

**BIOLOGICAL RESOURCES ASSESSMENT FOR THE  
PARCEL SUBDIVISION AT  
5595 HACKOMILLER ROAD, GARDEN VALLEY, CALIFORNIA**



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**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

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## **1. INTRODUCTION**

### **1.1. PROJECT LOCATION AND DESCRIPTION**

A biological resources assessment was conducted on a 170-acre parcel (APN 088-021-040) at 5595 Hackomiller Road, Garden Valley in El Dorado County, California. The proposed project is parcel subdivision and subsequent development. The tentative map / parcel subdivision of the property which will create 2 new 40-acre parcels, with the remaining parcel of approximately 90 acres (see Exhibits). Three building envelopes were created after setbacks were established for property lines and for streams; collectively, these are the Project Areas. The County's Zoning Code Section 130.30.050 states that ministerial development, such as single family dwellings, shall be set back for a distance of 25 feet from intermittent streams and 50 feet from perennial streams (see Exhibits). The entire 170-acre property was defined as the study area (the "Property"). The study area is defined to identify biological resources adjacent to the 3 building envelopes, and is the area subject to potential indirect effects from future land development.

### **1.2. SCOPE OF ASSESSMENT**

This assessment provides information about the biological resources on the Property, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts. The specific scope of services performed for this assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Property;
- Spatially query state and federal databases for any occurrences of special-status species or habitats on the Property and vicinity;
- Perform a reconnaissance-level field survey of the Property, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present on the Property, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

The scope of services does not include other services that are not described in this Section, such as formal aquatic resource delineations or protocol-level surveys for special-status species.

### **1.3. REGULATORY SETTING**

The following section summarizes some applicable regulations of biological resources on real property in California.

#### **1.3.1. Special-status Species Regulations**

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 et seq.). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from "take" (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued

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existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq.*, and CCR Title 14, §670.2, 670.51) prohibits “take” (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as “watch lists.” Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present on the Property and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 *et seq.*) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code §3511 designates certain bird species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.

California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines “rare” in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California “Species of Special Concern” is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.



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### **1.3.2. Water Resource Protection**

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into "waters of the United States". Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use, as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating "*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.*" CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of "waters of the State." The limit of CDFW jurisdiction is subject to the judgment of the Department; currently, this jurisdiction is interpreted to be the "stream zone", defined as "*that portion of the stream channel that restricts lateral movement of water*" and delineated at "*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

For construction projects that disturb one or more acres of soil, the landowner or developer must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ).

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**1.3.3. Tree Protection**

At the State level, in areas inside timberland, any tree removal is subject to the conditions and requirements set forth in the Z'berg-Nejedly Forest Practice Act and the California Forest Practice Rules. If development of a project will result in the removal of commercial tree species, one of the following permits is needed: Less than 3 Acre Conversion Exemption; Christmas Tree; Dead, Dying or Diseased, Fuelwood, or Split Products Exemption; a Public Agency, Public and Private Utility Right of Way Exemption; a Notice of Exemption from Timberland Conversion Permit for Subdivision; or an Application for Timberland Conversion Permit.

The County of El Dorado (County) has adopted the Oak Resources Conservation Ordinance Number 5061. The Oak Conservation Ordinance requires the inventory of oak resources and the mitigation for the removal of oak resources. Oak Resources consist of oak woodlands, individual native oak trees, and heritage trees. If Oak Resources are to be removed, an Oak Tree or Oak Woodland Removal Permit is required. This requires preparation of an Oak Resources Technical Report and a code compliance certificate verifying that no protected oak trees have been impacted within two years prior to the permit application.

## **2. ENVIRONMENTAL SETTING**

The Property is located within the northern Sierra Nevada Foothills geographic subregion, which is contained within the Sierra Nevada Mountains geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters. The Property is in Climate Zone 7 - California's Gray Pine Belt, defined by hot summers and mild but pronounced winters without severe winter cold or high humidity (Sunset, 2021). The topography of the Property is rolling, with ridgelines and moderate slopes. The elevation ranges from approximately 1,965 feet to 2,430 feet above mean sea level. Drainage runs south and west off of the parcel, entering Irish Creek, thence Big Sailor Creek, which eventually flows into the South Fork American River. Current land uses are rural residential, and open space. The surrounding land uses are rural residential, livestock grazing, vineyard, equestrian facilities and open space.

## **3. METHODOLOGY**

### **3.1. PRELIMINARY DATA GATHERING AND RESEARCH**

Prior to conducting the field survey, the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Property
- Aerial photography of the Property (current and historical)
- United States Geologic Service 7.5 degree-minute topographic quadrangles of the Property and vicinity
- USFWS National Wetland Inventory
- USDA Natural Resources Conservation Service soil survey maps
- California Natural Diversity Database (CNDDDB), electronically updated monthly by subscription
- USFWS species list (IPaC Trust Resources Report).

### **3.2. FIELD SURVEYS**

Consulting biologist Tim Nosal, MS. (Natural Investigations Co.) conducted a wildlife survey and botanical field survey on October 13, 2021, and again on July 23, 2023. Dr. Geo Graening (Graening and Associates LLC) conducted a follow-up biological survey on January 18, 2025. Variable-intensity pedestrian surveys were performed, and modified to account for differences in terrain, vegetation density, and visibility. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDDB within the vicinity of the Property and those species on the USFWS species list (Appendix 1).

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Dr. Graening holds the following scientific collection permits: CDFW Scientific Collecting Permit No. SC-006802; and CDFW Plant Voucher Specimen Permit 09004. Tim Nosal holds CDFW Plant Voucher Specimen Permit 2081(a)-16-102-V. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Brenzel (2012); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Baldwin et al. (2012); Calflora (2021); CDFW (2021b,c); NatureServe 2021; and University of California at Berkeley (2021a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring on the Property were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Property was also informally

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assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats

### **3.3. MAPPING AND OTHER ANALYSES**

Locations of species' occurrences and habitat boundaries on the Property were digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources on the Property were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). Wildlife habitats were classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW, 2021c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2021), Calflora (2021); CDFW (2021a,b,c); and University of California at Berkeley (2021a,b).

## 4. RESULTS

### 4.1. WILDLIFE AND WILDLIFE HABITATS

The following animals were detected on the Property during the field surveys:

northwestern fence lizard (*Sceloporus occidentalis occidentalis*); American black bear (*Ursus americana*); black-tailed jackrabbit (*Lepus californicus*); Botta's pocket gopher (*Thomomys bottae*); Columbian black-tailed deer (*Odocoileus hemionus columbianus*); western gray squirrel (*Sciurus griseus*); acorn woodpecker (*Melanerpes formicivorus*); Anna's hummingbird (*Calypte anna*); bandtailed pigeon (*Patagioenas fasciata*); bushtit (*Psaltiriparus minimus*); California quail (*Callipepla californica*); California scrub jay (*Aphelocoma californica*); California towhee (*Melospiza crissalis*); dark-eyed junco (*Junco hyemalis*); mourning dove (*Zenaida macroura*); northern flicker (*Colaptes auratus*); Nuttall's woodpecker (*Picoides nuttallii*); oak titmouse (*Baeolophus inornatus*); pileated woodpecker (*Dryocopus pileatus*); red-tailed hawk (*Buteo jamaicensis*); sparrow (Emberizidae); spotted towhee (*Pipilo maculatus*); Stellar's jay (*Cyanocitta stelleri*); turkey vulture (*Cathartes aura*); white-breasted nuthatch (*Sitta carolinensis*); wild turkey (*Meleagris gallopavo*); and other common songbirds.

Wildlife habitat types were classified using CDFW's Wildlife Habitat Relationship System. The Property contains the following wildlife habitat types: Urban; Barren; Annual Grassland; Mixed Chaparral; Montane Hardwood-Conifer; Emergent Wetland; Riverine; Lacustrine.

### 4.2. BOTANICAL SURVEYS AND VEGETATION COMMUNITIES

#### 4.2.1. Botanical Surveys

All plants detected during the field surveys of the Property are listed in Appendix 2.

The following previous studies have been performed:

- Natural Investigations Co. 2023. Biological Resources Assessment for the Parcel Subdivision and Cannabis Cultivation Operation at 5595 Hackomiller Road, Garden Valley, California.

Natural Investigations Co. conducted a botanical survey during the biological resources assessment. Nissenan manzanita (*Arctostaphylos nissenana*) (CNPS 1B.2) was observed near the center of the northern boundary of the Property.

In their biological resources assessment of the proposed project, Natural Investigations Company (2023) recommended additional botanical field surveys. These additional botanical field surveys have now been completed, and are summarized in the following report:

- Graening and Associates LLC. 2023. Botanical Survey Report for the Parcel Subdivision at 5595 Hackomiller Road, Garden Valley, California. 40 pp.

#### 4.2.2. Terrestrial Vegetation Communities

The Property contains the following terrestrial vegetation communities: Disturbed/Developed, Annual Grassland, Chaparral, Mixed-Pine Oak Forest and Woodland, and Freshwater Marsh. These vegetation communities are discussed here and are delineated in the Exhibits.

**Disturbed/Developed.** These areas consist of disturbed or converted natural habitat that is now either in ruderal state, graded, or urbanized with gravel roads. Vegetation within this habitat type consists primarily of nonnative weedy or invasive species lacking a consistent community structure. This habitat type provides limited resources for wildlife and is utilized primarily by



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species tolerant of human activities. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages.

**Annual Grassland:** The annual grassland habitat is comprised largely of annual grasses and herbs with patches of invasive brambles and shrubs. Plants common in this habitat type include Medusa-head (*Elymus caput-medusae*), soft chess (*Bromus hordeaceus*), rattail sixweeks fescue (*Festuca myuros*), brome fescue (*Festuca bromoides*), flax (*Linum sp.*), clover (*Trifolium sp.*), spiked western rosinweed (*Calycadenia spicata*), Fitch's spikeweed (*Centromadia fitchii*), Himalayan blackberry (*Rubus armeniacus*) and Scotch broom (*Cytisus scoparius*) and various other species. This vegetation can be classified as the Holland Type "Non-native Grassland" or as "42.020.03 *Elymus caput-medusae*" (CDFW 2021e).

**Chaparral:** Although chaparral species are common throughout the Property, chaparral habitat is found only near the center of the northern portion of the parcel. The dominant species within the chaparral is white-leaf manzanita (*Arctostaphylos viscida*) with Nissenan manzanita (*Arctostaphylos nissenana* CNPS 1B.2) also important along the shale ridgetop. Other species found in the chaparral include gray pine (*Pinus sabiniana*), ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*), interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*) and yerba santa (*Eriodictyon californicum*). Few grasses and herbs were observed in the understory of the dense shrub canopy. This vegetation type can be classified as the Holland Type "Upper Sonoran Manzanita Chaparral" or as "37.305.00 *Arctostaphylos viscida*" Whiteleaf Manzanita Chaparral (CDFW 2021e).

**Mixed Pine-Oak Forest and Woodland:** Tree dominated forest habitat is found throughout the Property. Found along the hills and slopes is habitat dominated by pine and oak. The mixed pine-oak forest consists of a canopy of ponderosa pine, sugar pine, California black oak (*Quercus kelloggii*), canyon live oak, white-leaf manzanita, Scotch broom with various grasses and herbs in the understory. This community transitions from forest to woodland in areas having less tree density. This vegetation can be classified as the Holland Type "Westside Ponderosa Pine Forest" or as "87.010.00 Ponderosa Pine Forest (CDFW 2021e).

**Freshwater Marsh:** One area of freshwater marsh is found along the south side of the access road at a point where two watercourses merge. Within the mapped marsh, the composition of the vegetation is characterized by broadleaf cattail (*Typha latifolia*), Himalayan blackberry and knotweed (*Persicaria sp.*). This vegetation can be classified as the Holland Type "Coastal and Valley Freshwater Marsh" or as "52.050.00 Cattail Marsh" (CDFW 2021)".

#### **4.2.3. Critical Habitat and Special-status Habitat**

No critical habitat for any federally-listed species occurs on the Property. The CNDDDB reported no special-status habitats on the Property. The CNDDDB reported no special-status habitats in a 10-mile radius outside of the Property. No special-status habitats were detected within the 3 building envelopes during the field surveys. However, the surrounding Property contains the following special-status habitats: watercourses, riverine wetlands, pond.

#### **4.2.4. Habitat Plans and Wildlife Corridors**

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations.

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No fishery resources exist in or near the Property. The nearest fishery resource is the South Fork American River several miles away. No designated wildlife corridors exist within or near the Property, although the open space on the Property allows for animal movement. The Property is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

### **4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES**

For the purposes of this assessment, “special status” is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;
- Plants considered to be rare, threatened or endangered in California by the California Native Plant Society (CNPS); this consists of species on Lists 1A, 1B, and 2 of the CNPS Ranking System; or
- Plants listed as rare under the California Native Plant Protection Act.

#### **4.3.1. Reported Occurrences of Listed Species and Other Special-status Species**

A list of special-status plant and animal species that have occurred on the Property and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Property;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at <https://ecos.fws.gov/ipac/>); and
- A spatial query of the CNDDDB
- A query of the California Native Plant Society’s database *Inventory of Rare and Endangered Plants of California* (online edition).

The CNDDDB was queried and any reported occurrences of special-status species were plotted in relation to the Property boundary using GIS software (see exhibits).

The CNDDDB has mapped an occurrence of Nissenan manzanita (*Arctostaphylos nissenana*; CNPS List 1.B.2) as generally occurring within the center of the Property. However, this occurrence may have been mis-mapped. The CNDDDB record has the following collection and locality information:

“ASHCRAFT RANCH, ABOUT 0.5 AIR MILE NORTH OF FOSTER MOUNTAIN, NEAR AMERICAN FLAT.... TYPE LOCALITY. IN 1965, THE POPULATION COVERED ~8 ACRES. UNK # IN 1966. ACCORDING TO DRAKE W/ CDFG TIMBER HARVEST REVIEW (1993), THIS AREA WAS CONVERTED TO GRAZING LAND MANY YEARS AGO. THE STATUS OF THIS POPULATION SHOULD BE FIELD CHECKED.”

Our field surveys determined that Nissenan manzanita is not present on the Property where it is mapped by CNDDDB, but it does occur another half mile the north.

Within a 10-mile buffer of the Property boundary, the CNDDDB reported several special-status species occurrences, summarized in the following table along with any additional CNPS species.

A USFWS species list was generated online using the USFWS’ IPaC Trust Resource Report System (see Appendix 1). The following species list is generated using a regional and/or watershed approach and does not necessarily indicate that the Property provides suitable habitat:

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- California spotted owl (*Strix occidentalis occidentalis*) Proposed Threatened
- Northwestern pond turtle (*Actinemys marmorata*) Proposed Threatened
- California Red-legged Frog (*Rana draytonii*) Threatened
- Foothill yellow-legged frog (*Rana boylei*) Endangered
- Delta Smelt (*Hypomesus transpacificus*) Threatened
- Monarch Butterfly (*Danaus plexippus*) Candidate
- Layne's Butterweed (*Senecio layneae*) Threatened

Migratory birds should also be considered in the impact assessment.

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Table 1: Special-status Species Reported by CNDDB in the Vicinity of the Property

Common Name Scientific Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Areas
PLANTS				
California red-legged frog <i>Rana draytonii</i>	FT/CSSC	Aquatic; Artificial flowing waters; Artificial standing waters; Freshwater marsh; Marsh & swamp; Riparian forest; Riparian scrub; Riparian woodland; South coast flowing waters; South coast standing waters; Sacramento/San Joaquin flowing waters; Sacramento	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Low potential to occur in Project Areas; potential to occur in streams in the vicinity
Foothill yellow-legged frog <i>Rana boylei</i>	CE/CSSC	Aquatic; Chaparral; Cismontane woodland; Coastal scrub; Klamath/North coast flowing waters; Lower montane coniferous forest; Meadow & seep; Riparian forest; Riparian woodland; Sacramento/San Joaquin flowing waters	Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Low potential to occur in Project Areas; potential to occur in streams in the vicinity
Great egret <i>Ardea alba</i>	CSSC	Brackish marsh; Estuary; Freshwater marsh; Marsh & swamp; Riparian forest; Wetland	Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	No potential to occur in Project Area; potential to occur in stream corridors in the vicinity
Northern goshawk <i>Accipiter gentilis</i>	CSSC	North coast coniferous forest; Subalpine coniferous forest; Upper montane coniferous forest	Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Low potential to occur in forest habitats
American peregrine falcon <i>Falco peregrinus anatum</i>	FD/CD/CFP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Nest consists of a scrape or a depression or ledge in an open site.	Low potential to occur in grassland and forest habitats
Bank swallow <i>Riparia riparia</i>	CT	Riparian scrub; Riparian woodland	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	No potential to occur in Project Area; potential to occur in stream corridors in the vicinity
Tricolored blackbird <i>Agelaius tricolor</i>	CT/CSSC	Freshwater marsh; Marsh & swamp; Swamp; Wetland	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No potential to occur in Project Area; potential to occur in stream corridors in the vicinity
Yuma myotis <i>Myotis yumanensis</i>	CSSC	Lower montane coniferous forest; Riparian forest; Riparian woodland; Upper montane coniferous forest	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Moderate potential to occur in forest habitats
Silver-haired bat <i>Lasionycteris noctivagans</i>	CSSC	Lower montane coniferous forest; Old-growth; Riparian forest	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Moderate potential to occur in forest habitats
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSSC	Broadleaved upland forest; Chaparral; Chenopod scrub; Great Basin grassland; Great Basin scrub; Joshua tree woodland; Lower montane coniferous forest; Mojavean desert scrub; Meadow & seep; Riparian forest; Riparian woodland; Sonoran desert scrub; Sonoran desert scrub	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Moderate potential to occur in forest habitats
Pallid bat <i>Antrozous pallidus</i>	CSSC	Chaparral; Coastal scrub; Desert wash; Great Basin grassland; Great Basin scrub; Mojavean desert scrub; Riparian woodland; Sonoran desert	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate potential to occur in chaparral and forest habitats

**P23-0006 Hackomiller Parcel Map  
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Bio. Assessment

Common Name Scientific Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Areas
		scrub; Upper montane coniferous forest; Valley & foothill grassland		
North American porcupine <i>Erethizon dorsatum</i>	CSSC	Broadleaved upland forest; Closed-cone coniferous forest; Cismontane woodland; Lower montane coniferous forest; North coast coniferous forest; Upper montane coniferous forest	Wide variety of coniferous and mixed woodland habitat.	Low potential to occur in forest habitats
Fisher <i>Pekania pennanti</i>	CSSC	North coast coniferous forest; Old-growth; Riparian forest	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	No potential to occur because requisite forest habitats not present.
Northwestern pond turtle <i>Actinemys marmorata</i>	CSSC	Aquatic; Artificial flowing waters; Klamath/North coast flowing waters; Klamath/North coast standing waters; Marsh & swamp; South coast flowing waters; South coast standing waters; Sacramento/San Joaquin flowing waters; Sacramento/San Joaquin standing waters	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No potential to occur in Project Areas; potential to occur in streams or ponds in the vicinity
Graham's Cave amphipod <i>Stygobromus grahami</i>	CSSC	Aquatic	Found only in caves.	No potential to occur in Project Areas; no caves on property
Wawona riffle beetle <i>Atractelmis wawona</i>	CSSC	Aquatic	Strong preference for inhabiting submerged aquatic mosses	No potential to occur in Project Areas; potential to occur in streams in the vicinity
Western bumble bee <i>Bombus occidentalis</i>	CCE	Once common & widespread, species has declined precipitously from central Ca to southern B.C., perhaps from disease.	grasslands with floral resources	Low potential to occur in areas containing grasslands because known populations are isolated and not in the vicinity.
An andrenid bee <i>Andrena subapasta</i>	CSSC	Collects pollen primarily from <i>Arenaria californica</i> but also <i>Orthocarpus erianthus</i> & <i>Lasthenia</i> spp.	grasslands with floral resources	Low potential to occur in areas containing grasslands because known populations are isolated and not in the vicinity.
Cosumnes stripetail <i>Cosumnoperla hypocrena</i>	CSSC	Aquatic	Found in intermittent streams on western slope of central Sierra Nevada foothills in American and Cosumnes River basins.	No potential to occur in Project Areas.
<b>PLANTS</b>				
Layne's ragwort <i>Packera layneae</i>	FT/CR/1B.2	Chaparral; Cismontane woodland; Ultramafic	Ultramafic soil (serpentine or gabbro); occasionally along streams. 205-1060 m.	No potential to occur in Project Areas. Potential to occur in part of the Study Area containing metamorphic soils.
El Dorado County mule ears <i>Wyethia reticulata</i>	1B.2	Chaparral; Cismontane woodland; Lower montane coniferous forest; Ultramafic	Stony red clay and gabbroic soils; often in openings in gabbro chaparral. 120-630 m.	No potential to occur in Project Areas. Potential to occur in part of the Property containing metamorphic soils.
Van Zuuk's morning-glory <i>Calystegia vanzuukiae</i>	1B.3	Chaparral; Cismontane woodland; Ultramafic	Gabbro, serpentinite. 700-1160 m.	No potential to occur in Project Areas. Potential to occur in part of the Property containing metamorphic soils.
Oval-leaved viburnum <i>Viburnum ellipticum</i>	2B.3	Chaparral; Cismontane woodland; Lower montane coniferous forest	215-1400 m.	Low potential to occur in Project Areas. Botanical surveys did not detect it.
Nissenan manzanita <i>Arctostaphylos nissenana</i>	1B.2	Closed-cone coniferous forest; Chaparral	Usually on metamorphics, associated w/ other chaparral species. 485-1005 m.	No potential to occur in Project Areas. Occurs in another part of the Property.



**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Bio. Assessment

Common Name Scientific Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Areas
Brandegee's clarkia <i>Clarkia biloba ssp. brandegeae</i>	4.2	Chaparral; Cismontane woodland; Lower montane coniferous forest	Often in roadcuts. 75-915 m.	Low potential to occur in Project Areas. Botanical surveys did not detect it.
Parry's horkelia <i>Horkelia parryi</i>	1B.2	Chaparral; Cismontane woodland; lone formation	Openings in chaparral or woodland; especially known from the lone Formation in Amador County. 85-1115 m.	No potential to occur in Project Areas. lone formation not present.
Sierra arching sedge <i>Carex cyrtostachya</i>	1B.2	Lower montane coniferous forest; Meadow & seep; Marsh & swamp; Riparian forest	Mesic sites. 605-1390 m.	Low potential to occur in Project Areas. Botanical surveys did not detect it.
Brownish beaked-rush <i>Rhynchospora capitellata</i>	2B.2	Lower montane coniferous forest; Meadow & seep; Marsh & swamp; Upper montane coniferous forest; Wetland	Mesic sites. 45-1710 m.	Low potential to occur in Project Areas. Botanical surveys did not detect it.
Jepson's onion <i>Allium jepsonii</i>	1B.2	Chaparral; Cismontane woodland; Lower montane coniferous forest; Ultramafic	On serpentine soils in Sierra foothills, volcanic soil on table mtn. On slopes and flats; usually in an open area. 355-1130 m.	No potential to occur in Project Areas. Potential to occur in part of the Property containing metamorphic soils.
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	1B.2	Chaparral; Cismontane woodland; Lower montane coniferous forest; Ultramafic	Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites. 265-1695 m.	No potential to occur in Project Areas. Occurs in another part of the Property.
Butte County fritillary <i>Fritillaria eastwoodiae</i>	3.2	Chaparral; Cismontane woodland; Lower montane coniferous forest; Ultramafic	Usually on dry slopes but also found in wet places; soils can be serpentine, red clay, or sandy 4550-1475 m.	No potential to occur in Project Areas. Potential to occur in part of the Property containing metamorphic soils.

\*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CR = California rare species; CFP = California fully protected species; CNPS (California Native Plant Society) List 1A = Plants presumed extinct in California by CNPS; CNPS List 1B = CNPS designated rare or endangered plants in California and elsewhere; and CNPS List 2 = CNPS designated rare or endangered plants in California, but more common elsewhere. Global Ranking: G1 = Critically Imperiled; G2 = Imperiled; G3 = Vulnerable. State Ranking: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable.

\*\*Copied verbatim from CNDDB, unless otherwise noted.

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#### **4.3.2. Listed Species or Special-status Species Observed During Field Surveys**

During the botanical field surveys, no listed species or special-status species were detected within the 3 building envelopes.

Two special-status plant taxa were detected outside of the Project Areas in the Property on the northern border in the center (see Exhibits):

- **Nissenan manzanita (*Arctostaphylos nissenana*) (CNPR 1B.2):** Suitable habitat (soil derived from metamorphic rock) for Nissenan manzanita is not present in the center of the Property where it is mapped by CNDDDB. However, a thriving population of Nissenan manzanita was found on a metamorphic rock ridgetop at the middle of the northern edge of the Property by botanist Tim Nosal; the population extent on the Property is approximately 200 specimens in an area of approximately 1.5 acres (see Exhibits). This location is about 1 mile north of Foster Mountain, which is very similar to the type locality description. Suitable habitat for this species is not found within the rest of the Property.
- **Red Hills soaproot (*Chlorogalum grandiflorum*) (CNPR 1B.2):** Approximately 25 specimens occur in an area of chaparral approximately 1.4 acres in size (same area as for Nissenan manzanita; see Exhibits). Suitable habitat for this species is not found within the rest of the Property.

#### **4.3.3. Potential for Listed Species or Special-status Species to Occur on the Property**

##### **Nissenan manzanita**

During the botanical field surveys, Nissenan manzanita was detected on the Property on the northern border in the center (see Exhibits). This area of about 1.5 acres contains rocky soil derived from metamorphic rock; USDA has mapped this area roughly as the soil type "MmF: Metamorphic rock land." Suitable habitat (metamorphic soils such as slate) for Nissenan manzanita is not present on the Property where it is mapped by CNDDDB. However, a thriving population of Nissenan manzanita was found on a slate ridgetop at the middle of the northern edge of the Property by botanist Tim Nosal. This location is about 1 mile north of Foster Mountain, which is very similar to the type locality description. Suitable habitat for this species is not found within the Project Areas (the 3 building envelopes), and no manzanita of any species occur in the 3 building envelopes.

##### **Red Hills soaproot**

During the botanical field surveys, Red Hills soaproot was detected on the Property on the northern border in the center (same area as for Nissenan manzanita; see Exhibits). This area of about 1.5 acres contains rocky soil derived from metamorphic rock; USDA has mapped this area roughly as the soil type "MmF: Metamorphic rock land." Suitable habitat for this species is not found within the Project Areas (the 3 building envelopes)

##### **Other Special-status Plants**

The disturbed/developed and annual grassland habitats on the Property have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs and the disturbance regime. Several special-status plant species have a moderate potential to occur on the Property on the northern border in the center in a 1.5-acre area that contains rocky soil derived from metamorphic rock (see Table 1). Several special-status plant species have the potential to occur within the chaparral and forest habitats of the Property (see Table 1); the potential is considered low because several botanical surveys did not detect these species.

##### **Special-status Animals**

**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Bio. Assessment

Streams, and the wetland and pond, on the Property can attract diverse wildlife species. The unnamed intermittent channel could sustain aquatic special-status species. However, the Project Areas have no water resources; by County ordinance, Project Areas must be setback at least 25 feet from intermittent streams, wetland or sensitive riparian habitat.

Special-status animals have a low potential to occur in the disturbed/developed and annual grassland and habitats. However, several special-status animals have a potential to occur in the chaparral and forest habitats of the Property. Nesting habitat is also present.

#### **4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES**

The USFWS National Wetland Inventory reported no water features within the 3 building envelopes, but the Inventory did report the following water features within the surrounding Property (see Exhibits): 2 riverine features.

A preliminary assessment for the presence of potentially-jurisdictional water resources on the Property was also conducted during the field surveys. For purposes of this biological site assessment, non-wetland waters (i.e., channels) were classified using the California Forest Practice Rules. The California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source; a Class II watercourse is 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1,000 feet of a watercourse that seasonally or always has fish present; a Class III watercourse is a watercourse with no aquatic life present and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions.

The field surveys determined that the Project Areas (the 3 building envelopes) do not contain any channels or wetlands. The following water features were detected within the surrounding Property during the field surveys (see Exhibits):

- 1 unnamed intermittent channel (Class II watercourse)
- 1 spring (a mine adit has created a spring which feeds a short run of intermittent channel, which then percolates back into the ground)
- 5 unnamed ephemeral channels (Class III watercourse)
- 1 pond (on one of the ephemeral channels)
- 1 wetland associated with the unnamed intermittent channel

There are no vernal pools or other isolated wetlands on the Property.

## **5. IMPACT ANALYSES AND MITIGATION MEASURES**

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources on the Property, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

### **5.1. IMPACT SIGNIFICANCE CRITERIA**

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA, the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW
- 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
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

### **5.2. IMPACT ANALYSIS**

The following discussion evaluates the potential for Project-related activities to adversely affect biological resources. The Project boundaries were digitized and then overlaid on the habitat map using GIS to quantify potential impacts. Historical aerial photos were also analyzed for changes in land use.

#### **5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species**

- *Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

#### **Known Special-status Plant Populations**

During the botanical field surveys, two special-status plant species were detected on the Property on the northern border in the center: Nissenan manzanita and Red Hills soaproot. This area of about 1.5 acres contains rocky soil derived from metamorphic rock; USDA has mapped this area roughly as the soil type "MmF: Metamorphic rock land." This is the only area on the Property that is known to contain special-status plant populations. Development in this area is considered a significant impact.

#### **Other Special-status Plants**

**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**

Bio. Assessment

The disturbed/developed and annual grassland habitats on the Property have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs and the disturbance regime. Several special-status plant species have the potential to occur within the chaparral and forest habitats of the Property (see Table 1); the potential is considered low because several botanical surveys did not detect these species. Implementation of the Proposed Project would have a less than significant impact on these special-status plant species.

Several special-status plant species have a moderate potential to occur on the Property on the northern border in the center in a 1.5-acre area that contains rocky soil derived from metamorphic rock (see Table 1). Development in this area is considered a significant impact.

### **Animals**

Streams, and the wetland and pond, on the Property can attract diverse wildlife species. The unnamed intermittent channel could sustain aquatic special-status species. However, the Project Areas have no water resources; by County ordinance, Project Areas must be setback at least 25 feet from intermittent streams, wetland or sensitive riparian habitat. Thus, aquatic special-status species would not be directly impacted from project implementation.

Other special-status animals have a low potential to occur in the Project Areas. Nevertheless, if the land is developed in the future, such as construction of a new residence, ground disturbance and habitat conversion could impact listed animals or special-status animals because they could migrate into the building envelopes between the time that the field survey was completed and the start of construction. This is a potentially significant impact before mitigation.

Special-status bat species have a moderate potential to occur in the forest habitats within the Project Areas. If the land is developed in the future, such as construction of a new residence, ground disturbance and habitat conversion could impact bats if they are present. This is a potentially significant impact before mitigation.

Special-status bird species were reported in databases (CNDDDB and USFWS) in the vicinity of the Property. The building envelopes, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, new construction is considered a potentially significant adverse impact to nesting birds.

### **Recommended Mitigation Measures**

#### **Mitigation for Impacts to Known Special-status Plant Populations**

The 1.5-acre area containing Nissenan manzanita and Red Hills soaproot and metamorphic soil should be avoided and never developed. Populations should be demarcated with exclusion fencing and signage and a 50-foot development setback established.

#### **Special-status Animals**

Because special-status animal species that occur in the vicinity could migrate into the building envelopes between the time that the field survey was completed and the start of construction, a general pre-construction survey for special-status species should be performed by a qualified biologist to ensure that special-status species are not present. If any listed species are detected, construction should be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) should be consulted and project impacts and mitigation reassessed. Once the pre-construction survey has confirmed that there are no listed or special-status animals in the construction areas, wildlife exclusion fencing should be erected between construction areas and any stream or wetland.



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Before any forest habitat is removed, a pre-construction survey for roosting bats should be performed by a qualified biologist to ensure that roosting bats are not present.

If construction activities would occur during the nesting season (typically February through August), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site. With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

**5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors**

- *Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Property contains channels, one pond and one seasonal wetland, which are special-status habitats due to their potential to attract wildlife or harbor rare plants and because these resources are protected by multiple laws. The building envelopes have been setback at least 25 feet from intermittent channels and wetlands, and vegetated buffers exist in between. Thus, future development will not impact special-status aquatic habitats.

The only other sensitive habitat on the Property is on the northern border in the center in a 1.5-acre area that contains rocky soil derived from metamorphic rock; conservation measures were recommended in the previous section.

**Recommended Mitigation Measures**

Mitigation measures have been prescribed in Section 5.2.1 and Section 5.2.3.

**5.2.3. Potential Direct / Indirect Adverse Effects on Jurisdictional Water Resources**

- *Will the project 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?*

The Property contains channels, one pond and one seasonal wetland. By design, the 3 building envelopes do not contain any water resources. Potential direct impacts to water resources could occur during construction by modification or destruction of stream banks or riparian vegetation or the filling of wetlands or channels. However, the building envelopes have been setback at least 25 feet from intermittent channels and wetlands, and vegetated buffers exist in between. Thus, future development will not impact jurisdictional water resources.

Potential indirect impacts to water resources could occur during construction by increased erosion and sedimentation in receiving water bodies due to soil disturbance. This is a potentially significant impact before mitigation.

**Recommended Mitigation Measures**

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If future construction will disturb 1 or more acres of land, the landowner must enroll under the State Water Quality Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related indirect impacts to water quality to a less-than-significant level.

**5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.**

- *Will the project 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?*

Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDDB) exist within or near the Property, the open space and the stream corridors on the Property facilitate animal movement and migrations. Future land development would not have a significant impact on this movement because it would not block movement, and most of the open space on the Property would still be available, and because corridors will be created by the 25-foot setbacks from intermittent streams, wetland or sensitive riparian habitat. Thus, future land development is a less than significant impact upon wildlife movement. Implementation of future land development will not 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.

**Recommended Mitigation Measures**

No mitigation required.

**5.2.5. Potential Conflicts with Ordinances, Habitat Conservation Plans, etc.**

- *Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Future land development will likely require the removal of oak trees. The Property is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

**Recommended Mitigation Measures**

If land development occurs in the future, and mature trees need to be removed, various ordinances and laws must be addressed and permits obtained.

El Dorado County's Oak Conservation Ordinance requires mitigation for the removal of oak trees and oak woodlands. Protected trees include valley oak trees, valley oak woodlands, and Heritage Trees (live native oak tree with a single main trunk measuring 36 inches or greater, or with a multiple trunk with an aggregate trunk measuring 36 inches or greater). If protected trees are to be removed, an Oak Tree or Oak Woodland Removal Permit may be required. This requires preparation of an Oak Resources Technical Report and a code compliance certificate verifying that no protected oak trees have been impacted within two years prior to the permit application.

Mitigation is required for impacts to oak woodland as well as to individual trees. Impacts to oak woodlands are typically mitigated through in-lieu fee payment to the County's Oak Woodland Conservation Fund. Alternative mitigation may be used such as replacement planting or oak woodlands conservation (either on-site or off-site through fee title or conservation easement). Methods of mitigation can also be

**P23-0006 Hackomiller Parcel Map**  
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combined. Mitigation ratios depend on the percentage of woodlands impacted on a development site and range from 1:1 for impacts less than 50 percent and 2:1 for impacts over 75 percent.

Impacts to individual trees, including Heritage Trees, typically mitigated through in-lieu fee payment to the County's Oak Woodland Conservation Fund. The per inch of trunk diameter (at breast height) fee is calculated, with Heritage Trees requiring a 3:1 mitigation ratio. Alternative mitigation such as replacement planting may be identified (either on-site or off-site and protected through deed restriction or conservation easement).

If replacement plantings are used to mitigation, the plantings must follow the guidelines of the County's Oak Resources Management Plan, which specifies the planting ratios according to type (acorn, tree size) and maintenance requirements.

With the implementation of these mitigation measures, adverse impacts upon oak resources would be reduced to a less-than-significant level.

# **P23-0006 Hackomiller Parcel Map**

## **Exhibit I - Biological Resources Report**

Bio. Assessment

## **6. REFERENCES**

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## **EXHIBITS**



TENTATIVE PARCEL MAP

A PORTION OF SECTION 2 TOWNSHIP 11 NORTH , RANGE 10 EAST M.D.M  
BEING PARCEL 1 OF P.M. 49-70  
COUNTY OF EL DORADO , STATE OF CALIFORNIA

OWNER OF RECORD:

SEAN JACKSON  
5595 HACKOMILLER ROAD  
GARDEN VALLEY,CA 95633

NAME OF APPLICANT/AGENT :

THOMAS VAN NOORD  
PO BOX 584  
EL DORADO,CA. 95623

MAP PREPARED BY :

LOREN A. MASSARO P.L.S. 8117  
1922 HEATHER HILL ROAD  
PLACERVILLE,CA 95667

SCALE:

1"=300'

CONTOUR INTERVAL:

20' INTERPOLATED

SOURCE OF TOPOGRAPHY

USGS INTERPOLATED

ASSESSORS PARCEL NUMBER :

088-021-040

PRESENT ZONING :

PA 20

TOTAL AREA :

169.85 ACRES

TOTAL NUMBER OF PARCELS:

3 (THREE)

MINIMUM PARCEL AREA:

20.00 ACRES

WATER SUPPLY:

GEORGETOWN DIVIDE PUD / INDIVIDUAL WELLS

SEWAGE DISPOSAL:

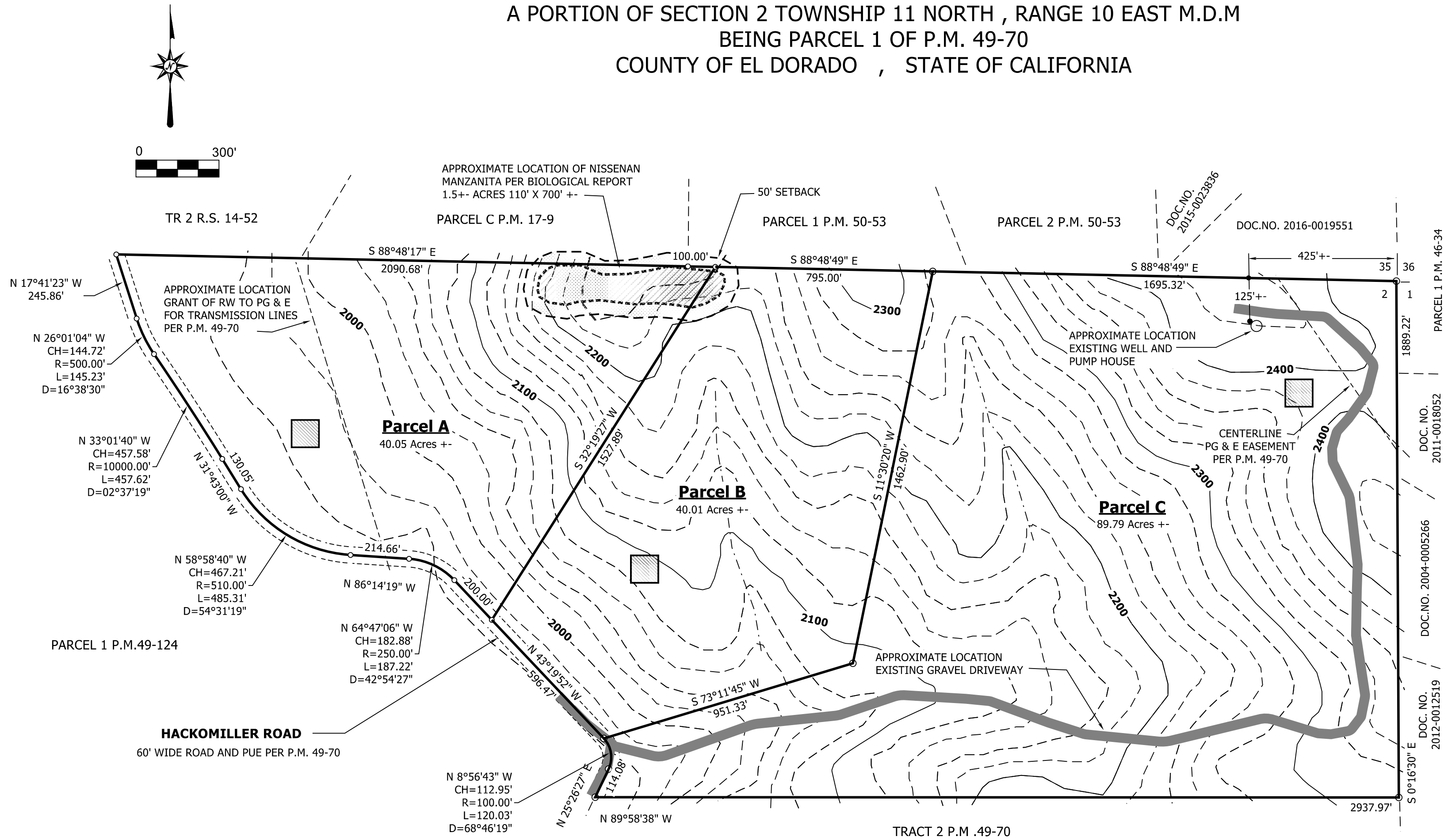
INDIVIDUAL SEPTIC SYSTEMS

PROPOSED STRUCTUAL FIRE PROTECTION:

GARDEN VALLEY FIRE PROTECTION DISTRICT

MAP PREPARED:

MARCH 01, 2025



LEGEND

P.M.----- PARCEL MAP  
PUE ----- PUBLIC UTILITY EASEMENT  
R.S. ----- RECORD OF SURVEY

----- APPROXIMATE LOCATION  
DRAINAGE COURSE  
DEVELOPEMENT SETBACKS  
PER EL DORADO COUNTY  
STANDARDS

----- PROPOSED SEPTIC DISPOSAL AREA  
10,000 SQ. FT. MIN.

----- APPROXIMATE LOCATION OF NISSENAN  
MANZANITA PER BIOLOGICAL REPORT

NOTE: INFORMATION SHOWN HEREON COMPILED FOM RECORD DATA

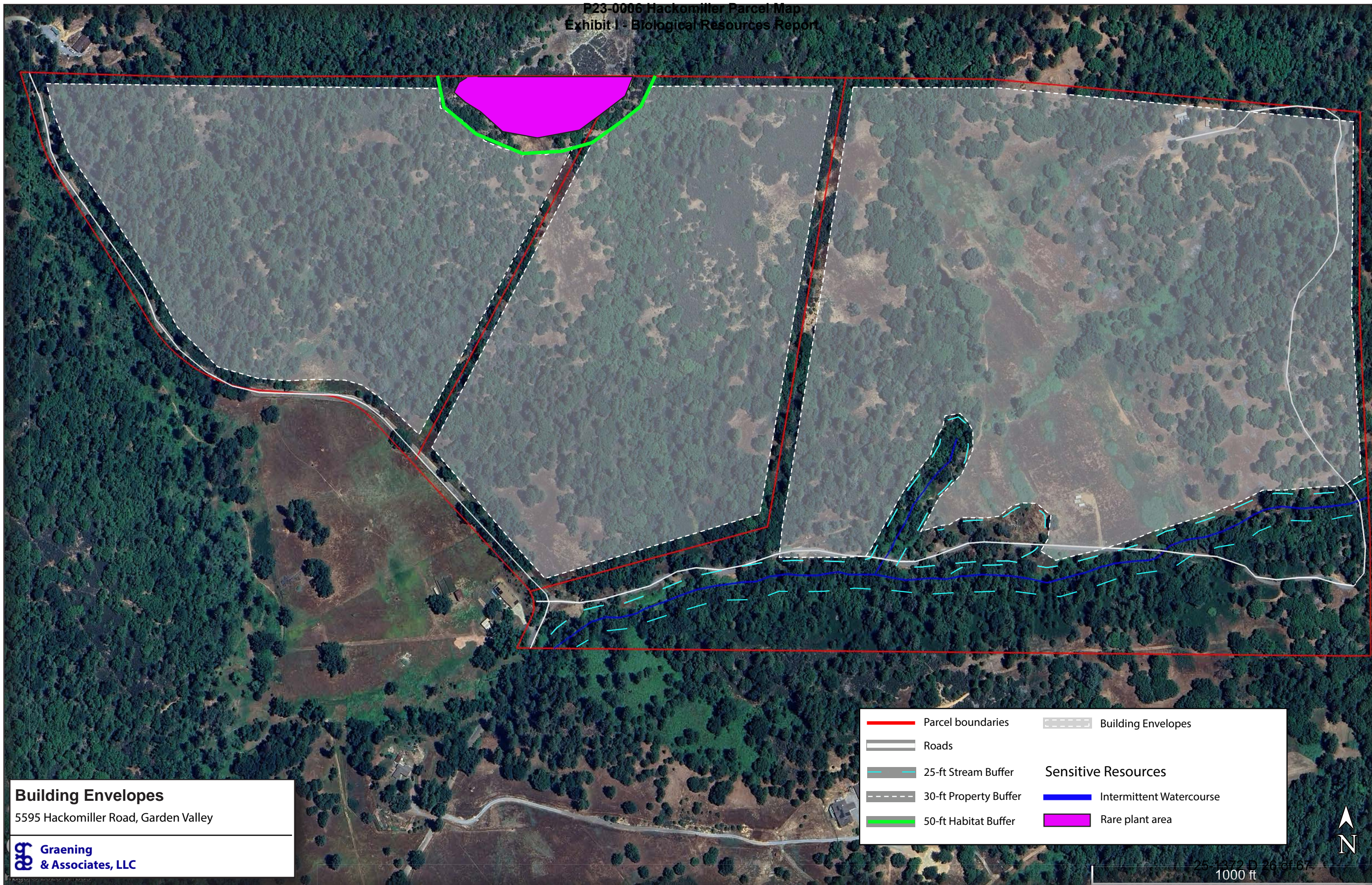
ZONING ADMINISTRATOR \_\_\_\_\_

APPROVAL/DENIAL DATE \_\_\_\_\_

BOARD OF SUPERVISORS \_\_\_\_\_

APPROVAL/DENIAL DATE \_\_\_\_\_





### Building Envelopes

5595 Hackomiller Road, Garden Valley

**Graening  
& Associates, LLC**

Parcel boundaries Building Envelopes

Roads

25-ft Stream Buffer

30-ft Property Buffer

50-ft Habitat Buffer

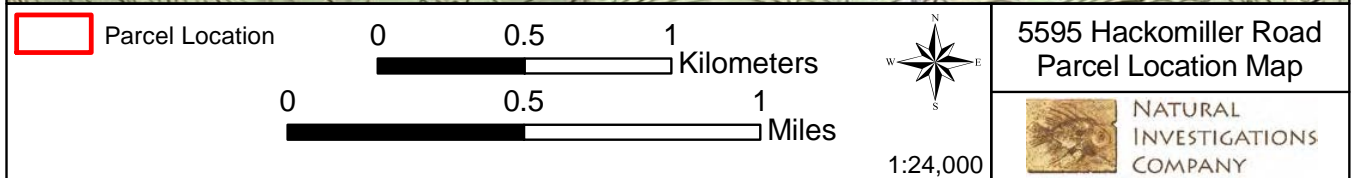
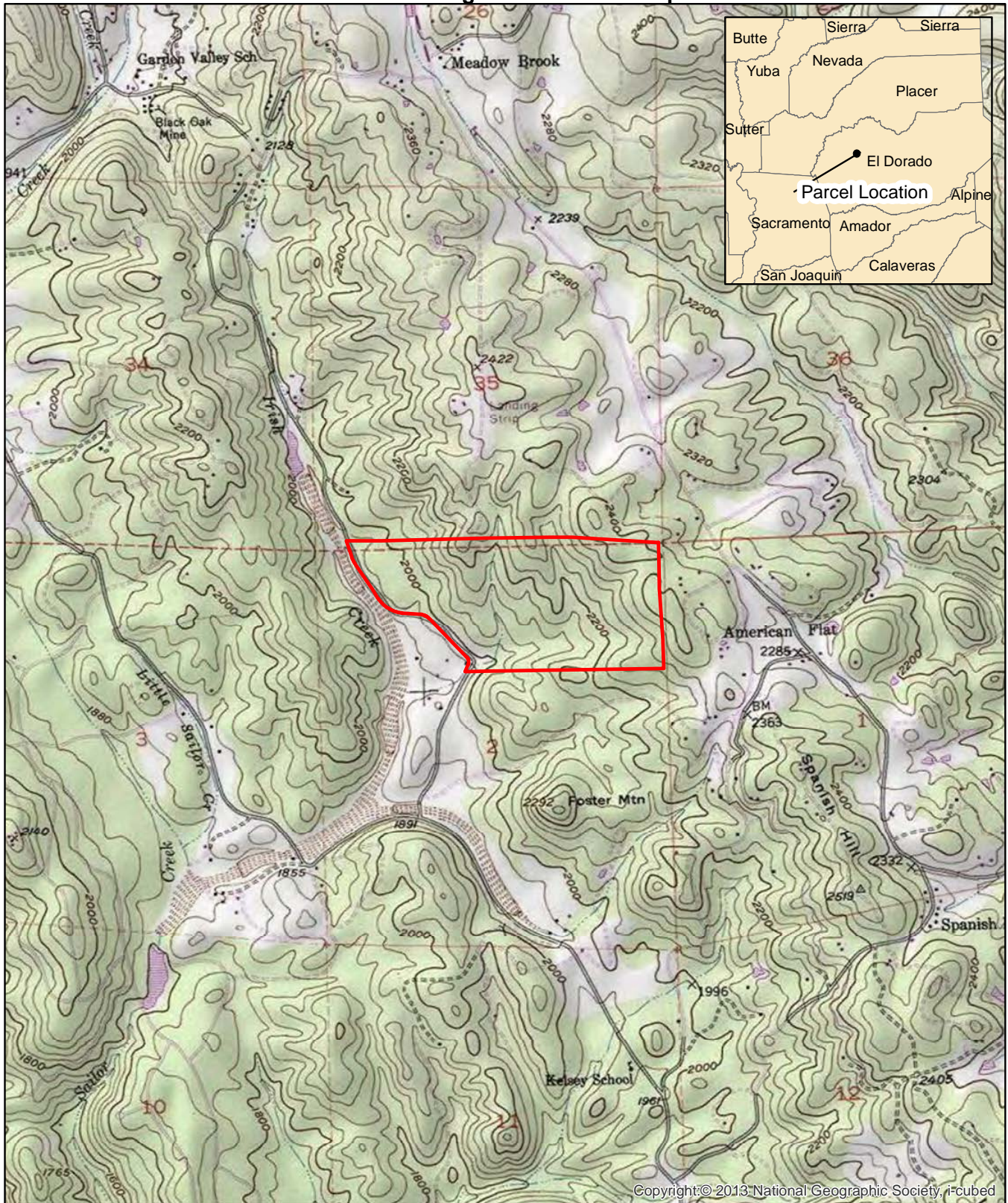
### Sensitive Resources

Intermittent Watercourse

Rare plant area



**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**



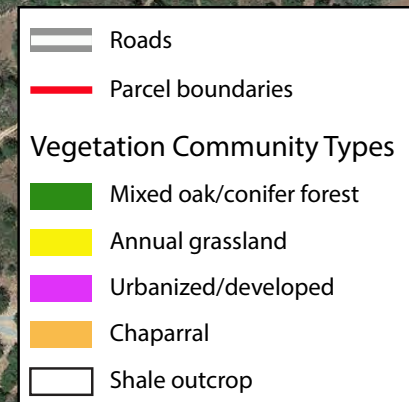


Arctostaphylos nissenana

### Terrestrial Vegetation Types

5595 Hackomiller Road, Garden Valley

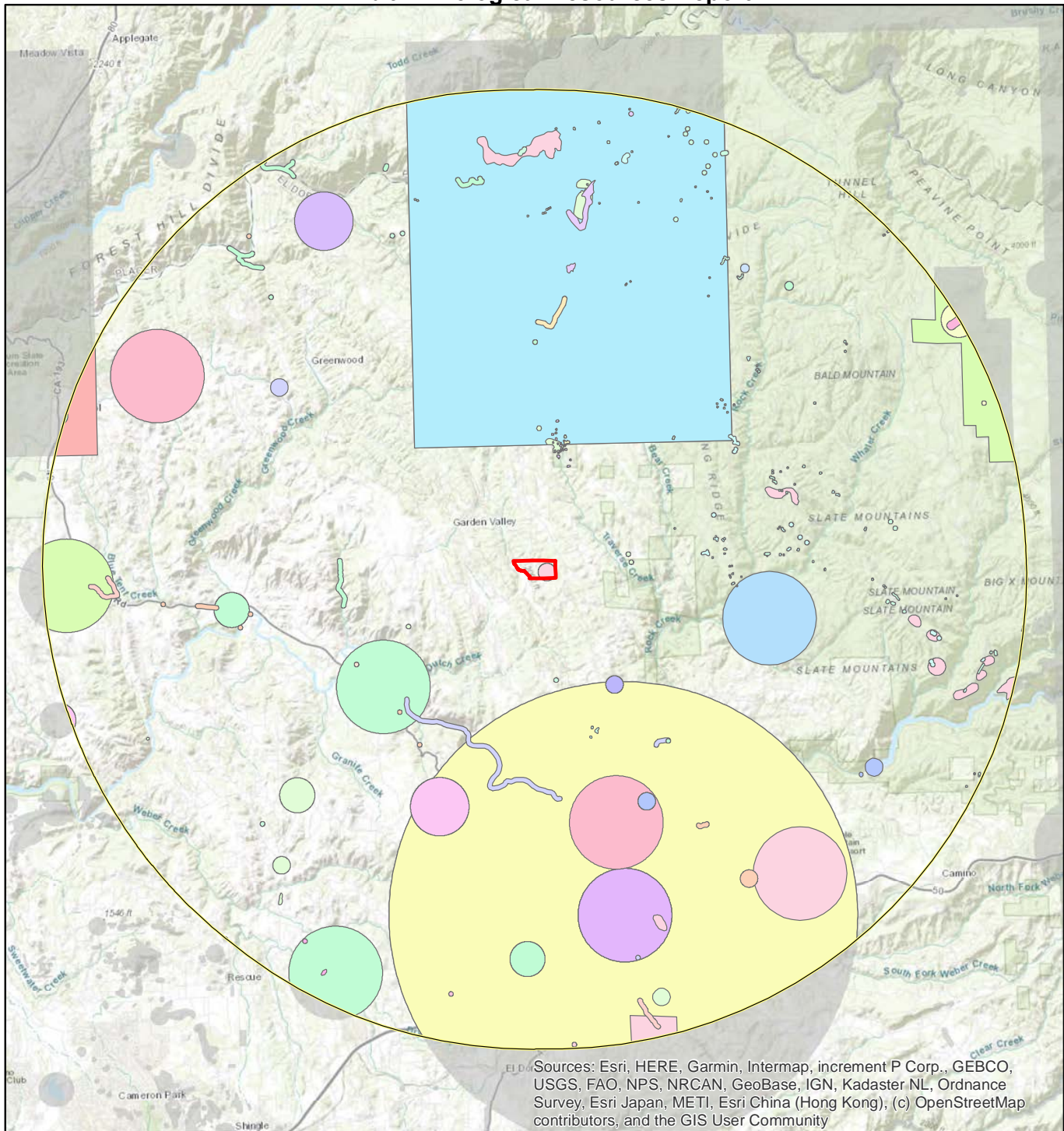
 **Graening  
& Associates, LLC**





# P23-0006 Hackomiller Parcel Map

## Exhibit I - Biological Resources Report



Data Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Parcel Location  10 Mile Buffer

1:190,000 1 inch = 3 miles

0 3 6 Miles



### Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. Natural Investigations Company can not guarantee the accuracy and content of electronic files. The master file is stored by Natural Investigations Company and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission. Data Sources: California Department of Fish and Wildlife. 2021. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)

### Special-Status Species Occurrences Map

5595 Hackomiller Road

Garden Valley 1949 Quadrangle Photorevised 1973: Township 11N, Range 10E, Section 02  
Garden Valley 1949 Quadrangle Photorevised 1973: Township 12N, Range 10E, Section 35



**NATURAL INVESTIGATIONS CO.**

WWW.NATURALINVESTIGATIONS.COM






Area containing  
*Chlorogalum grandiflorum*

Area containing  
*Arctostaphylos nissenana*

### Rare Plant Locations

5595 Hackomiller Road, Garden Valley

 **Graening  
& Associates, LLC**

 Roads  
 Parcel boundaries  
 Metamorphic rock outcrop

25-1372 D 30 of 67  
1000 ft

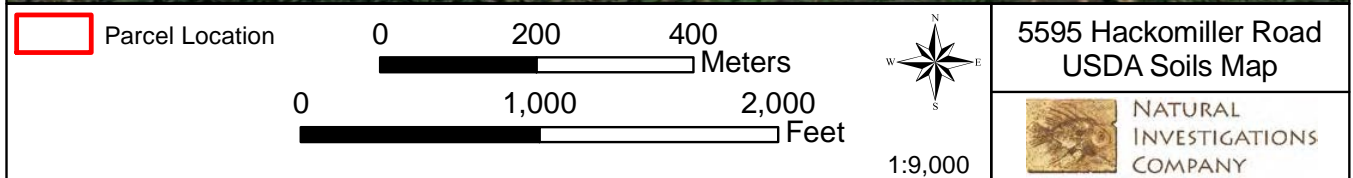




**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

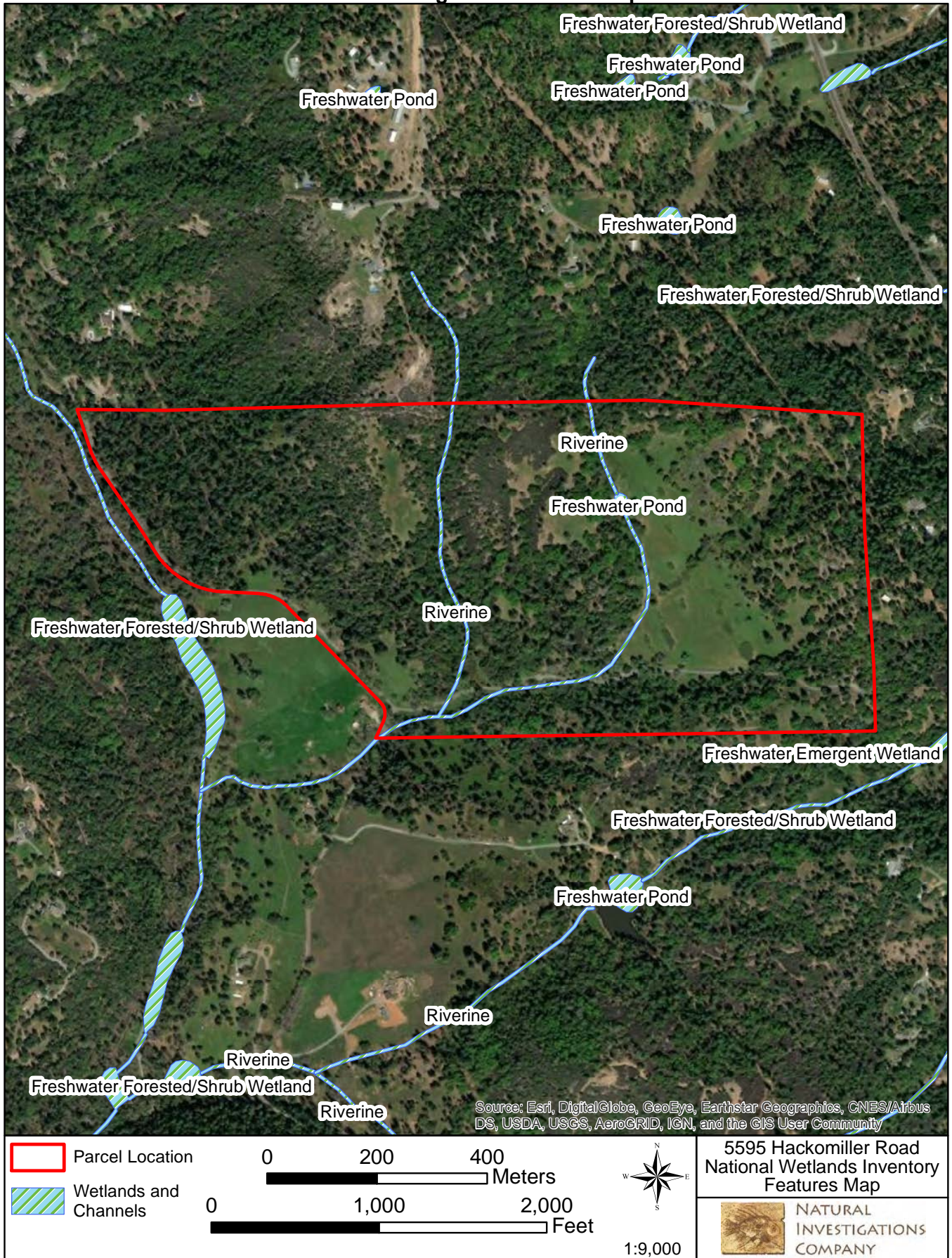


Map Date 10/7/2021

Garden Valley 1949 Quadrangle Photorevised 1973: Township 12N, Range 10E, Section 02  
 Garden Valley 1949 Quadrangle Photorevised 1973: Township 12N, Range 10E, Section 35



**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

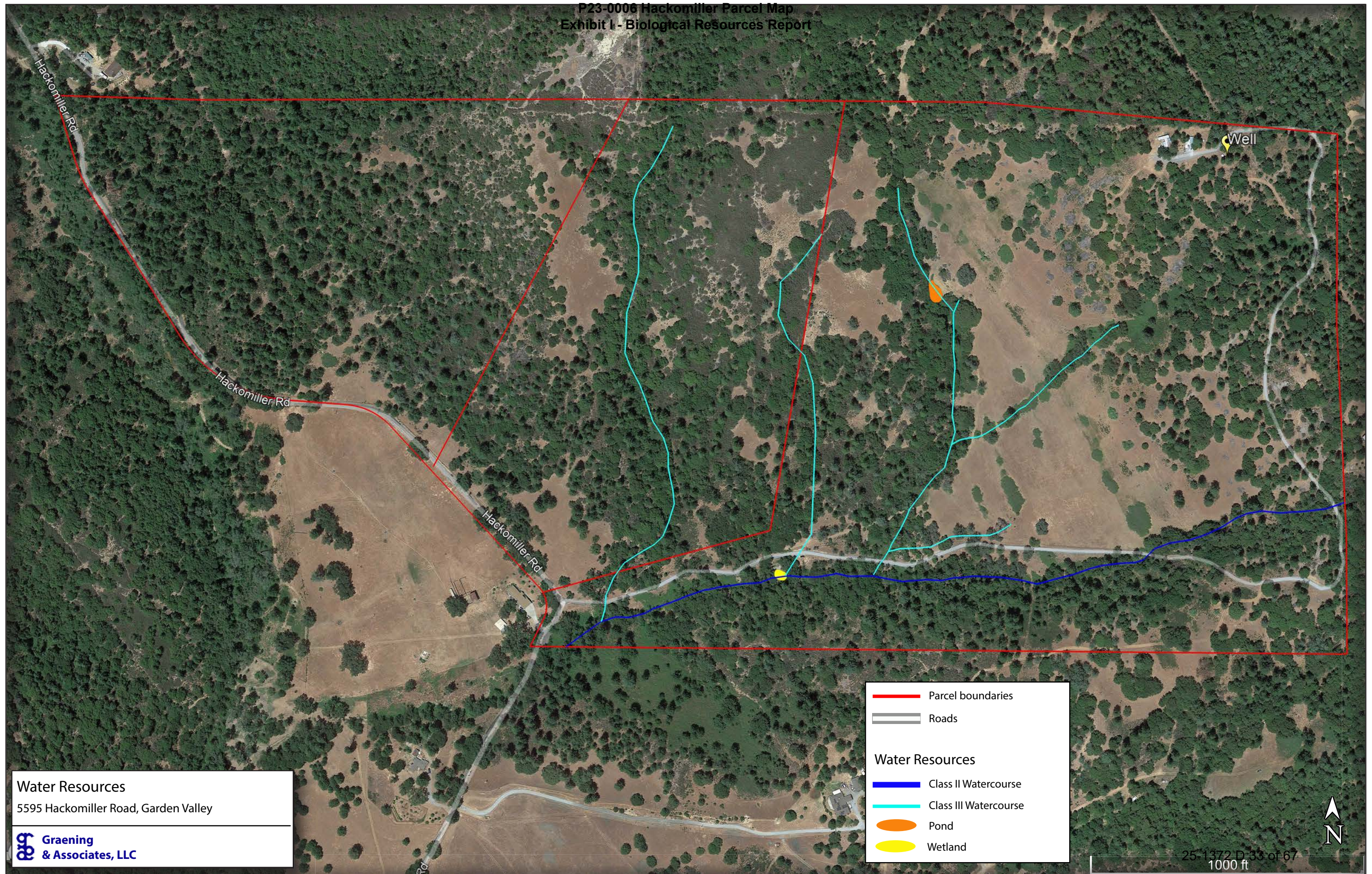


Map Date 10/7/2021

Garden Valley 1949 Quadrangle Photorevised 1973: Township 12N, Range 10E, Section 02  
 Garden Valley 1949 Quadrangle Photorevised 1973: Township 12N, Range 10E, Section 35



P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report



Water Resources  
5595 Hackomiller Road, Garden Valley

**Graening & Associates, LLC**



## **APPENDIX 1: USFWS SPECIES LIST**

**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**



**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:

11/06/2024 16:39:24 UTC

Project Code: 2025-0015728

Project Name: parcel subdivision and residential development

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 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 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))

**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Project code: 2025-0015728

11/06/2024 16:39:24 UTC

(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:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.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/program/migratory-bird-permit/what-we-do>.

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/library/collections/threats-birds>.

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/partner/council-conservation-migratory-birds>.

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.

**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Project code: 2025-0015728

11/06/2024 16:39:24 UTC

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



**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Project code: 2025-0015728

11/06/2024 16:39:24 UTC

## PROJECT SUMMARY

Project Code: 2025-0015728  
Project Name: parcel subdivision and residential development  
Project Type: Residential Construction  
Project Description: parcel subdivision and residential development  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.836661500000005,-120.82904528045482,14z>



Counties: El Dorado County, California

## **ENDANGERED SPECIES ACT SPECIES**

There is a total of 6 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<sup>1</sup>, 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.

**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Project code: 2025-0015728

11/06/2024 16:39:24 UTC

## **BIRDS**

NAME	STATUS
California Spotted Owl <i>Strix occidentalis occidentalis</i> Population: Sierra Nevada No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7266">https://ecos.fws.gov/ecp/species/7266</a>	Proposed Threatened

## **REPTILES**

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1111">https://ecos.fws.gov/ecp/species/1111</a>	Proposed Threatened

## **AMPHIBIANS**

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> Population: South Sierra Distinct Population Segment (South Sierra DPS) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5133">https://ecos.fws.gov/ecp/species/5133</a>	Endangered

## **INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## **FLOWERING PLANTS**

NAME	STATUS
Layne's Butterweed <i>Senecio layneae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4062">https://ecos.fws.gov/ecp/species/4062</a>	Threatened

## **CRITICAL HABITATS**

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**

Project code: 2025-0015728

11/06/2024 16:39:24 UTC

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: G.O. Graening  
Address: 343 Carpenter Hill Road  
City: Folsom  
State: CA  
Zip: 95630  
Email: ggraening@gmail.com  
Phone: 9164525442

## **APPENDIX 2: CHECKLIST OF PLANTS DETECTED ON THE PROPERTY**

**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**

**Appendix 2:**

Plants Observed at 5595 Hackomiller Road, Garden Valley on October 11, 2021

<b>Common Name</b>	<b>Scientific Name</b>
Spanish lotus	<i>Acmispon americanus</i>
Lotus	<i>Acmispon sp.</i>
Goatgrass	<i>Aegilops triuncialis</i>
California buckeye	<i>Aesculus californicus</i>
Bentgrass	<i>Agrostis sp.</i>
Silver hairgrass	<i>Aira caryophyllea</i>
Pearly everlasting	<i>Anaphalis margaritacea</i>
Nissenan manzanita	<i>Arctostaphylos nissenana</i> (CNPS 1B.2)
Whiteleaf manzanita	<i>Arctostaphylos viscida ssp. viscida</i>
California mugwort	<i>Artemisia douglasiana</i>
Slender wild oat	<i>Avena barbata</i>
Coyote brush	<i>Baccharis pilularis</i>
Brodiaea	<i>Brodiaea sp.</i>
Ripgut brome	<i>Bromus diandrus</i>
Soft chess	<i>Bromus hordeaceus</i>
Madrid brome	<i>Bromus madritensis</i>
Incense cedar	<i>Calocedrus decurrens</i>
Spiked western rosinweed	<i>Calycadenia spicata</i>
Italian thistle	<i>Carduus pycnocephalus</i>
Owl's clover	<i>Castilleja sp.</i>
Wedge leaf ceanothus	<i>Ceanothus cuneatus</i>
Yellow star thistle	<i>Centaurea solstitialis</i>
Fitch's spikeweed	<i>Centromadia fitchii</i>
Wavy leaf soap plant	<i>Chlorogalum pomeridianum</i>
Soap plant	<i>Chlorogalum sp.</i>
Skeleton weed	<i>Chondrilla juncea</i>
Bull thistle	<i>Cirsium vulgare</i>
Clarkia	<i>Clarkia sp.</i>
Field bindweed	<i>Convolvulus arvensis</i>
Mountain dogwood	<i>Cornus nuttallii</i>
Dove weed	<i>Croton setiger</i>
Bermuda grass	<i>Cynodon dactylon</i>
Dogtail grass	<i>Cynosurus echinatus</i>
Tall flatsedge	<i>Cyperus eragrostis</i>
Scotch broom	<i>Cytisus scoparius</i>
Orchard grass	<i>Dactylis glomerata</i>
Bush poppy	<i>Dendromecon rigida</i>
Wild hyacinth	<i>Dichelostemma sp.</i>
Medusa-head grass	<i>Elymus caput-medusae</i>
Blue wildrye	<i>Elymus glaucus</i>
Yerba santa	<i>Eriodictyon californicum</i>

**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**

<b>Common Name</b>	<b>Scientific Name</b>
Filaree	<i>Erodium sp.</i>
Yellow monkeyflower	<i>Erythranthe guttata</i>
Brome fescue	<i>Festuca bromoides</i>
Rattail sixweeks grass	<i>Festuca myuros</i>
Hoary coffeeberry	<i>Frangula tomentosa</i>
Bedstraw	<i>Galium sp.</i>
Nit grass	<i>Gastridium phleoides</i>
Great Valley gumplant	<i>Grindelia camporum</i>
Toyon	<i>Heteromeles arbutifolia</i>
Leather root	<i>Hoita macrostachya</i>
Wand tarplant	<i>Holocarpha virgata</i>
Mediterranean barley	<i>Hordeum marinum ssp. gussoneanum</i>
Wall barley	<i>Hordeum murinum</i>
Goldwire	<i>Hypericum concinnum</i>
Klamath weed	<i>Hypericum perforatum</i>
Northern California black walnut	<i>Juglans hindsii</i>
Baltic rush	<i>Juncus balticus</i>
Rush	<i>Juncus sp.</i>
Prickly lettuce	<i>Lactuca serriola</i>
Flax	<i>Linum sp.</i>
Pink honeysuckle	<i>Lonicera hispidula</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Lupine	<i>Lupinus sp.</i>
Tarplant	<i>Madia sp.</i>
Knotgrass	<i>Paspalum distichum</i>
Knotweed	<i>Persicaria sp.</i>
American mistletoe	<i>Phoradendron leucarpum</i>
Sugar pine	<i>Pinus lambertiana</i>
Ponderosa pine	<i>Pinus ponderosa</i>
Gray pine	<i>Pinus sabiniana</i>
Dwarf plantain	<i>Plantago erecta</i>
English plantain	<i>Plantago lanceolata</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
Bracken	<i>Pteridium aquilinum</i>
Canyon live oak	<i>Quercus chrysolepis</i>
Blue oak	<i>Quercus douglasii</i>
California black oak	<i>Quercus kelloggii</i>
Valley oak	<i>Quercus lobata</i>
Oracle oak	<i>Quercus x morehus</i>
California rose	<i>Rosa californica</i>
Himalayan blackberry	<i>Rubus armeniacus</i>
Cutleaf blackberry	<i>Rubus laciniatus</i>
California blackberry	<i>Rubus ursinus</i>
Sheep sorrel	<i>Rumex acetosella</i>



**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**

<b>Common Name</b>	<b>Scientific Name</b>
Fiddleleaf dock	<i>Rumex pulcher</i>
Dock	<i>Rumex sp.</i>
Red willow	<i>Salix laevigata</i>
Arroyo willow	<i>Salix lasiolepis</i>
Blue elderberry	<i>Sambucus nigra ssp. caerulea</i>
Sanicle	<i>Sanicula sp.</i>
Purple needlegrass	<i>Stipa pulchra</i>
Needlegrass	<i>Stipa sp.</i>
Tall sock-destroyer	<i>Torilis arvensis</i>
Poison-oak	<i>Toxicodendron diversilobum</i>
Clover	<i>Trifolium sp.</i>
Broad leaf cattail	<i>Typha latifolia</i>
Common mullein	<i>Verbascum thapsus</i>
Spring vetch	<i>Vicia sativa</i>
Winter vetch	<i>Vicia villosa</i>
Narrow leaf mule ears	<i>Wyethia angustifolia</i>

## **APPENDIX 3: SITE PHOTOS**



**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**





**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**





**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**





**P23-0006 Hackomiller Parcel Map**  
**Exhibit 1 - Biological Resources Report**





**P23-0006 Hackomiller Parcel Map**  
**Exhibit I - Biological Resources Report**





**P23-0006 Hackomiller Parcel Map  
Exhibit I - Biological Resources Report**



**P23-0006 Hackomiller Parcel Map**  
**Exhibit J - Mitigation Monitoring and Reporting Program**

Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring				Verification		
	Implementing Party	Type of Monitoring Action	Timing Requirements	Monitoring/ Verification Entity	Signature	Date	Comments
<b>Agriculture and Forest Resources</b>							
<b>Mitigation Measure 3.2-1: Oak Resources Protection.</b> The following shall be incorporated on any grading or building permit plans. Future development at the Project site shall implement the following measures to comply with the County's ORMP: <ul style="list-style-type: none"> <li>▶ Future development at the Project site shall avoid impacts to protected oak resources as much as possible.</li> <li>▶ If avoidance is not possible, prior to future tree removal at the Project site, an Oak Resources Technical Report shall be developed by a qualified biologist that maps and quantifies unavoidable impacts to the County's three classes of protected oak resources—oak woodlands, individual native oak trees, and heritage trees. Depending on the impact, an Oak Tree Removal Permit or Oak Woodland Removal Permit shall be obtained from the County.</li> <li>▶ The applicant shall compensate for loss of protected oak trees and oak woodlands through any combination of in-lieu fees, conservation, and/or replanting, as required under the ORMP, to the satisfaction of the El Dorado County Planning and Building Department.</li> </ul>	Property owner or designee (e.g., contractor)	Oak technical report, Administrative Permit, and fees provided to El Dorado County Planning Division	Prior to issuance of grading permit, prior to issuance of building permit	El Dorado County Planning Division			

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<b>Biological Resources</b>							
<b>MM-3.4-1: Special-Status Plant Protection.</b> The following shall be incorporated on any grading or building permit plans. Prior to future development at the Project site, the following measures shall be implemented to protect special-status plants: <ul style="list-style-type: none"> <li>▶ The chaparral area containing the Nissenan manzanita, which also contains the Red Hills soaproot, shall be avoided by at least 50 feet. The boundary of the 50-foot buffer shall be demarcated with high visibility fencing with a minimum 4-foot-tall metal fence posts (such as t-posts) and all-weather signage posted on the fence that states "Rare Plant Nondisturbance Area" every 150 feet or less.</li> <li>▶ Prior to any vegetation clearing, ground disturbing, or construction activities within the Project site within chaparral habitat that is outside of the above-noted fenced area containing the Nissenan manzanita and Red Hills soaproot, a qualified botanist shall implement protocol-level botanical surveys during the blooming period for the special-status plants with potential to occur in the Project site. The survey shall be conducted during the blooming/identification period closest to the initiation of proposed vegetation clearing or ground disturbance.</li> </ul>	Property owner or designee	Site visit to ensure fencing is installed; rare plant survey(s), monitoring, and report(s) provided to El Dorado County Planning Division	Prior to issuance of grading permit, prior to issuance of building permit	El Dorado County Planning Division			

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<ul style="list-style-type: none"> <li>▶ Surveys shall follow methods from CDFW's <i>Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities</i> (CDFW 2018 or most recent version). The qualified botanist shall (1) be knowledgeable about plant taxonomy; (2) be familiar with plants of the Project region, including special-status plants and sensitive natural communities; (3) have experience conducting floristic botanical field surveys as described in CDFW's protocol document; (4) be familiar with the California Manual of Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>); and (5) be familiar with federal and state statutes and regulations related to plants and plant collecting.</li> <li>▶ If no special-status plants are found, the botanist shall document the findings in a report to the applicant and El Dorado County, and no additional measures are required prior to proposed activities.</li> <li>▶ If activities last for more than one year, the botanical surveys described above shall be repeated during the blooming period in subsequent years prior to additional vegetation clearing or ground disturbing activities.</li> </ul>							

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<ul style="list-style-type: none"> <li>▶ If special-status plants are found, the botanist shall clearly mark, map, and record their locations. A no-disturbance buffer shall be established surrounding these locations, consisting of high visibility fencing with a minimum 4-foot-tall metal fence posts (such as t-posts). Fencing shall be maintained in place throughout the entirety of all ground disturbance or vegetation removal activities to ensure that the special-status plants are protected from equipment and vehicles, construction personnel, digging, trenching, placement of fill, storage of equipment or materials, and all other activities. All personnel involved in ground disturbance or vegetation removal work shall be informed of the requirement to avoid no-disturbance areas and shall be required to sign an acknowledgement that they have received these instructions and agree to adhere to all mitigation measures.</li> <li>▶ If special-status plant species are found that cannot be avoided, appropriate mitigation shall be implemented and shall depend on the species and its protection status.</li> <li>▶ For unavoidable impacts to special-status plants that are not listed under the federal ESA or CESA, various methods may be used to minimize or compensate for impacts on these species. Depending on the biology of the species affected</li> </ul>							

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<p>and the potential for transplanting and reseeding, establishing populations through seed collection or transplantation from the site that is to be affected may be implemented. Seeding or transplanting may be used to create new plant populations, or to enhance or expand existing populations. This work may be done in coordination with California Native Plant Society. Potential mitigation sites could include suitable locations within or outside the project site. Mitigation could include, or consist of, expanding the affected population on the project site if only a portion of the population is to be removed and suitable habitat is available or can be created to expand the extent of the affected population into a new area. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value of the new population and habitat.</p> <p>► If an affected plant species is protected under the federal ESA or CESA, coordination/consultation with USFWS and/or CDFW will be required. A site-specific mitigation strategy to compensate for loss of occupied habitat and individuals, consistent with the requirements of the federal ESA or CESA, will need to be developed and implemented. Actions to compensate for take of the federal ESA or CESA protected species may include preserving and enhancing existing populations and creation</p>							

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<p>of new populations. Elements of the mitigation approach and success criteria required by USFWS or CDFW may include, but would not be limited to:</p> <ul style="list-style-type: none"> <li>► Identification of appropriate mitigation ratios for enhancement, expansion, and creation of target plant populations to fully compensate for direct loss of affected plant populations as well as temporal losses of functions and values.</li> <li>► Number and/or density of target plant individuals in the mitigation area.</li> <li>► A requirement that compensatory and preserved populations shall be self-producing. Populations would be considered self-producing when plants reestablish annually for a set number of years with no human intervention, such as supplemental seeding.</li> <li>► If mitigation includes dedication of conservation easements, identifying responsible parties for long-term management, conservation easement holders, long-term management requirements, and funding sources as determined appropriate by the regulatory agency(ies).</li> </ul>							

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<p>► Documentation of surveys, completion of the mitigation strategy, and coordination/consultation process with USFWS or CDFW shall be provided to El Dorado County before commencement of any project activities that could adversely affect the protected plant species. Prior to any ground-disturbing or vegetation-removal activities, a Worker Environmental Awareness Training (WEAT) shall be prepared and administered to the construction crews. The WEAT will include the following: discussion of the state and federal Endangered Species Act, the Clean Water Act, the Project's permits and CEQA documentation, and associated mitigation measures; consequences and penalties for violation or noncompliance with these laws and regulations; identification of special-status wildlife that may be encountered on the project site; location of any avoidance, exclusion, or buffer areas; material to watch for that may indicate the presence of subsurface cultural resources; hazardous substance spill prevention and containment measures; and the contact person in the event of the discovery of a special-status wildlife species or potential cultural resources. A handout summarizing the WEAT information shall be provided to workers to keep on-site for future reference. Upon completion of the WEAT training, workers will sign a form stating that they attended the training,</p>							



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understand the information presented and will comply with the regulations discussed.							
<b>MM-3.4-2: Nesting Bird and Raptor Protection.</b> The following shall be incorporated on any grading or building permit plans. Future development at the Project site shall implement the following measures to protect nesting birds and raptors: <ul style="list-style-type: none"> <li>▶ To minimize impacts to special-status bird species, raptors, and other native birds, potential future development activities (e.g., tree removal, vegetation clearing, ground disturbance, staging, construction of off-site improvements) shall be conducted during the nonbreeding season (approximately September 1 through January 31, as determined by a qualified biologist), when feasible. If project activities are conducted during the nonbreeding season, no further mitigation is required prior to the proposed activity.</li> <li>▶ If development activities must commence during the avian nesting season (between February 1 and August 31), within 7 days prior to commencement of work, a qualified biologist familiar with birds of California and with experience conducting nesting bird surveys shall conduct focused surveys for special-status birds, nesting raptors, and other native birds. Surveys shall be conducted in publicly accessible areas within 0.5 miles of the</li> </ul>	Property owner or designee	Preconstruction nest survey(s) and report(s) provided to El Dorado County Planning Division	Prior to issuance of grading permit, prior to issuance of building permit	El Dorado County Planning Division			

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<p>development activity area for golden eagle, 0.25 miles of the development activity area for white-tailed kite, 500 feet of the development activity area for other raptor species and special-status birds, and 50 feet of the development activity area for non-raptor common native bird nests.</p> <ul style="list-style-type: none"> <li>▶ If no active bird nests are found, the qualified biologist shall submit a report documenting the survey methods and results to the applicant and El Dorado County, and work may proceed. If at any time during the nesting season there is a lapse of two weeks or more with no work, a new survey for nesting birds shall be completed before work proceeds.</li> <li>▶ If an active bird nest is found, a no-disturbance buffer shall be established around the nest site until the breeding season has ended or a qualified biologist has determined that the young have fledged or the nest is no longer active.</li> <li>▶ The size of the no-disturbance buffer shall be determined by the biologist, based on the sensitivity of the bird species, nesting chronology of the species, disturbance characteristics (type, extent, visibility, duration, and timing), existing ambient conditions, and other factors (e.g., screening from existing structures, vegetation, or topography), as determined by the biologist. Buffers typically shall be 0.5 miles for golden</li> </ul>							

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<p>eagle, 0.25 miles for white-tailed kite, 500 feet for other raptors, 100 feet for non-raptor special-status bird species, and at least 20 feet for common non-raptor bird species. The size of the buffer may be adjusted if a qualified biologist determines that such an adjustment shall be unlikely to adversely affect the nest. Any buffer reduction for a special-status bird species shall require coordination with CDFW.</p> <ul style="list-style-type: none"> <li>▶ Daily monitoring of the nest by a qualified biologist during activities shall be required if the activity has potential to adversely affect the nest as determined by the qualified biologist, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.</li> <li>▶ Documentation of compliance with this mitigation measure and any required coordination with CDFW shall be provided to El Dorado County before commencement of any project construction activities.</li> </ul>							
<p><b>MM-3.4-3: Bat Protection</b></p> <p>The following shall be incorporated on any grading or building permit plans. Future development at the</p>	Property owner or designee	Preconstruction bat survey(s) and report(s) provided to El Dorado County	Prior to issuance of grading permit, prior to	El Dorado County Planning Division			

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<p>Project site must implement the following measures to protect bats:</p> <ul style="list-style-type: none"> <li>▶ Within 14 days before any tree removal, a qualified biologist familiar with bats and bat ecology, and experienced in conducting bat surveys, shall conduct surveys for bat roosts in suitable habitat (e.g., large trees, crevices, cavities, exfoliating bark, foliage, buildings) within 250 feet of the tree(s) to be removed.</li> <li>▶ If no evidence of bat roosts is found, the qualified biologist shall submit a report summarizing the results of the survey to the applicant and El Dorado County, and no further study shall be required.</li> <li>▶ If evidence of bat maternity roosts or hibernacula is observed, the species and number of bats using the roost shall be determined by a qualified biologist using noninvasive methods. Bat detectors (i.e., acoustic monitoring) or evening emergence surveys shall be used if deemed necessary to supplement survey efforts by the qualified biologist.</li> <li>▶ A no-disturbance buffer of 250 feet shall be established by the qualified biologist around active maternity roosts or hibernacula of pallid bat, as well as maternity roosts (i.e., considered to be a wildlife nursery) or winter hibernacula of other bat species that contain a substantial</li> </ul>		Planning Division	issuance of building permit				

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<p>number of bats (i.e., more than a few roosting bats that would leave on their own during the day). Project activities shall not occur within this buffer until after the roosts no longer support juvenile bats or hibernating bats as determined by a qualified biologist.</p> <p>► If roosts of pallid bat are determined to be present and must be removed, the bats shall be excluded from the roosting site before the tree is removed. A program addressing compensation, exclusion methods, and roost removal procedures shall be developed in coordination with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) resulting from the project shall be replaced in coordination with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during coordination with CDFW, replacement roosts shall be implemented before bats are excluded from the original roost</p>							



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<p>sites. After the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site by a qualified biologist, the roost tree or building may be removed. For roost trees, a two-step tree removal process supervised by a qualified biologist shall be implemented, including removal of all branches that do not provide roosting habitat on the first day, and removal of the remaining portion of the tree on the following day. For trees used as maternity roosts or hibernacula by non-special status bat species, the trees may be removed either when a qualified biologist determines that bats are no longer present, or using the exclusion and removal method described above for pallid bat if bats are using the tree for a daytime roost, but it is no longer functioning as a maternity roost or hibernacula. Coordination with CDFW and compensatory measures, such as installation of bat boxes, will not be required for non-special status bat species.</p> <p>► Documentation of compliance with this mitigation measure shall be provided to El Dorado County before commencement of any tree removal activities.</p>							

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<b>Mitigation Measure 3.4-4: Aquatic Resources Protection.</b> The following shall be incorporated on any grading or building permit plans. Future development at the Project site must implement the following measures to protect aquatic resources: <ul style="list-style-type: none"> <li>▶ If ground disturbance is proposed within 25 feet of the bank of the intermittent channels on-site, at a minimum, any portion of the stream within 25 feet of the disturbance footprint shall be delineated and evaluated by a qualified biologist for jurisdiction as a water or wetland of the United States and/or water of the state. The delineation shall follow the US Army Corps of Engineers (USACE) methods current at the time.</li> <li>▶ If the aquatic feature is determined to be jurisdictional, all applicable permits shall be obtained prior to any disturbance of the feature(s). All permit requirements shall be adhered to, including any potential compensatory mitigation that may be required.</li> <li>▶ Authorization for dredge or fill of waters of the United States shall be secured from USACE and the regional water quality control board (RWQCB) through the permitting processes for Clean Water Act Sections 401 and 404. In association with Section 404, Section 401 Water Quality Certification from the Central Valley RWQCB shall</li> </ul>	Property owner or designee	Wetland delineations and copies of applicable agreements and permits provided to El Dorado County Planning Division	Prior to issuance of building permit, prior to issuance of grading permit	El Dorado County Planning Division			

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<p>be obtained. For impacts on waters of the state that are not also waters of the United States and are therefore not covered by the 401 Water Quality Certification, the applicant shall apply to the RWQCB for Waste Discharge Requirements. Any waters of the United States or waters of the state that are affected by the project shall be replaced on a no-net-loss basis in accordance with the applicable USACE and RWQCB permit requirements.</p> <p>► Before commencing activity that may divert the natural flow or otherwise alter the bed or bank of any lake or stream on the Project site (i.e., the intermittent channels, ephemeral channels, and any associated water bodies), the applicant shall notify CDFW, through issuance of a Lake and Streambed Alteration Notification (notification). If CDFW determines, based on the notification, that project activities trigger the need for a Lake and Streambed Alteration Agreement, the project applicant shall obtain an agreement from CDFW before the activity commences. The applicant shall conduct activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect fish and wildlife resources, when working within the bed or bank of waterways or in riparian habitats associated with those waterways.</p>							