendron diversiloba* (Torrey & A. Gray) E. Greene, **Western poison-oak**

**Apiaceae**
*Daucus carota* L., **Wild carrot, Queen Anne's Lace**
*Ligusticum californicum* J.M. Coult. & Rose
*Sanicula* sp., **Sanicle**

**Asteraceae**
*Achillea millefolium* L., **Yarrow**
*Adenocaulon bicolor* Hook., **Trail plant**
*Agoseris heterophylla* (Nutt.) Greene var. *heterophylla*, **Annual mountain dandelion**
*Baccharis pilularis* DC., **Coyote brush**
*Bidens frondosa* L., **Sticktight**
*Centaurea solstitialis* L., **Yellow star-thistle**
*Cirsium vulgare* (Savi) Ten., **Bull thistle**
*Hypochaeris* sp., **Cat's-ear**
*Lactuca serriola* L., **Prickly lettuce**
*Lapsana communis* L., **Common nipplewort**
*Madia elegans* D. Don, **Common madia**
*Madia subspicata* D.D. Keck
*Micropus* sp. **Cottonweed**
*Stephanomeria elata* Nutt., **Wirelettuce**
*Symphyotrichum* sp., **American-aster**
Taraxicom sp., **Dandelion**
*Tragopogon dubius* Scop. **Goat's beard**

**Athyriaceae**
*Athyrium filix-femina* (L.) Roth var. *cyclosorum* Rupr. **Lady fern**

**Berberidaceae**
*Berberis aquifolium* Pursh., **Oregon-grape**

**Betulaceae**
*Alnus rhombifolia* Nutt., **White alder**

**Blechanaceae**
*Struthiopteris spicant* (L.) Weiss, **Deer fern**

**Brassicaceae**
*Brassica nigra* (L.) W.D.J. Koch, **Black mustard**

**Caprifoliaceae**
*Lonicera hispidula* (indl.) Torr. & A. Gray, **California honeysuckle**
*Symphoricarpos albus* (L.) S.F. Blake var. *laevigatus* (Fernald) S.F. Blake, **Snowberry**

**Caryophyllaceae**
*Cerastium fontanum* Baumg. ssp. *vulgare* (Hartm.) Greuter & Burdet **Common mouse-ear chickweed**
*Stellaria media* (L.) Vill., **Common chickweed**

**Chenopodiaceae**
*Dysphania botrys* (L.) Mosyakine & Clements, **Jerusalem Oak**
*Salsola* sp., **Russian thistle**

**Convolvulaceae**
*Convolvulus arvensis*, L. **Field bindweed**
*Calystegia occidentalis* (A. Gray) Brummitt

**Cornaceae**
*Cornus nuttallii* Audubon, **Mountain**

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

**Cyperaceae**
*Carex amplifolia* Boott, **Big-leaf sedge**
Carex tiompkinsii J.T. Howell, **Tompkin's sedge**
*Cyperus eragrostis* Lam., **Lovegrass sedge**
*Scirpus microcarpus* .Presl & C.Presl, **Panicled bulrush**

**Cystopteridaceae**
*Cystopteris fragilis* (L.) Bernh. **Fragile fern**

**Dennstaedtiaceae**
*Pteridium aquilinum* (L.) Kuhn var. *pubescens* Underw. **Bracken fern**

**Dryopteridaceae**
*Dryopteris arguta* (Kaulf.) Maxon, **Wood fern**

**Ericaceae**
*Arbutus menziesii* Pursh, **Pacific madrone**
*Arctostaphylos viscida* C. Parry, **White-leaf manzanita**

**Euphorbiaceae**
*Croton setiger* Hook, **Dove weed**
*Chamaesyce maculata* L., **Spotted spurge**
*Euphorbia serpillifolia* Pers. subsp. *serpillifolia*, **Thyme-leaf sandmat**

**Equisetaceae**
*Equisetum arvense* L. **Common horsetail**

**Fabaceae**
*Acmispon americanus* (Nutt.) Rydb., var. *americanus*, **American lotus**
*Lathyrus latifolius* L., **Perennial sweet pea**
*Hosackia oblongifolia* Benth. var. *oblongifolia*, **Bird's-foot trefoil**
*Medicago polymorpha* L., **California burclover**
*Trifolium glomeratum* L., **Clustered clover**
*Trifolium gracilentum* Torr. & A.Gray, **Pinpoint clover**
*Vicia* sp., **Vetch**

**Fagaceae**
*Quercus chrysolepis* Liebm., **Canyon live oak**
*Quercus kelloggii Newb.*, **California black oak**
*Quercus wislizeni* A.DC., **Interior live oak**

**Gentianaceae**
*Centaurium tenuiflorum* (Hoffmans. & Link) Janch., **Centaury**

**Hypericaceae**
*Hypericum calycinum L.*, **Aarons beard**
*Hypericum perforatum* L. subsp. *perforatum*, **Klamathweed**

**Iridaceae**
*Iris hartwegii* Baker subsp. *hartwegii* **Sierra iris**
*Iris pseudacorus* L. **Water iris**

**Juglandaceae**
*Juglans hindsii* Jeps. ex R.E. Sm., **Northern California Black walnut**

**Juncaceae**
*Juncus balticus* Willd. ssp. Ater (Rydb.) Snogerup, **Baltic rush**
*Juncus bufonius* L. var. *bufonius*, **Toad rush**
*Luzula comosa* E. Mey. var. *comosa*, **Hairy wood-rush**

**Lamiaceae**
*Prunella vulgaris* L. var. *vulgaris* , **Self-heal**

**Lauraceae**
*Unbellularia californica* (Hook. & Arn.) Nutt. **California Bay Laurel**

**Liliaceae**
*Chlorogalum pomeridianum* (DC.) Kunth var. *pomeridianum*, **Common soaproot**

**Myrsinaceae**
*Lysimachia arvensis* (L.) U. Manns & Anderb., **Scarlet pimpernel**
*Lysimachia latifolia* (Hook.) Cholewa, **Pacific Starflower**

**Onagraceae**
*Epilobium brachycarpum* C. Presl, **Willow herb**
*Epilobium minutum* Lindl.

**Orchidaceae**
*Goodyera oblongifolia* Raf., **Rattlesnake-plantain**
*Piperia traansversa* Suksd., **Flat spurred piperia**

**Orobanchaceae**
*Cordylanthus tenuis* A.Gray ssp. *tenuis*, **bird's-beak**

**Oxalidaceae**
*Oxalis corniculata* L. **Wood sorrel**

**Phytolaccaceae**
*Phytolacca americana* L., var. *americana*, **Pokeweed**

**Pinaceae**
*Abies concolor* (Gordon & Glend.) Lindl. ex Hildebr., **White fir**
*Abies magnifica* A. Murray bis, **California red fir**
*Picea pungens*, Engelm., **Blue spruce**
*Pinus ponderosa* Lawson & C. Lawson, **Ponderosa pine**
*Pseudotsuga menziesii* (Mirb.) Franco var. *menziesii* **Douglas-fir**

**Plantaginaceae**
*Kickxia elatine* (L.) Dumort., **Fluellen**
*Plantago lanceolata* L., **English plantain**
*Plantago major* L., **Common plantain**

**Poaceae**
*Aira caryophyllea* L, **Silver hair grass**
*Avena barbata* Pott ex Link, **Slender wild oats**
*Brachypodium distachyon* (L.) P. Beauv., **False brome**
*Briza minor* L., **Annual quaking grass**
*Bromus* sp., **Brome**
*Calamagrostis rubescens* Buckley. **Pine reed grass**
*Cynodon dactylon* (L.) Pers., **Bermuda grass**
*Cynosurus echinatus* L., **Hedgehog dogtail**
*Deschampsia danthonioides* (Trin.) Munro, **Annual Hairgrass**
*Elymus glaucus* Buckley, **Blue wildrye**
*Eragrostis minor* Host, **Little love grass**
*Festuca myuros* L, **Rattail sixweeks grass**
*Festuca perennis* (L.) Columbus & J.P.Sm., **Ryegrass**
*Holcus lanatus* L., **Common velvet grass**
*Melica* sp., **Melica**
*Phalaris* sp., **Canary grass**
*Poa pratensis* L. subsp. *pratensis*, **Kentucky bluegrass**
*Setaria faberi* R.A.W. Herrm., **Chinese foxtail**

**Polemoniaceae**
*Phlox speciosa* Pursh

**Polygalaceae**
*Polygala cornuta* Kellogg var. *cornuta*, **Milkwort**

**Polygonaceae**
*Persicaria lapathifolia* (L.) Delarbre. **Willow weed**
*Polygonum sp.* **Common knotweed**
*Rumex acetosella* L., **Sheep sorrel**
*Rumex conglomeratus* Murray, **Clustered dock**
*Rumex occidentalis* S. Watson, **Western dock**

**Portulacaceae**
*Portulaca oleracea* L., **Purslane**

**Primulaceae**
*Anagallis arvensis* L., **Scarlet pimpernel**

**Ranunculaceae**
*Ranunculus canus* Benth. Var. *canus,* **Buttercup**

**Rhamnaceae**
*Ceanothus integerrimus* Hook. & Arn, **Deer brush**
*Rhamnus crocea* Nutt. **Redberry**

**Rosaceae**
*Chamaebatia foliolosa* Benth., **Mountain misery**
*Drymocallis glandulosa* (Lindl.) Rydb., **Sticky Cinquefoil**
*Frageria vesca* L., **Wood strawberry**
*Heteromeles arbutifolia* (Lindley) Roemer, **Toyon**
*Prunus cerasifera* Ehrh., **Cherry plum**
*Rosa californica* /cham. & Schldl., **California rose**
*Rubus armeniacus* Focke **Himalayan blackberry**
*Rubus laciniatus* Willd., **Cutleaf blackberry**

**Rubiaceae**
*Galium divaricatum* Lam., **Lamarck's bedstraw**

*Galium bolanderi* A. Gray, **Bolander's bedstraw**
*Sherardia arvensis* L., **Field madder**

**Ruscaceae**
*Maianthemum racemosum* (L.) Link, **Western false Soloman's seal**

**Sapindaceae**
*Acer macrophyllum* Pursh, **Big-leaf maple**

**Saxifragaceae**
*Lithophragma bolanderi* A. Gray; **Woodland star**
*Tellima grandiflora* (Pursh) Douglas ex Lindl., **Fringe cup**

**Scrophulariaceae**
*Verbascum thapsus* L., **Wooly mullein**

**Taxaceae**
*Torreya californica* Torr., **California nutmeg**

**Violaceae**
*Viola* sp., **Violet**

# Wetland Delineation Report

**for**

**Assessor's Parcel Number 085-540-003-000**

**3800 North Canyon Road**

**Camino, 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
***Geraldine Hyder***
Contact
**Karen Hyder**
Phone: 530-391-9056

September 2022

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### Figures



### Tables



### Appendices

# I. Report Summary

## A. Potential Jurisdictional Features

The project site has two waters: North Canyon Creek, a perennial stream, and one off-channel pond, dug several decades ago. Wetlands are limited to the footprint of the pond, when drained; thus, their area is included within the waters calculation. The total potential jurisdictional features on the project site is 35,019 ft.$^2$ (0.78 acres). See Page 12 for more specific information.

## B. Proposed Mitigation

Normal setbacks from perennial waters (100 feet on each side of North Canyon Creek and the pond) would be sufficient to protect those resources and the vegetation associated with them.

# II. Introduction

## A. Purpose of Report

A wetland delineation was conducted September 21, 2022, on Assessor's Parcel Number 085-540-003-000 (Figure 1), at the request of Karen Hyder. The wetland delineation is part of submittal information required by El Dorado County for a zone change from TPZ to PA for a 33.22-acre parcel of land.

## B. Project Location and Description

The study area is in the east half of Section 36, Township 11 North, Range 11 East, M.D.M., located at 3800 North Canyon Road, Camino, El Dorado County, CA. (Figures 2 and 3). It has been the site of a choose-and-cut Christmas tree farm for decades, and also supports about 15 acres of timber land. The property has one home, a gift shop, a mine tunnel and other outbuildings.

The project site has a General Plan designation of Agricultural Land (AL, District A) with TPZ zoning. It is bounded by properties varying in size from 0.716 to 31.75 acres.

## C. Property Owner and Project Manager

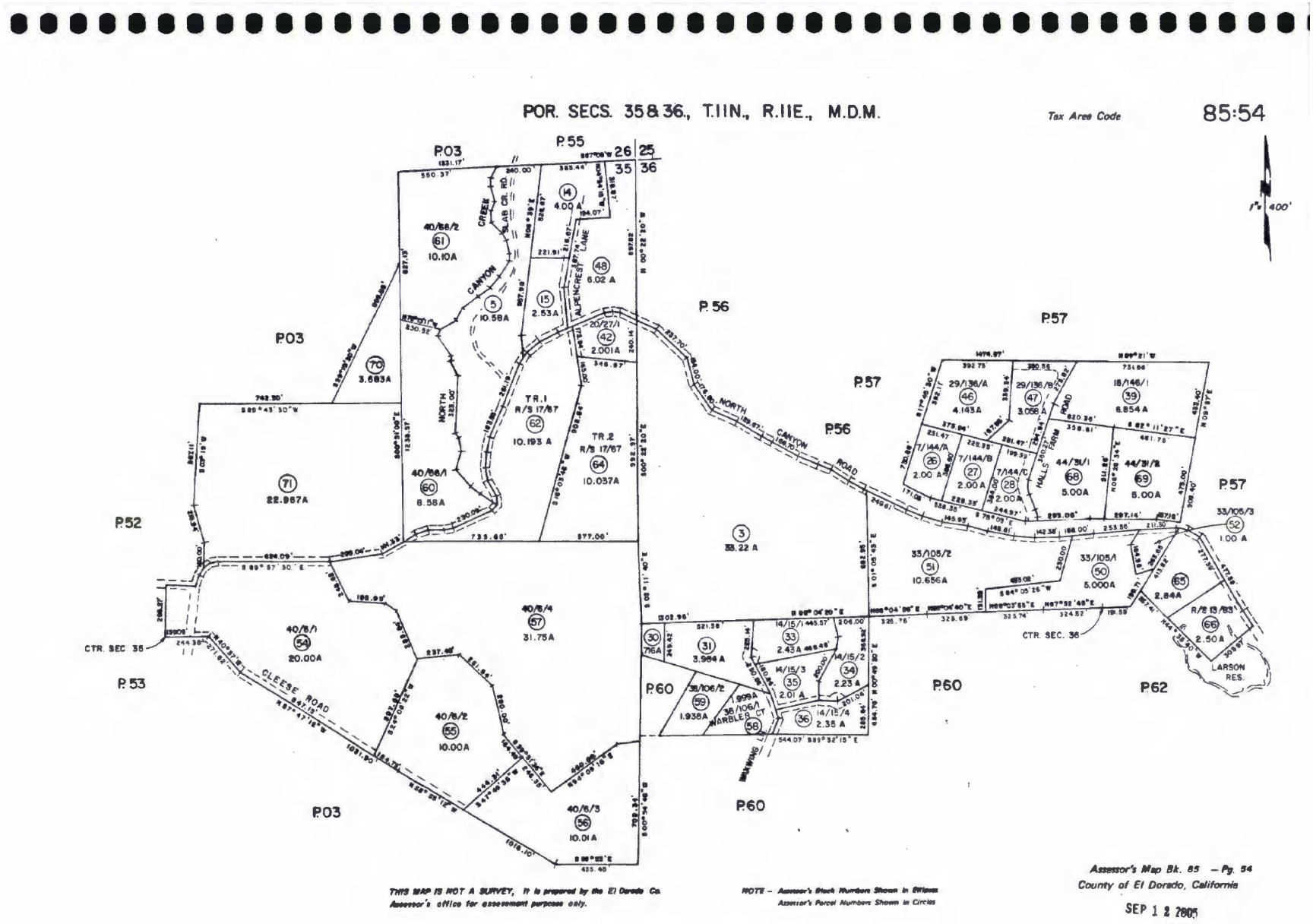
**Property Owner**
Raymond L. Hyder and Geraldine
F. Hyder 1994 Trust
3800 North Canyon Road
Camino, CA 95709

**Project Manager**
Karen Hyder
Phone: 530-391-9056

## E. Report Preparer

Ruth A. Willson, M.A., Biology, California State University, Fresno, Biologist for Site Consulting, Inc., 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 a Certified Arborist with the International Society of Arboriculture (Certification No. WE-8335A).

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 9 - WETLAND DELINEATION REPORT



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SCALE 1" = 200'

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FIGURE 2. AERIAL PHOTO

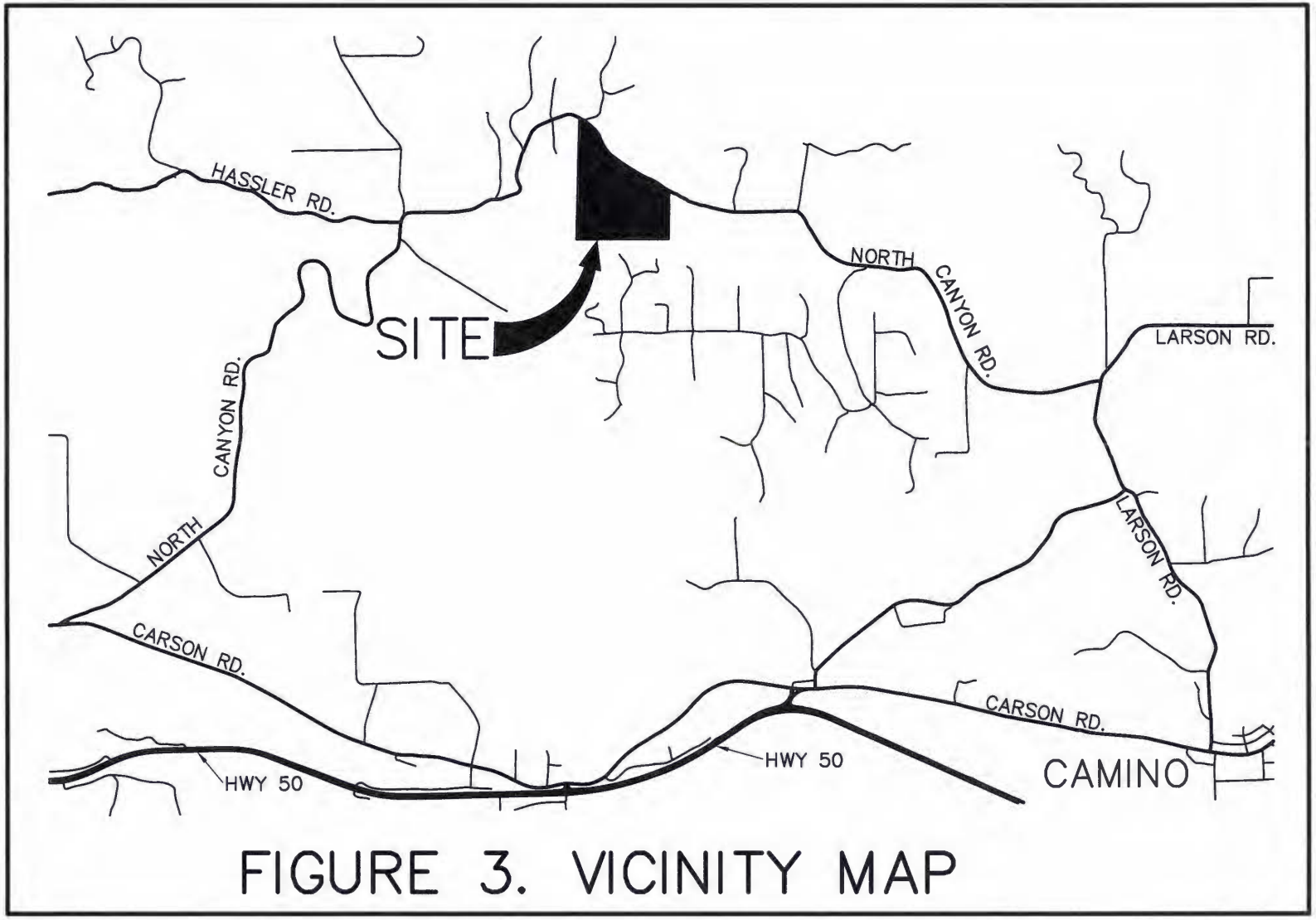



FIGURE 3. VICINITY MAP

## III. Methods

### A. Literature

Literature utilized for the wetland delineation includes U.S. Army Corps (2010), and Wetland Training Institute (1995). Jurisdictional suitability of hydrologic features was evaluated utilizing the Environmental Protection Agency's Rapanos guidelines (EPA 2007). Soil color was determined using Munsell (2000). Soil classification and descriptions were found on the NRCS Web Soil Survey (2022). Vegetation and plant taxonomy references include California Department of Fish and Game (DFG, 2010), Sawyer et al. (2009), Mayer and Laudenslayer (1988), Klein et al. (2007), and Baldwin, ed. (2012). Hydrophytic vegetation classification was found in Corps (2020). Hydric soils information was obtained from NRCS (2022).

### B. Field Survey and Mapping

A field survey to delineate the boundaries of wetlands and waters on the project site was conducted September 21, 2022, by Ruth Willson, utilizing the routine determination method in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual (Corps 1987) and its Western Mountains, Valleys and Coast Regional Supplement to the Wetland Delineation Manual (Corps 2010). Wetland determination data points are mapped on Figure 9, page 13, and wetland data sheets are presented in Appendix A.

The channel of North Canyon Creek and the footprint of the off-channel pond were surveyed September 21, 2022, by James Willson, L.S., utilizing centimeter-accuracy GPS.

## IV. Site Description

### A. Topography

The project site lies between 2600 and 2850 feet (790 and 870 meters) elevation. North Canyon Creek, a perennial stream, flows northwesterly through the parcel, with a gradient of 5 percent. The topography south of the creek primarily consists of northerly and westerly slopes from a knoll on the property's south boundary to the creek. The gradient of that slope is approximately 22 percent. The topography north of the creek consists of a southeasterly slope from a knoll to the creek, with a gradient of about 20 percent (Figure 4).

### B. Hydrology

Direct precipitation, drainage of precipitation and groundwater discharge are the hydrologic sources for the project site. While the property has no ephemeral or intermittent waters, North Canyon Creek passes through it. The creek collects water from intermittent and ephemeral sources upstream of Larsen Reservoir, located less than one-half mile upstream, southeasterly of the study area. The creek enters the study area near its northeast corner and carries water about one-fourth mile northwesterly, leaving the property along its western boundary. After leaving the study area, the creek carries water about one mile northerly to the South Fork American River, a traditional navigable water (Figure 5).

An off-channel pond, dug decades ago, receives water from the creek, then releases it back into the creek. Some water also seeps into the pond from the creek through the soil between the two features.

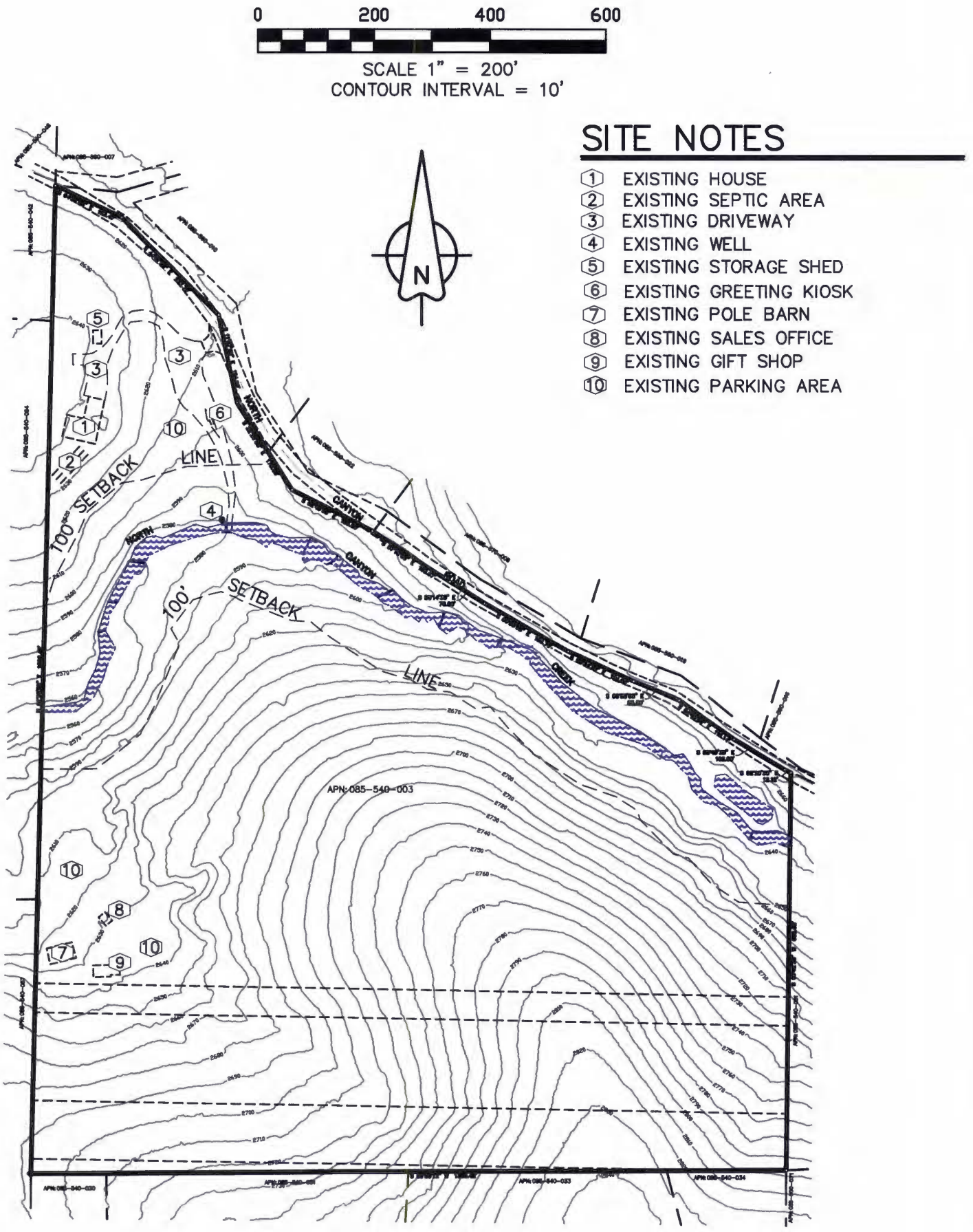
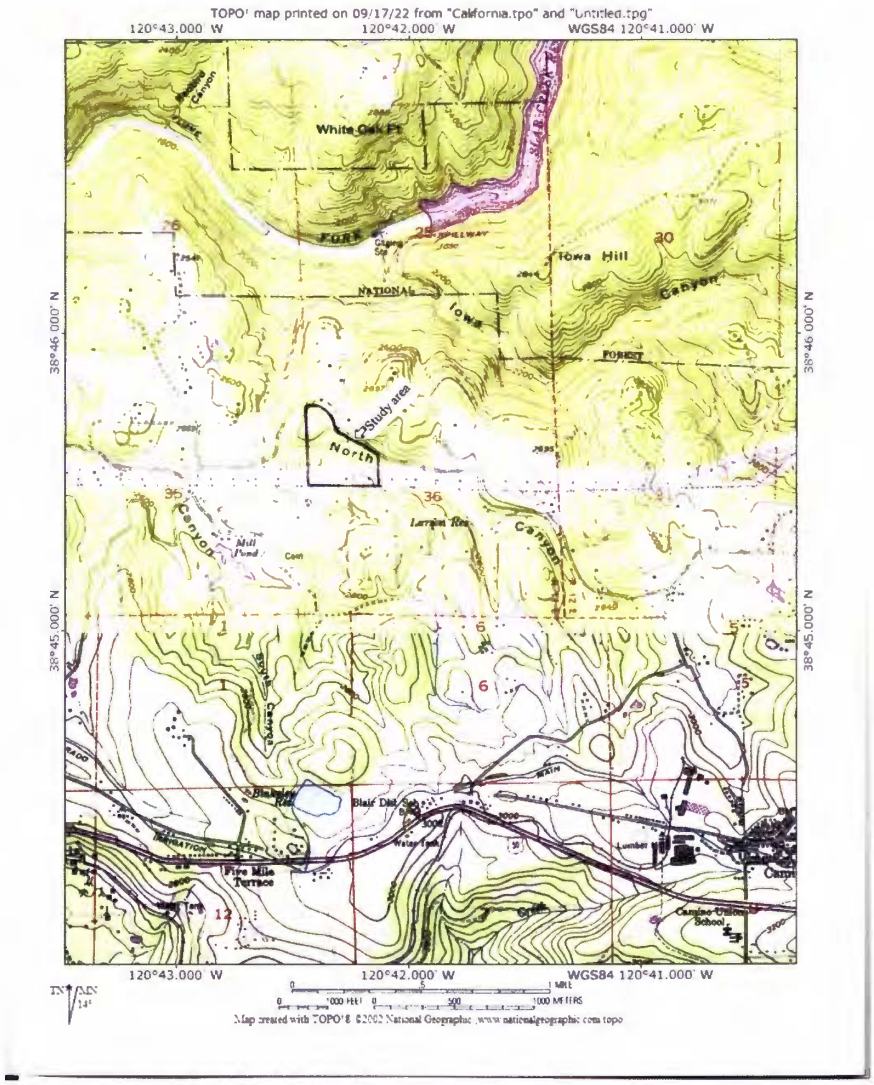



FIGURE 4. TOPOGRAPHIC MAP

**Figure 5.** Topographic map, from National Geographic Maps (2002).



### C. Vegetation Communities

Vegetation communities on the project site include Sierran Mixed Conifer Forest, Riparian and Agricultural Land (Figures 6 and 7).

#### 1. Sierran Mixed Conifer Forest

Sierran mixed conifer forest (Mayer & Laudenslayer 1988; El Dorado County 2004) covers about 15.6 acres of the project site. The most abundant species is ponderosa pine *(Pinus ponderosa)*, followed by incense cedar (*Calocedrus decurrens*) and Douglas-fir (*Pseudotsuga menziesii*). California black oak (*Quercus kelloggii*), Madrone (*Arbutus menziesii)*, Mountain dogwood (*Cornus nuttallii*), and California nutmeg (*Torreya californica*) are also found in the tree canopy. The shrub layer is mostly absent, due to careful forest management through the years (prescribed burning and shrub removal), but scattered shrubs include Oregon grape (*Berberis aquifolium*), toyon (*Heteromeles arbutifolia*), Western poison-oak (*Toxicodendron diversiloba*) and California rose (*Rosa californica*). The ground layer includes mountain misery (*Chamaebatia foliolosa*), blue wild-rye (*Elymus glaucus ),* dogtail grass (*Cynosurus echinatus)*, Pacific starflower (*Lysimachia latifolia*), hairy wood-rush (*Luzula comosa*), American lotus (*Acmisphon americanus*) and klamathweed *(Hypericum perforatum ).* A complete list of plants found on-site is presented in Appendix B.

#### 2. Riparian

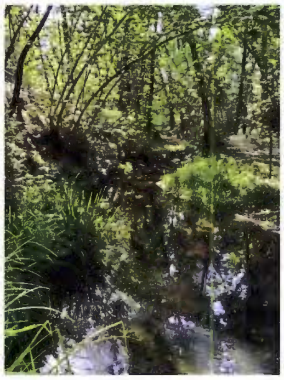
Riparian vegetation, occurring along the banks of North Canyon Creek, covers about 1.6 acres. Riparian trees include big-leaf maple (*Acer macrophyllum*) and white alder (*Alnus rrhombifolia*). Shrubs found alongside the stream include Himalayan blackberry (*Rubus armeniacus*) and cutleaf blackberry (*R. laciniatus*). The creek supports a large variety of herbaceous species, including common horsetail (*Equisetum arvense*), big-leaf sedge (*Carex amplifolia*), Thompkin's sedge *(C. tompkinsii)*, lovegrass sedge (*Cyperus eragrostis*), panicled bulrush (*Scirpus microcarpus*), water iris (*Iris pseudacorus*), Baltic rush (*Juncus balticus*), common velvet grass (*Holcus lanatus*) and clustered dock (*Rumex conglomeratus*), among others.

#### 3. Agricultural land

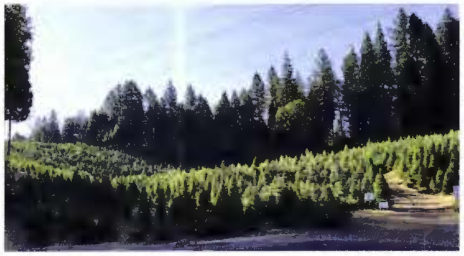
Approximately 15.2 acres of the project site is utilized as a choose-and-cut Christmas tree farm. The plantations include Douglas-fir, Silvertip fir (*Abies magnifica*), White fir (*Abies concolor*), Blue spruce (*Picea pungens*) and various specialty firs. The plantations have been managed to suppress competing vegetation, so the ground layer is largely absent.

**Figure 6.** Vegetation communities photos.

Sierran Mixed Conifer Forest



Riparian



Agricultural land: Christmas tree plantation.

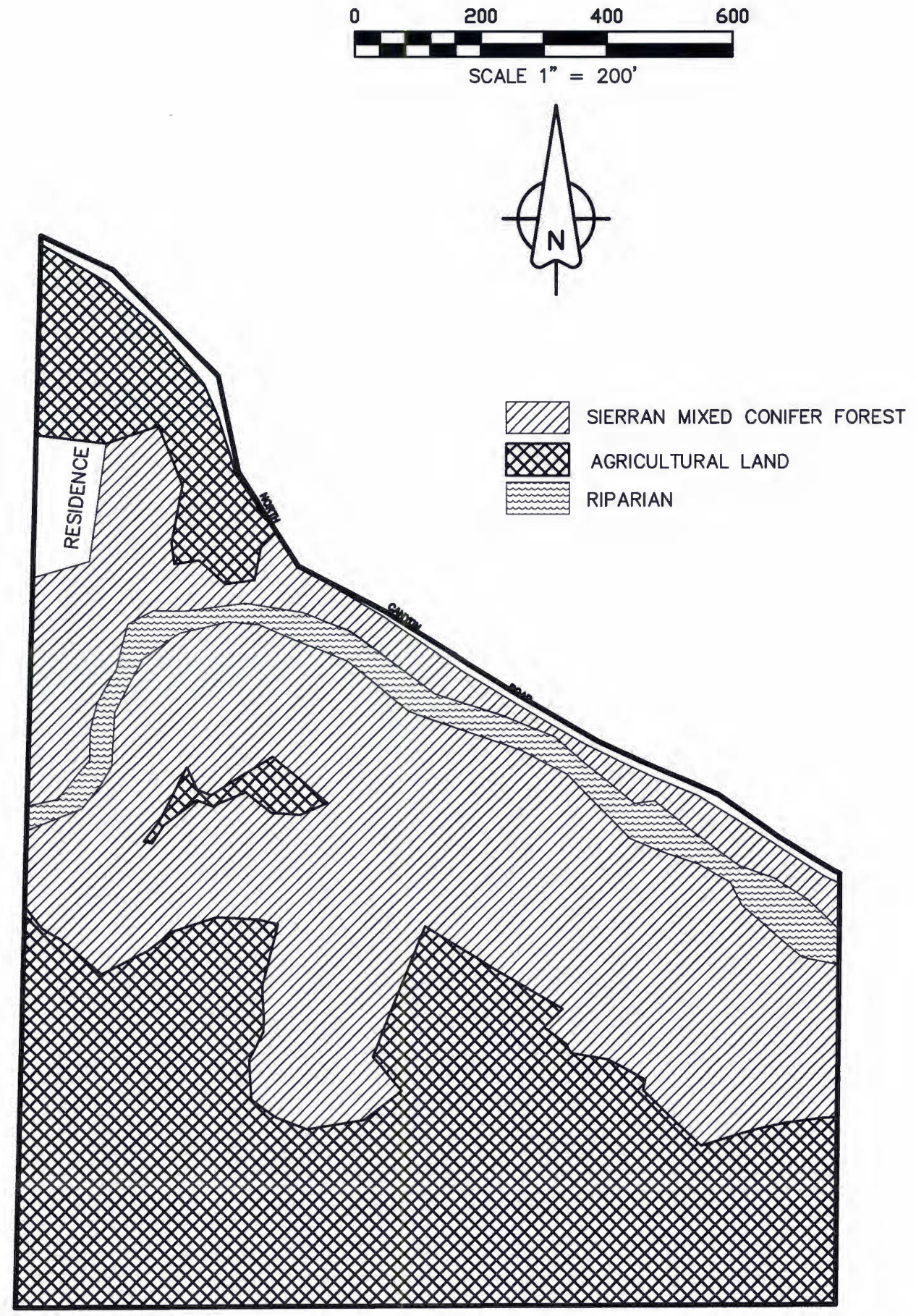



FIGURE 7. VEGETATION COMMUNITIES

## D. Soils

### 1. Soil Classification

Soils on the project site (Figure 8, below) include (counterclockwise from northwest to northeast) Musick sandy loam, 9 to 15 percent slopes (MrC), Musick sandy loam, 15 to 30 percent slopes (MrD), Sites loam, 15 to 30 percent slopes (SkD), Sites loam 15 to 30 percent slopes (SkE), and Sites loam, 9 to 15 percent slopes (SkC). Musick sandy loam covers about 22 acres and Sites loam covers about 11 acres of the project site (USDA, NRCS 2022, Appendix C).

**Figure 8.** Soils map from National Resource Conservation Service.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## 2. Soil Descriptions

### a. Musick Series

Musick Series soils are well-drained soils underlain by acid igneous rocks at a depth below 48 inches, and are found on gently rolling to steep mountainous uplands (5 to 50% slopes) at elevations from 2000 to 5000 feet. Average annual precipitation, including snowfall, is 35 to 60 inches and frost-free season varies from 140 to 240 days. (USDA 1974). Soil colors from a representative profiles of Musick series soils is shown below.

#### i. Musick Sandy Loam, 15 to 30 percent slopes (MrD)

**0-6 inches**: Brown (10YR 5/3) sandy loam, dark brown (7.5YR 3/3) when moist;
**6 to 12 inches**: Brown (7.5YR 5/4) heavy sandy loam, reddish brown (5YR 4/4) when moist;
**12 to 18 inches**: Variegated reddish-brown and red (5YR 5/4 and 2.5YR 5/6) light sandy clay loam, variegated yellowish-red and red (5YR 4/6 and 2.5YR 4/6) when moist;
**18 to 28 inches:** variegated red and reddish-yellow (2.,5YR 5/8 and 5YR 6/6) heavy clay loam near sandy clay, variegated red and yellowish-red (2.5YR 4/6, 4/8 and 5YR 5/6) when moist;
**28 to 42 inches:** Variegated light-red and reddish-yellow (2.5YR 6/8 and 5YR 6/8) light sandy clay, variegated red and reddish-yellow (2.5YR 4/8 and 5YR 6/8) when moist;
**42 to 56 inches:** Variegated light-red, red and reddish-yellow (2.5YR 6/8, 2.5YR 5/8 and 5YR 6/8) heavy sandy loam, variegated red, light red and reddish-yellow (2.5YR 5/8, 2.5YR 6/8 and 5YR 6/8) when moist;
**56 to 60 inches:** Variegated reddish-yellow (5YR 6/8 & 7/8) sandy loam, variegated reddish-yellow and light red (5YR 6/8 and 2.5YR 6/8) when moist.

#### ii. Musick sand loam, 9 to 15 percent slopes (MrC)

The soil profile is similar to Musick sand loam, 15 to 30 percent slopes, except the land is less sloping.

### b. Sites Series

The Sites Series consists of well-drained soils underlain by metasedimentary and metabasic rocks at a depth of 40 to more than 60 inches. The soils occur on rolling to very steep mountainous uplands, with slopes are from 9 to 70 percent, at elevations between 2000 to 5000 feet. Average annual precipitation, including snow, is 35 to 60 inches, and frost-free season is 140 to 240 days. Soil colors from a representative profile of Sites loam, 15 to 30 percent slopes (SkD) follows:

#### i. Sites Loam, 15-30% slopes (SkD)

**0-to 7 inches**: Brown (7.5YR 5/4) loam, dark brown (7.5YR 3/3) when moist;
**7 to 14 inches**: Reddish-brown (5YR 5/4) loam, dark reddish brown (5YR 5/4) when moist;
**14 to 21 inches**: Yellowish-red (5YR 4/6) clay loam, reddish-brown (5 YR 4/4) when moist;
**21 to 29 inches**: Red (2.5YR 5/6) clay, red (2.5YR 4/6) when moist;
**29 to 53 inches**: Red (2.5YR 5/8) clay, red (2.5YR 4/8) when moist;
**53 to 69 inches:** Light-red (2.5YR 6/8) clay loam, red (2.5YR 4/8) when moist;
**69 inches:** Weathered schist and slate.

#### ii. Sites Loam, 9 to 15 percent slopes (SkC)

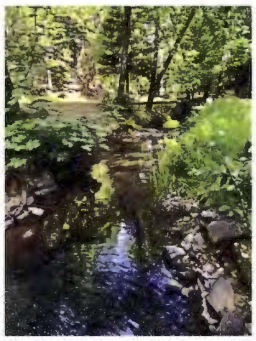
Sites loam, 9 to 15 percent slopes, is similar to Sites loam, 15 to 30 percent slopes, except it is on less-sloping ground.

#### iii. Sites Loam, 30 to 50 percent slopes (SkE)

Sites loam, 9 to 15 percent slopes, is similar to Sites loam, 15 to 30 percent slopes, except it is on more-sloping ground.

## VI. Delineation Results

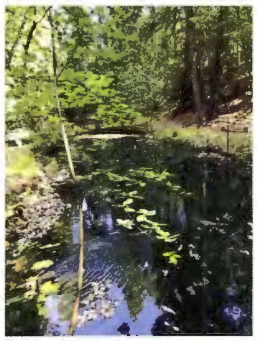
The project site has two waters: North Canyon Creek and an off-channel pond dug decades ago. (Figure 9). When the pond is drained, its footprint has wetland characteristics (hydric soils and hydrophytic vegetation), but its area is included herein as a water, rather than a wetland. The topographic map of the project site (Figure 4) shows a drainage swale near the parking area by the southwest corner of the property. Field studies did not find a defined channel within the swale; thus, it is not classified as an ephemeral stream and is not part of the Waters of the U.S.



North Canyon Creek.

### A. Waters

North Canyon Creek enters the study area near its northeast corner and carries water about one-fourth mile northwesterly, leaving the property along its western boundary. Total area of North Canyon Creek is 31,630 ft.$^2$ (0.7 Ac.). The off-channel pond is located near the northeastern corner of the project site. Its total area 3,389 ft.$^2$ (0.08 Ac.). The total potential jurisdictional area on the project site, shown in Table 1, is 35,019 ft.$^2$ (0.78 Ac.).



The off-channel pond.

### B. Wetlands

The study area has no wetlands, except within the pond's footprint. As noted above, its area is included as a water rather than a wetland.

**Table 1. Potential jurisdictional waters on the project site.**

| WATERS | | | | |
|---|---|---|---|---|
| **Water ID** | **Channel Length (ft)** | **Average Flow-line Width (ft)** | **Area (ft²)** | **Area (acres)** |
| North Canyon Creek | ±1660 | ±19 | 31,630 | 0.7 |
| Pond | n/a | n/a | 3,389 | 0.08 |
| **TOTAL WATERS** | | | **35,019** | **0.78** |
| **POTENTIAL JURISDICTIONAL TOTAL** | | | **35,019** | **0.78** |

## VI. Permits

Disturbance of any 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.

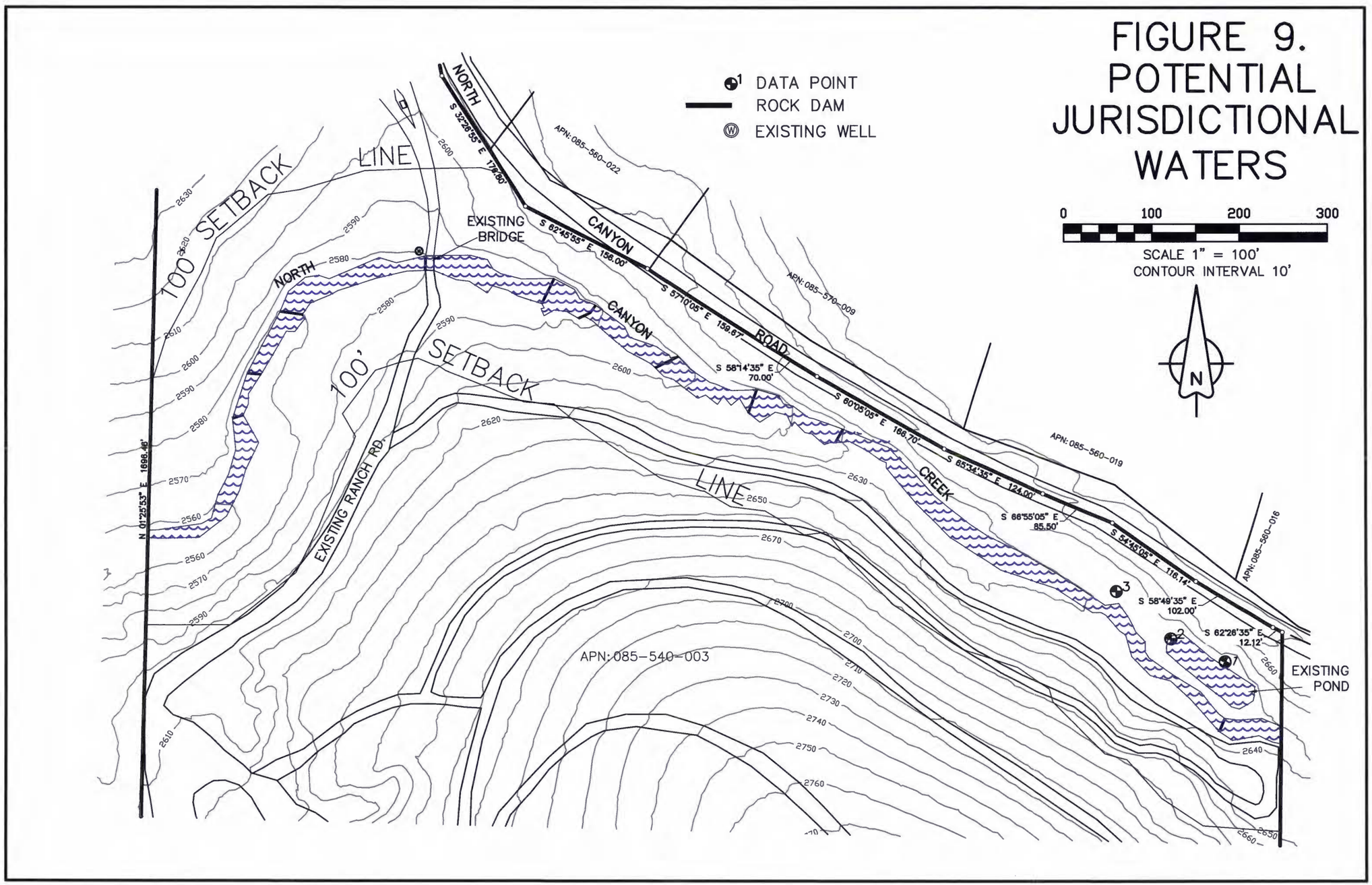


FIGURE 9.
POTENTIAL JURISDICTIONAL WATERS
1 DATA POINT
ROCK DAM
EXISTING WELL
0 100 200 300
SCALE 1" = 100'
CONTOUR INTERVAL 10'
N
100' SETBACK LINE
NORTH CANYON ROAD
NORTH CANYON CREEK
EXISTING BRIDGE
EXISTING RANCH RD
EXISTING POND
APN: 085-560-022
APN: 085-570-009
APN: 085-560-019
APN: 085-560-016
APN: 085-540-003
S 32°28'55" E 178.60'
S 62°45'55" E 156.00'
S 57°10'05" E 159.67'
S 58°14'35" E 70.00'
S 60°05'05" E 186.70'
S 65°34'35" E 124.00'
S 86°55'05" E 85.50'
S 54°45'05" E 116.14'
S 58°49'35" E 102.00'
S 62°26'35" E 12.12'
N 01°25'53" E 1698.49'

## VII. References

Baldwin, B.G, D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti and D.H. Wilken (eds). 2012. The Jepson Manual, Vascular Plants of California, Second Edition. Berkeley: University of California Press.

California Department of Fish and Game (DFG). 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=107303&inline

El Dorado County. 2004. El Dorado County General Plan. Placerville, California: El Dorado County Planning Department.

Environmental Protection Agency. 2007. Clean Water Act Jurisdiction following the U.S. Supreme Court's Decision in *Rapanos v. United States* and *Carabell v. United States.* http://www.epa.gov/owow/wetlands/guidance/CWAwaters.html.

Jepson Flora Project (eds.) 2022. Jepson eFlora. https://ucjeps.berkeley.edu/eflora

Klein, A., J. Crawford, J. Evens, T. Keeler-Wolfe and D. Hickson. 2007. Classification of the Vegetative Alliances of the Northern Sierra Nevada Foothills; Report prepared for California Department of Fish and Game. Sacramento: California Native Plant Society.

Mayer, K.E. and W.F. Laudenslayer, Jr. 1988. *A guide to wildlife habitats of California.* Sacramento: California Dept. of Fish and Game.

Munsell Color. 2000. *Munsell soil color charts.* New Windsor, NY: Greta G. Macbeth.

National Geographic Maps. 2002. California: Seamless USGS topographic maps on CD-ROM. San Francisco, California.

National Resource Conservation Service (NRCS). 2022. Hydric soils of El Dorado Area, California. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html

Natural Resources Conservation Service, United States Department of Agriculture. 2022. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov.

Sawyer, J.O., T. Keeler-Wolf and J.M. Evans. 2009. *A manual of California vegetation, 2nd ed.* Sacramento: California Native Plant Society.

U.S. Army Corps of Engineers (Corps). 2020. National Wetland Plant List, version 3.5: Western mountains, valleys and coast. http://wetland-plants.usace.army.mil/

U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valley and Coast Region, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-03. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

USDA, Natural Resources Conservation Service (NRCS). 1974. Soil Survey of El Dorado Area, California. Washington, D.C.: U.S. Government Printing Office.

USDA, NRCS. 2006. Field indicators of hydric soils in the United States, Version 6.0. G.W. Hurt and L.M. Vasilas (eds). USDA, NRCS in cooperation with the National Technical Committee for Hydric Soils.

# Appendix A.

## Wetland Determination Data Forms

## Western Mountains, Valleys, and Coast Region

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Hyder Trust City/County: El Dorado Sampling Date: 9/21/2022

Applicant/Owner: Geraldine Hyder State: CA Sampling Point: 1

Investigator(s): Ruth Willson Section, Township, Range: Sec. 36, T. 11 N., R. 11 E., MDM

Landform (hillslope, terrace, etc.): Slope within pond footprint Local relief (concave, convex, none): Concave Slope (%): 45

Subregion (LRR): MLRA 22A Lat: 38° 45' 35.98" Long: _: 120° 42' 09.24" Datum: WGS 84

Soil Map Unit Name: Sites loam, 15 to 30 percent slopes (SkE) NWI classification: PSSC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | |
|---|---|---|
| Hydrophytic Vegetation Present? | Yes X No _____ | **Is the Sampled Area within a Wetland?** Yes X No _____ |
| Hydric Soil Present? | Yes X No _____ | |
| Wetland Hydrology Present? | Yes X No _____ | |

Remarks:

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: 3 m²) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Alnus rhombifolia* | 100 | Yes | FACW |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | 100 = Total Cover | | |
| **Sapling/Shrub Stratum** (Plot size: 3 m²) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | = Total Cover | | |
| **Herb Stratum** (Plot size: 3 m²) | | | |
| 1. *Lapsana communis* | 4 | Yes | FACU |
| 2. *Rumex conglomeratus* | 2 | Yes | FACW |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| | 6 = Total Cover | | |
| **Woody Vine Stratum** (Plot size: 3 m²) | | | |
| 1. *Rubus laciniatus* | 3 | Yes | FACU |
| 2. | | | |
| | 3 = Total Cover | | |

% Bare Ground in Herb Stratum 94

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: | |
|---|---|---|
| OBL species | x 1 = | |
| FACW species 102 | x 2 = | 204 |
| FAC species | x 3 = | |
| FACU species 7 | x 4 = | 28 |
| UPL species | x 5 = | |
| Column Totals: 109 (A) | | 232 (B) |

Prevalence Index = B/A = 2.1

**Hydrophytic Vegetation Indicators:**

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No _____

Remarks:

## SOIL

Sampling Point: 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-4 | 5YR 2.5/1 | 50 | 7.5TR 2.5/1 | 2 | C | M | Loam | 40% coarse rock |
| | | | 2.5YR 4/6 | 8 | C | M | | |
| 4-10 | 5YR 3/3 | 35 | 2.5YR 4/6 | 10 | C | M | Sandy loam | 5% medium gravel |
| | 5YR 4/3 | 50 | | | C | M | | |
| 10-13 | 5YR 3/2 | 60 | 10YR 3/4 | 3 | C | M | Sandy clay | 5% medium gravel |
| | 5YR 3/3 | 30 | 10YR 4/6 | 2 | CS | on rocks | | |
| 13 | Bottom of hole | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes X No _____

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

**Field Observations:**

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Data point was located within the footprint of a pond, above the water level.

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Hyder Trust City/County: Applicant/ El Dorado Sampling Date: 9/21/2022

Owner: Geraldine Hyder State: CA Sampling Point: 2

Investigator(s): Ruth Willson Section, Township, Range: Sec. 36, T. 11 N., R. 11 E., MDM

Landform (hillslope, terrace, etc.): Terrace below hillslope Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR): MLRA 22A Lat: 38° 45' 35.7" Long: _: 120° 42' 08.5" Datum: WGS 84

Soil Map Unit Name: Sites loam, 15 to 30 percent slopes (SkE) NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ | No X | **Is the Sampled Area within a Wetland?** Yes _____ No X |
| Hydric Soil Present? | Yes _____ | No X | |
| Wetland Hydrology Present? | Yes _____ | No X | |

Remarks:

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: 3 m²) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | = Total Cover | | |
| **Sapling/Shrub Stratum** (Plot size: 3 m²) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | = Total Cover | | |
| **Herb Stratum** (Plot size: 3 m²) | | | |
| 1. *Hypochaeris radicata* | 70 | Yes | FACU |
| 2. *Equisetum arvense* | 3 | No | FAC |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| | 73 = Total Cover | | |
| **Woody Vine Stratum** (Plot size: 3 m²) | | | |
| 1. *Rubus armeniacus* | 5 | Yes | FACU |
| 2. | | | |
| | 5 = Total Cover | | |

% Bare Ground in Herb Stratum 27

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: | |
|---|---|---|
| OBL species | x 1 = | |
| FACW species | x 2 = | |
| FAC species 3 | x 3 = | 9 |
| FACU species 75 | x 4 = | 280 |
| UPL species | x 5 = | |
| Column Totals: 78 (A) | | 289 (B) |

Prevalence Index = B/A = 3.7

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No X

Remarks:

## SOIL

Sampling Point: 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-1.5 | 2.5YR 3/4 | 95 | | | | | Loam | 5% medium gravel |
| 1.5-12 | 5YR 4/6 | 79 | 10YR 4/8 | 1 | C | M | Clayey loam | Many fine roots |
| | 2.5YR 5/6 | 20 | | | | | | |
| 12 | Bottom of hole | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present? Yes _____ No __X__**

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

**Field Observations:**

Surface Water Present? Yes _____ No __X__ Depth (inches): _____

Water Table Present? Yes _____ No __X__ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No __X__ Depth (inches): _____

**Wetland Hydrology Present? Yes _____ No __X__**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Data point was located on a terrace below a hillslope and above a pond.

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Hyder Trust City/County: El Dorado Sampling Date: 9/21/2022

Applicant/Owner: Geraldine Hyder State: CA Sampling Point: 3

Investigator(s): Ruth Willson Section, Township, Range: Sec. 36, T. 11 N., R. 11 E., MDM

Landform (hillslope, terrace, etc.): Terrace below hillslope Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR): MLRA 22A Lat: 38° 45' 36.75" Long: _: 120° 42' 10.0" Datum: WGS 84

Soil Map Unit Name: Sites loam, 15 to 30 percent slopes (SkE) NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No ____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | |
|---|---|---|
| Hydrophytic Vegetation Present? | Yes _____ No X | **Is the Sampled Area within a Wetland?** Yes _____ No X |
| Hydric Soil Present? | Yes _____ No X | |
| Wetland Hydrology Present? | Yes _____ No X | |

Remarks:

### VEGETATION – Use scientific names of plants.

| | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (Plot size: 2 m²) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | = Total Cover | | |
| Sapling/Shrub Stratum (Plot size: 2 m²) | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | = Total Cover | | |
| Herb Stratum (Plot size: 2 m²) | | | |
| 1. *Fragaria vesca* | 85 | Yes | FACU |
| 2. *Equisetum arvense* | 15 | No | FAC |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| | 100 = Total Cover | | |
| Woody Vine Stratum (Plot size: 2 m²) | | | |
| 1. | | | |
| 2. | | | |
| | = Total Cover | | |
| % Bare Ground in Herb Stratum 0 | | | |

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 00 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | Multiply by: |
|---|---|
| OBL species _____ | x 1 = _____ |
| FACW species _____ | x 2 = _____ |
| FAC species _____ | x 3 = _____ |
| FACU species _____ | x 4 = _____ |
| UPL species _____ | x 5 = _____ |
| Column Totals: _____ (A) | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes _____ No X

Remarks:

## SOIL

Sampling Point: 3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-9 | 2.5YR 3/3 | 98 | 2.5YR 4/6 | 1 | C | M | Sandy Loam | Many fine roots |
| | | | 2.5YR 3/6 | 1 | CS | on rocks | Sandy Loam | |
| 9-11 | 2.5YR 4/4 | 95 | | | | | Sandy loam | 5% medium gravel |
| 11 | Bottom of hole | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes _____ No X

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

**Field Observations:**

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

**Wetland Hydrology Present?** Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Data point was located within a shallow depression on a terrace below a hillslope and above a creek.

# Appendix B

Plant Species Found on the Project Site

July 27, August 9, and September 1, 2022

**Plant Species Found on the Project Site**
July 27, August 9, and September 1, 2022

**Agavaceae**
*Chlorogalum pomeridianum* (DC.) Kunth var. *pomeridianum*, **Soaproot**

**Amaranthaceae**
*Amaranthus* sp., **Pigweed**

**Anacardiaceae**
*Rhus aromatica* Aiton, **Skunk bush**
*Toxicodendron diversiloba* (Torrey & A. Gray) E. Greene, **Western poison-oak**

**Apiaceae**
*Daucus carota* L., **Wild carrot, Queen Anne's Lace**
*Ligusticum californicum* J.M. Coult. & Rose
*Sanicula* sp., **Sanicle**

**Asteraceae**
*Achillea millefolium* L., **Yarrow**
*Adenocaulon bicolor* Hook., **Trail plant**
*Agoseris heterophylla* (Nutt.) Greene var. *heterophylla*, **Annual mountain dandelion**
*Baccharis pilularis* DC., **Coyote brush**
*Bidens frondosa* L., **Sticktight**
*Centaurea solstitialis* L., **Yellow star-thistle**
*Cirsium vulgare* (Savi) Ten., **Bull thistle**
*Hypochaeris* ., **Cat's-ear**
*Lactuca serriola* L., **Prickly lettuce**
*Lapsana communis* L., **Common nipplewort**
*Madia elegans* D. Don, **Common madia**
*Madia subspicata* D.D. Keck
*Micropus* sp. **Cottonweed**
*Stephanomeria elata* Nutt., **Wirelettuce**
*Symphyotrichum* sp., **American-aster**
Taraxicom sp., **Dandelion**
*Tragopogon dubius* Scop. **Goat's beard**

**Athyriaceae**
*Athyrium filix-femina* (L.) Roth var. *cyclosorum* Rupr. **Lady fern**

**Berberidaceae**
*Berberis aquifolium* Pursh., **Oregon-grape**

**Betulaceae**
*Alnus rhombifolia* Nutt., **White alder**

**Blechanaceae**
*Struthiopteris spicant* (L.) Weiss, **Deer fern**

**Brassicaceae**
*Brassica nigra* (L.) W.D.J. Koch, **Black mustard**

**Caprifoliaceae**
*Lonicera hispidula* (indl.) Torr. & A. Gray, **California honeysuckle**
*Symphoricarpos albus* (L.) S.F. Blake var. *laevigatus* (Fernald) S.F. Blake, **Snowberry**

**Caryophyllaceae**
*Cerastium fontanum* Baumg. ssp. *vulgare* (Hartm.) Greuter & Burdet **Common mouse-ear chickweed**
*Stellaria media* (L.) Vill., **Common chickweed**

**Chenopodiaceae**
*Dysphania botrys* (L.) Mosyakine & Clements, **Jerusalem Oak**
*Salsola* sp., **Russian thistle**

**Convolvulaceae**
*Convolvulus arvensis*, L. **Field bindweed**
*Calystegia occidentalis* (A. Gray) Brummitt

**Cornaceae**
*Cornus nuttallii* Audubon, **Mountain**

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

**Cyperaceae**
*Carex amplifolia* Boott, **Big-leaf sedge**
Carex tiompkinsii J.T. Howell, **Tompkin's sedge**
*Cyperus eragrostis* Lam., **Lovegrass sedge**
*Scirpus microcarpus* .Presl & C.Presl, **Panicled bulrush**

**Cystopteridaceae**
*Cystopteris fragilis* (L.) Bernh. **Fragile fern**

**Dennstaedtiaceae**
*Pteridium aquilinum* (L.) Kuhn var. *pubescens* Underw. **Bracken fern**

**Dryopteridaceae**
*Dryopteris arguta* (Kaulf.) Maxon, **Wood fern**

**Ericaceae**
*Arbutus menziesii* Pursh, **Pacific madrone**
*Arctostaphylos viscida* C. Parry, **White-leaf manzanita**

**Euphorbiaceae**
*Croton setiger* Hook**, Dove weed**
*Chamaesyce maculata* L., **Spotted spurge**
*Euphorbia serpillifolia* Pers. subsp. *serpillifolia*, **Thyme-leaf sandmat**

**Equisetaceae**
*Equisetum arvense* L. **Common horsetail**

**Fabaceae**
*Acmispon americanus* (Nutt.) Rydb., var. *americanus*, **American lotus**
*Lathyrus latifolius* L., **Perennial sweet pea**
*Hosackia oblongifolia* Benth. var. *oblongifolia*, **Bird's-foot trefoil**
*Medicago polymorpha* L., **California burclover**
*Trifolium glomeratun* L., **Clustered clover**
*Trifolium gracilentum* Torr. & A.Gray, **Pinpoint clover**
*Vicia* sp., **Vetch**

**Fagaceae**
*Quercus chrysolepis* Liebm., **Canyon live oak**
*Quercus kelloggii Newb.*, **California black oak**
*Quercus wislizeni* A.DC., **Interior live oak**

**Gentianaceae**
*Centaurium tenuiflorum* (Hoffmans. & Link) Janch., **Centaury**

**Hypericaceae**
*Hypericum calycinum L.*, **Aarons beard**
*Hypericum perforatum* L. subsp. *perforatum*, **Klamathweed**

**Iridaceae**
*Iris hartwegii* Baker subsp. *hartwegii* **Sierra iris**
*Iris pseudacorus* L. **Water iris**

**Juglandaceae**
*Juglans hindsii* Jeps. ex R.E. Sm., **Northern California Black walnut**

**Juncaceae**
*Juncus balticus* Willd. ssp. Ater (Rydb.) Snogerup, **Baltic rush**
*Juncus bufonius* L. var. *bufonius*, **Toad rush**
*Luzula comosa* E. Mey. var. *comosa*, **Hairy wood-rush**

**Lamiaceae**
*Prunella vulgaris* L. var. *vulgaris* , **Self-heal**

**Lauraceae**
*Unbellularia californica* (Hook. & Arn.) Nutt. **California Bay Laurel**

**Liliaceae**
*Chlorogalum pomeridianum* (DC.) Kunth var. *pomeridianum*, **Common soaproot**

**Myrsinaceae**
*Lysimachia arvensis* (L.) U. Manns & Anderb., **Scarlet pimpernel**
*Lysimachia latifolia* (Hook.) Cholewa, **Pacific Starflower**

**Onagraceae**
*Epilobium brachycarpum* C. Presl, **Willow herb**
*Epilobium minutum* Lindl.

**Orchidaceae**
*Goodyera oblongifolia* Raf., **Rattlesnake-plantain**
*Piperia traansversa* Suksd., **Flat spurred piperia**

**Orobanchaceae**
*Cordylanthus tenuis* A.Gray ssp. *tenuis*, **bird's-beak**

**Oxalidaceae**
*Oxalis corniculata* L. **Wood sorrel**

**Phytolaccaceae**
*Phytolacca americana* L., var. *americana*, **Pokeweed**

**Pinaceae**
*Abies concolor* (Gordon & Glend.) Lindl. ex Hildebr., **White fir**
*Abies magnifica* A. Murray bis, **California red fir**
*Picea pungens*, Engelm., **Blue spruce**
*Pinus ponderosa* Lawson & C. Lawson, **Ponderosa pine**
*Pseudotsuga menziesii* (Mirb.) Franco var. *menziesii* **Douglas-fir**

**Plantaginaceae**
*Kickxia elatine* (L.) Dumort., **Fluellen**
*Plantago lanceolata* L., **English plantain**
*Plantago major* L., **Common plantain**

**Poaceae**
*Aira caryophyllea* L, **Silver hair grass**
*Avena barbata* Pott ex Link, **Slender wild oats**
*Brachypodium distachyon* (L.) P. Beauv., **False brome**
*Briza minor* L., **Annual quaking grass**
*Bromus* sp., **Brome**
*Calamagrostis rubescens* Buckley. **Pine reed grass**
*Cynodon dactylon* (L.) Pers., **Bermuda grass**
*Cynosurus echinatus* L., **Hedgehog dogtail**
*Deschampsia danthonioides* (Trin.) Munro, **Annual Hairgrass**
*Elymus glaucus* Buckley, **Blue wildrye**
*Eragrostis minor* Host, **Little love grass**
*Festuca myuros* L, **Rattail sixweeks grass**
*Festuca perennis* (L.) Columbus & J.P.Sm., **Ryegrass**
*Holcus lanatus* L., **Common velvet grass**
*Melica* sp., **Melica**
*Phalaris* sp., **Canary grass**
*Poa pratensis* L. subsp. *pratensis*, **Kentucky bluegrass**
*Setaria faberi* R.A.W. Herrm., **Chinese foxtail**

**Polemoniaceae**
*Phlox speciosa* Pursh

**Polygalaceae**
*Polygala cornuta* Kellogg var. *cornuta*, **Milkwort**

**Polygonaceae**
*Persicaria lapathifolia* (L.) Delarbre. **Willow weed**
*Polygonum sp.* **Common knotweed**
*Rumex acetosella* L., **Sheep sorrel**
*Rumex conglomeratus* Murray, **Clustered dock**
*Rumex occidentalis* S. Watson, **Western dock**

**Portulacaceae**
*Portulaca oleracea* L., **Purslane**

**Primulaceae**
*Anagallis arvensis* L., **Scarlet pimpernel**

**Ranunculaceae**
*Ranunculus canus* Benth. Var. *canus,* **Buttercup**

**Rhamnaceae**
*Ceanothus integerrimus* Hook. & Arn, **Deer brush**
*Rhamnus crocea* Nutt. **Redberry**

**Rosaceae**
*Chamaebatia foliolosa* Benth., **Mountain misery**
*Drymocallis glandulosa* (Lindl.) Rydb., **Sticky Cinquefoil**
*Frageria vesca* L., **Wood strawberry**
*Heteromeles arbutifolia* (Lindley) Roemer, **Toyon**
*Prunus cerasifera* Ehrh., **Cherry plum**
*Rosa californica* /cham. & Schldl., **California rose**
*Rubus armeniacus* Focke **Himalayan blackberry**
*Rubus laciniatus* Willd., **Cutleaf blackberry**

**Rubiaceae**
*Galium divaricatum* Lam., **Lamarck's bedstraw**

*Galium bolanderi* A. Gray, **Bolander's bedstraw**
*Sherardia arvensis* L., **Field madder**

**Ruscaceae**
*Maianthemum racemosum* (L.) Link, **Western false Soloman's seal**

**Sapindaceae**
*Acer macrophyllum* Pursh, **Big-leaf maple**

**Saxifragaceae**
*Lithophragma bolanderi* A. Gray; **Woodland star**
*Tellima grandiflora* (Pursh) Douglas ex Lindl., **Fringe cup**

**Scrophulariaceae**
*Verbascum thapsus* L., **Wooly mullein**

**Taxaceae**
*Torreya californica* Torr., **California nutmeg**

**Violaceae**
*Viola* sp., **Violet**

# Appendix C

National Resource Conservation Service
Custom Soils Report

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


August 18, 2022

# 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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# Contents

# 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
120° 42' 26" W
120° 42' 6" W
38° 45' 48" N
38° 45' 27" N
699250
699330
699410
699490
699570
699650
4292980
4292920
4292860
4292800
4292740
4292680
4292620
4292560
4292500
4292440
4292380
4292320
Canyon
MrC
SkC
MrD
SkE
SkD
Soil Map may not be valid at this scale.
Map Scale: 1:3,110 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

Custom Soil Resource Report

## 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 13, Sep 3, 2021

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

Date(s) aerial images were photographed: May 3, 2019—Oct 29, 2019

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 |
|---|---|---|---|
| MrC | Musick sandy loam, 9 to 15 percent slopes | 8.5 | 25.2% |
| MrD | Musick sandy loam, 15 to 30 percent slopes | 13.9 | 41.4% |
| SkC | Sites loam, 9 to 15 percent slopes, C low montane | 0.2 | 0.6% |
| SkD | Sites loam, 15 to 30 percent slopes, C low montane | 1.0 | 2.8% |
| SkE | Sites loam, 30 to 50 percent slopes, C low montane | 10.1 | 29.9% |
| **Totals for Area of Interest** | | **33.6** | **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

## MrC—Musick sandy loam, 9 to 15 percent slopes

**Map Unit Setting**

*National map unit symbol:* hj0p
*Elevation:* 2,000 to 5,000 feet
*Mean annual precipitation:* 35 to 70 inches
*Mean annual air temperature:* 50 to 57 degrees F
*Frost-free period:* 140 to 200 days
*Farmland classification:* Farmland of local importance

**Map Unit Composition**

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

**Description of Musick**

**Setting**

*Landform:* Mountain slopes
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Mountainflank, mountaintop
*Down-slope shape:* Concave
*Across-slope shape:* Convex
*Parent material:* Colluvium derived from granite and/or colluvium derived from granodiorite

**Typical profile**

*H1 - 0 to 12 inches:* sandy loam
*H2 - 12 to 18 inches:* sandy clay loam
*H3 - 18 to 42 inches:* sandy clay loam
*H4 - 42 to 56 inches:* sandy clay loam
*H5 - 56 to 60 inches:* sandy loam

**Properties and qualities**

*Slope:* 9 to 15 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* High (about 9.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 4e
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* F022AW007CA - Deep Mesic Mountains >40"ppt
*Hydric soil rating:* No

**Minor Components**

**Holland**
*Percent of map unit:* 4 percent
*Landform:* Mountain slopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

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

**Shaver**
*Percent of map unit:* 4 percent
*Landform:* Mountain slopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Concave
*Hydric soil rating:* No

**Argonaut**
*Percent of map unit:* 3 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

## MrD—Musick sandy loam, 15 to 30 percent slopes

**Map Unit Setting**
*National map unit symbol:* hj0q
*Elevation:* 2,000 to 5,000 feet
*Mean annual precipitation:* 35 to 70 inches
*Mean annual air temperature:* 50 to 57 degrees F
*Frost-free period:* 140 to 200 days
*Farmland classification:* Farmland of local importance

**Map Unit Composition**
*Musick and similar soils:* 85 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Musick**

**Setting**

*Landform:* Mountain slopes
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Mountainflank, mountaintop
*Down-slope shape:* Concave
*Across-slope shape:* Convex
*Parent material:* Colluvium derived from granite and/or colluvium derived from granodiorite

**Typical profile**

*H1 - 0 to 12 inches:* sandy loam
*H2 - 12 to 18 inches:* sandy clay loam
*H3 - 18 to 42 inches:* sandy clay loam
*H4 - 42 to 56 inches:* sandy clay loam
*H5 - 56 to 60 inches:* sandy loam

**Properties and qualities**

*Slope:* 15 to 30 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* High (about 9.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 6e
*Land capability classification (nonirrigated):* 6e
*Hydrologic Soil Group:* C
*Ecological site:* F022AW007CA - Deep Mesic Mountains >40"ppt
*Hydric soil rating:* No

**Minor Components**

**Holland**

*Percent of map unit:* 5 percent
*Landform:* Mountain slopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

**Shaver**

*Percent of map unit:* 5 percent
*Landform:* Mountain slopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Concave
*Hydric soil rating:* No

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

## SkC—Sites loam, 9 to 15 percent slopes, C low montane

**Map Unit Setting**
*National map unit symbol:* 2w86w
*Elevation:* 1,690 to 3,940 feet
*Mean annual precipitation:* 35 to 59 inches
*Mean annual air temperature:* 55 to 59 degrees F
*Frost-free period:* 200 to 270 days
*Farmland classification:* Farmland of local importance

**Map Unit Composition**
*Sites and similar soils:* 85 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Sites**

**Setting**
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from metasedimentary rock

**Typical profile**
*Oi - 0 to 3 inches:* slightly decomposed plant material
*A - 3 to 17 inches:* loam
*BAt - 17 to 24 inches:* loam
*Bt - 24 to 56 inches:* clay
*BCt - 56 to 72 inches:* clay
*Cr - 72 to 79 inches:* bedrock

**Properties and qualities**
*Slope:* 9 to 15 percent
*Depth to restrictive feature:* 39 to 79 inches to paralithic bedrock
*Drainage class:* Well drained
*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 supply, 0 to 60 inches:* High (about 11.8 inches)

**Interpretive groups**
*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* F022AW007CA - Deep Mesic Mountains >40"ppt
*Hydric soil rating:* No

**Minor Components**

**Jocal**
*Percent of map unit:* 5 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank, mountaintop
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Mariposa**
*Percent of map unit:* 5 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank, mountaintop
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Boomer**
*Percent of map unit:* 3 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Rock outcrop**
*Percent of map unit:* 2 percent
*Landform:* Mountains
*Hydric soil rating:* No

## SkD—Sites loam, 15 to 30 percent slopes, C low montane

**Map Unit Setting**
*National map unit symbol:* 2x29f
*Elevation:* 1,710 to 3,840 feet
*Mean annual precipitation:* 37 to 60 inches
*Mean annual air temperature:* 55 to 59 degrees F
*Frost-free period:* 200 to 275 days
*Farmland classification:* Farmland of local importance

**Map Unit Composition**
*Sites and similar soils:* 85 percent

*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Sites**

**Setting**
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from metasedimentary rock

**Typical profile**
*Oi - 0 to 3 inches:* slightly decomposed plant material
*A - 3 to 17 inches:* loam
*BAt - 17 to 24 inches:* loam
*Bt - 24 to 56 inches:* clay
*BCt - 56 to 72 inches:* clay
*Cr - 72 to 79 inches:* bedrock

**Properties and qualities**
*Slope:* 15 to 30 percent
*Depth to restrictive feature:* 39 to 79 inches to paralithic bedrock
*Drainage class:* Well drained
*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 supply, 0 to 60 inches:* High (about 11.8 inches)

**Interpretive groups**
*Land capability classification (irrigated):* 4e
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* F022AW007CA - Deep Mesic Mountains >40"ppt
*Hydric soil rating:* No

**Minor Components**

**Boomer**
*Percent of map unit:* 9 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Mariposa**
*Percent of map unit:* 5 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex

*Hydric soil rating:* No

**Rock outcrop**
*Percent of map unit:* 1 percent
*Landform:* Mountains

## SkE—Sites loam, 30 to 50 percent slopes, C low montane

**Map Unit Setting**
*National map unit symbol:* 2x29h
*Elevation:* 1,690 to 3,760 feet
*Mean annual precipitation:* 34 to 56 inches
*Mean annual air temperature:* 55 to 61 degrees F
*Frost-free period:* 215 to 280 days
*Farmland classification:* Farmland of local importance

**Map Unit Composition**
*Sites and similar soils:* 80 percent
*Minor components:* 20 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Sites**

**Setting**
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from metasedimentary rock

**Typical profile**
*Oi - 0 to 3 inches:* slightly decomposed plant material
*A - 3 to 17 inches:* loam
*BAt - 17 to 24 inches:* loam
*Bt - 24 to 56 inches:* clay
*BCt - 56 to 72 inches:* clay
*Cr - 72 to 79 inches:* bedrock

**Properties and qualities**
*Slope:* 30 to 50 percent
*Depth to restrictive feature:* 39 to 79 inches to paralithic bedrock
*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 supply, 0 to 60 inches:* High (about 11.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 6e
*Hydrologic Soil Group:* C
*Ecological site:* F022AW007CA - Deep Mesic Mountains >40"ppt
*Hydric soil rating:* No

**Minor Components**

**Mariposa**

*Percent of map unit:* 10 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Boomer**

*Percent of map unit:* 5 percent
*Landform:* Mountains
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Mountainflank
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 5 percent
*Landform:* Mountains

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

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May 17, 2023

Karen Hyder
Indian Rock Tree Farm
3800 N Canyon Road
Camino, CA 95709

**RE: Acoustical Report / Conditional Use Permit**
**Indian Rock Tree Farm – Camino, CA**

Dear Karen:

The following report summarizes our environmental noise measurements, analysis, and recommendations for the Indian Rock Tree Farm, CA.

## Executive Summary

Indian Rock Tree Farm is a business located at 3800 N Canyon Road, Camino, CA. It is our understanding that Indian Rock is applying for a Conditional Use Permit (CUP) to allow live music for weddings and events. As part of the CUP application, El Dorado County is requiring an acoustical study to show that events will comply with the requirements of the county's General Plan / Noise Element and Noise Ordinance (County Code of Ordinance, Chapter 130.37).

The client indicated the desired location for events is a relatively flat area on the west side of the property, between the creek and private service road. The proposed event area is approximately 150'+ from the west property line, 180'+ from the northeast property line, and 900'+ from the south and east property lines. The nearest residential dwellings are approximately 350' west and 400' northeast from the proposed event area.

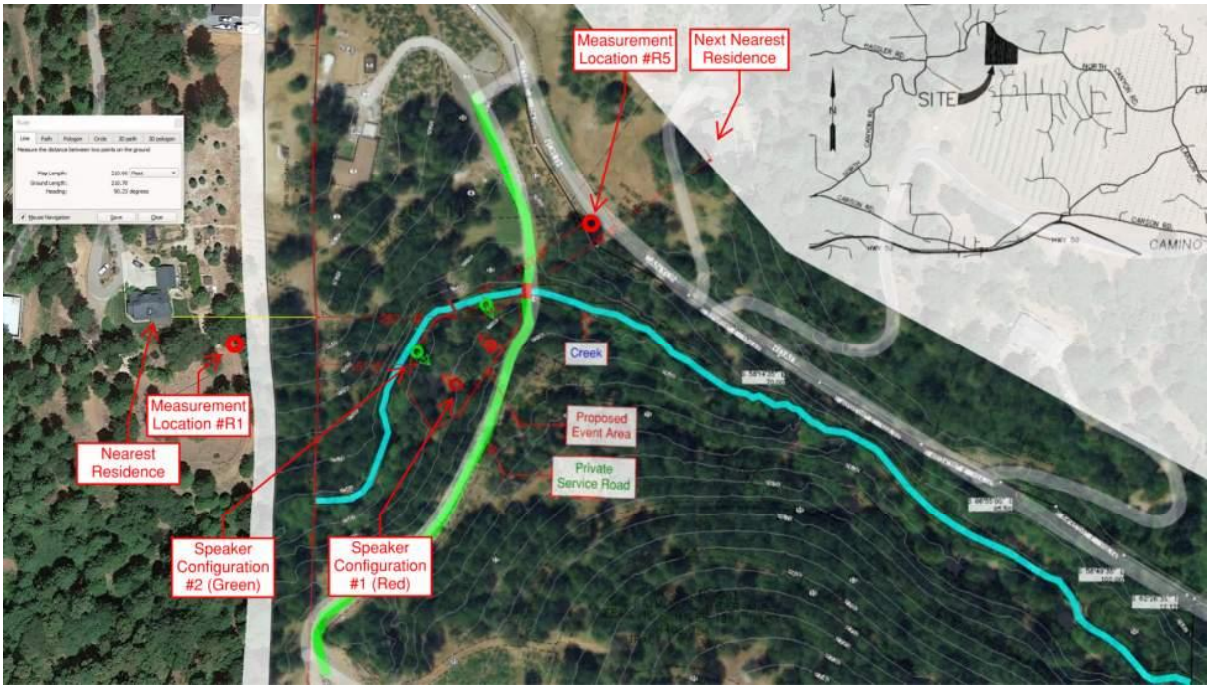
The Indian Rock Tree Farm property and neighboring properties are considered "Rural Region" with respect to El Dorado County zoning, land-use, noise element, and noise ordinance regulations. **The county noise regulations indicate maximum allowable hourly equivalent sound levels of 50 dBA from 7am to 7pm, 45 dBA from 7pm to 10pm, and 40 dBA from 10pm to 7am. For noises consisting primarily of speech or music, the maximum allowable levels shall be lowered by five dBA.**

| | Maximum Allowable Hourly Equivalent Level (LAeq,1hr / dBA) | | |
|---|---|---|---|
| **El Dorado County, CA Noise Element and Ordinance Limits** | **Day 7:00a - 7:00p** | **Evening 7:00p - 10:00p** | **Night 10:00p - 7:00a** |
| **Rural Region (Standard)** | 50 dBA | 45 dBA | 40 dBA |
| **Rural Region (Speech, Music, Tone)** | 45 dBA | 40 dBA | 35 dBA |

The attached annotated site plan shows the proposed event location (red boundary) in reference to the creek (light blue) and private service road (green).

The red circles with arrows represent "Speaker Configuration #1," which was indicated by the owner to be the preferred speaker location and orientation for most events.

The green circles with arrows represent "Speaker Configuration #2," which was indicated to be an alternate speaker orientation.




RNS Acoustics conducted on-site sound measurements and audio recordings on Tuesday, April 25th, 2023. The test results and observations were analyzed to develop recommendations to comply with the county noise regulations.

**To comply with the County noise regulations and minimize noise impacts to neighboring properties, we recommend the following noise mitigation measures:**

- Loudspeakers shall only be placed at the proposed event area adjacent to the creek. Loudspeakers shall not be pointed directly towards the nearest neighboring residences. Loudspeakers shall be placed a minimum of 150' from the property lines.

- **Sound levels from the loudspeakers shall be limited to a maximum hourly equivalent level of 75 dBA from 7am to 7pm, 70 dBA from 7pm to 10pm, and 65 dBA from 10pm to 7am, measured at a point 15 feet (or closer) from the front of the loudspeakers.**

- **Sound levels from the loudspeakers shall be limited to a maximum hourly equivalent level of 70 dBA from 7am to 7pm, 65 dBA from 7pm to 10pm, and 60 dBA from 10pm to 7am, measured 15' from the speakers in the direction of the nearest west and northeast property lines.** Note that typical PA loudspeakers have some degree of directionality, and keeping the speakers from pointing directly towards the neighboring residences will typically result in ~5+ dBA reduction in sound levels measured off-axis from the front of the loudspeakers.

- The maximum allowable sound levels shall be measured using a sound level meter and microphone having a minimum Class 2 / Type 2 rating according to the American National Standard Institute (ANSI) Standard S1.4A-1985. We recommend using a Smaart SPL sound meter system, or approved equal. Smaart SPL is a computer-based data logging system that measures multiple sound level metrics (time and frequency content) using calibrated microphones. The real-time sound levels are displayed on a local LED monitor or viewed remotely via web browser, and are also recorded for further reporting or analysis. The sound levels can be displayed numerically, as well as using a "traffic light" style display (i.e. green is acceptable, yellow is approaching the allowable limits, and red is exceeding the allowable limits).

- The recommended loudspeaker locations and sound levels shall comply with the maximum allowable A-weighted hourly equivalent levels stated in the county noise ordinance. The resulting A-weighted hourly equivalent sound levels are estimated to be 45 dBA or lower from 7am to 7pm, 40 dBA or lower from 7pm to 10pm, and 35 dBA or lower from 10pm to 7am, when measured on the neighboring properties, 100' from the nearest residences (towards the Indian Rock property line), as described by the noise ordinance.

- The following report provides additional details on the relevant noise regulations, on-site sound measurements, and analysis used to determine the above recommendations.

## Regulatory Environment

The following section briefly summarizes the most relevant points of the applicable noise regulations, to the best of our current knowledge. Note that the interpretation and application of the regulations may include some discretion by the Authorities Having Jurisdiction.

### El Dorado County General Plan – Noise Element

The El Dorado County General Plan includes a Noise Element (Chapter 6 – Public Health, Safety, and Noise Element), attached. The relevant sections of the Noise Element are excerpted below.

**NOISE**

**GOAL 6.5: ACCEPTABLE NOISE LEVELS**

**Ensure that County residents are not subjected to noise beyond acceptable levels.**

**OBJECTIVE 6.5.1: PROTECTION OF NOISE-SENSITIVE DEVELOPMENT**

**Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses**

**and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.**

Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 or the performance standards of Table 6-2, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.2 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.3 Where noise mitigation measures are required to achieve the standards of Tables 6-1 and 6-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

… (Non-relevant clauses omitted for brevity)

Policy 6.5.1.7 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise-sensitive uses.

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

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

**Notes:**
Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

*Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

<u>El Dorado County Noise Ordinance</u>

The El Dorado County Municipal Code of Ordinances includes noise regulations under Section 130.37 – Noise Standards. For brevity, we will refer to these regulations as the "county noise ordinance," and a copy is attached for reference. The maximum allowable A-weighted Hourly Equivalent Levels in the county noise ordinance are generally equivalent to the county noise element (130.37.060.1). The noise ordinance does not include requirements or technical definition of "maximum level," and there are other minor differences, but the overall regulations are similar.

<u>Caveats</u>

The above information is a high-level summary of the most relevant sections of the county noise regulations. We recommend reviewing this report and the complete regulations in detail with qualified legal counsel or planning authorities to verify interpretation and compliance with all regulations. In some situations, the Authorities Having

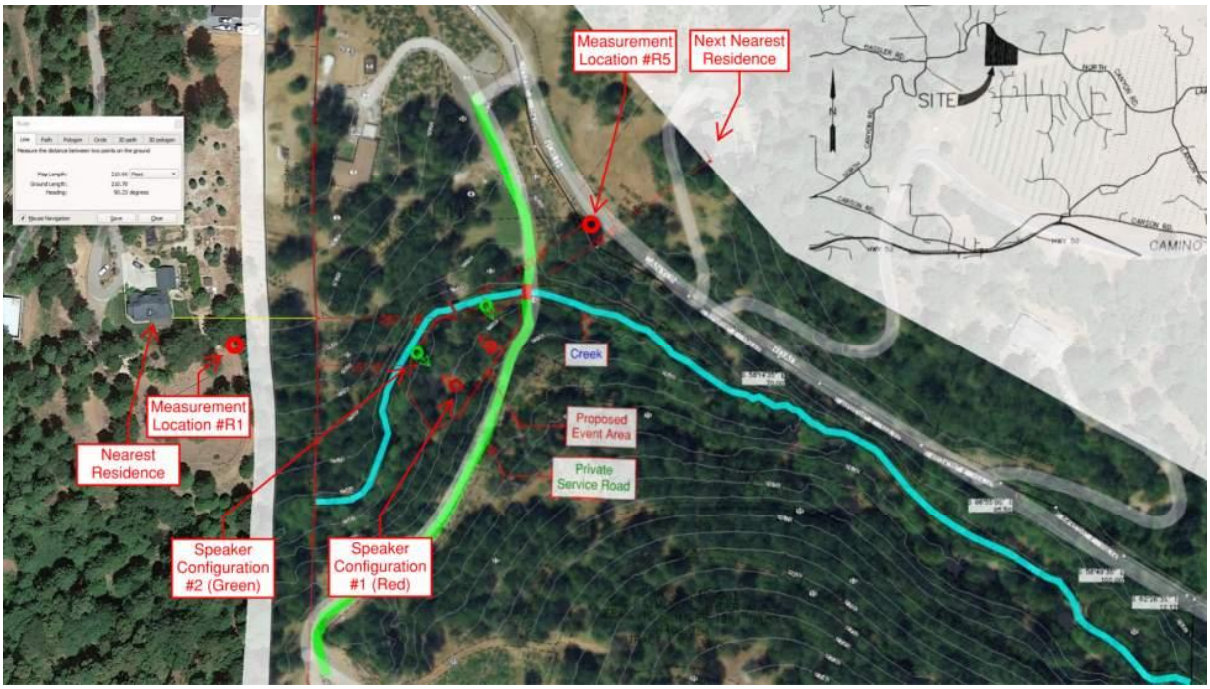
Jurisdiction may have discretion to interpret, modify, or apply the regulations in a manner different from our understanding.

**Environmental Noise Sources**

The typical background noise environment and sound levels are due to the combination of noise sources near and far. Typical environmental noise sources at the project site include traffic, aircraft, wind through trees and grass, water flowing through the creek, birds, landscaping equipment and activities, etc.

**Noise Measurements and Analysis**

RNS Acoustics conducted noise measurements from 4:00 pm to 7:00 pm on Tuesday, April 25th, 2023.

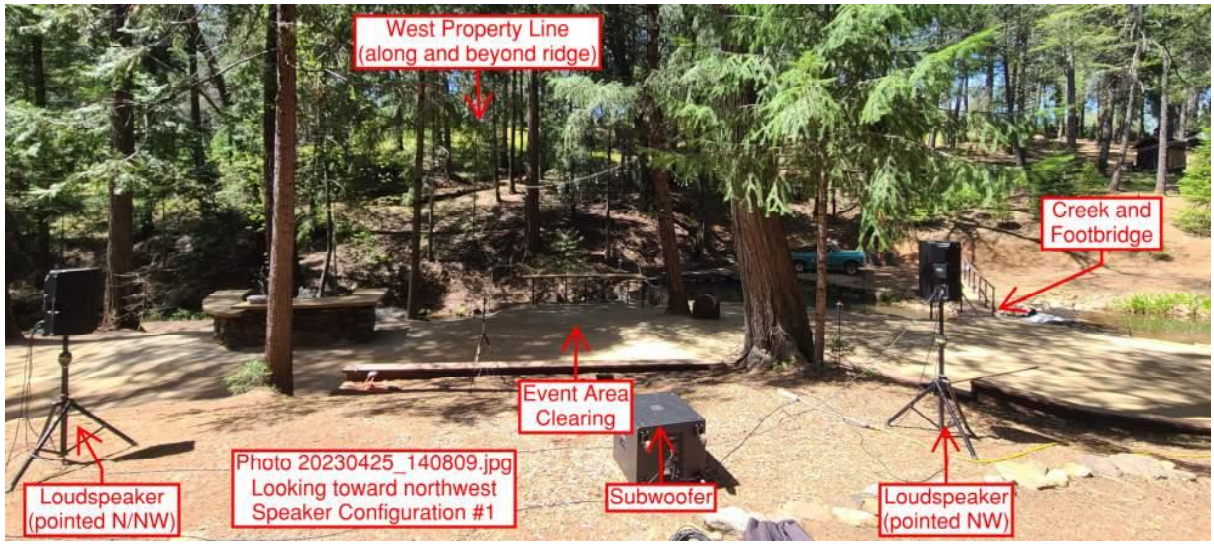



Two full-range PA loudspeakers and one subwoofer were placed at the proposed event area, and configured to play a sequence of test signals including pink noise, classical music, rock music, and dance music.

Measurements and audio recordings were made at six locations around the west, north, and northeast property lines, and the locations were selected based on the residences closest to the proposed event area, site topography, and the county noise regulations. On inspection of the measured results and audio recordings, many of the measurements were not clearly representative of the test signals, due to interference from intrusive background noises (landscaping or construction equipment, traffic, planes, chickens, creek). Due to this interference, and to simplify presentation of the results and analysis, we will focus on measurement location #1, which is 100' from the nearest residence to the west, and measurement location #5, which is ~180' northeast of the event area and ~220' from the next nearest residence to the northeast.

Speaker Configuration #1

"Speaker Configuration #1" was indicated to be the owner's preferred setup, with the speakers located along the southeast edge of the event area and pointed to the north/northwest (red circles and arrows on the annotated plan).




The test signal was adjusted so that the average sound level was approximately 85 dBA (LAeq) during loudest portions of the pink noise, rock, and dance music samples, measured at 15' in front each loudspeaker. For reference, during the various test signals, the maximum sound level fluctuated between 82-88 dBA using slow time response (LASmax) and real-time monitoring.

The average ambient sound level at measurement location #R1 (100' from the nearest residence to the west) was 45.5 dBA before the loudspeaker testing began, and 43.5 dBA after the loudspeaker testing was concluded.

With the loudspeakers playing the test signal at 85 dBA at 15 ft (equivalent level), the resulting sound level was 50.0 – 52.3 dBA at measurement location #R1, which was audible above ambient sound levels, and above the daytime noise regulation limit (45 dBA for music).

The loudspeakers were then turned down 10 dBA, so the equivalent sound level was 75 dBA measured 15 feet in front of each speaker, and the test was repeated. The test signal was slightly audible above background, but did not significantly increase the sound level above the typical ambient levels.

| | Sound Level at Location #R1 (dBA) | | | |
|---|---|---|---|---|
| **Speaker Configuration #1** | **Ambient** | **Pink Noise** | **Rock** | **Dance** |
| **85 dBA @ 15'** | **43.5 - 45.5** | **50** | **52.3** | **50.7** |
| **75 dBA @ 15'** | **43.5 - 45.5** | **44.4** | **44.7** | **44.2** |

The average ambient sound level at measurement location #R5 (~180' northeast of the event area, towards the next nearest residence) was 46.8 – 47.4 dBA when there were no cars passing directly by.

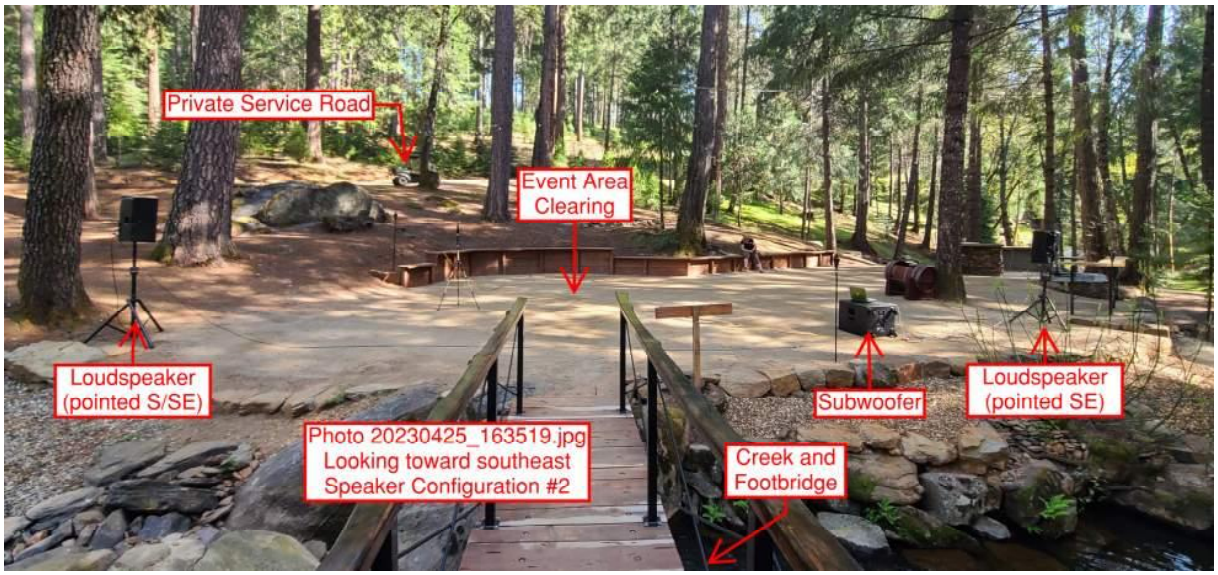
Unfortunately, measurements at R5 with the loudspeaker at 85 dBA were not usable. However, with the loudspeakers at 75 dBA, the resulting sound levels were 48.1 – 49.8 dBA at R5 which included contributions from background noise sources.

| | Sound Level at Location #R5 (dBA) | | | |
|---|---|---|---|---|
| **Speaker Configuration #1** | **Ambient** | **Pink Noise** | **Rock** | **Dance** |
| **85 dBA @ 15'** | **46.8 - 47.4** | **-** | **-** | **-** |
| **75 dBA @ 15'** | **46.8 - 47.4** | **48.1** | **49.8** | **48.8** |

Note that measurement location R5 is located directly adjacent to the property line and road. If noise levels were measured for compliance at 100' from the northeast residence, then measurement location would be ~120' further from the event area, resulting in an estimated 4-5 dBA reduction in amplified sound levels due to increased distance from the sound source (20* LOG(300'/180') = 4.4 dBA reduction). Sound levels from speaker configuration 1 at 75 dBA (15' from the speaker) are estimated to be 45 dBA or less measured 100' from the northeast neighboring residence.

Speaker Configuration #2

"Speaker Configuration #2" was selected to be an alternate event setup, with the speakers located along the creek adjacent to the event area and pointed to the south/southeast (green circles and arrows on the annotated plan).




With the loudspeakers playing the test signal at 85 dBA at 15 ft (equivalent level), the resulting sound level was 47.2 – 50.5 dBA at measurement location #R1, which was audible above ambient sound levels, and above the daytime noise regulation limit (45 dBA for music).

The loudspeakers were then turned down 10 dBA, so the equivalent sound level was 75 dBA measured 15 feet in front of each speaker, and the test was repeated. The test signal was slightly audible above background, but did not increase the sound level above the typical ambient levels.

| | Sound Level at Location #R1 (dBA) | | | |
|---|---|---|---|---|
| **Speaker Configuration #2** | **Ambient** | **Pink Noise** | **Rock** | **Dance** |
| **85 dBA @ 15'** | **43.5 - 45.5** | **47.2** | **50.5** | **47.8** |
| **75 dBA @ 15'** | **43.5 - 45.5** | **44.0** | **44.7** | **44.2** |

The average ambient sound level at measurement location #R5 (~180' northeast of the event area, towards the next nearest residence) was 46.8 – 47.4 dBA when there were no cars passing directly by.

With the loudspeakers playing the test signal at 85 dBA at 15 ft (equivalent level), the resulting sound level was 51.8 – 54.2 dBA at measurement location #R5, which was audible above ambient sound levels, and above the daytime noise regulation limit (45 dBA for music).

The loudspeakers were then turned down 10 dBA, so the equivalent sound level was 75 dBA measured 15 feet in front of each speaker, and the test was repeated. The test signal was slightly audible above background, but did not significantly increase the sound level above the typical ambient levels.

| | Sound Level at Location #R5 (dBA) | | | |
|---|---|---|---|---|
| **Speaker Configuration #2** | **Ambient** | **Pink Noise** | **Rock** | **Dance** |
| **85 dBA @ 15'** | **46.8 - 47.4** | **51.8** | **54.1** | **54.2** |
| **75 dBA @ 15'** | **46.8 - 47.4** | **48.0** | **48.1** | **48.7** |

## Conclusions

From these measurements, we can make the following conclusions and recommendations:

- The proposed speaker configurations would exceed the daytime county noise regulations at the neighboring properties (LAeq 45 dBA for music) if the sound level is set at LAeq 85 dBA measured 15' from the front of the speakers.

- However, with the speakers limited to LAeq 75 dBA at 15', the amplified hourly equivalent sound levels are estimated to be LAeq 45 dBA measured 100' from the nearest neighboring residences (in the direction of the event area), and similar to or below the typical daytime ambient sound levels.

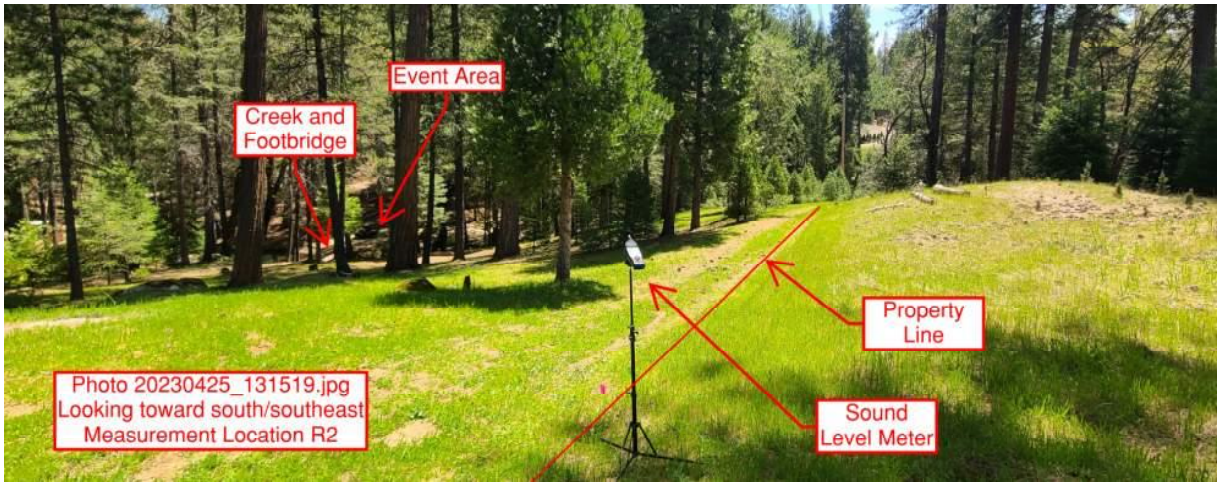
- Meeting the evening (LAeq 40 dBA for music) and nighttime (LAeq 35 dBA for music) sound limits would require further limiting the sound levels to LAeq 70 dBA during the evening and LAeq 65 dBA during the night.

- To minimize the noise impact to neighbors, we recommend that the speakers be located a minimum of 150' from any property line, and not pointed directly towards the nearest residences.

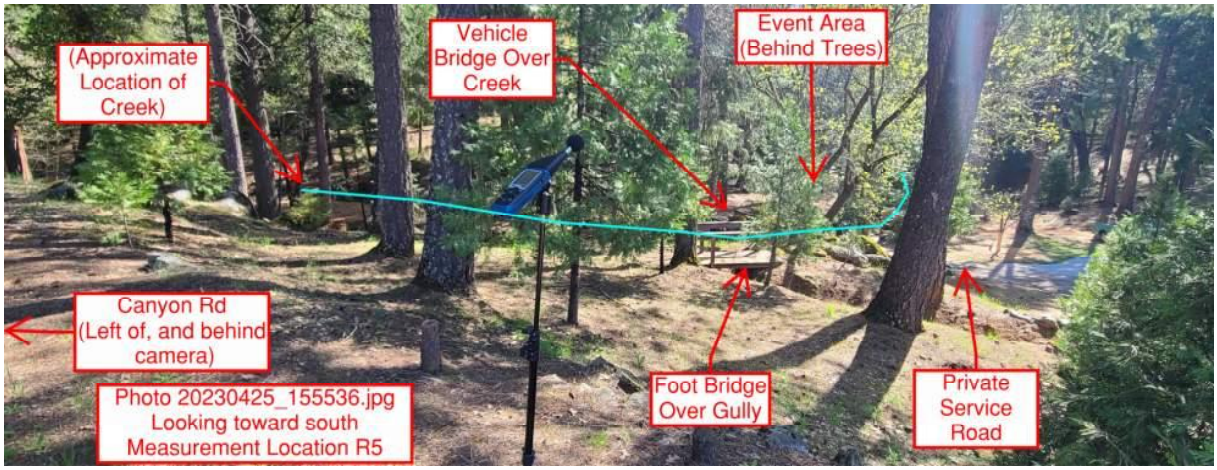
## Additional Information

Measurement Location #R1 – 100' from nearest residence

Measurement Location #R2 – West Property Line




Measurement Location #R5 – Northeast property line / ~180' northeast from event area




**Sound Level Monitoring System**

- A sound level monitoring system can help to ensure that the allowable sound levels are not exceeded.
- An example of a robust sound level monitoring system is the Smaart SPL system provided by Rational Acoustics. https://www.rationalacoustics.com/products/smaart-spl-v9-perpetual
- Smaart SPL is a computer-based data logging system that measures multiple sound level metrics (time and frequency content) using calibrated microphones. The real-time sound levels are displayed on a local LED monitor or viewed remotely via web browser, and are also recorded for further reporting or analysis. The sound levels can be displayed numerically, as well as using a "traffic light" style display (i.e. green is acceptable, yellow is approaching the allowable limits, and red is exceeding the allowable limits).
- A simple and easy to read display showing the real-time sound levels should be placed at an appropriate position for the event staff, DJ, sound engineer, and/or musicians. The sound level display should also be

digitally transmitted or accessible via web interface, so that venue staff can also monitor the sound levels in real time.

The following photo shows an example of the Smaart SPL system with a simplified sound level display including a color coded “traffic light” style indicator.


- It is important that the sound level meter and microphone (or sound monitoring system) meet a minimum Class 2 / Type 2 specification (ANSI S1.4A-1985). Class 1 / Type 1 equipment is technically more accurate and precise, however, Class 1 / Type 1 equipment is usually significantly more expensive. Class 2 / Type 2 equipment is acceptable according to the county noise regulations, and, in our experience, is sufficiently accurate for this type of application.

- It is also important that the sound level meters are field calibrated at the beginning of each event, and the calibration checked again at the end of the event. The calibration values for each microphone / meter should be documented, and typically should be within 0.5 dB from start to end. The calibrator should be Class 1 / Type 1 approved and verified by the manufacturer on an annual basis. If the microphones are not regularly field calibrated, the reported sound levels could vary by an unpredictable and unacceptable amount due to environmental conditions (temperature, humidity, atmospheric pressure).

- The maximum allowable sound levels should be clearly communicated to the event organizers, DJ, sound engineer, and/or musicians.

- The maximum allowable sound levels and curfews should be written into the event contracts, with clearly defined and enforceable penalties for violating the requirements (i.e. venue staff can turn the music down or off if sound levels approach or exceed the allowable limits).

- When installing the sound monitoring system, the allowable level thresholds and alerts generated by the system may need to be adjusted depending on the location of the microphone(s) in relation to the loudspeakers and property lines. For example, it may not be feasible to have microphones installed permanently 15’ in front of or to the side of the speakers, particularly if events use their own PA system or musicians. The sound thresholds, limits, and alerts should be set during installation and configuration of the monitoring system, and periodically field verified using spot measurements, to ensure sound levels do not exceed the maximum allowable equivalent sound levels at 15’ from the speakers and at the neighboring properties.

## Test Equipment

The following table lists the acoustical test equipment used for our measurements. The equipment was calibrated before starting the measurement and checked again at the end of the measurement.

| Type | Manufacturer | Model | Serial |
|---|---|---|---|
| Sound Level Meter | NTi | XL2 | A2A-14078-E0 |
| Sound Level Meter | NTi | XL2 | A2A-14080-E0 |
| Calibrator | ACO Pacific | Model #521 | 85110 |
| Microphone | Earthworks | M23 | 6740I |
| Microphone | Earthworks | M23 | 6740I |
| PA Loudspeakers (2) | QSC | K12.2 | N/A |
| PA Subwoofer (1) | QSC | KS118 | N/A |

## Terminology

**Decibels (dB)** – "A unit of level which denotes the ratio between two quantities that are proportional to the power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio." In acoustics, decibels most commonly refer to Sound Pressure Level (dBSPL), but decibels can also be used to characterize electrical signals, vibration, and other quantities. Decibels are used to simplify the characterization of levels that have a very large range of magnitude. For example, a Sound Pressure Level of 0 dB is typically referenced to 20 micropascals, and 100 dB equals 2,000,000 micropascals.

**Sound Pressure Level** – Sound pressure levels characterize the magnitude of fluctuations in air pressure, which are perceived as sound.

**Frequency** refers to the speed of air pressure fluctuations, measured in cycles per second, or Hertz (Hz). For example, the human ear can hear sounds from ~20 Hz to ~20,000 Hz, and a piano ranges from ~30 Hz to ~4000 Hz. Low-frequency sounds range from ~20 Hz to ~200 Hz (subwoofers, bass, kick drum). Mid-frequency sounds range from ~200 – 2,000 Hz (human voice). High-frequency sounds range from ~2,000 Hz to ~20,000 Hz (snare drum, cymbals, birds chirping, etc).

**A-weighting** is a method of interpreting the frequency content of sound. A-weighting reduces the influence of low-frequency sound, similar to how the human ear perceives loudness. A-weighting is commonly used in noise ordinances and is indicated by dB(A), dBA, LAx,y (where "x" indicates the metric and "y" (optional) indicates the time period).

**Equivalent Level** – "The level of a steady sound which, in a stated time period and at a stated location, has the same sound energy as the (A-weighted) time-varying sound." This is sometimes also called the Equivalent Continuous Noise Level, and commonly said to indicate the average sound level over a given measurement period. For purposes of environmental noise analysis, the A-weighted Hourly Equivalent Level ($LA_{EQ,1hr}$) is most commonly used.

Decibels and Loudness

The loudness of sound is most commonly indicated by A-weighted decibels (dBA). Human perception of loudness is a complicated and somewhat subjective phenomenon. However, for a simplified comparison, consider the following table of descriptions:

| Reduction or Improvement | Subjective Description |
|---|---|
| 1 dB | Not noticeable or barely noticeable to most individuals<br>"One click on a car radio volume dial" |
| 2 - 3 dB | Just noticeable difference<br>"Minor improvement" |
| 5 dB | Clearly noticeable<br>"Moderate improvement" |
| 10 dB | Significant change<br>Commonly said to be "half as loud" |
| 20 dB | Very Significant change<br>"One quarter as loud" |

**Comments**

This report is based on our best understanding of the current design intent and project goals. If any of the project conditions or design goals change significantly, we reserve the right to modify our analysis and recommendations. Feel free to call if you have any questions or comments.

Sincerely,
RNS Acoustics

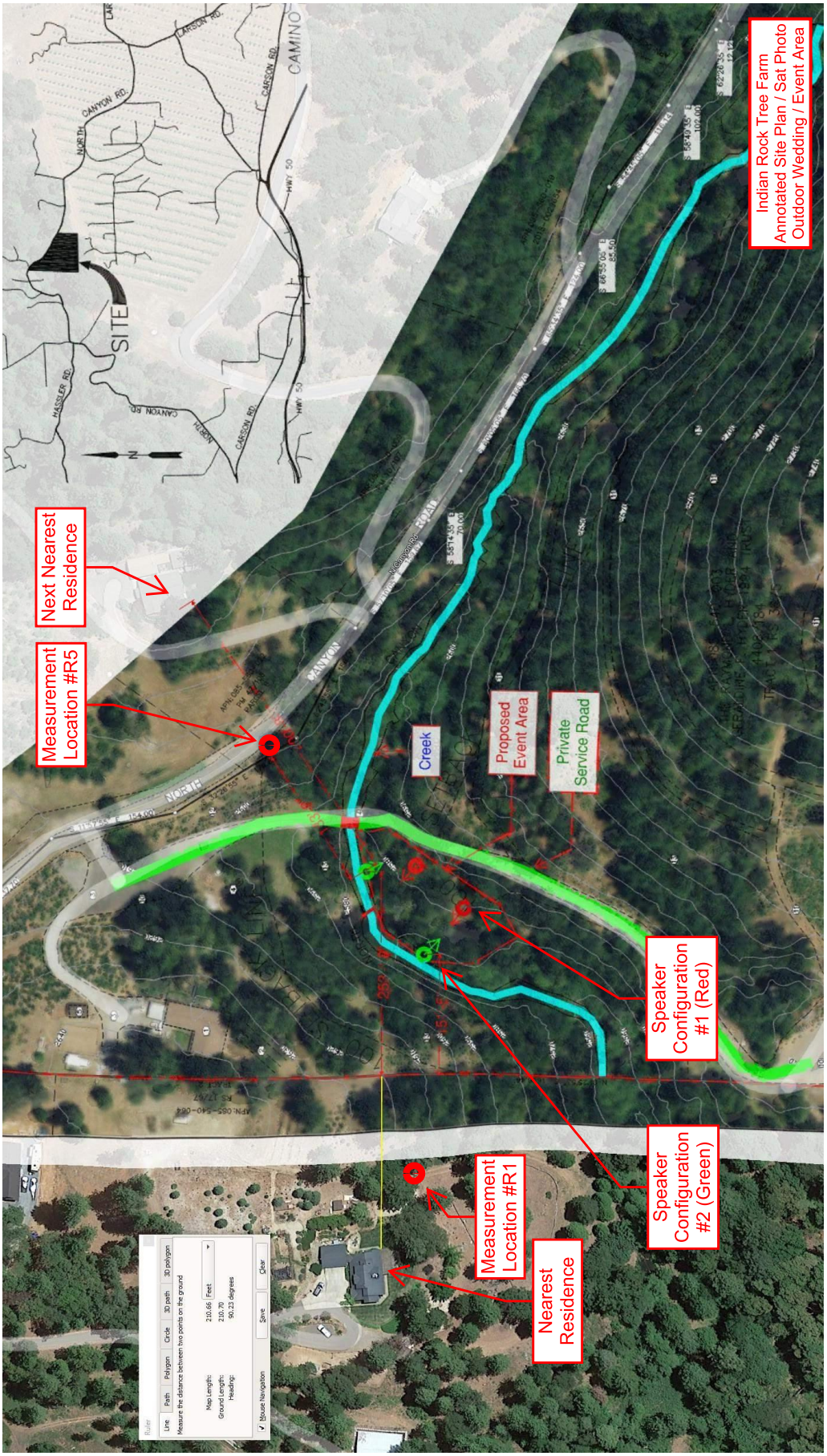
Prepared by:
Joe Erickson
Lead Acoustical Consultant

Reviewed By:
Ryan Sema
Principal

Enclosed:

Annotated Site Plan
El Dorado County General Plan – Noise Element
El Dorado County Code of Ordinances – Chapter 130.37 (Noise Ordinance)

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 10 - ACOUSTICAL ANALYSIS



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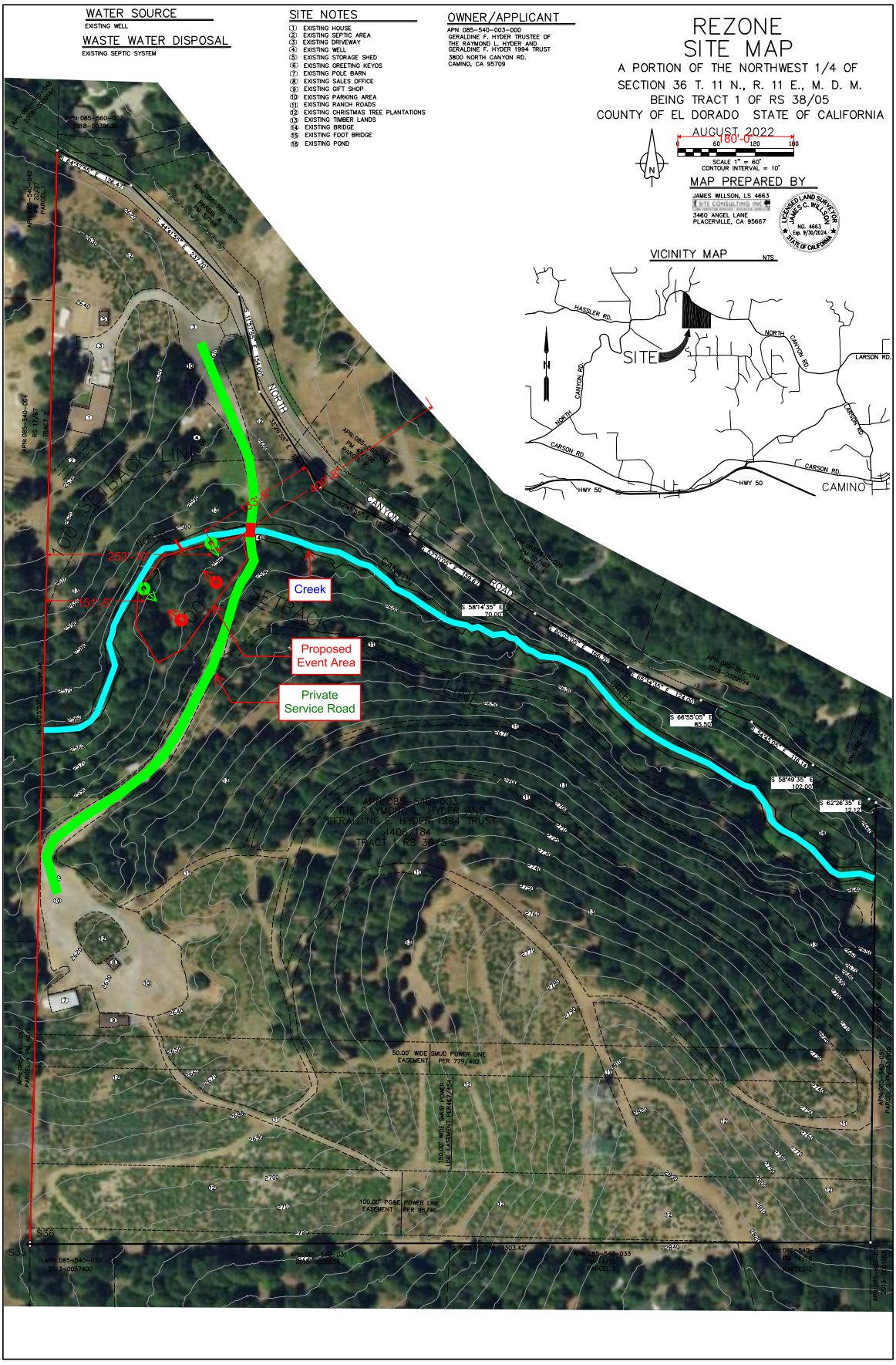

# EL DORADO COUNTY GENERAL PLAN
# PUBLIC HEALTH, SAFETY, AND NOISE ELEMENT

## *PRINCIPLE*

*The Plan must identify public health and safety issues and provide guidance for protecting the health, safety, and welfare of El Dorado County residents.*

## INTRODUCTION

The Public Health, Safety, and Noise Element is consistent with the requirements set forth in the California Government Code Section 65302 and other applicable sections. Specifically, California Government Code Section 65302(g) requires communities to identify "any reasonable risk associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiches, and dam failure; slope instability leading to mudslides and landslides, subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires."

The Public Health, Safety, and Noise Element addresses community noise problems, in accordance with Government Code Section 65302(f). The noise contour maps required by that statute are found in Appendix C. Additionally, this element satisfies the State mandated requirements for the safety general plan element.

## REGULATORY FRAMEWORK

In 1971, the State of California mandated that county and city general plans include a noise element. A noise element must contain the following information:

1. Identification of major noise sources which affect the county;
2. Mapping of noise contours for major noise producers, including roadways;
3. Policies and programs which address existing and foreseeable noise problems and minimize the exposure of community residents to excessive noise.

## RELATIONSHIP TO OTHER ELEMENTS

Issues set forth in this element are closely linked to the Land Use, Conservation and Open Space, Circulation, and Public Services and Utilities elements. The overall focus of the Public Health, Safety, and Noise Element is to provide guidelines for protecting the residents from existing and potential hazards in El Dorado County.

## ORGANIZATION OF THE ELEMENT

This element sets forth planning strategies for fire hazards, seismic hazards, flood hazards, noise, hazardous materials, air quality, airport safety, and highway safety.

## POLICY SECTION

### GENERAL

**GOAL 6.1: COORDINATION**

**A coordinated approach to hazard and disaster response planning.**

**OBJECTIVE 6.1.1: EL DORADO COUNTY MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION PLAN**

**The El Dorado County Multi-Jurisdictional Local Hazard Mitigation Plan shall serve as the implementation program for this Goal.**

Policy 6.1.1.1 The El Dorado County Multi-jurisdictional Local Hazard Mitigation Plan (LHMP) shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County and is incorporated by reference to this Element. The County will ensure that the LHMP is updated on a regular basis to keep pace with the growing population.

### FIRE SAFETY

**GOAL 6.2: FIRE HAZARDS**

**Minimize fire hazards and risks in both wildland and developed areas.**

**OBJECTIVE 6.2.1: DEFENSIBLE SPACE**

**All new development and structures shall meet "defensible space" requirements and adhere to fire code building requirements to minimize wildland fire hazards.**

Policy 6.2.1.1 Implement Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building permit stage.

Policy 6.2.1.2 Coordinate with the local Fire Safe Councils, California Department of Forestry and Fire Protection, and federal and state agencies having land use jurisdiction in El Dorado County in the development of a countywide fuels management strategy.

**OBJECTIVE 6.2.2: LIMITATIONS TO DEVELOPMENT**

**Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.**

Policy 6.2.2.1 Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.2.2.2 The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as wildland-urban interface (WUI) communities within the vicinity of Federal lands that are a high risk for wildfire, as listed in the Federal Register Executive Order 13728 of May 18, 2016, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a WUI Fire Safe Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association. The WUI Fire Safe Plan shall be approved by the local Fire Protection District having jurisdiction and/or California Department of Forestry and Fire Protection. (Resolution 124-2019, August 6, 2019)

**OBJECTIVE 6.2.3: ADEQUATE FIRE PROTECTION**

**Application of uniform fire protection standards to development projects by fire districts.**

Policy 6.2.3.1 As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and fire fighting personnel and equipment will be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2 As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.3.3 Day care centers shall be subject to conformance with all applicable sections of Title 19 of the Fire Code.

Policy 6.2.3.4 All new development and public works projects shall be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.

**OBJECTIVE 6.2.4: AREA-WIDE FUEL MANAGEMENT PROGRAM**

**Reduce fire hazard through cooperative fuel management activities.**

Policy 6.2.4.1 Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Policy 6.2.4.2 The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.

**OBJECTIVE 6.2.5: FIRE PREVENTION EDUCATION**

**Inform and educate homeowners regarding fire safety and prevention.**

Policy 6.2.5.1 The County shall cooperate with the U.S. Forest Service, California Department of Forestry and Fire Protection, and local fire districts in fire prevention education programs.

## GEOLOGIC AND SEISMIC HAZARDS

### ASBESTOS

Asbestos is of special concern in El Dorado County because it occurs naturally in surface deposits of several types of ultramafic materials (materials that contain magnesium and iron and a very small amount of silica). Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining.

The El Dorado County Air Quality Management District (AQMD) is responsible for implementing and enforcing asbestos-related regulations and programs. This includes implementation of Title 17, Sections 93105 and 93106 of the California Code of Regulations (Asbestos Airborne Toxic Control Measure-Asbestos-Containing Serpentine) and the

County's Naturally Occurring Asbestos and Dust Protection Ordinance. Regulated activities include construction or digging on a site containing naturally occurring asbestos in rock or soils and the sale and use of serpentine material or rock containing asbestos materials for surfacing.

Asbestos-related measures presented in this General Plan are focused on supporting the actions of the AQMD.

**GOAL 6.3: GEOLOGIC AND SEISMIC HAZARDS**

**Minimize the threat to life and property from seismic and geologic hazards.**

**OBJECTIVE 6.3.1: BUILDING AND SITE STANDARDS**

**Adopt and enforce development regulations, including building and site standards, to protect against seismic and geologic hazards.**

Policy 6.3.1.1 The County shall require that all discretionary projects and all projects requiring a grading permit, or a building permit that would result in earth disturbance, that are located in areas likely to contain naturally occurring asbestos (based on mapping developed by the California Department of Conservation [DOC]) have a California-registered geologist knowledgeable about asbestos-containing formations inspect the project area for the presence of asbestos using appropriate test methods. The County shall amend the Erosion and Sediment Control Ordinance to include a section that addresses the reduction of thresholds to an appropriate level for grading permits in areas likely to contain naturally occurring asbestos (based on mapping developed by the DOC). The Department of Transportation and the County Air Quality Management District shall consider the requirement of posting a warning sign at the work site in areas likely to contain naturally occurring asbestos based on the mapping developed by the DOC.

Policy 6.3.1.2 The County shall establish a mandatory disclosure program, where potential buyers and sellers of real property in all areas likely to contain naturally occurring asbestos (based on mapping developed by the California Department of Conservation [DOC]) are provided information regarding the potential presence of asbestos subject to sale. Information shall include potential for exposure from access roads and from disturbance activities (e.g., landscaping).

Policy 6.3.1.3 The County Environmental Management Department shall report annually to the Board of Supervisors regarding new information on asbestos and design an information outreach program.

**OBJECTIVE 6.3.2: COUNTY-WIDE SEISMIC HAZARDS**

**Continue to evaluate seismic related hazards such as liquefaction, landslides, and avalanche, particularly in the Tahoe Basin.**

Policy 6.3.2.1 The County shall maintain updated geologic, seismic and avalanche hazard maps, and other hazard inventory information in cooperation with the State Office of Emergency Services, California Department of Conservation--Division of Mines and Geology, U.S. Forest Service, Caltrans, Tahoe Regional Planning Agency, and other agencies as this information is made available. This information shall be incorporated into the El Dorado County Operational Area Multi-Hazard Functional Emergency Operations Plans.

Policy 6.3.2.2 Future subdivision in the area around Fallen Leaf Lake shall be precluded.

Policy 6.3.2.3 An avalanche overlay zone shall be established and applied to all residential areas subject to avalanche. All new structures located within avalanche susceptible areas shall be designed to withstand the expected forces of such an event.

Policy 6.3.2.4 *intentionally blank*

Policy 6.3.2.5 Applications for development of habitable structures shall be reviewed for potential hazards associated with steep or unstable slopes, areas susceptible to high erosion, and avalanche risk. Geotechnical studies shall be required when development may be subject to geological hazards. If hazards are identified, applicants shall be required to mitigate or avoid identified hazards as a condition of approval. If no mitigation is feasible, the project will not be approved.

## FLOOD HAZARDS

**GOAL 6.4: FLOOD HAZARDS**

**Protect the residents of El Dorado County from flood hazards.**

**OBJECTIVE 6.4.1: DEVELOPMENT REGULATIONS**

**Minimize loss of life and property by regulating development in areas subject to flooding in accordance with Federal Emergency Management Agency (FEMA) guidelines, California law, and the El Dorado County Flood Damage Prevention Ordinance.**

Policy 6.4.1.1 The County shall continue participation in the National Flood Insurance Program and application of flood plain zoning regulations.

Policy 6.4.1.2 The County shall identify and delineate flood prone study areas discovered during the completion of the master drainage studies or plans.

Policy 6.4.1.3 No new critical or high occupancy structures (e.g., schools, hospitals) shall be located in the 100-year floodplain of any river, stream, or other body of water.

Policy 6.4.1.4 Creation of new parcels which lie entirely within the 100-year floodplain as identified on the most current version of the flood insurance rate maps provided by FEMA or dam failure inundation areas as delineated in dam failure emergency response plans maintained by the County shall be prohibited.

Policy 6.4.1.5 New parcels which are partially within the 100-year floodplain or dam failure inundation areas as delineated in dam failure emergency response plans maintained by the County must have sufficient land available outside the FEMA or County designated 100-year floodplain or the dam inundation areas for construction of dwelling units, accessory structures, and septic systems. Discretionary applications shall be required to determine the location of the designated 100-year floodplain and identified dam failure inundation areas on the subject property.

**OBJECTIVE 6.4.2: DAM FAILURE INUNDATION**

**Protect life and property of County residents below dams.**

Policy 6.4.2.1 Apply a zoning overlay for areas located within dam failure inundation zones as identified by the State Department of Water Resources Division of Safety of Dams.

Policy 6.4.2.2 No new critical or high occupancy structures (e.g., schools, hospitals) should be located within the inundation area resulting from failure of dams identified by the State Department of Water Resources Division of Safety of Dams.

## NOISE

**GOAL 6.5: ACCEPTABLE NOISE LEVELS**

**Ensure that County residents are not subjected to noise beyond acceptable levels.**

**OBJECTIVE 6.5.1: PROTECTION OF NOISE-SENSITIVE DEVELOPMENT**

**Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses**

**and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.**

Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 or the performance standards of Table 6-2, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.2 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.3 Where noise mitigation measures are required to achieve the standards of Tables 6-1 and 6-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

Policy 6.5.1.4 Existing dwellings and new single-family dwellings on legal lots of record, as of the date of adoption of this General Plan, are not subject to County review with respect to satisfaction of the standards of the Public Health, Safety, and Noise Element except in areas governed by the Airport Land Use Compatibility Plan for applicable airports. (See Objective 6.5.2.)

As a consequence, such dwellings may be constructed in other areas where noise levels exceed the standards of the Public Health, Safety, and Noise Element. It is not the responsibility of the County to ensure that such dwellings meet the noise standards of the Public Health, Safety, and Noise Element, or the noise standards imposed by lending agencies such as HUD, FHA and Cal Vet. If homes are located and constructed in accordance with the Public Health, Safety, and Noise Element, it is expected that the resulting exterior and interior noise levels will conform to the HUD/FHA/Cal Vet noise standards.

Policy 6.5.1.5 Setbacks shall be the preferred method of noise abatement for residential projects located along U.S. Highway 50. Noise walls shall be discouraged within the foreground viewshed of U.S. Highway 50 and shall be discouraged in favor of less intrusive noise mitigation (e.g., landscaped berms, setbacks) along other high volume roadways.

Policy 6.5.1.6 New noise-sensitive uses shall not be allowed where the noise level, due to non-transportation noise sources, will exceed the noise level standards of Table 6-2 unless effective noise mitigation measures have been incorporated into the development design to achieve those standards.

Policy 6.5.1.7 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise-sensitive uses.

Policy 6.5.1.8 New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 6-1 unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 6-1.

Policy 6.5.1.9 Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 at existing noise-sensitive land uses.

Policy 6.5.1.10 To provide a comprehensive approach to noise control, the County shall:

A. Develop and employ procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the project review process and, as may be determined necessary, through the building permit process.

B. Develop and employ procedures to monitor compliance with the standards of the Noise Element after completion of projects where noise mitigation measures were required.

C. The zoning ordinance shall be amended to provide that noise standards will be applied to ministerial projects with the exception of single-family residential building permits if not in areas governed by the Airport Land Use Compatibility Plan. (See Objective 6.5.2.)

**TABLE 6-1**
**MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES**

| Land Use | Outdoor Activity Areas[1] $L_{dn}$/CNEL, dB | Interior Spaces | |
|---|---|---|---|
| | | $L_{dn}$/CNEL, dB | $L_{eq}$, dB[2] |
| Residential | 60[3] | 45 | -- |
| Transient Lodging | 60[3] | 45 | -- |
| Hospitals, Nursing Homes | 60[3] | 45 | -- |
| Theaters, Auditoriums, Music Halls | -- | -- | 35 |
| Churches, Meeting Halls, Schools | 60[3] | -- | 40 |
| Office Buildings | -- | -- | 45 |
| Libraries, Museums | -- | -- | 45 |
| Playgrounds, Neighborhood Parks | 70 | -- | -- |

**Notes:**

[1] In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB $L_{dn}$ shall be applied at the building facade, in addition to a 60 dB $L_{dn}$ criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB $L_{dn}$ shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB $L_{dn}$ may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB $L_{dn}$/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB $L_{dn}$/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

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

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

**Notes:**
Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

*Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays. Further, the standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to public projects to alleviate traffic congestion and safety hazards.

**TABLE 6-3**
**MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN COMMUNITY REGIONS AND ADOPTED PLAN AREAS–CONSTRUCTION NOISE**

| Land Use Designation[1] | Time Period | Noise Level (dB) | |
|---|---|---|---|
| | | $L_{eq}$ | $L_{max}$ |
| Higher-Density Residential (MFR, HDR, MDR) | 7 am–7 pm | 55 | 75 |
| | 7 pm–10 pm | 50 | 65 |
| | 10 pm–7 am | 45 | 60 |
| Commercial and Public Facilities (C, R&D, PF) | 7 am–7 pm | 70 | 90 |
| | 7 pm–7 am | 65 | 75 |
| Industrial (I) | Any Time | 80 | 90 |

**Note:**
[1] Adopted Plan areas should refer to those land use designations that most closely correspond to the similar General Plan land use designations for similar development.

**TABLE 6-4**
**MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN RURAL CENTERS–CONSTRUCTION NOISE**

| Land Use Designation | Time Period | Noise Level (dB) | |
|---|---|---|---|
| | | $L_{eq}$ | $L_{max}$ |
| All Residential (MFR, HDR, MDR) | 7 am–7 pm | 55 | 75 |
| | 7 pm–10 pm | 50 | 65 |
| | 10 pm–7 am | 40 | 55 |
| Commercial, Recreation, and Public Facilities (C, TR, PF) | 7 am–7 pm | 65 | 75 |
| | 7 pm–7 am | 60 | 70 |
| Industrial (I) | Any Time | 70 | 80 |
| Open Space (OS) | 7 am–7 pm | 55 | 75 |
| | 7 pm–7 am | 50 | 65 |

**TABLE 6-5**
**MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN RURAL REGIONS–CONSTRUCTION NOISE**

| Land Use Designation | Time Period | Noise Level (dB) | |
|---|---|---|---|
| | | $L_{eq}$ | $L_{max}$ |
| All Residential (LDR) | 7 am–7 pm | 50 | 60 |
| | 7 pm–10 pm | 45 | 55 |
| | 10 pm–7 am | 40 | 50 |
| Commercial, Recreation, and Public Facilities (C, TR, PF) | 7 am–7 pm | 65 | 75 |
| | 7 pm–7 am | 60 | 70 |
| Rural Land, Natural Resources, Open Space, and Agricultural Lands (RR, NR, OS, AL) | 7 am–7 pm | 65 | 75 |
| | 7 pm–7 am | 60 | 70 |

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

A. Where existing or projected future traffic noise levels are less than 60 dBA $L_{dn}$ at the outdoor activity areas of residential uses, an increase of more than 5 dBA $L_{dn}$ caused by a new transportation noise source will be considered significant;

B. Where existing or projected future traffic noise levels range between 60 and 65 dBA $L_{dn}$ at the outdoor activity areas of residential uses, an increase of more than 3 dBA $L_{dn}$ caused by a new transportation noise source will be considered significant; and

C. Where existing or projected future traffic noise levels are greater than 65 dBA $L_{dn}$ at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA $L_{dn}$ caused by a new transportation noise will be considered significant.

Policy 6.5.1.13 When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

A. In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 5 dBA shall be considered significant; and

B. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 3 dBA shall be considered significant.

Policy 6.5.1.14 The County will adopt a noise ordinance to resolve neighborhood conflicts and to control unnecessary noise in the County. Examples of the types of noise sources that can be controlled through the use of a quantitative noise ordinance include noisy mechanical equipment (e.g., swimming pool pumps, HVAC units), and amplified music in commercial establishments.

Policy 6.5.1.15 The County will establish and maintain coordination among city, county, and state agencies involved in noise abatement and other agencies to reduce noise generated from sources outside the County's jurisdiction.

**OBJECTIVE 6.5.2: AIRPORT NOISE GUIDELINES**

**The County shall recognize the Airport Land Use Compatibility Plan (ALUCP) for the Placerville Airport, the Cameron Airpark Airport, and the Georgetown Airport as the applicable guidelines for development within the Airport Noise Zones for these airports. Where there is a conflict between the County noise standards and the noise standards of the ALUCP, the standards of the ALUCP shall take precedence.**

Policy 6.5.2.1 All projects, including single-family residential, within the Airport Noise Zones of the Cameron Airpark, Georgetown, and Placerville airports shall be evaluated against the applicable policies in the ALUCP.

Policy 6.5.2.2 The County shall develop and apply a combining zone district for areas located within the Airport Noise Zones in the ALUCP.

## HAZARDOUS MATERIALS

**GOAL 6.6: MANAGEMENT OF HAZARDOUS MATERIALS**

**Recognize and reduce the threats to public health and the environment posed by the use, storage, manufacture, transport, release, and disposal of hazardous materials.**

**OBJECTIVE 6.6.1: REGULATION OF HAZARDOUS MATERIALS**

**Regulate the use, storage, manufacture, transport and disposal of hazardous materials in accordance with State and Federal regulations.**

Policy 6.6.1.1 The Hazardous Waste Management Plan shall serve as the implementation program for management of hazardous waste in order to protect the health, safety, property of residents and visitors, and to minimize environmental degradation while maintaining economic viability.

Policy 6.6.1.2 Prior to the approval of any subdivision of land or issuing of a permit involving ground disturbance, a site investigation, performed by a Registered Environmental Assessor or other person experienced in identifying potential hazardous wastes, shall be submitted to the County for any subdivision or parcel that is located on a known or suspected contaminated site included in a list on file with the Environmental Management Department as provided by the State of California and federal agencies. If contamination is found to exist by the site investigations, it shall be corrected and remediated in compliance with applicable laws, regulations, and standards prior to the issuance of a new land use entitlement or building permit.

Policy 6.6.1.3 Provision must be made for disposal of aviation generated petroleum, oils, lubricants, and solvents at the County airports.

## AIR QUALITY

**GOAL 6.7: AIR QUALITY MAINTENANCE**

**A. Strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board.**

**B. Minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.**

### OBJECTIVE 6.7.1: EL DORADO COUNTY CLEAN AIR PLAN

**Adopt and enforce Air Quality standards to reduce the health impacts caused by harmful emissions.**

Policy 6.7.1.1 Improve air quality through land use planning decisions.

Policy 6.7.1.2 Support local and regional air quality improvement efforts.

### OBJECTIVE 6.7.2: VEHICULAR EMISSIONS

**Reduce motor vehicle air pollution by developing programs aimed at minimizing congestion and reducing the number of vehicle trips made in the County and encouraging the use of clean fuels.**

Policy 6.7.2.1 Develop and implement a public awareness campaign to educate community leaders and the public about the causes and effects of El Dorado County air pollution and about ways to reduce air pollution.

Policy 6.7.2.2 Encourage, both through County policy and discretionary project review, the use of staggered work schedules, flexible work hours, compressed work weeks, teleconferencing, telecommuting, and car pool/van pool matching as ways to reduce peak-hour vehicle trips.

Policy 6.7.2.3 To improve traffic flow, synchronization of signalized intersections shall be encouraged as a means to reduce congestion, conserve energy, and improve air quality.

Policy 6.7.2.4 Encourage a local and inter-State rail system.

Policy 6.7.2.5 Upon reviewing projects, the County shall support and encourage the use of, and facilities for, alternative-fuel vehicles to the extent feasible. The County shall develop language to be included in County contract procedures to give preference to contractors that utilize low-emission heavy-duty vehicles.

Policy 6.7.2.6 The County shall investigate the replacement of its fleet vehicles with more fuel-efficient alternative fuel vehicles (e.g., liquid natural gas, fuel cell vehicles).

**OBJECTIVE 6.7.3: TRANSIT SERVICE**

**Expand the use of transit service within the County.**

Policy 6.7.3.1 Legally permissible trip reduction programs and the development of transit and ridesharing facilities shall be given priority over highway capacity expansion when such programs and facilities will help to achieve and maintain mobility and air quality.

Policy 6.7.3.2 Transit Service – The County shall promote infill development that is compact, mixed used, pedestrian friendly, and transit oriented in areas identified as Transit Priority Project Areas.

**OBJECTIVE 6.7.4: PROJECT DESIGN AND MIXED USES**

**Encourage project design that protects air quality and minimizes direct and indirect emissions of air contaminants.**

Policy 6.7.4.1 Reduce automobile dependency by permitting mixed land use patterns which locate services such as banks, child care facilities, schools, shopping centers, and restaurants in close proximity to employment centers and residential neighborhoods.

Policy 6.7.4.2 Promote the development of new residential uses within walking or bicycling distance to the County's larger employment centers.

Policy 6.7.4.3 New development on large tracts of undeveloped land near the rail corridor shall, to the extent practical, be transit supportive with high density or intensity of use.

Policy 6.7.4.4 All discretionary development applications shall be reviewed to determine the need for pedestrian/bike paths connecting to adjacent development and to common service facilities (e.g., clustered mail boxes, bus stops, etc.).

Policy 6.7.4.5 Specific plans submitted to the County shall provide for the implementation of all policies contained under Objective 6.7.4 herein.

Policy 6.7.4.6 The County shall regulate wood-burning fireplaces and stoves in all new development. Environmental Protection Agency (EPA)-approved stoves and fireplaces burning natural gas or propane are allowed. The County

shall discourage the use of non-certified wood heaters and fireplaces during periods of unhealthy air quality.

Policy 6.7.4.7 The County shall inform the public regarding the air quality effects associated with the use of wood for home heating. The program should address proper operation and maintenance of wood heaters, proper wood selection and use, the health effects of wood smoke, weatherization methods for homes, and determining the proper size of heaters needed before purchase and professional installation. The County shall develop an incentive program to encourage homeowners to replace high-pollution emitting non-EPA-certified wood stoves that were installed before the effective date of the applicable EPA regulation with newer cleaner-burning EPA-certified wood stoves.

**OBJECTIVE 6.7.5: AGRICULTURAL AND FUEL REDUCTION BURNING**

**Adopt and maintain air quality regulations which will continue to permit agricultural and fuel reduction burning while minimizing their adverse effects.**

**OBJECTIVE 6.7.6: AIR POLLUTION-SENSITIVE LAND USES**

**Separate air pollution sensitive land uses from significant sources of air pollution.**

Policy 6.7.6.1 Ensure that new facilities in which sensitive receptors are located (e.g., schools, child care centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Policy 6.7.6.2 New facilities in which sensitive receptors are located (e.g. residential subdivisions, schools, childcare centers, playgrounds, retirement homes, and hospitals) shall be sited away from significant sources of air pollution.

**OBJECTIVE 6.7.7: CONSTRUCTION RELATED, SHORT-TERM EMISSIONS**

**Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.**

Policy 6.7.7.1 The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the El Dorado County Air Quality Management (AQMD) *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide.

The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.

**OBJECTIVE 6.7.8: THE EFFECTS OF AIR POLLUTION ON VEGETATION**

**Monitor ongoing scientific research regarding the adverse effects, if any, of air pollution on vegetation.**

Policy 6.7.8.1 The County shall monitor ongoing scientific research regarding the adverse effects, if any, of air pollution on vegetation, including commercially valuable timber, threatened or endangered plant species, and other plant species. If and when such research conclusively determines, or if and when the weight of scientific opinion concludes, that air pollution is causing significant harm to vegetation within El Dorado County or similarly situated areas, the County, through its periodic review of the General Plan pursuant to Policy 2.9.1.2, shall consider whether to add policies to the General Plan to try to mitigate such harm.

## AVIATION-RELATED HAZARDS

**GOAL 6.8: AVIATION-RELATED HAZARDS**

**Minimize aviation-related hazards in and around existing and future airports.**

**OBJECTIVE 6.8.1: SAFETY HAZARDS EXPOSURE**

**Minimize the public's exposure to airport-related safety hazards by requiring new development around airports to be compatible with that use.**

Policy 6.8.1.1 All development within the Airport Influence Area of the Placerville Airport, the Cameron Airpark Airport, and the Georgetown Airport shall comply with El Dorado County Airport Land Use Commission's policies and maps as set forth in the Airport Land Use Compatibility Plan for each airport. All development within the Airport Influence Area of the South Lake Tahoe Airport shall comply with the Airport Land Use Compatibility Plan (ALUCP) for the areas around the South Lake Tahoe Airport. Where there is a difference between the County development standards and the development standards of the Airport Land Use Compatibility Plan, as applied to proposed development, the standards that will most reduce airport-related hazards shall apply. (Resolution 124-2019, August 6, 2019)

Policy 6.8.1.2 The County shall develop an airport combining zone district within the El Dorado County Zoning Ordinance, for each of the Safety Zones as defined by the Airport Land Use Compatibility Plan for each of the County's public airports. Said ordinance shall specify maximum density and minimum parcel size.

## HIGHWAY SAFETY

**GOAL 6.9: HIGHWAY SAFETY**

**Provide highways within the County that provide for the safe movement of goods and people throughout the County.**

### OBJECTIVE 6.9.1: SAFETY HAZARDS REDUCTION PROGRAM

**Create a program to reduce safety hazards on County roadways especially at locations with a history of frequent accidents.**

Policy 6.9.1.1 The County shall identify those roadways with existing or projected safety problems, prioritize them in terms of the immediacy of the need for improvements, and develop programs for financing needed improvements.

Policy 6.9.1.2 Recognize that substandard road conditions exist in some rural areas of the County and include feasible roadway, pedestrian, and bicyclist safety improvements in the roadway improvement priority list.

Policy 6.9.1.3 New roads connecting to County roads shall be designed to provide safe access as required by the County Design and Improvement Standards Manual.

### OBJECTIVE 6.9.2: EMERGENCIES ON STATE HIGHWAYS

**The County should coordinate with Caltrans for the efficient movement of traffic on County roads in the event of closures on State highways.**

# IMPLEMENTATION PROGRAM

## MEASURE HS-A

Maintain emergency response procedures and programs, including agreements with other local, state, and federal agencies, to provide coordinated disaster response and programs to inform the public of emergency preparedness and response procedures. [Policy 6.1.1.1]

| | |
|---|---|
| Responsibility: | Sheriff's Department (Office of Emergency Services), County Administrative Officer, Department of Transportation, Environmental Management, and General Services Department |
| Time Frame: | Ongoing review and updating of the Operational Area Multi-Hazard Functional Emergency Operations Plan. |

## MEASURE HS-B

Work with the local Fire Safe Councils, fire protection districts, U.S. Forest Service, and California Department of Forestry and Fire Protection to develop and implement a countywide Wildfire Safety Plan. The Wildfire Safety Plan shall focus on, but not be limited to, the following:

- Public wildfire safety education;
- Basic fire protection standards for different areas of the county;
- Appropriate mitigation for development in areas having high and very high fuel hazards;
- Opportunities for fire fuel reduction;
- Implementation of fire safe standards;
- Coordination with fire protection districts
- Fuels management standards to apply to new development adjacent to forested areas and within greenbelts; and
- Appropriate standards for open space and greenbelts.

[Policies 6.2.1.1, 6.2.4.2, and 6.2.5.1]

| | |
|---|---|
| Responsibility: | Planning Department, Department of Transportation, and Building Department |
| Time Frame: | Develop draft plan within six months of General Plan adoption. |

## MEASURE HS-C

Develop a program to collect, maintain, and update geological, seismic, avalanche, and other geological hazard information. [Policy 6.3.2.1]

| | |
|---|---|
| Responsibility: | Planning Department and Sheriff's Department (Office of Emergency Services) |
| Time Frame: | Develop program within five years of General Plan adoption. |

## MEASURE HS-D

Develop and adopt standards to protect against seismic and geologic hazards. [Objective 6.3.1]

| | |
|---|---|
| Responsibility: | Planning Department, Building Department, and Department of Transportation |
| Time Frame: | Develop standards within five years of General Plan adoption. |

## MEASURE HS-E

The County shall adopt a Naturally Occurring Asbestos Disclosure Ordinance that includes the provisions in the policy described in Policy 6.3.1.2.

| | |
|---|---|
| Responsibility: | Environmental Management |
| Time Frame: | Present ordinance to Board of Supervisors within three years of General Plan adoption. |

## MEASURE HS-F

Develop a program to track asbestos-related information as it pertains to El Dorado County. [Policy 6.3.1.3]

| | |
|---|---|
| Responsibility: | Environmental Management |
| Time Frame: | Develop program within one year of General Plan adoption. Report results to the Board of Supervisors annually. |

## MEASURE HS-G

Adopt California Building Code revisions. [Policy 6.3.2.4]

| | |
|---|---|
| Responsibility: | Building Department |
| Time Frame: | Adopt revisions as UBC changes are promulgated (ongoing). |

## MEASURE HS-H

Continue to participate in the Federal Flood Insurance Program, maintain flood hazard maps and other relevant floodplain data made available by other sources, and revise or update this information as new information becomes available. In its review of applications for building permits, discretionary project applications, and capital improvement proposals, the County shall determine whether the proposed project is within the 100-year floodplain based on these data. [Policies 6.4.1.1, 6.4.1.2, and 6.4.1.3]

| | |
|---|---|
| Responsibility: | Planning Department, Building Department, Department of Transportation, and General Services Department |
| Time Frame: | Ongoing |

## MEASURE HS-I

To provide a comprehensive approach to noise control, adopt a Noise Ordinance that includes, but is not limited to, the following:

A. Procedures to ensure that noise mitigation measures, as determined through an acoustical analysis, are implemented in the project review process and, if determined necessary, through the building permit process;

B. Procedures to monitor compliance with the standards of the Noise Ordinance after completion of projects where noise mitigation measures were required; and

C. Application of the noise standards to ministerial projects, with the exception of single-family residential building permits, if not in areas governed by the Airport Land Use Compatibility Plan.

[Policies 6.5.1.10, 6.5.1.13, and 6.5.1.14]

| | |
|---|---|
| Responsibility: | Planning Department and Department of Transportation |
| Time Frame: | Develop ordinance within five years of General Plan adoption. |

## MEASURE HS-J

Establish a working group to address cross-jurisdictional noise issues. Members of the group should include representatives from the County, cities of Placerville and South Lake Tahoe, California Department of Transportation, California Department of Forestry and Fire Protection, California Department of Parks and Recreation, U.S. Forest Service, U.S. Bureau of Land Management, and Tahoe Regional Planning Agency. [Policy 6.5.1.15]

| | |
|---|---|
| Responsibility: | Planning Department, Department of Transportation, General Services Department, and Sheriff's Department. |
| Time Frame: | Seat working group within three years of General Plan adoption. |

## MEASURE HS-K

Review the Zoning Ordinance and identify changes that would accomplish the following:

A. Include an airport combining zone district for each of the Safety Zones as defined in the Airport Land Use Compatibility Plan for each of the County's public airports; and

B. Develop and apply a combining zone district for areas within the Airport Influence Area for each of the public airports to discourage the placement of incompatible uses. [Policies 6.5.2.2 and 6.8.1.2]

| | |
|---|---|
| Responsibility: | Planning Department |
| Time Frame: | Update Zoning Ordinance within one year of General Plan adoption. |

## MEASURE HS-L

Update airport master plans and work with the appropriate Airport Land Use Commissions to update the Comprehensive Land Use Plans to reflect noise levels in the year 2025. [Policy 6.5.2.3]

| | |
|---|---|
| Responsibility: | Planning Department and Department of Transportation |
| Time Frame: | Revise master plans within five years of adoption of General Plan. |

## MEASURE HS-M

Maintain and update the Hazardous Waste Management Plan for management of hazardous waste to protect the health, safety, and property of residents and visitors, and to minimize environmental degradation. [Policy 6.6.1.1]

| | |
|---|---|
| Responsibility: | Environmental Management |
| Time Frame: | Review and update, if necessary, within five years of General Plan adoption. |

## MEASURE HS-N

Collect and maintain information on sites known, or suspected to be contaminated by hazardous materials. The information shall include current data from the California Department of Toxic Substances Control's Hazardous Waste and Substance Sites List compiled pursuant to Section 65962.5 of the Government Code. [Policy 6.6.1.2]

| | |
|---|---|
| Responsibility: | Environmental Management and Planning Department |
| Time Frame: | Ongoing |

## MEASURE HS-O

Develop, implement, and update, as necessary, a plan for the storage, transport, and disposal of hazardous materials used at County-operated facilities. [Policy 6.6.1.3]

| | |
|---|---|
| Responsibility: | Department of Transportation and General Services Department |
| Time Frame: | Develop plan within five years of General Plan adoption. |

## MEASURE HS-P

Enhance and maintain the Air Quality Management District's air quality public education program. The program will include information regarding naturally occurring asbestos. [Policies 6.3.1.3 and 6.7.2.1]

| | |
|---|---|
| Responsibility: | Air Quality Management District |
| Time Frame: | Develop program within three years of General Plan adoption. |

## MEASURE HS-Q

Develop and implement a program to encourage use of mechanisms to reduce peak-hour vehicle trips consistent with Policy 6.7.2.2.

| | |
|---|---|
| Responsibility: | Planning Department and Department of Transportation |
| Time Frame: | Develop program within three years of General Plan adoption. |

## MEASURE HS-R

Identify fleet vehicles that could successfully be replaced with more fuel efficient or alternative fuel vehicles. When those fleet vehicles are due for replacement, thoroughly investigate their replacement with such vehicles. [Policy 6.7.2.6]

| | |
|---|---|
| Responsibility: | Department of General Services |
| Time Frame: | Ongoing |

## MEASURE HS-S

Develop and implement an incentive program to encourage homeowners to replace high-pollution emitting non-EPA-certified wood stoves. [Policy 6.7.4.7]

| | |
|---|---|
| Responsibility: | Planning Department, Building Department, and Environmental Management |
| Time Frame: | Develop program within four years of General Plan adoption. |

## MEASURE HS-T

Adopt and/or update air quality regulations regarding agricultural and fuel reduction burning, construction emissions, mobile source emissions, fugitive dust, and volatile organic emissions. [Objective 6.7.5 and Policy 6.7.7.1]

| | |
|---|---|
| Responsibility: | Air Quality Management District |
| Time Frame: | Develop standards within five years of General Plan adoption. |

## MEASURE HS-U

Monitor existing, ongoing studies related to effects of air pollution on vegetation. [Policy 6.7.8.1]

| | |
|---|---|
| Responsibility: | Air Quality Management District |
| Time Frame: | Ongoing |

## MEASURE HS-V

Amend prescriptive standard for the Fugitive Dust Prevention and Control Plan and Contingent Asbestos Hazard Dust Mitigation Plan. [Policy 6.3.1.1]

| | |
|---|---|
| Responsibility: | Environmental Management |
| Time Frame: | Adopt amendment within three years of General Plan adoption. |

## MEASURE HS-W

Survey and prioritize safety improvements on County roads. Develop financing programs for making necessary improvements. [Policy 6.9.1.1]

| | |
|---|---|
| Responsibility: | Department of Transportation |
| Time Frame: | Complete survey within three years; Develop financing program within eight years of General Plan adoption. |

## MEASURE HS-X

Coordinate air quality planning efforts with other local and regional agencies. [Policies 6.7.1.1 and 6.7.1.2]

| | |
|---|---|
| Responsibility: | Planning Department |
| Time Frame: | Ongoing |

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CHAPTER 130.37. - NOISE STANDARDS

Sec. 130.37.010 - Content.

This Chapter complies with General Plan Goal 6.5 (Acceptable Noise Levels), and supplements County Code Chapter 9.16 (Noise) by establishing standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses.

Sec. 130.37.020 - Exemptions.

The following noise sources shall be exempt from the standards of this Chapter:

A. Activities conducted in public parks, public playgrounds, and public or private school grounds, including but not limited to school athletic and school entertainment events, providing an amplified sound system is not required or used.

B. The use of any mechanical device, apparatus, or equipment related to or connected with emergency activities or emergency work to protect life or property.

C. Safety signals, warning devices, and emergency pressure relief valves properly operated and in good working order.

D. Noise sources associated with property maintenance, such as lawn mowers, trimmers, snow blowers, power tools in good working order, and cutting of firewood for non-commercial personal use, provided that the activities take place between the hours of eight a.m. and nine p.m. on weekdays and nine a.m. to nine p.m. on weekends and federal holidays.

E. Noise sources associated with agricultural uses listed in Section 130.21.020 (Agricultural Zones: Matrix of Allowed Uses) in Article 2 (Zones, Allowed Uses, and Zoning Standards) of this Title that are performed consistent with the standards and practices of the agricultural industry.

F. Noise sources associated with work performed by public or private utilities in the maintenance or modification of its facilities.

G. Noise sources associated with public holidays, or other commonly celebrated occasions.

H. Traffic on public roadways, railroad line operations, aircraft in flight, and any other activity where regulation thereof has been preempted by state or federal law.

I. Construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order.

Sec. 130.37.030 - Applicability.

Subject to the exemptions in Section 130.37.020 (Noise Standards, Exemptions) above in this Chapter, noise standards established in this Chapter shall apply to all noise generating uses requiring discretionary review or ministerial permits, with the exception of existing and new single-unit residential dwellings on legal lots that are not within areas governed by an Airport Comprehensive Land Use Plan. (General Plan Policy 6.5.1.4, Acceptable Noise Levels, Protection of Noise-Sensitive Development).

Sec. 130.37.040 - Definitions.

The following definitions shall apply to this Chapter:

"Acoustic Specialist" means a person trained in acoustic sampling that is qualified to measure sound levels consistent with criteria contained within this article.

"Ambient Sound Level" means the composite of normal or existing sound from all sources, measured at a given location for a specified time of the day or night.

"A-weighting" means the scale for measuring sound that de-emphasizes low and high frequencies in order to simulate human hearing; indicated as dBA.

"Community Noise Equivalent Level (CNEL)" means a weighted average hourly noise level over a 24 hour day used specifically for airport and aircraft noise assessment.

"Day-Night Average Sound Level (Ldn)" means the dBA for a given area during a 24-hour day with a 10dB weighting applied to nighttime sound levels.

"Decibel" means a unit of relative loudness on a logarithmic scale that runs from zero for the least perceptible sound to 140 for sound that causes pain.

"Equivalent Noise Level (Leq)" means the average energy noise level determined by averaging the cumulative noise event levels during a specific period of time and expressing it in A-weighted decibels, or dBA.

"Fixed Sound Source" means a device or machine which creates sounds while fixed or stationary, including but not limited to residential, agricultural, industrial, and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment, and motor vehicles operated on private property.

"Maximum Sound Level (Lmax)" means the maximum instantaneous noise level measured on a sound level meter.

"Non-Transportation Noise Source" means industrial operations, commercial land uses, outdoor recreation activities and facilities, Heating, Ventilation and Air Conditioning (HVAC) units, schools, hospitals, and other outdoor land use.

"Sensitive Receptor" means a land use in which there is a reasonable degree of sensitivity to noise. Such uses include single- and multi-unit residential dwellings including frequently inhabited outbuildings, schools, hospitals, churches, rest homes, cemeteries, public libraries, and other sensitive uses as determined by the Director.

"Sound Level Meter" means an instrument meeting American National Standard Institute (ANSI) Standard S1.4A-1985 for Type 1 or Type 2 sound level meters, or an instrument and associated recording and analyzing equipment that will provide equivalent data.

"Transportation Noise Source" means traffic on public or private (non-county maintained) roadways, railroad line operations, and aircraft in flight.

Sec. 130.37.050 - Acoustic Analysis Requirements.

An acoustic analysis prepared by an acoustic specialist shall be required prior to discretionary authorization or permit approval for the following uses:

A. New noise-generating land uses likely to exceed the performance thresholds in the Tables in Section 130.37.060 (Noise Standards) below in this Chapter when proposed in areas adjacent to sensitive receptors. Noise sources may include industrial operations, outdoor recreation facilities, outdoor concerts and events utilizing amplified sound systems, commercial land uses, fixed sound sources, and other similar uses; or
B. New noise-sensitive land uses proposed in areas exposed to existing or projected exterior noise levels likely to exceed the thresholds in the Tables in Section 130.37.060 (Noise Standards) below in this Chapter.

Sec. 130.37.060 - Noise Standards.

The following standards shall apply to all development projects for which an acoustic analysis is required:

A. Noise sensitive land uses affected by non-transportation noise sources shall not exceed standards set forth in Table 130.37.060.1 (Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-Transportation Sources) below in this Section:

**Table 130.37.060.1—Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-Transportation Sources**

| NOISE LEVEL PERFORMANCE 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 Leq, dBA | 55 | 50 | 50 | 45 | 45 | 40 |
| Maximum level, dBA | 70 | 60 | 60 | 55 | 55 | 50 |

1. Each of the noise levels specified above shall be lowered by five dBA for simple tone noises, noises consisting primarily of unamplified speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses, such as caretaker dwellings.
2. The Director can impose noise level standards which are up to five dBA less than those specified above, based upon a determination of existing low ambient noise levels in the vicinity of the project site.
3. The exterior noise level standard shall be applied as follows:
   a. In Community Regions, at the property line of the receiving property;
   b. In Rural Centers and Regions, at a point 100 feet away from a sensitive receptor or, if the sensitive receptor is within the Platted Lands Overlay (-PL) where the underlying land use designation is consistent with Community Region densities, at the property line of the receiving property or 100 feet away from the sensitive receptor, whichever is less; or
   c. In all areas, at the boundary of a recorded noise easement between affected properties.

B. Transportation noise shall not exceed thresholds set forth in Table 130.37.060.2 (Noise Level Standards for Noise-Sensitive Land Uses Affected by Transportation Noise Sources) below in this Section:

**Table 130.37.060.2—Noise Level Standards for Noise-Sensitive Land Uses Affected by Transportation Noise Sources**

| NOISE LEVEL STANDARDS FOR NOISE-SENSITIVE LAND USES AFFECTED BY TRANSPORTATION NOISE SOURCES | | | |
|---|---|---|---|
| **Sensitive Receptor** | **Outdoor Activity Areas** | **Interior Spaces** | |
| | Ldn/CNEL, dB | Ldn/CNEL, dB | Leq, dB [1] |
| Residential | 60 | 45 | - |
| Transient Lodging | 60 | 45 | - |
| Hospitals, Nursing Homes | 60 | 45 | - |
| Theaters, Auditoriums, Music Halls | - | - | 35 |
| Churches, Meeting Halls, Schools | 60 | - | 40 |
| Office Buildings | - | - | 45 |
| Libraries, Museums | - | - | 45 |
| Playgrounds, Neighborhood Parks | 70 | - | - |
| **Notes**<br>[1] As determined for a typical worst-case hour during periods of use. | | | |

1. In Community Regions and Rural Centers:

   (a) Where the location of outdoor activity areas is not clearly defined, the exterior noise

level standard shall be applied at the property line of the sensitive receptor.

(b) For residential uses with front yards facing the identified noise source, an exterior noise level threshold of 65 dBA Ldn shall be applied at the dwelling facade in addition to the required threshold at the outdoor activity area.

2. In Rural Regions: An exterior noise level threshold of 60 dBA Ldn shall be applied at a 100 foot radius from the dwelling on lots five acres and larger. Those lots less than five acres shall have the noise level standards applied at the property line.

3. Where it is not possible to reduce noise levels in those outdoor activity areas limited to 60 dBA Ldn/CNEL thresholds using a practical application of the best-available noise reduction measures, an exterior noise threshold of up to 65 dBA Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

C. Construction-related noise shall allow for exceptions to the evening and night time standards or other temporary exceedances of noise standards as may be approved by the Director, where necessary to alleviate traffic congestion and safety hazards, or where authorized by an approved permit.

Sec. 130.37.070 - Noise Reduction Measures.

Noise reduction measures shall be incorporated into the project design to reduce noise levels at or below the thresholds set forth in Tables in Section 130.37.060 (Noise Standards) above in this Chapter. Where applicable, the following specific requirements shall also apply:

A. To meet noise threshold standards under Table 130.37.060.2 (Noise Level Standards for Noise-Sensitive Land Uses Affected by Transportation Noise Sources) above in this Chapter, where feasible, setbacks shall be the preferred method of noise abatement for residential projects located along U.S. Highway 50. Noise walls shall be discouraged within the foreground viewshed of U.S. Highway 50 and shall be discouraged in favor of less intrusive noise mitigation (e.g., landscaped berms, setbacks) along other high volume roadways.

B. For outdoor concerts and events utilizing amplified sound system(s), a discretionary permit shall be required in the form of a Temporary or Conditional Use Permit. Self-monitoring shall be performed to insure that sound system levels are in compliance with those specified in the conditions of approval based on the acoustic analysis. As a standard condition of approval for such use permits, failure to comply with sound system levels shall result in termination of the event for the duration of the period approved under the use permit and a moratorium on future events for the applicant or the property owner of two calendar years from the date of

non-compliance. A second violation after such time shall result in revocation of the Conditional Use Permit, if applicable, and a permanent moratorium on future events for the applicant and property owner whether on that site or any other within the County.

Sec. 130.37.080 - Noise Level Measurements.

For the purpose of evaluating conformance with the standards of this Chapter, noise levels shall be measured as follows:

A. Use of Meter. Any noise measurement shall be made with a sound level meter using the A-weighted scale. Calibration of the measurement equipment utilizing an acoustical calibrator shall be performed immediately prior to recording any noise data.

B. Ambient Sound Levels. Compliance with the above standards shall be determined by measuring the existing noise level with a sound level meter using slow response, with the sound source at issue remaining silent. The ambient sound level shall be determined based on the mean average of not less than three 20 minute measurements for any given time period. Additional noise measurements may be necessary to ensure that the ambient sound level is adequately determined.

C. Measuring Exterior Noise Levels. Except as otherwise provided in this Chapter, exterior noise levels shall be measured at the property line of the affected noise-sensitive land use. Where practical, the microphone shall be positioned five feet above the ground and away from reflective surfaces.

D. Measuring Interior Noise Levels. Interior noise levels shall be measured within the sensitive receptor, as defined in Section 130.37.040 (Noise Standards, Definitions) above in this Chapter, at points at least four feet from the wall, ceiling, or floor nearest the noise source, with windows in the normal seasonal configuration. The reported interior noise level shall be determined by taking the arithmetic average of the readings taken at the various microphone locations.

T. KEAR
TRANSPORTATION PLANNING
& MANAGEMENT, INC.


# Memorandum

TO: Karen Hyder, Indian Rock Tree Farm

CC: Zach Oates, El Dorado County DOT

FROM: Tom Kear, PhD, PE

Date: January 9, 2024

RE: Indian Rock Tree Farm Vehicle Miles Traveled Analysis

## Introduction

Indian Rock Tree Farm is a long-established Christmas tree farm and private event venue located in the Apple Hill region of El Dorado County. The property consists of approximately 33.2 acres with the tree farm, limited event facilities, and a single residence. The owner's adult children plan to return to the property to manage business interests and provide elder care. The business is located at 3800 North Canyon Rd, Camino, CA 95709 (APN 085-540-03-100).

As part of the entitlement process for building an additional dwelling unit on the property, El Dorado County determined that the parcel requires rezoning from its historic designation(s) *Residential Estate 5-Acre* (RE-5), *Timber Production* (TPZ), *Two-acre Residential* (R2A), and *Select Agricultural District* (SA-10). The proposed zoning is *Planned Agriculture* (PA). The rezone is hereafter referred to as "the Project." Note that it is a common occurrence that historic non-compliant zoning such as this occurs where operating businesses are grandfathered in on parcels where the General Plan and/or zoning requirements are modified subsequent to the opening of the business. However new business applications and or development applications can trigger the need to correct historic zoning inconsistencies. In this case the anticipated request to build an additional dwelling unit has triggered the need to rezone the parcel to PA.

Even though there are no aspects of the business that are being changed, the proposed rezone requires an initial study under the California Environmental Quality Act (CEQA) to document that there are no anticipated CEQA impacts associated with the change in zoning. A Vehicle Miles Traveled (VMT) analysis has been requested by the County to support that initial study. T. Kear Transportation Planning and Management (TKTPM) spoke with El Dorado County Department of Transportation staff (Zach Oates) regarding an overall approach framework for the VMT analysis. It was determined that only *new* business activity and housing needs to be considered in the VMT analysis. While there are no planned changes in the operation of Indian Rock Tree Farm, the proposed zoning would allow for up to 24 special events of 250 people annually[1]. This VMT analysis will document that the potential

[1] El dorado county Zoning) Ordinance, Title 130, Adopted August 14, 2018, amended August 23, 2022. Section 130.40.260, available online at https://www.edcgov.us/Government/planning/Pages/zoning_ordinance.aspx, accessed January 8, 2024.

for more and larger special events and the anticipated additional dwelling unit will not exceed El Dorado County's de minimis threshold for VMT from small projects that generate on average fewer than 100 daily vehicle trips[2].

## Analysis

This VMT analysis is based on comparing. The potential increase in daily vehicle tips (from the new single-family residence that the applicant intends to eventually construct, and a potential increase in special events allowed under the PA zoning, to the County's threshold for small projects of 100 trips per day. VMT from business operations and the potential additional residence are both considered.

**VMT related potential changes in business operations**

As stated above, there is not an anticipated change in business operations on the Project parcel, however the rezone to PA would allow for additional events on the parcel, up to 24 events with 250 people per event. Vehicle occupancy for event centers is poorly documented but generally believed to average about 2.5 persons per vehicle. To be conservative we assume 1.5 persons per vehicle with each vehicle making two trips (1 inbound, 1 outbound).

$$\left(\frac{24\ events}{1\ year}\right)\left(\frac{1\ year}{365\ days}\right)\left(\frac{250\ people}{1\ event}\right)\left(\frac{1\ Vehicle}{1.5\ people}\right)\left(\frac{2\ trips}{1\ vehcile}\right) = 21.9\ trips\ per\ day$$

It is unclear whether the 250-person limit includes staff. To be conservative the average daily trip estimate is therefore increased by just over 25% to **27.4 trips per day.**

**VMT related potential addition of one single-family home**

Trip generation for the additional single-family home is based on the ITE Trip Generation Manual[3] single-family detached housing. Average trip generation for a single-family home is:

- 9.43 daily trips per weekday
- 9.48 daily trips on Saturday
- 8.48 daily trips on Sunday

This results in an average of **9.3 daily trips**.

## Findings and Recommendations

Combined trip generation for potential new business activity and the additional single-family residence is anticipated to be less than 36.7 trips per day on average. This is well below the County's adopted de minimis threshold for small projects with an average of 100 trips per day. This analysis finds that the proposed rezone will have a **less-than-significant** impact on VMT under CEQA. TKTPM recommends that the rezone be approved.

[2] El dorado County Board of Supervisors Resolution 141-2020 adopted October 6, 2020.
[3] ITE (2021) Trip Generation Manual 11 Edition, Land use 210, Institute of Transportation engineers, Washington DC.

# Indian Rock Tree Farm Rezone

# Wildland Urban Interface Fire Protection Plan
# Fire Safe Plan
## WAC 21-003/Z 21-0010 PA

**Prepared for:**

**The Raymond L. Hyder and**
**Geraldine F. Hyder 1994 Trust**

**Prepared by:**

**CDS Fire Prevention Planning**
**William F. Draper**
**Registered Professional Forester**
**#898**
**4645 Meadowlark Way**
**Placerville, CA 95667**

**October 21, 2022**

**Indian Rock Tree Farm**

The Fire Safe Plan for the Indian Rock tree Farm does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures will greatly reduce the exposure of structures to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner's attention to aid in wildfire safety. The plan recommends and acknowledges best management practices. It is of great importance to recognize that no plan can completely protect property from wildland fire with multiple variables inherent in the wildland-urban interface.

**Approved by:**

11/9/2022
**Braden Stirling, Fire Marshal** — **Date**
**El Dorado County Fire Protection District**

11/13/22
**Darin McFarlin, FCS** — **Date**
**Fire Prevention**
**California Department of Forestry and Fire Protection**

**Prepared by:**

11/9/22
**William F. Draper** — **Date**
**RPF # 898**

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 12 - WILDLAND URBAN INTERFACE FIRE PROTECTION PLAN

## PURPOSE:

Indian Rock Tree Farm is an actively managed forest and Christmas tree farm located on 33.2 acres in Camino, California in the heart of “Apple Hill”. The owners are wanting to diversify their business to fully utilize the unique features of the property. They are seeking a rezoning from Timber Production Zone (TPZ) to Planned Agriculture (PA).

## SCOPE:

The Fire Safe Plan for this property takes into consideration the existing best management practices being used and expands on those practices with the most current fire safe requirements that will be incorporated in the future management and development of the tree farm.

The Fire Safe Plan for the Indian Rock Tree Farm does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the fire safe requirements will greatly reduce the exposure of structures to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. It is important to recognize that no plan can completely protect property from wildland fire with multiple variables inherent in the wildland-urban interface.

## PROJECT:

Indian Rock Tree Farm located at 3200 North Canyon Road in Camino has requested to be rezoned to better meet the needs of the farm for the future. This 33.2 acre parcel, APN: 085-540-003, has a long history of being a managed forest and “choose and cut” Christmas tree farm. The majority of the property is on a northwest facing ridge with slopes up to 30%. There is an existing residence, sales area, farm support buildings, parking, gathering site, and roads/trails. There is a high voltage transmission lines across the back of the property where some of the Christmas trees are grown. The landowners have developed North Canyon Creek to be a productive fish stream with pools and a drafting site. The drafting site is on the south side of the creek in the northeast corner of the property. The entire property has been manicured. The timber stand is a mixture of conifers with Incense cedar, Ponderosa pine, Douglas-fir, White fir, Black oak, and Madrone overstory. Big Leaf maple is the dominate tree species along the creek. The understory has been mostly eliminated and the trees limbed. In some areas of the understory there are Christmas trees planted. The tree canopy is generally well over 30’ from the ground to tree limbs. There are patches of understory with managed Christmas trees. The majority of Christmas tree plantings are densely planted in open areas under the high-tension powerline towers.

The stewards of this property use wood chips around and under their trees to control weeds and erosion. There are a series of roads and footpaths winding through the trees to provide access and break-up the vegetative fuels the forest contains. The clean understory is the product of years of control burns and intensive management.

The house site is at the north west corner of the property on a knoll. The house is in good repair and there are not plans to construct any additional housing or additions to the existing residence. The Firescaping standards in Appendix A should serve as a guide for maintaining a fire safe environment around the home. Zone O is a new requirement that will need to be incorporated around the residence in the coming year. This is referred to as the ember resistant zone and extends out from the foundation of the house for 5’.

## FIRE SAFE REQUIREMENTS:

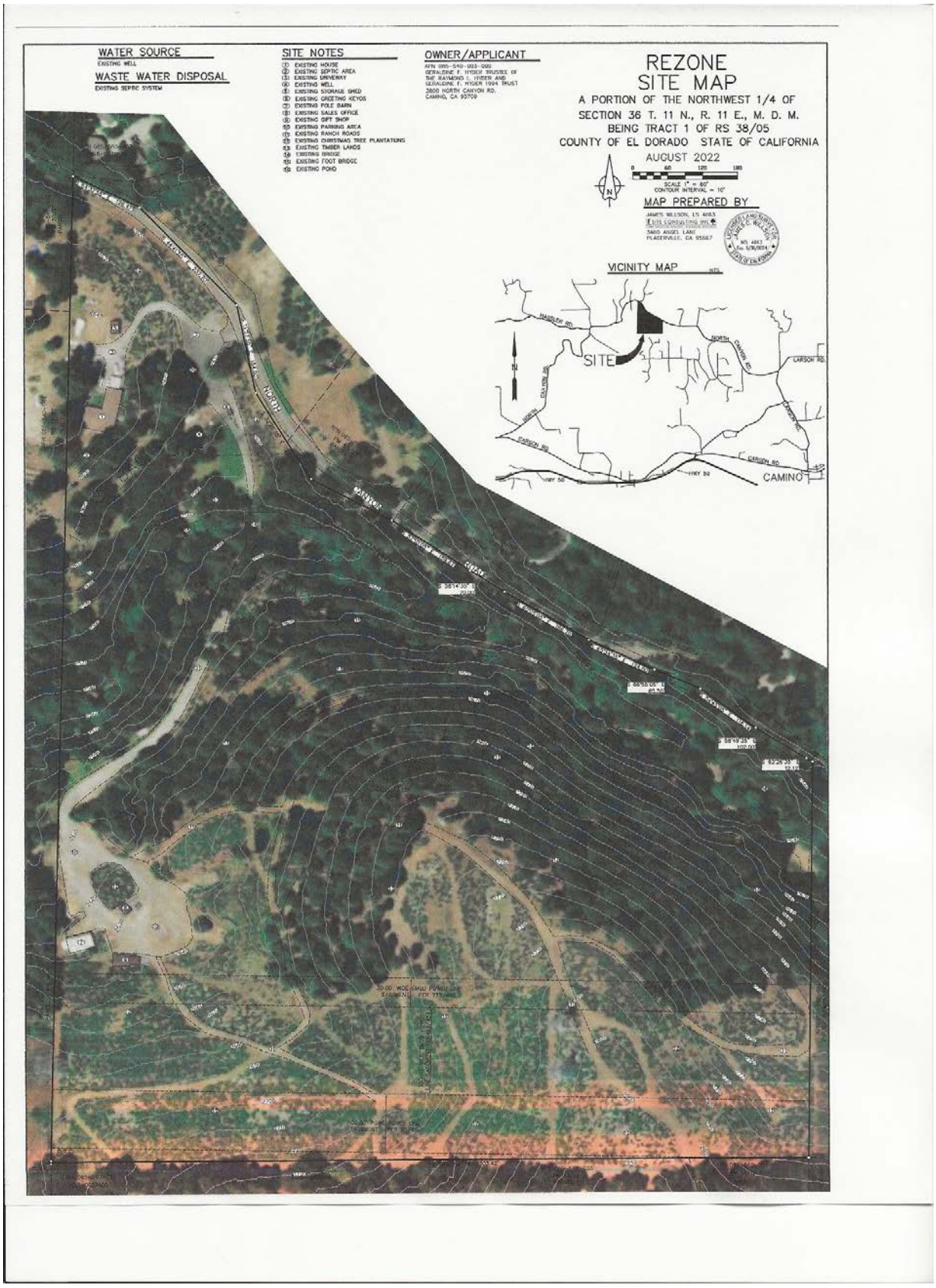
The existing residence is subject to El Dorado County Code of Ordinances Chapter 8.09 (Vegetation Management and Defensible Space) and California Public Resources Code section 4291 (PRC 4291) the state defensible space requirement for maintaining 100’ clearances around all structures (See Appendix

A CAL FIRE Guideline). The County's "Good Neighbor" provision in the County Code will be utilized as necessary to meet the 100' clearance requirement. The property is located in a "Very High" Fire Severity Zone as prepared by CAL FIRE as part of its Fire Resource and Assessment Program (FRAP) in 2007. The El Dorado County Fire Protection District (EDCFPD) provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CALFIRE) has wildland fire responsibility in this state responsibility area (SRA).

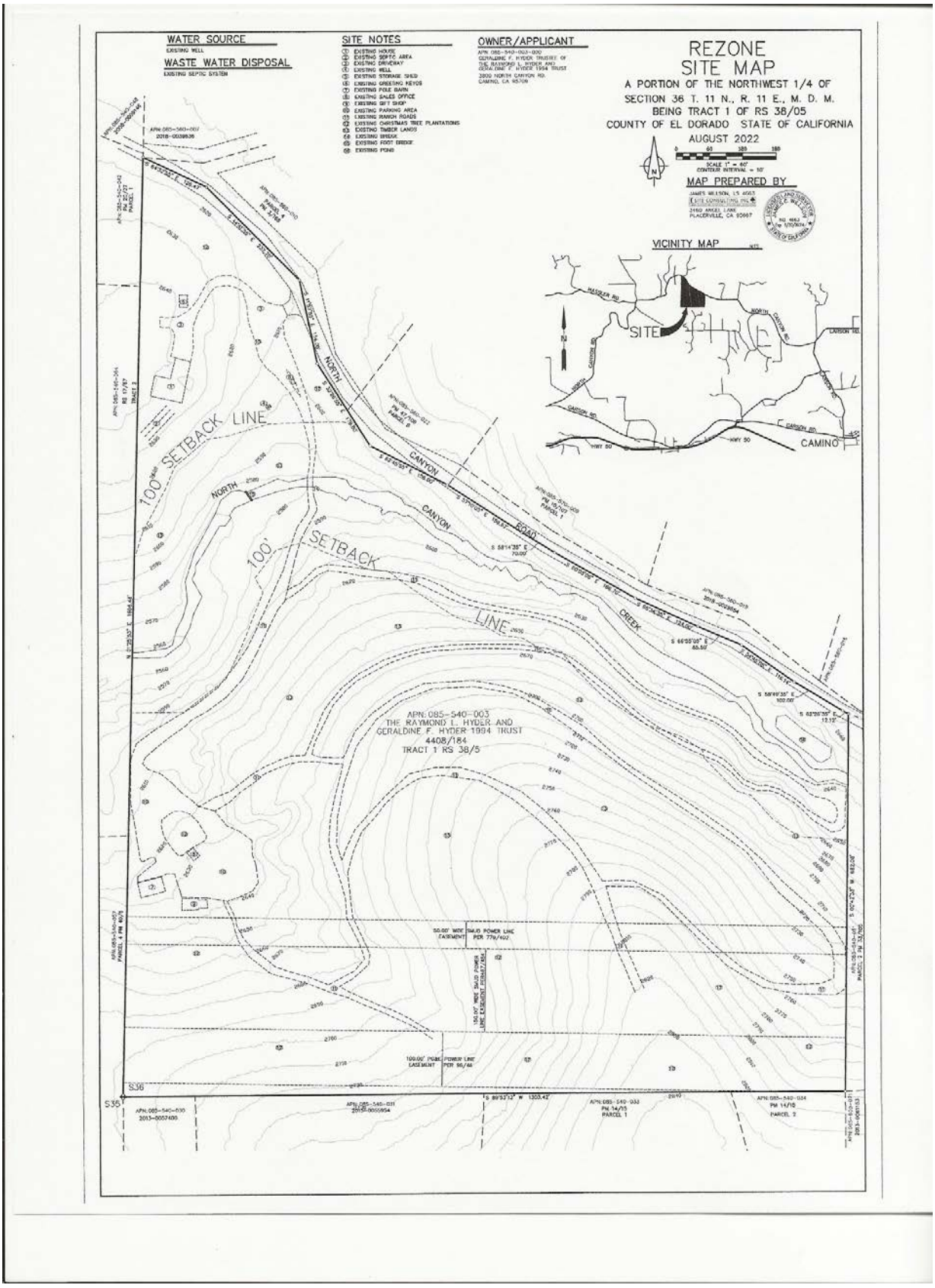
Any new building shall comply with California Code of Regulations Title 24, Parts 1-12 (California Building Standards Code) or those in effect at the time of construction. The property owner is responsible for any future fire safe or building code changes adopted by the state or local authority. A periodic review (about every 5 years) should be done between the landowner and EDCFPD to determine that the fire safe conditions are being followed or need to be revised.

The annual maintenance of the hazardous vegetation and removal prior to the start of the fire season and maintained throughout the fire season are critical for establishing and keeping a fire safe environment. All burning shall be carried out in full compliance with state and local regulations. Appropriate burning permits and adherence to burn day restrictions shall be followed. Hazard reduction work shall be completed by May 15 annually.

# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 12 - WILDLAND URBAN INTERFACE FIRE PROTECTION PLAN



# Z21-0010/WAC21-0003 INDIAN ROCK TREE FARM (HYDER)
# ATTACHMENT 12 - WILDLAND URBAN INTERFACE FIRE PROTECTION PLAN



# APPENDIX A
# INDIAN ROCK TREE FARM
# FIRESCAPING STANDARDS

Firescaping is an approach to landscaping to help protect homes from wildland fires. The goal is to create a landscape that will slow the advance of a wildfire and create a Defensible Space that provides the key point for firefighting agencies to defend the home. This approach has a landscape zone surrounding the home containing a balance of native and exotic plants that are fire and drought resistant, help control erosion, and are visually pleasing. Firescaping is designed not only to protect the home but to reduce damage to oaks and other plants.

Zone 0

This is the 5' ember resistant zone. No flammable vegetation or ground cover is allowed within 5' of the residence foundation.

Zone I

The zone extends to not less than 30 feet from the house **or to the property line whichever is less** in all directions and has a traditional look of irrigated shrubs, flowers gardens, trees and lawns. All dead trees, brush, concentrations of dead ground fuels (tree limbs, logs etc. exceeding 1inch in diameter) shall be removed. All native oak trees, conifers and brush species are pruned up to 10 feet above the ground as measured on the uphill side but no more than 1/3 of the live crown. The plants in this zone are generally less than 18 inches in height, must be slow to ignite from windblown sparks and flames. Such plants should produce only small amounts of litter and retain high levels of moisture in their foliage year around. Native and exotic trees are permitted inside the Zone, but foliage may not be within 10 feet of the roof or chimney. Grass and other herbaceous growth within this zone must be irrigated or if left to cure must be mowed to a 2 inch stubble, chemically treated or removed. Such treatment must be accomplished by June 1, annually. This zone has built in firebreaks created by driveways, sidewalks etc.

Zone II

This Zone adds 70 feet to Zone I and extends a minimum of 100 feet from the house in all directions, **or to the property line whichever is less,** and is a transition area to the outlying vegetation. The zone is a band of low growing succulent ground covers designed to reduce the intensity, flame length and rate of spread of an approaching wildfire. Irrigation may be necessary to maintain a quality appearance and retain the retardant ability of the plants. All dead trees, brush, concentration of dead ground fuels (tree limbs, logs etc.) exceeding 2 inches in diameter shall be removed. Annual grasses shall be mowed after they have cured to a 2 inch stubble by June 1, annually. Native trees and brush species may be preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side.

For All Zones With Oaks

Mature, multi stemmed Oaks can present a serious wildfire problem if untreated. Treat the Oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.

## APPENDIX A

CAL FIRE GUIDELINE