SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.
6355 Riverside Blvd., Suite C, Sacramento, CA 95831
916/ 427-0703 www.sycamoreenv.com

20 April 2017

Mr. Jim Davies
854 Diablo Road
Danville, CA 94526

Phone: (925) 984-1222

Subject: Biological Review of Revised Design for the Piedmont Oak Project, El Dorado County, CA.

Dear Mr. Davies:

Sycamore Environmental prepared a biological update letter for the project dated 26 July 2016. Since that time, there have been minor design changes. I reviewed the updated project design dated March 2017 prepared by Lebeck Young Engineering, Inc. The purpose of the review was to determine if any of the design changes would affect any of the conclusions in the July 2016 biological update letter.

Most of the biological impacts, including oak impacts, occur as a result of project grading, and are dependent on the project's grading footprint. The only location where there are substantive changes to the grading footprint is on lots 25–40, along the southeast boundary of the project. Lots 25–40 have been moved so that they are 30 feet away from the project boundary. There is little oak canopy in the vicinity of the lots and it is along the project boundary. As a result, the grading is now farther away from the canopy near lots 25–40.

Near the northeastern project boundary, seven lots have been removed and an eighth has been realigned. There is no oak canopy on any of the lots and so the changes do not affect project impacts to oak canopy. As a result, the current design's impacts to oak canopy are the same as the July 2016 letter. The project site contains 8.21 acres of oak canopy and the project's oak canopy retention standard is 85% per General Plan policy 7.4.4.4. The project grading footprint will remove 1.15 acres of oak canopy and retain 7.06 acres. The project's oak canopy retention rate of 86% (7.06/8.21) meets the retention standard.

None of the design changes affect the proposed mitigation measure for nesting birds. We appreciate the opportunity of assisting you with this project. If you have any questions, please contact me.

Cordially,

Chuck Hughes, M.S.
Senior Biologist

ATTACHMENTS 10 and 11

SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.
6355 Riverside Blvd., Suite C, Sacramento, CA 95831
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26 July 2016

Mr. Jim Davies
854 Diablo Road
Danville, CA 94526

Phone: (925) 984-1222

Subject: Biological Update for the Piedmont Oak Project, El Dorado County, CA.

Dear Mr. Davies:

The Project biological reports and oak canopy impact analysis were updated in February 2013. Since that time small changes have been made to the Project design. The purpose of this letter is to update the February 2013 biological and oak canopy results based on the revised tentative map and planned development exhibits prepared by Lebeck Young Engineering, Inc dated March 2016.

Methods:

- A new California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) query was conducted for the Placerville quad and the eight surrounding quads. A new letter from the U.S. Fish and Wildlife Service (USFWS) was obtained with a list of federal-listed species that could be affected by projects in the area. The results of the updated database queries are in Attachment A. The updated database queries were reviewed for additions since the 2013 biological update.
- Updated project design was provided by Lebeck Young Engineering, Inc. The updated design was used to update the oak canopy impact map and biological impacts map in Attachment B.
- The channel boundaries on the project site were verified by the U.S. Army Corps of Engineers on 24 April 2013 (Attachment C). There are no wetlands at the site. The biological impacts map in Attachment B has been updated to include the Corps-verified channel boundaries.

Results − Current Conditions & Impacts:

An updated Biological Resources Map is in Attachment B. Biological community boundaries are the same as in 2013. Small changes in project design since 2013 have resulted in small changes to the Phase 1 and Phase 2 impacts in the table of biological communities below. None of the impacts are significantly different than the 2013 results.

Table of Biological Communities

Biological Community	State Rarity Rank [1]	Acreage	Phase 1 Impacts	Phase 2 Impacts
Mixed Oak Forest	S4	13.96	3.803	4.908
Ponderosa Pine Forest	S4	8.56	6.95	0.537
Annual Brome Grassland	--	2.99	2.204	0.076
White Leaf Manzanita Chaparral	S4	1.23	0.89	--
Tree-of-Heaven Woodland	--	0.57	0.49	--
Ephemeral Channels	--	0.08	0.008	0.008
Total:		**27.39**	**14.35**	**5.53**

[1] State ranks of S1, S2, or S3 are generally considered rare or imperiled. Communities dominated by nonnative species are not ranked. The list of recognized vegetation associations and their rarity rankings in CDFW (2010) was reviewed, and the communities in the project area would not have an S3 or lower ranking at the association level.

Impacts to mixed oak forest are regulated and mitigated by El Dorado County General Plan Policy 7.4.4.4 and the associated Interim Interpretive Guidelines (amended 12 October 2007). Attachment B contains an updated oak canopy impact map for Phase 1. There were two primary changes that affected the oak canopy map. One is the addition of a lift station in Phase 1, near the road crossing of a channel, that removes existing oak canopy. To offsite the additional canopy loss from the lift station, six residential parcels (lots 34–39) near Highway 49 were moved into Phase 2, in order to preserve oak canopy in Phase 1. The result is that the amount of oak canopy removed, 1.15 acres, is slightly less than the 2013 project design. Phase 1 of the Project complies with the County oak canopy retention standards and General Plan Policy 7.4.4.4. Phase 1 retains 86% of existing oak canopy. The projects oak canopy retention standard is 85%. The 2013 proposed oak canopy replacement areas remain valid under the current design. An updated oak canopy replacement map is in Attachment B.

Phase 1 and 2 together would retain 55.4% of existing oak canopy. With the inclusion of Phase 2 the project does not meet the County's retention standards in General Plan Policy 7.4.4.4. The following table identifies oak canopy removed by phase.

Table of Oak Canopy

Phase	Oak Canopy Removed (acres)	Oak Canopy Retained (acres)	Oak Canopy Retained (%)
Existing Canopy (Baseline)	--	8.21 acres	100%
Phase 1	1.15 acres	7.06 acres	86%
Phase 1 and 2	3.66 acres	4.55 acres	55.4%

The Corps verified the map of channels at the site in April 2013 (Attachment C). The Corps determined that channel 2a is 42 feet shorter than was shown on previous project maps. The Corps verified that there are no wetlands on the project site. The revised table of wetlands and waters below incorporates the Corps-verified channel dimensions. Both phases of the Project may fill up to 0.016 acre (430 linear feet) of ephemeral channels. The fill could be avoided with the use of bottomless culverts. Fill of the channels would require permitting under Sections 404 and 401 of the federal Clean Water Act. The project would require permitting under section 1600 of state Fish and Game Code due to work near the channels. The existing federal and/or state permitting processes require mitigation for the loss or degradation of channels, including replacement or restoration based on the extent of impact.

Table of Waters

Feature	Hydrology	Length (ft)/ Avg. Width (ft)	Total Acreage	Phase 1 Impacts	Phase 2 Impacts
Channel 1	Ephemeral	977 ft / 2.5 ft	0.056	123 ft / 0.007 ac	--
Channel 1b	Ephemeral	537 ft / 1.0 ft	0.012	--	74 ft / 0.002 ac
Channel 2	Ephemeral	301 ft / 1.5 ft	0.010	--	165 ft / 0.006 ac
Channel 2a	Ephemeral	68 ft / 0.5 ft	0.001	68 ft / 0.001 ac	--
Total:		**1,883 ft / --**	**0.079**	**191 ft / 0.008 ac**	**239 ft / 0.008 ac**

Special-status species considered are those listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by CDFW, or that are ranked 1 or 2 on the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2016). Several special-status species have been added to the lists included in Attachment A since the 2013 report. A brief evaluation of each of these special-status species is below.

- Van Zuuk's morning-glory (*Calystegia vanzuukiae*): Van Zuuk's morning-glory is a perennial rhizomatous herb found in gabbro or serpentine soils in chaparral or cismontane woodland from about 1,600 ft. to 3,900 feet (CNPS 2016). The project site does not provide potential habitat due to a lack of suitable soils.

- Sierra arching sedge (*Carex cyrtostachya*): Sierra arching sedge is a perennial herb found in mesic lower montane coniferous forest, meadows and seeps, marshes and swamps, and riparian forest margins from about 2,000 to 4,460 feet. The project site does not provide potential habitat due to a lack of wetlands and sufficiently large channels with summertime moisture.
- Chaparral sedge (*Carex xerophila*): Chaparral sedge is a newly described perennial cespitose herb known from serpentine or gabbro soils. It occurs in uplands in full sun to partial shade, in open forest or chaparral, from about 1,475 to 2,525 ft (Zika *et al.* 2014). The project site does not provide potential habitat due to a lack of suitable soils.
- Starved daisy (*Erigeron miser*): Starved daisy is a perennial herb found on rocky substrates in upper montane coniferous forest from about 6,000 to 8,600 feet (CNPS 2016). The project site is too low in elevation to provide suitable habitat.

A floristic botanical survey was conducted in 2009 and no special-status plants were found. The 2009 botanical survey met the requirements of CDFW (2009), although the protocol was released several months after the survey.

The project site provides potential nesting habitat for birds listed under the federal Migratory Bird Treaty Act (MBTA) and CA Fish and Game Code §3503 and §3503.5. Fish and Game Code §3503 protects the nest or eggs of any bird and §3503.5 protects birds-of-prey (orders Falconiformes and Strigiformes). Construction activities could impact nesting birds listed by the MBTA and CA Fish and Game Code. The project site is not in a County designated Important Biological Corridor (IBC) or Ecological Preserves overlay (El Dorado County 2004). The project site is in County Rare Plant Mitigation Area 2, which is defined as the El Dorado Irrigation District Service Area (El Dorado County Code Chapter 130.71).

Results − Proposed Avoidance and Minimization:

The measure below is proposed for birds listed under the MBTA and CA Fish and Game Code.

Mitigation Measure 1:

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.
- If construction begins between 1 February and 31 August then a qualified biologist shall conduct a preconstruction survey for active nests. The survey will include a 250 foot radius from the work area for nesting birds-of-prey and a 50 foot radius from the work area for other nesting MBTA birds. The survey will be conducted from publicly accessible areas within two weeks prior to construction. If no active nest of a bird-of-prey or MBTA bird is found, then no further action is necessary.
- If an active nest of a bird-of-prey or MBTA bird is found, then the biologist shall recommend a buffer suitable to protect the nest until fledging. The County shall approve the final buffer. The size and shape of suitable buffers depends on the species of bird, the location of the nest relative to the Project, Project activities during the time the nest is active, and other Project specific conditions.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest

is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced, with the County's concurrence, if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring.

Impacts to channels on the project site are regulated under the permitting programs of CDFW (1600 Lake and Streambed Alteration Agreements), the Regional Water Quality Control Board (Waste Discharge Requirements and Section 401 Certification), and the U.S. Army Corps of Engineers (Clean Water Act Section 404). These permitting programs as a whole consider physical impacts to the bed, banks, and riparian area of channels, as well as potential impacts to water quality, and require mitigation. The state and federal permitting programs reduce potential impacts to the ephemeral channels.

We appreciate the opportunity of assisting you with this project. If you have any questions, please contact me.

Cordially,

Chuck Hughes, M.S.
Senior Biologist

Attachment A.	Database Queries
Attachment B.	Biological Impacts Map
	Phase 1 Oak Canopy Impact Map
	Phase 1 Oak Canopy Replacement Map
Attachment C.	Corps Verification Letter

Literature Cited:

California Department of Fish and Wildlife (CDFW, formerly DFG). 24 November 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities.

California Department of Fish and Wildlife (CDFW, formerly DFG). September 2010. Vegetation classification and mapping program: Natural Communities – List. Biogeographic Data Branch, Sacramento, CA.

California Native Plant Society (CNPS). Accessed July 2016. Inventory of rare and endangered plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. <http://www.rareplants.cnps.org/>

El Dorado County. Adopted 19 July 2004. El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.

El Dorado County. January 2004, Certified 19 July 2004. El Dorado County general plan, final environmental impact report (EIR). Resolution No. 234-2004, State Clearinghouse No. 2001082030. Prepared by EDAW.

El Dorado County. Amended 10 May 2007. Interim interpretive guidelines for El Dorado County general plan policy 7.4.4.4 (option A). El Dorado County, CA.

Zika, P. F., L. P. Janeway, and B. L. Wilson. 2014. *Carex xerophila* (Cyperaceae), a new sedge from the chaparral of Northern California. Madrono 61:3(299-307).

Attachment A

Database Queries

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
PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2016-SLI-1827 July 14, 2016
Event Code: 08ESMF00-2016-E-03977
Project Name: Piedmont Oak Estates

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

To Whom It May Concern:

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

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

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Piedmont Oak Estates

Official Species List

Provided by:

Sacramento Fish and Wildlife Office
FEDERAL BUILDING
2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
(916) 414-6600

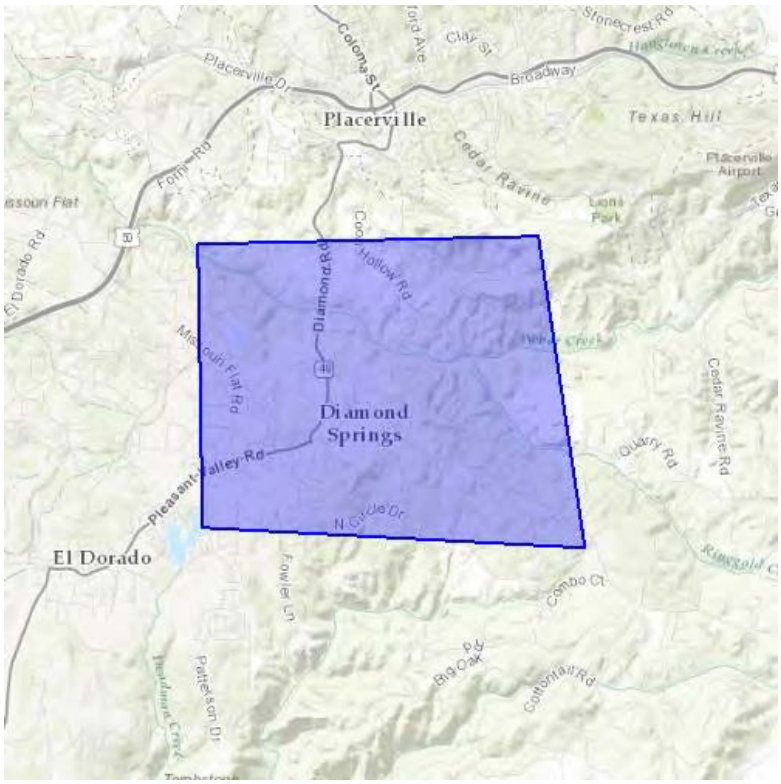
Consultation Code: 08ESMF00-2016-SLI-1827
Event Code: 08ESMF00-2016-E-03977

Project Type: DEVELOPMENT

Project Name: Piedmont Oak Estates

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-120.82798004150389 38.71471512069058, -120.78420639038086 38.715384828496404, -120.7781982421875 38.68416977848471, -120.82729339599608 38.68617974136571, -120.82798004150389 38.71471512069058)))

Project Counties: El Dorado, CA

Endangered Species Act Species List

There are a total of 4 threatened or endangered species on your 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. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	**Status**	**Has Critical Habitat**	**Condition(s)**
California red-legged frog *(Rana draytonii)* Population: Entire	Threatened	Final designated	
Fishes			
Delta smelt *(Hypomesus transpacificus)* Population: Entire	Threatened	Final designated	
steelhead *(Oncorhynchus (=salmo) mykiss)* Population: Northern California DPS	Threatened	Final designated	
Flowering Plants			
Layne's butterweed *(Senecio layneae)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

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

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	None	G2G3	S1S2	SSC
Allium jepsonii Jepson's onion	PMLIL022V0	None	None	G2	S2	1B.2
Arctostaphylos nissenana Nissenan manzanita	PDERI040V0	None	None	G1	S1	1B.2
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Calochortus clavatus var. avius Pleasant Valley mariposa-lily	PMLIL0D095	None	None	G4T2	S2	1B.2
Calystegia stebbinsii Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
Calystegia vanzuukiae Van Zuuk's morning-glory	PDCON040Q0	None	None	G2Q	S2	1B.3
Carex cyrtostachya Sierra arching sedge	PMCYP03M00	None	None	G2	S2	1B.2
Ceanothus roderickii Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.2
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Central Valley Drainage Resident Rainbow Trout Stream Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	GNR	SNR	
Chlorogalum grandiflorum Red Hills soaproot	PMLIL0G020	None	None	G2	S2	1B.2
Clarkia biloba ssp. brandegeeae Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
Cosumnoperla hypocrena Cosumnes stripetail	IIPLE23020	None	None	G2	S2	
Crocanthemum suffrutescens Bisbee Peak rush-rose	PDCIS020F0	None	None	G2Q	S2	3.2

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Fremontodendron decumbens Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2
Galium californicum ssp. sierrae El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
Horkelia parryi Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Packera layneae Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Pekania pennanti fisher - West Coast DPS	AMAJF01021	Proposed Threatened	Candidate Threatened	G5T2T3Q	S2S3	SSC
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	None	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sacramento-San Joaquin Foothill/Valley Ephemeral Stream Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA	None	None	GNR	SNR	
Strix nebulosa great gray owl	ABNSB12040	None	Endangered	G5	S1	
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
Wyethia reticulata El Dorado County mule ears	PDAST9X0D0	None	None	G2	S2	1B.2

Record Count: 34

CNPS California Native Plant Si Rare and Endangered Plant Inventory

Plant List

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

Search Criteria

Found in 9 Quads around 38120F7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	1B.2	S2	G2
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	4.3	S3	G3T3
Arctostaphylos mewukka ssp. truei	True's manzanita	Ericaceae	perennial evergreen shrub	4.2	S3	G4?T3
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	1B.2	S1	G1
Bolandra californica	Sierra bolandra	Saxifragaceae	perennial herb	4.3	S4	G4
Calochortus clavatus var. avius	Pleasant Valley mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G4T2
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G1
Calystegia vanzuukiae	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.3	S2	G2Q
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	1B.2	S2S3	G2G3
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	4.3	S4	G4
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S2	G2
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	4.3	S3	G3
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3	G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2	G2Q
Delphinium hansenii ssp. ewanianum	Ewan's larkspur	Ranunculaceae	perennial herb	4.2	S3	G4T3
Erigeron miser	starved daisy	Asteraceae	perennial herb	1B.3	S3?	G3?
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2	S1	G1

Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	1B.2	S2	G2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3	G4T3
Navarretia prolifera ssp. lutea	yellow bur navarretia	Polemoniaceae	annual herb	4.3	S3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Trichostema rubisepalum	Hernandez bluecurls	Lamiaceae	annual herb	4.3	S4	G4
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	S3?	G4G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed 14 July 2016].

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Simple Search
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Glossary

Information
About the Inventory
About the Rare Plant Program
CNPS Home Page
About CNPS
Join CNPS

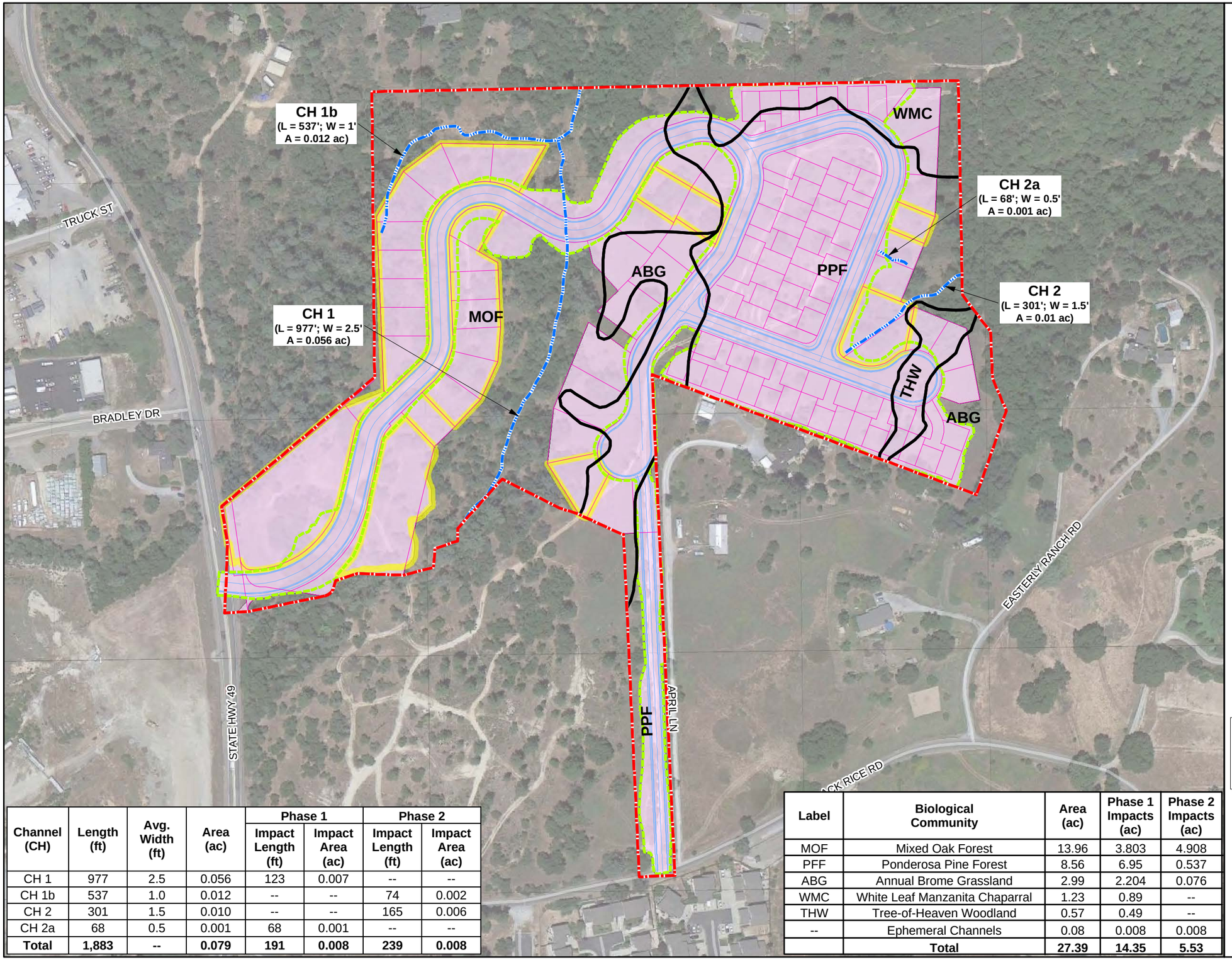
Contributors
The Calflora Database
The California Lichen Society

Attachment B

Biological Impacts Map
Phase 1 Oak Canopy Impact Map
Phase 1 Oak Canopy Replacement Map

Piedmont Oak Estates
El Dorado County, CA
21 July 2016

Biological Impacts Map



Project Study Area (PSA; 27.39 ac)
Biological Community Boundary
Channel (CH)
Lot Lines
Proposed Paved Roads
Phase II Lots
Grading Footprint (March 2016)

200 100 0 200 Feet
N
Scale: 1 inch = 200 feet

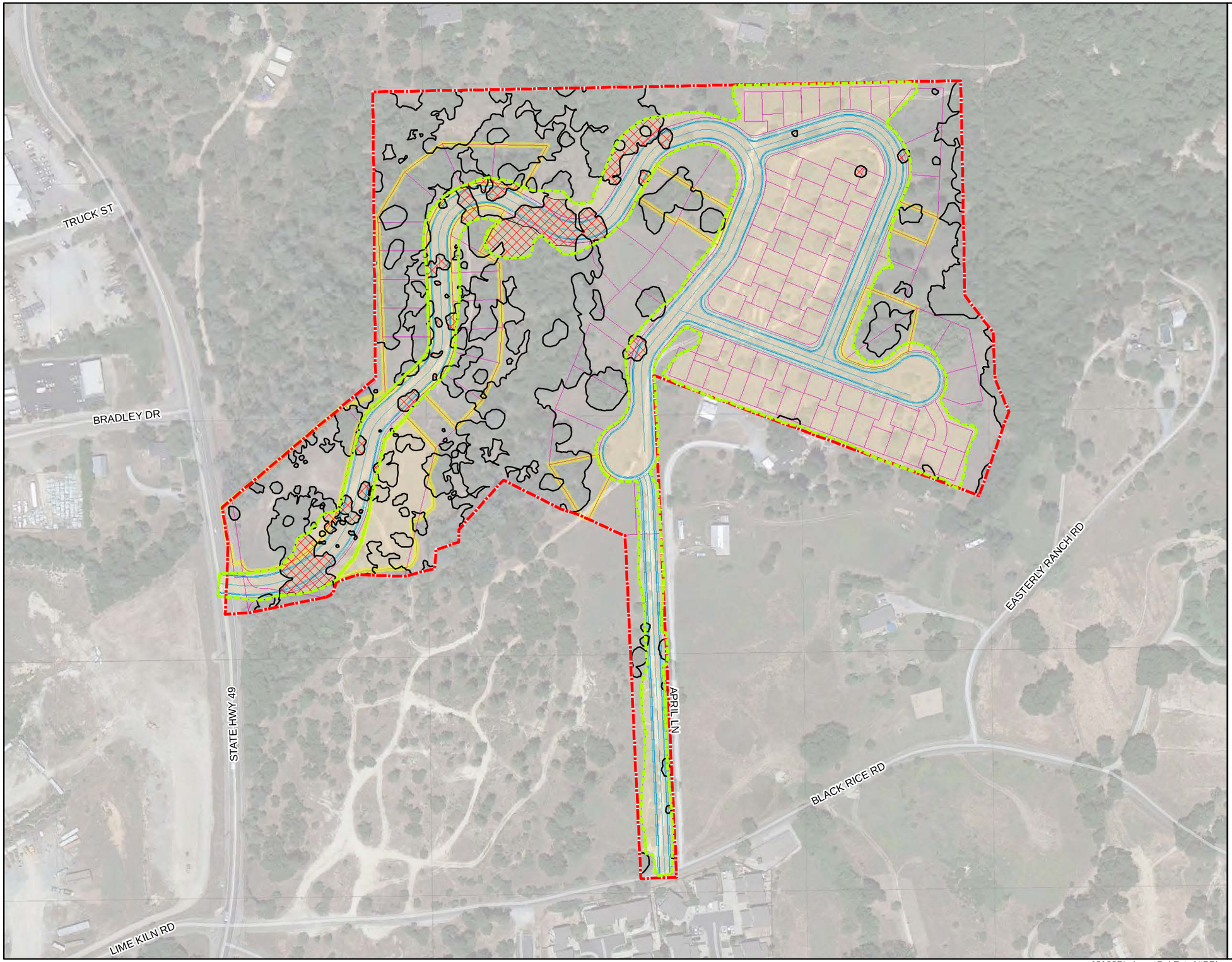
Channel (CH)	Length (ft)	Avg. Width (ft)	Area (ac)	Phase 1		Phase 2	
				Impact Length (ft)	Impact Area (ac)	Impact Length (ft)	Impact Area (ac)
CH 1	977	2.5	0.056	123	0.007	--	--
CH 1b	537	1.0	0.012	--	--	74	0.002
CH 2	301	1.5	0.010	--	--	165	0.006
CH 2a	68	0.5	0.001	68	0.001	--	--
Total	**1,883**	**--**	**0.079**	**191**	**0.008**	**239**	**0.008**

Label	Biological Community	Area (ac)	Phase 1 Impacts (ac)	Phase 2 Impacts (ac)
MOF	Mixed Oak Forest	13.96	3.803	4.908
PFF	Ponderosa Pine Forest	8.56	6.95	0.537
ABG	Annual Brome Grassland	2.99	2.204	0.076
WMC	White Leaf Manzanita Chaparral	1.23	0.89	--
THW	Tree-of-Heaven Woodland	0.57	0.49	--
--	Ephemeral Channels	0.08	0.008	0.008
	Total	**27.39**	**14.35**	**5.53**

SYCAMORE Environmental Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
TSM-1.dwg by BTConsulting, Inc.

14-0367 Piedmont Oak Estates\Phase I\Impacts_v2.mxd



Piedmont Oak Estates
El Dorado County, CA
21 July 2016

Attachment B.
Phase 1 Oak Canopy Impact

- Project Study Area (PSA; 27.39 ac)
- Existing Oak Canopy (8.21 ac)
- Phase 1 Oak Canopy Removed (1.15 ac)
- Lot Lines
- Proposed Paved Roads
- Phase II Boundary
- Project Footprint
- Grading Footprint (March 2016)

200 100 0 200 Feet

N

Scale: 1 inch = 200 feet

SYCAMORE
Environmental
Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
M-Base.dwg by Peter K. Thorne (15 Jan. 2013)
Grading Footprint: 2016-06-29 Piedmont Oak Estates
TM & EX's.dwg by Lebeck Young Engineering (March 2016)

12100PiedmontOakEst_AttBPhase1OakCanopyRemoved_v3.mxd

Piedmont Oak Estates
El Dorado County, CA
26 July 2016

Attachment C.
Phase 1 Oak Canopy Replacement

- Project Study Area (PSA; 27.39 ac)
- Existing Oak Canopy (8.21 ac)
- Phase 1 Oak Canopy Removed (1.15 ac)
- Non-oak Canopy
- Phase 1 Oak Canopy Replacement (1.20 ac)
- 30ft Fire Safety Buffer
- Lot Lines
- Proposed Paved Roads
- Project Footprint
- Project Footprint
- Compact Lot Structure
- Premium Lot Setback

200 100 0 200 Feet

N

Scale: 1 inch = 200 feet

SYCAMORE
Environmental
Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
M-Base.dwg by Peter K. Thorne (15 Jan. 2013)
Grading Footprint: 2016-06-29 Piedmont Oak Estates
TM & EX's.dwg by Lebeck Young Engineering (March 2016)

12100PiedmontOakEst_ArcGIS\OakCanopy\OakCanopyReplacement_v3.mxd

Attachment C

Corps Verification Letter

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

April 24, 2013

Regulatory Division SPK-2009-00928

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, California 94526-2760

Dear Mr. Davies:

We are responding to your April 9, 2013, request for a preliminary jurisdictional determination (JD), in accordance with our Regulatory Guidance Letter (RGL) 08-02, for the Piedmont Oak Estates site. The approximately 27.39-acre site is located near Weber Creek, Section 19, Township 10 North, Range 11 East, Mount Diablo Meridian, Latitude 38.7025313162938°, Longitude -120.808560315998°, Town of Diamond Spring, El Dorado County, California.

Based on available information, **we concur with the amount and location of wetlands and/or other water bodies on the site as depicted on the enclosed 16 April, 2013, *Piedmont Oak Estates, El Dorado County, CA*, prepared by Sycamore Environmental Consultants, Inc** (enclosure 1). The approximately 0.0709 acre of other water bodies present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act.

A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for this site is enclosed (enclosure 2). Please sign and return a copy of the completed form to this office. Once we receive a copy of the form with your signature we can accept and process a Pre-Construction Notification or permit application for your proposed project.

You should not start any work in potentially jurisdictional waters of the United States unless you have Department of the Army permit authorization for the activity. You may request an approved JD for this site at any time prior to starting work within waters. In certain circumstances, as described in RGL 08-02, an approved JD may later be necessary.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This preliminary determination has been conducted to identify the potential limits of wetlands and other water bodies which may be subject to Corps of Engineers' jurisdiction for the particular site identified in this request. A Notification of Appeal Process and Request for

Appeal Form is enclosed to notify you of your options with this determination (enclosure 3). This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey.*

Please refer to identification number SPK-2009-00928 in any correspondence concerning this project. If you have any questions, please contact Mr. Peck Ha at our California North Branch Office, Regulatory Division, Sacramento District, U.S. Army Corps of Engineers, 1325 J Street, Room 1350, Sacramento, California 95814-2922, email *Peck.Ha@usace.army.mil*, or telephone 916-557-6617. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx.*

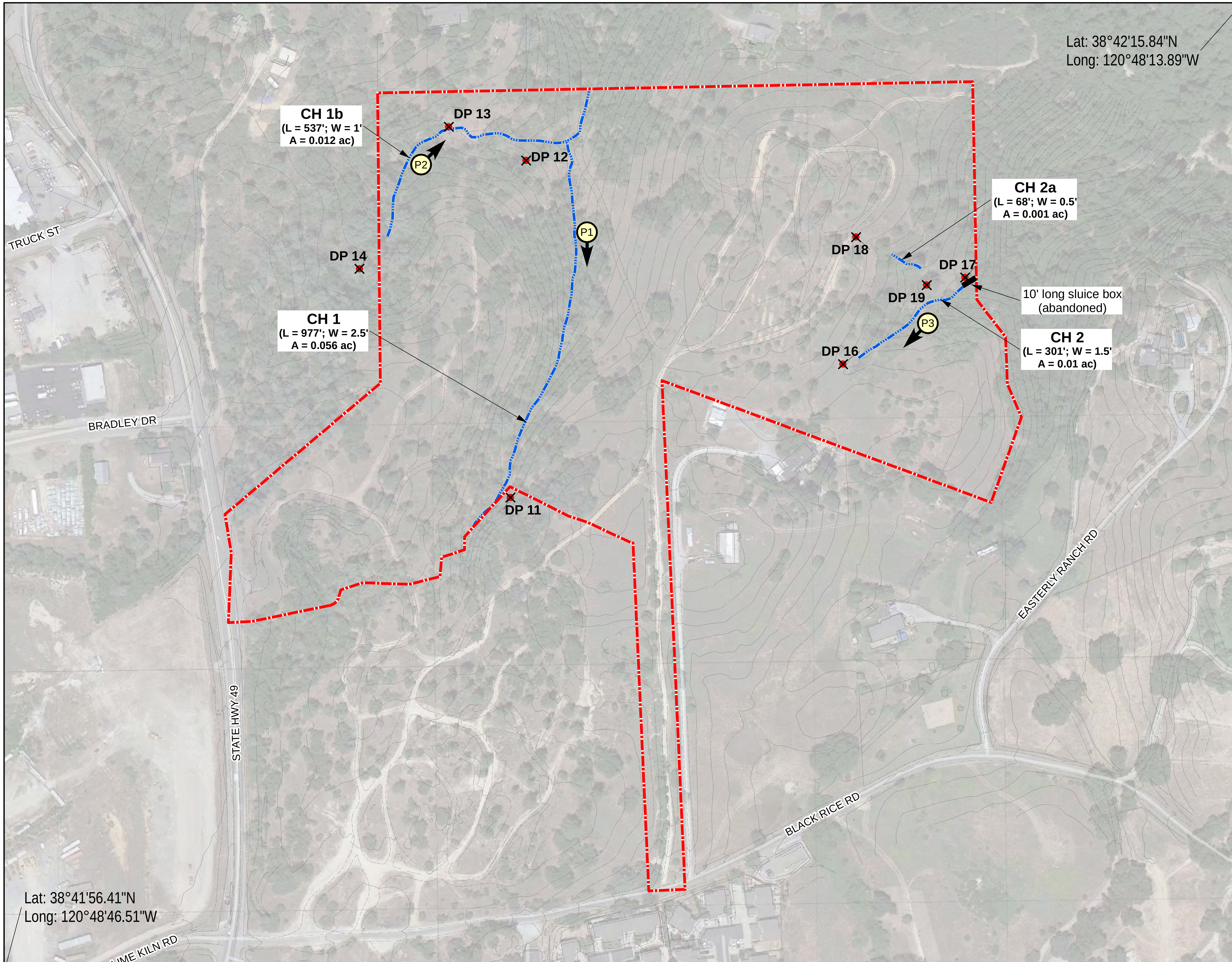
Sincerely,

Nancy Arcady Haley
Chief, California North Branch

Enclosures

Copy Furnished with enclosures:
Ms. Lillian Macleod, El Dorado County Planning Department, 2850 Fairlane Court, Placerville, California 95667

Copies Furnished without enclosures:
Mr. Chuck Hughes, Sycamore Environmental Consultants, Inc., 6355 Riverside Boulevard, Suite C, Sacramento, California 95831
Ms. Elizabeth Lee, California Regional Water Quality Control Board, Central Valley Region, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Ms. Tina Bartlett, California Department of Fish and Game, Region 2, 1701 Nimbus Drive, Rancho Cordova, California 95670-4599
U.S. Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901
Mr. Jason Brush, Environmental Protection Agency, WRT-8, 75 Hawthorne Street, San Francisco, California 94105-3922



Piedmont Oak Estates
El Dorado County, CA
16 April 2013

Jurisdictional Delineation Map

- Project Study Area (PSA; 27.39 ac)
- Datapoint Location and Number (DP)
- Channel
- Photopoint Location and Direction

Channel (CH)	Length (ft)	Avg. Width (ft)	Area (ac)
CH 1	977	2.5	0.056
CH 1b	537	1.0	0.012
CH 2	301	1.5	0.010
CH 2a	68	0.5	0.001
Total	**1,883**	**--**	**0.079**

200 100 0 200 Feet
N
Scale: 1 inch = 200 feet

Date	Submittal	Delineators	Agency/ Co.
9 Apr 07	Original	ACF	Sycamore
4 Apr 13	Update PSA	CCH	Sycamore
16 Apr 13	After Corps Field Review	CCH	Sycamore

SYCAMORE Environmental Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
T-Base.dwg & TSM-1.dwg by BTConsulting, Inc.

SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.
6355 Riverside Blvd., Suite C, Sacramento, CA 95831
916/ 427-0703 Fax 916/ 427-2175

6 February 2013

Mr. Jim Davies
854 Diablo Road
Danville, CA 94526

Phone: (925) 984-1222

Subject: Biological and Wetlands Report Updates for the Piedmont Oak Project, El Dorado County, CA.

Dear Mr. Davies:

The purpose of this letter is to update biological and wetland reports previously prepared for the project. The project boundary and design have been revised since the reports were prepared. The following biological reports were previously prepared for the project:

9 April 2007	*Biological Resources Evaluation and Preliminary Jurisdictional Delineation Report for Piedmont Oak Estates.*
2 July 2009	*Botanical Survey Update for Piedmont Oak Estates.*

Parcels 051-461-37 and -54 are no longer part of the project, except for an emergency access road on parcel -54. This letter updates the previous maps and acreage estimates for the new design, as well as updating the database searches. The project is divided into two phases. Phase 1 includes the road network, 62 clustered residential parcels, 21 detached single residential parcels, and one commercial lot. Phase 2 includes 21 additional detached single residential parcels, and a second commercial lot.

Methods:

- A new California Natural Diversity Database (CNDDB) query was conducted for the Placerville quad and the eight surrounding quads. A new letter from the U.S. Fish and Wildlife Service (USFWS) was obtained with a list of federal-listed species that could be affected by projects in the area. A query of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants was conducted. The results of the updated database searches are in Attachment A. The updated database searches were reviewed for changes since the 2007 biological report.
- A reconnaissance field visit was conducted on 6 December 2012 and 10 January 2013. The field visits were conducted to document current site conditions, and in support of updating the maps from the 2007 biological report. The updated maps are in Attachment B.

- Project design, prepared by BTConsulting, Inc., was overlaid on the existing biological resources map to estimate potential impacts.

Results − Current Conditions & Impacts:

An updated Biological Resources Map is in Attachment B. Biological community boundaries have been updated since the 2007 report at the alliance level. Much of the understory vegetation in some parts of the site had been removed prior the 2007 report, and the areas were categorized as "partially cleared land." Understory vegetation has re-grown since then. Also, the CA Department of Fish and Wildlife has since updated the recognized natural communities list (CDFW 2010) based on Sawyer et al. (2009). The revised Biological Communities Table below incorporates the changes. Tree-of-heaven woodland is not included on the CDFW list (2010), however CDFW acknowledges that description and classification of the State's vegetation communities is ongoing. Tree-of-heaven is an invasive weed with moderate ecological impacts (Cal-IPC 2006).

Table of Biological Communities

Biological Community	State Rarity Rank [1]	Acreage	Phase 1 Impacts	Phase 2 Impacts
Mixed Oak Forest	S4	13.96	4.78	3.98
Ponderosa Pine Forest	S4	8.56	6.95	0.54
Annual Brome Grassland	--	2.99	1.69	0.59
White Leaf Manzanita Chaparral	S4	1.23	0.89	--
Tree-of-Heaven Woodland	--	0.57	0.49	0.01
Ephemeral Channels	--	0.08	0.008	0.008
Total:		**27.39**	**14.81**	**5.12**

[1] State ranks of S1, S2, or S3 are generally considered rare or imperiled. Communities dominated by nonnative species are not ranked. The list of recognized vegetation associations and their rarity rankings in CDFW (2010) was reviewed, and the communities in the project area would not have an S3 or lower ranking at the association level.

Impacts to mixed oak forest are regulated and mitigated by El Dorado County General Plan Policy 7.4.4.4 and the associated Interim Interpretive Guidelines (amended 12 October 2007). A separate analysis specific to Policy 7.4.4.4 will be prepared. The other biological communities are not considered sensitive at the state or local level. Ponderosa pine, chaparral, and annual grassland are not identified as sensitive habitat in the General Plan EIR (El Dorado County 2004).

The extent of waters and wetlands at the site has not changed since the 2007 report. There are no wetlands on the current project site. The wetlands were on the parcels that are no longer part of the project. The revised table of wetlands and waters below incorporates the changes. The Project may fill up to 0.016 acre (472 linear feet) of ephemeral channels. The fill could be avoided with the use of bottomless culverts. Fill of the channels would require permitting under Sections 404 and 401 of the federal Clean Water Act if the channels meet criteria for Waters of the U.S. Fill of the channels would

require permitting under section 1600 of state Fish and Game Code and the state Porter-Cologne Water Quality Control Act regardless of federal jurisdiction. The existing federal and/or state permitting processes require mitigation for the loss or degradation of channels, including replacement or restoration based on the extent of impact.

Table of Waters

Feature	Hydrology	Length (ft)/ Avg. Width (ft)	Total Acreage	Phase 1 Impacts	Phase 2 Impacts
Channel 1	Ephemeral	977 ft / 2.5 ft	0.056	123 ft / 0.007 ac	--
Channel 1b	Ephemeral	537 ft / 1.0 ft	0.012	--	74 ft / 0.002 ac
Channel 2	Ephemeral	301 ft / 1.5 ft	0.010	--	165 ft / 0.006 ac
Channel 2a	Ephemeral	110 ft / 0.5 ft	0.001	110 ft / 0.001 ac	--
Total:		**1,925 ft / --**	**0.079**	**233 ft / 0.008 ac**	**239 ft / 0.008 ac**

Special-status species considered are those listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by CDFW, or that are on List 1 or 2 of the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2012). Several special-status species have been added to the lists included in Attachment A since the 2007 report. A brief evaluation of each of these special-status species is below.

- *Winter-run Chinook salmon, Sacramento River*: Once found throughout the upper Sacramento River basin, the winter-run chinook salmon is now confined to the mainstem Sacramento River below Keswick Dam (Moyle 2002). The project site does not provide potential habitat.
- *Conservancy fairy shrimp, vernal pool fairy shrimp, Sacramento orcutt grass*: These species are associated with vernal pools in and around the Central Valley (USFWS 1994, CNPS 2012). There are no vernal pools in the project site and there is no potential habitat.
- *Bank swallow*: This bird is restricted to riparian areas with vertical cliffs and banks with fine-textured or sandy soil (Zeiner et al. 1990). The project site does not provide potential habitat.
- *Great gray owl*: This species occurs between 4,500 and 7,500 feet in the Sierra Nevada from the vicinity of Quincy in Plumas Co. south to the Yosemite Region. It breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows (Zeiner et al. 1990). The project site does not provide potential habitat.

The 2007 report identified four special-status plants for which potential habitat occurred: Nissenan manzanita, Pleasant Valley mariposa lily, Brandegee's clarkia, and oval-leaved viburnum. The current project site continues to provide habitat for these species. A floristic botanical survey was conducted in 2009 during the evident and identifiable period of the plants and none were found. Brandegee's clarkia has since been down-listed from CNPS List 1B to List 4. The 2009 botanical survey met the protocol of the CDFW (2009), although it was released several months after the survey.

The current project site provides potential nesting habitat for birds listed under the federal Migratory Bird Treaty Act (MBTA) and CA Fish and Game Code §3503 and §3503.5. Fish and Game Code §3503 protects the nest or eggs of any bird and §3503.5 protects birds-of-prey (orders Falconiformes and Strigiformes). Construction activities could impact nesting birds listed by the MBTA and CA Fish and Game Code. The project site is not in a County designated Important Biological Corridor (IBC) or Ecological Preserves overlay (El Dorado County 2004). The project site is in County Rare Plant Mitigation Area 2, which is defined as the El Dorado Irrigation District Service Area (El Dorado County Code Chapter 17.71).#

Results − Proposed Avoidance and Minimization:

The measure below is proposed for birds listed under the MBTA and CA Fish and Game Code.

Avoidance and Minimization Measure 1:

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.
- If construction begins between 1 February and 31 August then a qualified biologist shall conduct a preconstruction survey for active nests. The survey will include a 250 foot radius from the work area for nesting birds-of-prey and a 50 foot radius from the work area for other nesting MBTA birds. The survey will be conducted from publicly accessible areas within two weeks prior to construction. If no active nest of a bird-of-prey or MBTA bird is found, then no further action is necessary.
- If an active nest of a bird-of-prey or MBTA bird is found, then the biologist shall recommend a buffer suitable to protect the nest until fledging. The County shall approve the final buffer. The size and shape of suitable buffers depends on the species of bird, the location of the nest relative to the Project, Project activities during the time the nest is active, and other Project specific conditions.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced, with the County's concurrence, if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring.

Impacts to channels on the project site are regulated under the permitting programs of CDFW (1600 Lake and Streambed Alteration Agreements), the Regional Water Quality Control Board (Waste Discharge Requirements and Section 401 Certification), and possibly the U.S. Army Corps of Engineers (Clean Water Act Section 404). These permitting programs as a whole consider physical impacts to the bed, banks, and riparian area of channels, as well as potential impacts to water quality, and require mitigation. The state and federal permitting programs reduce potential impacts to the ephemeral channels.

We appreciate the opportunity of assisting you with this project. If you have any questions, please contact me.

Cordially,

Chuck Hughes, M.S.
Botanist/ Biologist

c: Mr. Peter Thorne, P.E. BTConsulting, Inc.

Attachment A.	USFWS Letter & List
	CNDDB Query
	CNPS Inventory Query
Attachment B.	Project Location Map
	Aerial Photograph
	Biological Resources Map
	Biological Impacts Map

Literature Cited:

California Department of Fish and Wildlife (CDFW, formerly DFG). 24 November 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities.

California Department of Fish and Wildlife (CDFW, formerly DFG). September 2010. Vegetation classification and mapping program: Natural Communities – List. Biogeographic Data Branch, Sacramento, CA.

California Invasive Plant Council (Cal-IPC). 2006. Invasive plant inventory. California Invasive Plant Council, Berkeley, CA. <www.cal-ipc.org>

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El Dorado County. Adopted 19 July 2004. El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.

El Dorado County. January 2004, Certified 19 July 2004. El Dorado County general plan, final environmental impact report (EIR). Resolution No. 234-2004, State Clearinghouse No. 2001082030. Prepared by EDAW.

El Dorado County. Amended 10 May 2007. Interim interpretive guidelines for El Dorado County general plan policy 7.4.4.4 (option A). El Dorado County, CA.

Moyle, P. B. 2002. Inland Fishes of California. University of California Press, Berkeley and Los Angeles, CA.

U.S. Fish and Wildlife Service (USFWS). 19 September 1994. Endangered and threatened wildlife and plants; Determination of endangered status for the conservancy fairy shrimp, longhorn fairy shrimp, and the vernal pool tadpole shrimp; and threatened status for the vernal pool fairy shrimp. Federal Register 59:48136.

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

Zeiner, D., K. Mayer, M. White, and W. Laudenslayer, Jr., eds. 1990. California's wildlife, Volume II, Birds. California Department of Fish and Game, Sacramento, CA.

Attachment A

USFWS Letter & List
CNDDB Query
CNPS Inventory Query

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

December 10, 2012

Document Number: 121210050303

R. John Little, Ph.D.
Sycamore Environmental Consultants, Inc.
6355 Riverside Blvd., Suite C
Sacramento, CA 95831

Subject: Species List for Piedmont Oak Estates

Dear: Dr. Little

We are sending this official species list in response to your December 10, 2012 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 10, 2013.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found here.

Endangered Species Division

TAKE PRIDE IN AMERICA

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 121210050303

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Plants

Senecio layneae
Layne's butterweed (=ragwort) (T)

Quads Containing Listed, Proposed or Candidate Species:

PLACERVILLE (510A)

County Lists

El Dorado County

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus (=Salmo) clarki henshawi
Lahontan cutthroat trout (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Thamnophis gigas
giant garter snake (T)

Plants

Calystegia stebbinsii
Stebbins's morning-glory (E)

Ceanothus roderickii
Pine Hill ceanothus (E)

Fremontodendron californicum ssp. decumbens
Pine Hill flannelbush (E)

Galium californicum ssp. sierrae
El Dorado bedstraw (E)

Orcuttia viscida

Critical habitat, Sacramento Orcutt grass (X)
Sacramento Orcutt grass (E)

Senecio layneae
Layne's butterweed (=ragwort) (T)

Candidate Species

Amphibians

Bufo canorus
Yosemite toad (C)

Rana muscosa
mountain yellow-legged frog (C)

Mammals

Martes pennanti
fisher (C)

Plants

Rorippa subumbellata
Tahoe yellow-cress (C)

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.

- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential

to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 10, 2013.

	Scientific Name	Common Name	Element Code	Federal Status	State Status	Global Rank	State Rank	CNPS	CDFG
1	Accipiter gentilis	northern goshawk	ABNKC12060			G5	S3		SC
2	Agelaius tricolor	tricolored blackbird	ABPBXB0020			G2G3	S2		SC
3	Allium jepsonii	Jepson's onion	PMLIL022V0			G1	S1	1B.2	
4	Arctostaphylos nissenana	Nissenan manzanita	PDERI040V0			G2	S2.2	1B.2	
5	Ardea alba	great egret	ABNGA04040			G5	S4		
6	Calochortus clavatus var. avius	Pleasant Valley mariposa-lily	PMLIL0D095			G4T2	S2	1B.2	
7	Calystegia stebbinsii	Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1	
8	Ceanothus roderickii	Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.2	
9	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA			G?	SNR		
10	Central Valley Drainage Resident Rainbow Trout Stream	Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA			G?	SNR		
11	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020			G3	S3	1B.2	
12	Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	PDONA05053			G4G5T4	S4	4.2	
13	Cosumnoperla hypocrena	Cosumnes spring stonefly	IIPLE23020			G1	S1		
14	Emys marmorata	western pond turtle	ARAAD02030			G3G4	S3		SC
15	Fremontodendron decumbens	Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2	
16	Galium californicum ssp. sierrae	El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2	
17	Helianthemum suffrutescens	Bisbee Peak rush-rose	PDCIS020F0			G2Q	S2.2	3.2	
18	Horkelia parryi	Parry's horkelia	PDROS0W0C0			G2	S2.2	1B.2	
19	Lasionycteris noctivagans	silver-haired bat	AMACC02010			G5	S3S4		
20	Martes pennanti (pacifica) DPS	Pacific fisher	AMAJF01021	Candidate		G5	S2S3		SC
21	Myotis yumanensis	Yuma myotis	AMACC01020			G5	S4?		
22	Packera layneae	Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2	
23	Phrynosoma blainvillii	coast horned lizard	ARACF12100			G4G5	S3S4		SC
24	Rana boylii	foothill yellow-legged frog	AAABH01050			G3	S2S3		SC
25	Riparia riparia	bank swallow	ABPAU08010		Threatened	G5	S2S3		
26	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA			G?	SNR		
27	Strix nebulosa	great gray owl	ABNSB12040		Endangered	G5	S1		
28	Viburnum ellipticum	oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3	
29	Wyethia reticulata	El Dorado County mule ears	PDAST9X0D0			G2	S2	1B.2	

CNPS California Native Plant Society Inventory of Rare and Endangered Plants

Plant List

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

Search Criteria

Found in 9 Quads around 38120F7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	1B.2	S1	G1
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	4.3	S3.3	G3T3
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	1B.2	S2.2	G2
Bolandra californica	Sierra bolandra	Saxifragaceae	perennial herb	4.3	S3.3	G3
Calochortus clavatus var. avius	Pleasant Valley mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G4T2
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G1
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	1B.2	S1	G1
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S3	G3
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	4.3	S3.3	G3
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3.2	G5T3
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	1B.2	S1	G1
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
Helianthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2.2	G2Q
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	1B.2	S2.2	G2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G4T3
Navarretia prolifera ssp. lutea	yellow bur navarretia	Polemoniaceae	annual herb	4.3	S3.3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2.3	S2.3	G5

Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	1B.2	S2	G2

Suggested Citation

California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on Monday, December 10, 2012.

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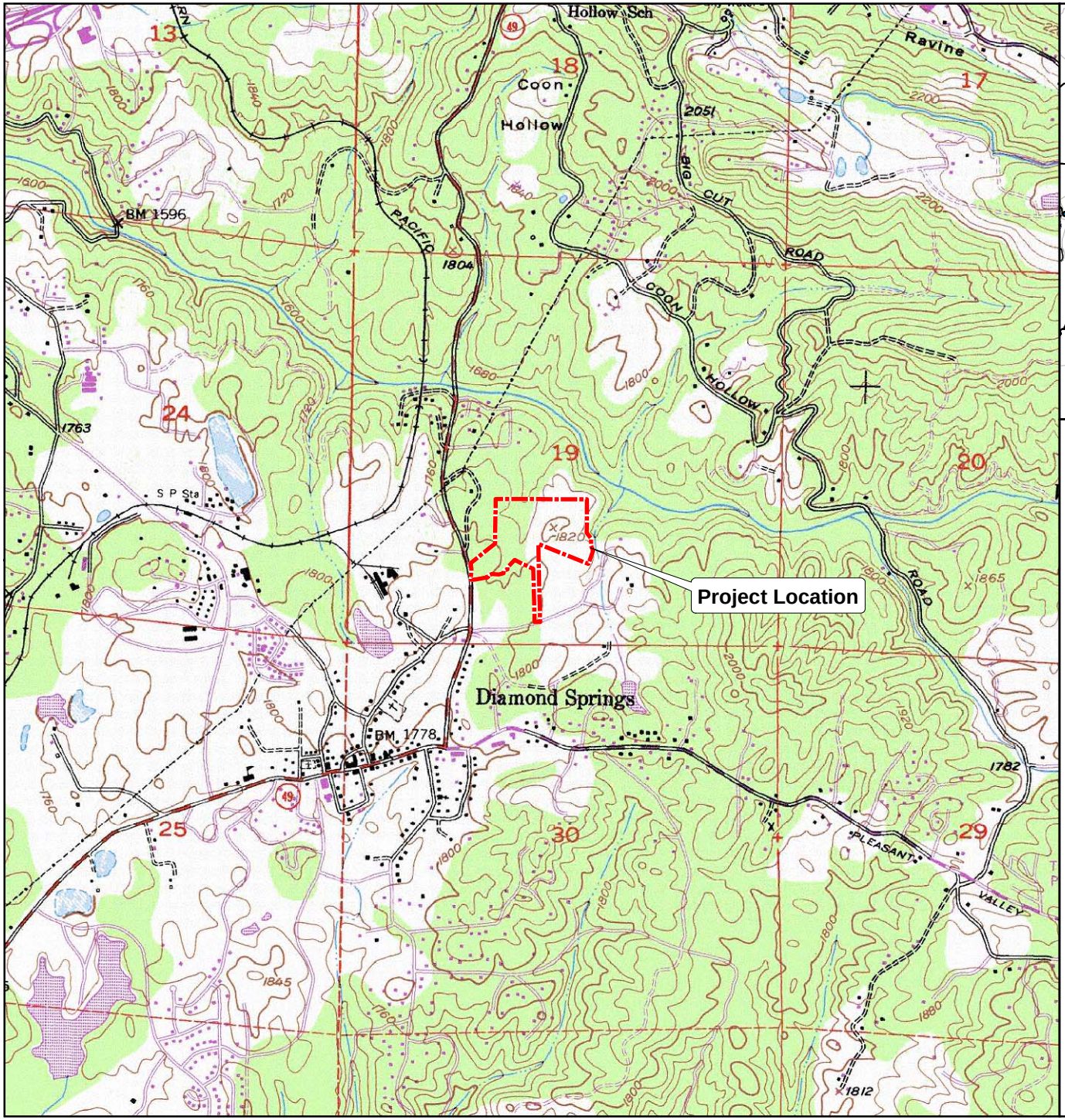
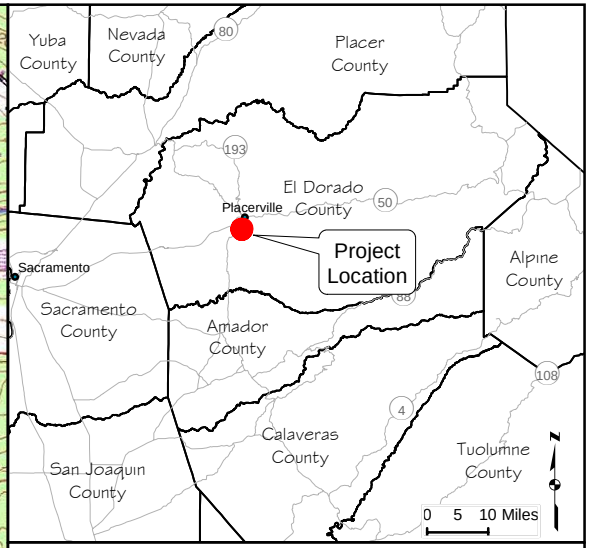
The Calflora Database
Studio Simple
TRC

Attachment B

Project Location Map
Aerial Photograph
Biological Resources Map
Biological Impacts Map





Piedmont Oak Estates
El Dorado County, CA
6 February 2013

Project Location Map

Project Location

2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

SYCAMORE
Environmental
Consultants, Inc.

Placerville, CA (Revised 1973)
CASIL California USGS Digital Raster Graphics (DRG),
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID)
o_nw0101.sid & o_nw0102.sid

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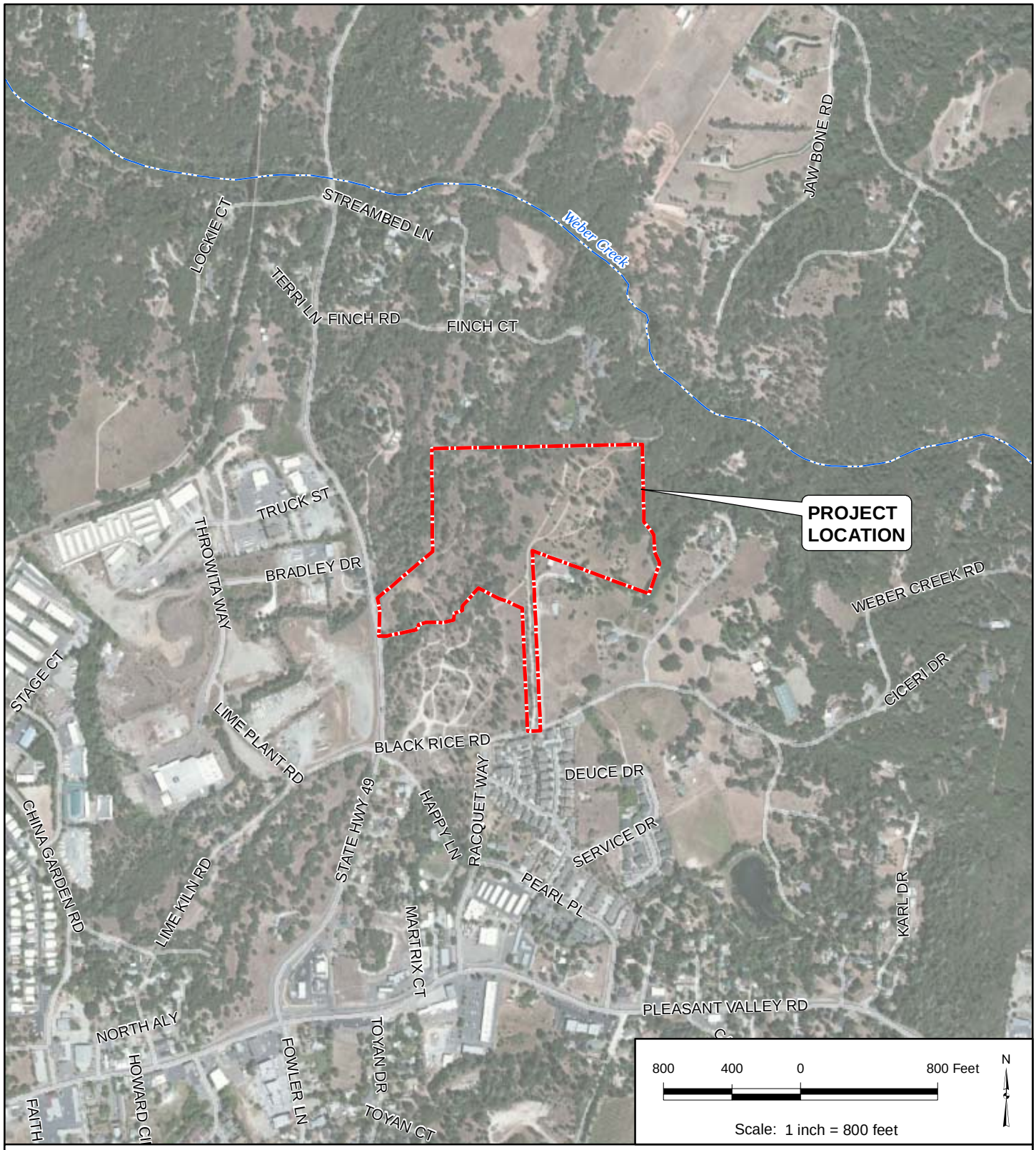


Piedmont Oak Estates
El Dorado County, CA
6 February 2013

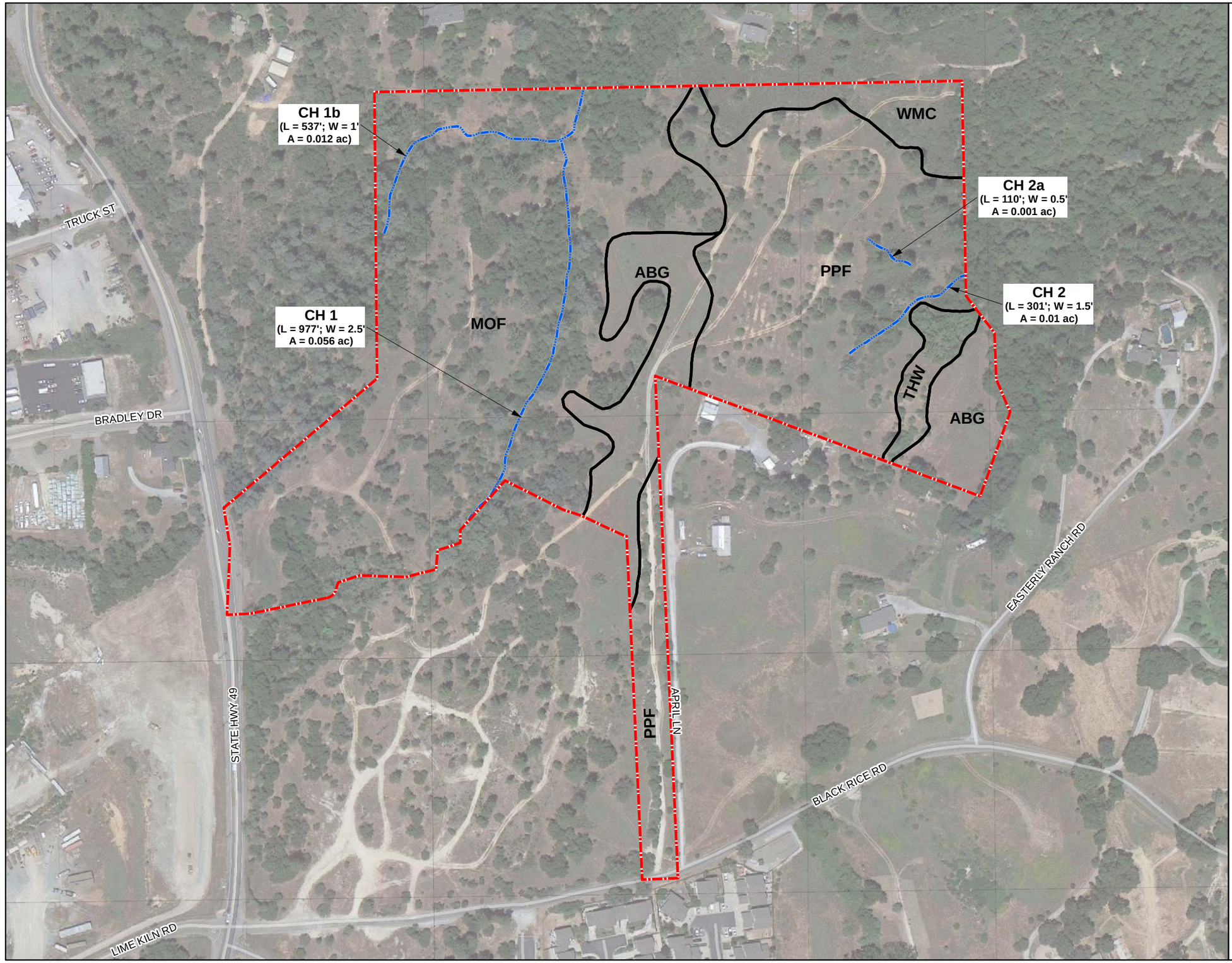
Project Location

Aerial Photograph

SYCAMORE Environmental Consultants, Inc.

Aerial Photograph: 20 July 2010
2010 NAIP Imagery, USDA FSA Imagery
ArcGIS Imagery Basemap Layer

El Dorado County GIS Roads and River layer



Piedmont Oak Estates
El Dorado County, CA
6 February 2013

Biological Resources Map

Project Study Area (PSA; 27.39 ac)
Biological Community Boundary
Channel

Label	Biological Community	Area (ac)
MOF	Mixed Oak Forest	13.96
PFF	Ponderosa Pine Forest	8.56
ABG	Annual Brome Grassland	2.99
WMC	White Leaf Manzanita Chaparral	1.23
THW	Tree-of-Heaven Woodland	0.57
--	Ephemeral Channels	0.08
	Total	**27.39**

Channel (CH)	Length (ft)	Avg. Width (ft)	Area (ac)
CH 1	977	2.5	0.056
CH 1b	537	1.0	0.012
CH 2	301	1.5	0.010
CH 2a	110	0.5	0.001
Total	**1,925**	**--**	**0.079**

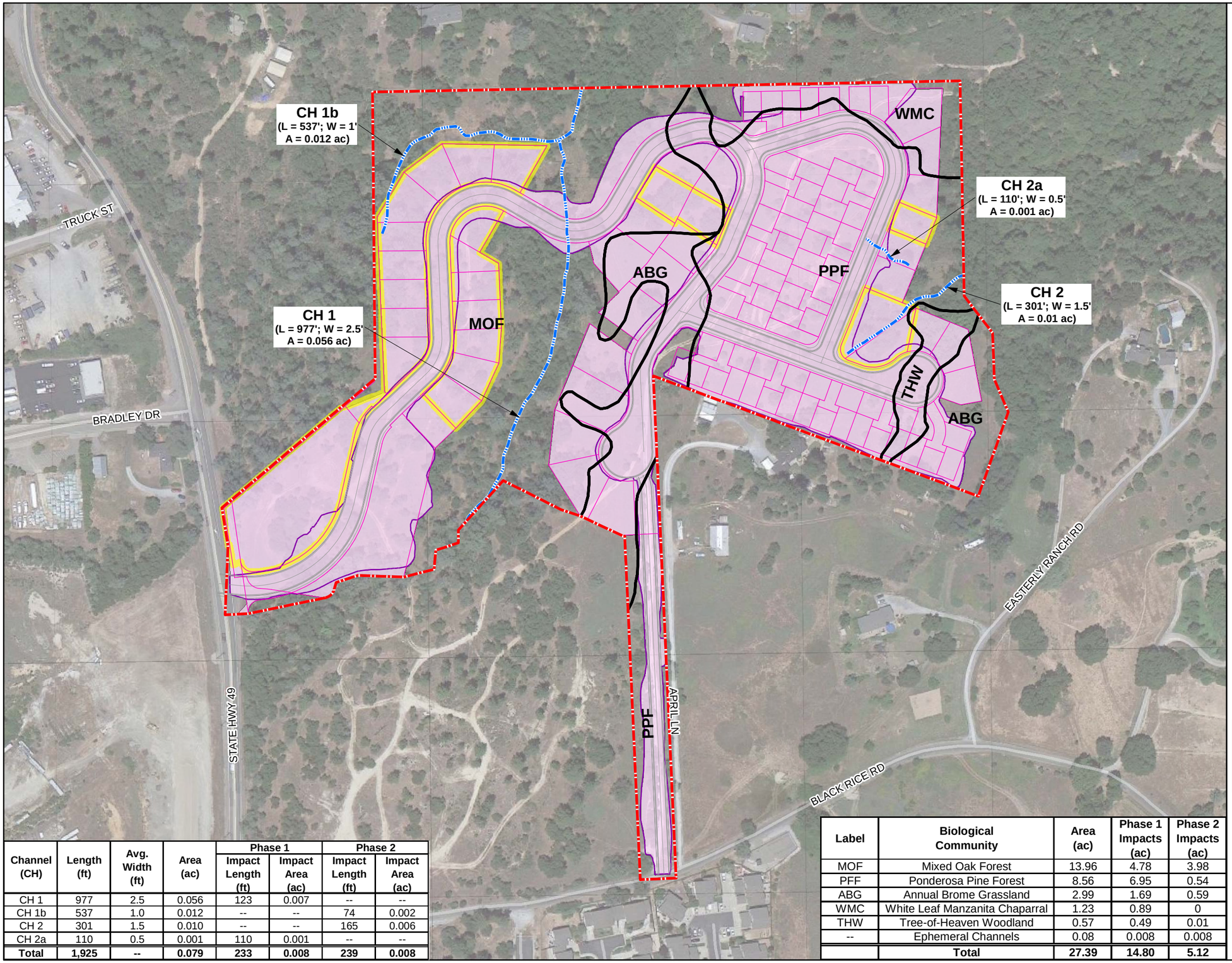
200 100 0 200 Feet
N
Scale: 1 inch = 200 feet

SYCAMORE Environmental Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
TSM-1.dwg by BTConsulting, Inc.

Piedmont Oak Estates
El Dorado County, CA
6 February 2013

Biological Impacts Map



Project Study Area (PSA; 27.39 ac)
Biological Community Boundary
Channel (CH)
Lot Lines
Proposed Paved Roads
Limits of Grading
Phase II Lots

200 100 0 200 Feet
N
Scale: 1 inch = 200 feet

Channel (CH)	Length (ft)	Avg. Width (ft)	Area (ac)	Phase 1		Phase 2	
				Impact Length (ft)	Impact Area (ac)	Impact Length (ft)	Impact Area (ac)
CH 1	977	2.5	0.056	123	0.007	--	--
CH 1b	537	1.0	0.012	--	--	74	0.002
CH 2	301	1.5	0.010	--	--	165	0.006
CH 2a	110	0.5	0.001	110	0.001	--	--
Total	**1,925**	**--**	**0.079**	**233**	**0.008**	**239**	**0.008**

Label	Biological Community	Area (ac)	Phase 1 Impacts (ac)	Phase 2 Impacts (ac)
MOF	Mixed Oak Forest	13.96	4.78	3.98
PFF	Ponderosa Pine Forest	8.56	6.95	0.54
ABG	Annual Brome Grassland	2.99	1.69	0.59
WMC	White Leaf Manzanita Chaparral	1.23	0.89	0
THW	Tree-of-Heaven Woodland	0.57	0.49	0.01
--	Ephemeral Channels	0.08	0.008	0.008
	Total	**27.39**	**14.80**	**5.12**

SYCAMORE Environmental Consultants, Inc.

Aerial Photograph: 11 June 2012
Google Earth Imagery
Piedmont Oak Estates
Tentative Map and Project
Development Plan (Sept. 2012)
TSM-1.dwg by BTConsulting, Inc.

SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.
6355 Riverside Blvd., Suite C, Sacramento, CA 95831
916/ 427-0703 Fax 916/ 427-2175

2 July 2009

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760

Phone: 925/ 855-8489
Fax: 925/ 943-7409

Subject: Botanical Survey Update for Piedmont Oak Estates, El Dorado County, CA

Dear Mr. Davies:

Sycamore Environmental prepared a Biological Resources Evaluation and Preliminary Jurisdictional Delineation Report (BRE) on 9 April 2007 for the Piedmont Oak Estates Project. The BRE identified the Project Study Area (PSA) as potential habitat for four special-status plants. Fieldwork for the BRE was conducted on 9 and 10 September 2006, at which time three of the four special-status plants were not evident and identifiable. This Botanical Survey Update was prepared to document the results of a botanical survey conducted in the PSA during the evident and identifiable period of the special-status plants with the potential to occur in the PSA.

Methods

For the preparation of the BRE, background studies were conducted that included reviewing maps, aerial photographs, lists of special-status species from the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (DFG), and reviewing the soils map of the PSA. General biological surveys were conducted that identified habitat in the PSA and the potential for special-status species occurrence. The results of these background studies are documented in the BRE. The PSA is in County rare plant mitigation area 2. The PSA is not in the recommended preserve boundary for the Pine Hill Plants (USFWS 2002). The BRE concluded potential habitat was present for the special-status plants in Table 1.

The botanical survey was conducted by Chuck Hughes, M.S., on 12 June 2009 and by Michael Bower, (M.S. in prep) and Jessica Easley on 24 June 2009. The survey followed the guidelines set forth by the Department of Fish and Game (DFG 2000) except that impacts and mitigation were not identified because project design was not available. Scientific nomenclature follows Hickman, ed. (1993).

Approximately 13 person-hours were spent in the field during the June 2009 botanical fieldwork. The PSA was searched by walking systematic transects. An additional approximately two hours were spent keying plant specimens collected in the field. Approximately 11.5 person-hours were spent in the field during the September 2006 general biological surveys. All plants found in the

PSA were identified to the taxonomic level necessary to determine legal status. A list of all plant species observed in the PSA is in Attachment A.

Table 1. Special-Status Plant Species with the Potential to Occur in the PSA

Special-Status Plant Species	Common Name	Federal Status [a]	State Status/ CNPS List [b]	Habitat Present? / Species Observed?
Arctostaphylos nissenana	Nissenan manzanita	--	--/ 1B.2	Yes/ No
Calochortus clavatus var. *avius*	Pleasant Valley mariposa lily	--	--/ 1B.2	Yes/ No
Clarkia biloba ssp. *brandegeae*	Brandegee's clarkia	--	--/ 1B.2	Yes/ No
Viburnum ellipticum	Oval-leaved viburnum	--	--/ 2.3	Yes/ No

[a] **Status:** **E** = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **R** = California Rare; * = Possibly extinct; **CH** = Critical habitat designated.

[b] **CNPS:** **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution; **0.1** = Seriously endangered in CA; **0.2** = Fairly endangered in CA; **0.3** = Not very endangered in CA.

The June 2009 botanical fieldwork was conducted outside the published blooming period of Nissenan manzanita (CNPS 2009); however, Nissenan manzanita is a perennial evergreen shrub that is evident and identifiable year-round based on vegetative characteristics. The June 2009 botanical fieldwork was conducted during the published blooming period of the other special-status plants with the potential to occur in the PSA.

Results

No special-status plant species were observed in the PSA during the general biological surveys or the botanical survey conducted during the evident and identifiable period for the special-status plants with the potential to occur in the PSA.

Please contact me you have any questions.

Cordially,

Chuck Hughes, M.S.
Botanist/ Biologist

c: Mr. Mike Smith, P.E. Thorne & Associates, Inc.

Attachment A. Plant Species Observed

Literature Cited

California Department of Fish and Game (DFG). May 2000. Guidelines for assessing the effects of proposed projects on rare, threatened, and endangered plants and natural communities. Sacramento, CA. http://www.dfg.ca.gov/bdb/pdfs/guideplt.pdf

California Native Plant Society (CNPS). Accessed May 2009. Inventory of rare and endangered plants (online edition, v7-09b 4-10-09). California Native Plant Society, Sacramento, CA. <http://www.cnps.org/inventory>

Hickman, J., ed. 1993. The Jepson manual: Higher plants of California. University of California Press, Berkeley, CA.

Sycamore Environmental Consultants, Inc. 9 April 2007. Biological resources evaluation and preliminary jurisdictional delineation report for Piedmont Oak Estates, El Dorado County, CA. Prepared for Piedmont Oak Estates, LLC., Danville, CA.

U.S. Fish and Wildlife Service (USFWS). 2002. Recovery plan for Gabbro soil plants of the Central Sierra Nevada Foothills. Portland, OR.

ATTACHMENT A.

Plant Species Observed

Piedmont Oak Estates

El Dorado County, CA

Family	Scientific Name	Common Name	Native/ Introduced
FERNS & ALLIES			
Dryopteridaceae	*Dryopteris arguta*	Wood fern	N
Polypodiaceae	*Polypodium calirhiza*	Polypody	N
Pteridaceae	*Pentagramma triangularis*	Goldback fern	N
CONIFERS			
Cupressaceae	*Calocedrus decurrens*	Incense cedar	N
Pinaceae	*Pinus ponderosa*	Pacific ponderosa pine	N
	Pinus sabiniana	Gray pine	N
	Pseudotsuga menziesii	Douglas fir	N
DICOTS			
Amaranthaceae	*Amaranthus* sp.	Pigweed	--
Anacardiaceae	*Toxicodendron diversilobum*	Western poison oak	N
Apiaceae	*Daucus carota*	Carrot	I
	Daucus pusillus	--	N
	Lomatium sp.	--	N
	Sanicula bipinnatifida	Purple sanicle	N
	Sanicula crassicaulis	Sanicle	N
	Torilis arvensis	Hedge parsley	I
Asclepiadaceae	*Asclepias fascicularis*	Narrow-leaf milkweed	N
Asteraceae	*Achillea millefolium*	Yarrow	N
	Agoseris sp.	--	N
	Anaphalis margaritacea	Pearly everlasting	N
	Anthemis cotula	Mayweed	I
	Artemisia douglasiana	Mugwort	N
	Baccharis pilularis	Coyote brush	N
	Calycadenia sp.	--	N
	Carduus pycnocephalus	Italian thistle	I
	Centaurea solstitialis	Yellow star-thistle	I
	Chamomilla suaveolens	Pineapple weed	I
	Chondrilla juncea	Skeleton weed	I
	Cichorium intybus	Chicory	I
	Cirsium vulgare	Bull thistle	I
	Ericameria sp.	Goldenbrush	N
	Eriophyllum lanatum var. *croceum*	Woolly sunflower	N
	Filago californica	Herba impia	N
	Gnaphalium sp.	Cudweed	--
	Grindelia hirsutula var. *davyi*	Gumplant	N
	Hemizonia fitchii	Fitch's hemizonia	N
	Holocarpha virgata	--	N
	Hypochaeris radicata	Rough cat's-ear	I
	Lactuca serriola	Prickly lettuce	I
	Leontodon taraxacoides	Hawkbit	I
	Madia sp. (2 species present)	Tarweed	N

Family	Scientific Name	Common Name	Native/ Introduced
	Micropus californicus var. *californicus*	Slender cottonweed	N
	Psilocarphus tenellus ssp. *tenellus*	Woolly-heads	N
	Sonchus asper ssp. *asper*	Prickly sow thistle	I
	Tragopogon sp.	Goat's beard	I
Bignoniaceae	*Catalpa* sp.	--	I
Brassicaceae	*Brassica nigra*	Black mustard	I
	Rorippa curvisiliqua	Water cress	N
	Sisymbrium officinale	Hedge mustard	I
Boraginaceae	*Plagiobothrys* sp.	Popcornflower	N
Caprifoliaceae	*Lonicera subspicata* var. *denudata*	Honeysuckle	N
	Lonicera interrupta	Honeysuckle	N
	Symphoricarpos albus var. *laevigatus*	Snowberry	N
Caryophyllaceae	*Cerastium glomeratum*	Mouse-ear chickweed	I
	Scleranthus annuus	Knawel	I
	Spergularia sp.	Sand-spurrey	--
	Stellaria media	Common chickweed	I
Convolvulaceae	*Calystegia occidentalis*	Morning glory	N
Ericaceae	*Arctostaphylos viscida* ssp. *viscida*	Manzanita	N
Euphorbiaceae	*Eremocarpus setigerus*	Dove weed; Turkey mullein	N
Fabaceae	*Lathyrus latifolius*	Perennial sweet pea	I
	Lotus micranthus	--	N
	Lotus purshianus var. *purshianus*	--	N
	Lupinus sp.	Lupine	N
	Trifolium dubium	Little hop clover	I
	Trifolium glomeratum	Clover	I
	Trifolium hirtum	Rose clover	I
	Trifolium microcephalum	Clover	N
	Trifolium subterraneum	Subterranean clover	I
	Trifolium willdenovii	Clover	N
	Vicia sativa ssp. *sativa*	Common vetch	I
	Vicia villosa ssp. *villosa*	Hairy vetch	I
Fagaceae	*Quercus chrysolepis*	Maul oak	N
	Quercus douglasii	Blue oak	N
	Quercus kelloggii	California black oak	N
	Quercus lobata	Valley oak	N
	Quercus wislizenii var. *wislizenii*	Interior live oak	N
Gentianaceae	*Centaurium muehlenbergii*	Centaury	N
Geraniaceae	*Erodium botrys*	Filaree	I
	Erodium cicutarium	Filaree	I
	Geranium dissectum	Cranesbill	I
	Geranium molle	Cranesbill	I
Hippocastanaceae	*Aesculus californica*	California buckeye	N
Hydrophyllaceae	*Eriodictyon californicum*	Yerba santa	N
Hypericaceae	*Hypericum perforatum*	Klamathweed	I
Lamiaceae	*Lamium amplexicaule*	Dead nettle	I
	Mentha sp.	Mint	--
	Monardella villosa ssp. *villosa*	Coyote-mint	N
	Scutellaria californica	Skullcap	N
	Stachys sp.	Hedge nettle	N
	Trichostema lanceolatum	Vinegar weed	N
Lythraceae	*Lythrum hyssopifolium*	--	I

Family	Scientific Name	Common Name	Native/ Introduced
Malvaceae	*Sidalcea malviflora* ssp. *asprella*	Checker mallow	N
Onagraceae	*Clarkia biloba* ssp. *biloba*	--	N
	Clarkia purpurea ssp. *quadrivulnera*	Four-spot	N
	Epilobium brachycarpum	Fireweed	N
	Epilobium sp.	Fireweed	--
Papaveraceae	*Eschscholzia californica*	California poppy	N
Plantaginaceae	*Plantago lanceolata*	English plantain	I
Polemoniaceae	*Allophyllum diaricatum*	--	N
	Navarretia intertexta ssp. *intertexta*	--	N
Polygonaceae	*Polygonum arenastrum*	Common knotweed	I
	Polygonum sp.	Knotweed	--
	Rumex acetosella	Sheep sorrel	I
	Rumex conglomeratus	Dock	I
	Rumex crispus	Curly dock	I
	Rumex pulcher	Fiddle dock	I
Portulacaceae	*Claytonia perfoliata* ssp. *perfoliata*	Miner's lettuce	N
Primulaceae	*Anagallis arvensis*	Scarlet pimpernel	I
Ranunculaceae	*Delphinium variegatum* ssp. *variegatum*	Royal larkspur	N
	Ranunculus muricatus	Buttercup	I
Rhamnaceae	*Ceanothus cuneatus* var. *cuneatus*	Buck brush	N
	Rhamnus ilicifolia	Holly-leaved redberry	N
	Rhamnus tomentella ssp. *tomentella*	Hoary coffeeberry	N
Rosaceae	*Aphanes occidentalis*	--	N
	Heteromeles arbutifolia	Toyon	N
	Potentilla glandulosa	Cinquefoil	N
	Prunus sp.	--	--
	Pyrus communis	Common pear	I
	Rubus discolor	Himalayan blackberry	I
	Sanguisorba minor ssp. *muricata*	Garden burnet	I
Rubiaceae	*Galium aparine*	Goose grass	N
	Galium murale	Tiny bedstraw	I
	Galium parisiense	Wall bedstraw	I
	Galium porrigens var. *tenue*	Climbing bedstraw	N
	Sherardia arvensis	Field madder	I
Salicaceae	*Salix* sp.	Willow	N
Scrophulariaceae	*Collinsia* sp.	--	N
	Kickxia elatine	Fluellin	I
	Mimulus guttatus	Yellow monkeyflower	N
	Verbascum blattaria	Moth mullein	I
	Verbascum thapsus	Woolly mullein	I
Simaroubaceae	*Ailanthus altissima*	Tree of heaven	I
Solanaceae	*Solanum* sp.	Nightshade	--
Verbenaceae	*Verbena litoralis*	Verbena	I
Viscaceae	*Arceuthobium occidentale*	Foothill-pine dwarf mistletoe	N
	Phoradendron villosum	Oak mistletoe	N
Vitaceae	*Vitis californica*	California wild grape	N

Family	Scientific Name	Common Name	Native/ Introduced
MONOCOTS			
Cyperaceae	*Carex sp.*	Sedge	N
	Cyperus eragrostis	Nut sedge	N
	Eleocharis macrostachya	Spikerush	N
Iridaceae	*Sisyrinchium bellum*	Blue-eyed-grass	N
Juncaceae	*Juncus balticus*	Baltic rush	N
	Juncus bufonius	Toad rush	N
	Juncus occidentalis	Rush	N
	Juncus phaeocephalus var. *paniculatus*	Rush	N
	Luzula comosa	Hairy wood rush	N
Liliaceae	*Brodiaea elegans* ssp. *elegans*	Harvest brodiaea	N
	Calochortus albus	White globe lily	N
	Chlorogalum pomeridianum var. *pomeridianum*	Soap plant	N
	Dichelostemma multiflorum	Wild hyacinth	N
	Dichelostemma volubile	Twining brodiaea	N
Poaceae	*Aegilops triuncialis*	Barbed goatgrass	I
	Agrostis sp.	Bent grass	--
	Aira caryophyllea	Silver European hairgrass	I
	Avena fatua	Wild oat	I
	Avena sativa	Cultivated oat	I
	Briza minor	Quaking grass	I
	Bromus diandrus	Ripgut grass	I
	Bromus hordeaceus	Soft brome	I
	Bromus laevipes	Brome	N
	Bromus madritensis ssp. *rubens*	Foxtail chess	I
	Cynodon dactylon	Bermuda grass	I
	Cynosurus echinatus	Hedgehog dogtail	I
	Deschampsia danthonioides	Annual hairgrass	N
	Elymus glaucus	Blue wildrye	N
	Elymus multisetus	Big squirreltail	N
	Gastridium ventricosum	Nit grass	I
	Hordeum marinum ssp. *gussoneanum*	Mediterranean barley	I
	Lolium multiflorum	Italian ryegrass	I
	Melica torreyana	Melic	N
	Muhlenbergia rigens	Deergrass	N
	Nassella pulchra	Purple needlegrass	N
	Phalaris sp.	--	--
	Poa bulbosa	Bulbous bluegrass	I
	Polypogon monspeliensis	Annual beard grass	I
	Taeniatherum caput-medusae	Medusa head	I
	Vulpia myuros var. *myuros*	Vulpia	I

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

April 24, 2013

Regulatory Division SPK-2009-00928

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, California 94526-2760

Dear Mr. Davies:

We are responding to your April 9, 2013, request for a preliminary jurisdictional determination (JD), in accordance with our Regulatory Guidance Letter (RGL) 08-02, for the Piedmont Oak Estates site. The approximately 27.39-acre site is located near Weber Creek, Section 19, Township 10 North, Range 11 East, Mount Diablo Meridian, Latitude 38.7025313162938°, Longitude -120.808560315998°, Town of Diamond Spring, El Dorado County, California.

Based on available information, **we concur with the amount and location of wetlands and/or other water bodies on the site as depicted on the enclosed 16 April, 2013, *Piedmont Oak Estates, El Dorado County, CA*, prepared by Sycamore Environmental Consultants, Inc** (enclosure 1). The approximately 0.0709 acre of other water bodies present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act.

A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for this site is enclosed (enclosure 2). Please sign and return a copy of the completed form to this office. Once we receive a copy of the form with your signature we can accept and process a Pre-Construction Notification or permit application for your proposed project.

You should not start any work in potentially jurisdictional waters of the United States unless you have Department of the Army permit authorization for the activity. You may request an approved JD for this site at any time prior to starting work within waters. In certain circumstances, as described in RGL 08-02, an approved JD may later be necessary.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

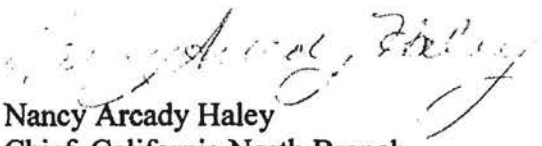
This preliminary determination has been conducted to identify the potential limits of wetlands and other water bodies which may be subject to Corps of Engineers' jurisdiction for the particular site identified in this request. A Notification of Appeal Process and Request for

Appeal Form is enclosed to notify you of your options with this determination (enclosure 3). This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2009-00928 in any correspondence concerning this project. If you have any questions, please contact Mr. Peck Ha at our California North Branch Office, Regulatory Division, Sacramento District, U.S. Army Corps of Engineers, 1325 J Street, Room 1350, Sacramento, California 95814-2922, email *Peck.Ha@usace.army.mil*, or telephone 916-557-6617. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,



Nancy Arcady Haley
Chief, California North Branch

Enclosures

Copy Furnished with enclosures:
Ms. Lillian Macleod, El Dorado County Planning Department, 2850 Fairlane Court, Placerville, California 95667

Copies Furnished without enclosures:
Mr. Chuck Hughes, Sycamore Environmental Consultants, Inc., 6355 Riverside Boulevard, Suite C, Sacramento, California 95831
Ms. Elizabeth Lee, California Regional Water Quality Control Board, Central Valley Region, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Ms. Tina Bartlett, California Department of Fish and Game, Region 2, 1701 Nimbus Drive, Rancho Cordova, California 95670-4599
U.S. Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901
Mr. Jason Brush, Environmental Protection Agency, WRT-8, 75 Hawthorne Street, San Francisco, California 94105-3922

Biological Resources Evaluation
and
Preliminary Jurisdictional Delineation Report
for
Piedmont Oak Estates

EL Dorado County, CA

Prepared by:

Sycamore Environmental Consultants, Inc.
6355 Riverside Blvd., Suite C
Sacramento, CA 95831-1143
Phone: 916/ 427-0703
Fax: 916/ 427-2175
Contact: R. John Little, Ph.D.

Prepared for:
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760
Phone: 925/ 855-8489
Fax: 925/ 943-7409
Contact: Mr. Jim Davies

9 April 2007

Biological Resources Evaluation
and
Preliminary Jurisdictional Delineation Report
for
Piedmont Oak Estates

El Dorado County, CA

Table of Contents

FIGURES

TABLES

APPENDICES

I. SUMMARY OF FINDINGS AND CONCLUSIONS

No state- or federal-listed species were observed in the Piedmont Oak Estates project study area (PSA). The PSA does not contain habitat for state- or federal-listed wildlife species. The PSA does not contain habitat for state and or federal-listed plant species.

The PSA contains potential habitat for special-status plant species including Pleasant Valley mariposa lily, Brandegee's clarkia, and oval-leaved viburnum. The PSA is located in El Dorado County rare plant mitigation area 2 (El Dorado Irrigation District Service Area).

Potential wetlands and other waters of the U.S. occur in the PSA. Dredging or fill activities in wetlands and other waters of the U.S. require a section 404 permit from the U.S. Army Corps of Engineers (Corps), a section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) and a 1602 Streambed Alteration Agreement from the California Department of Fish and Game (DFG).

II. INTRODUCTION

A. Purpose of Report

This report documents biological resources, wetlands, and other waters of the U.S. in the PSA. This report can be used in support of state and federal permit applications and CEQA documents. This report does not evaluate project impacts or identify mitigation measures.

B. Project Location

The 46.36 ac PSA is located east of the intersection of State Highway 49 and Black Rice Road north of the community of Diamond Springs in El Dorado County, CA (Figure 1). The PSA is located on the Placerville USGS topographic quadrangle (T10N, R11E, Sections 19 and 30). The PSA is in the South Fork American River watershed (hydrologic unit code 18020129). The PSA centroid is 38N 42' 05.94" and 120W 48' 34.89" (UTM zone 10, NAD 1983).

The PSA is located in El Dorado County rare plant mitigation area 2. The PSA is located outside the El Dorado County Important Biological Community (IBC) and Ecological Preserve areas (El Dorado County 2004).

To access the PSA from Sacramento, take State Highway 50 east and take Exit 44a towards Diamond Springs. Turn right onto Missouri Flat Road. Turn left at the intersection of Missouri Flat Road and State Highway 49. Veer left at the intersection of State Highway 49 and Pleasant Valley Road. Proceed north on State Highway 49 and turn right onto Black Rice

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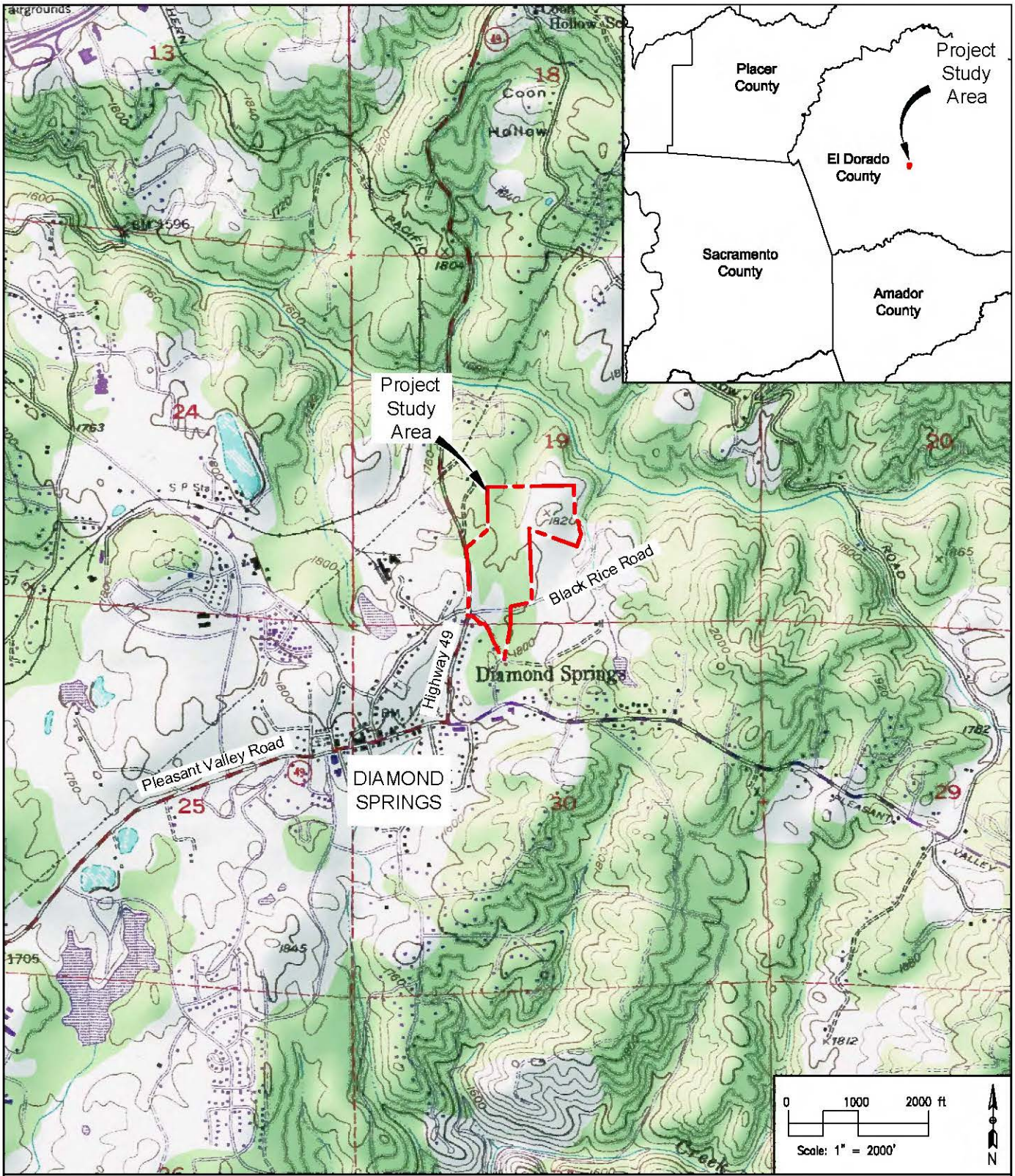

Piedmont Oak Estates
El Dorado County, CA
9 April 2007

= Project Study Area (PSA)

SYCAMORE Environmental Consultants, Inc.

Figure 1.
Location Map

Photograph:
Placerville, CA
USGS 7.5' Quadrangle

06039_Location.pdf

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Road. The PSA is located immediately east of the intersection of State Highway 49 and Black Rice Road on the north and south side of Black Rice Road.

C. Project Applicant and Engineer

Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760
Contact: Mr. Jim Davies
Phone: 925/ 855-8489
Fax: 925/ 943-7409

Gene E. Thorne & Associates, Inc.
3025 Alhambra Drive
Cameron Park, CA 95682
Contact: Mr. Gene Thorne
Phone: 916/ 985-7745
Fax: 530/ 676-4205

D. Project Description

Project design has not yet been completed.

III. STUDY METHODS

A. Studies Conducted

Studies included conducting field surveys; obtaining and analyzing data from state and federal agencies; and reviewing maps, aerial photographs, and published and unpublished literature. A preliminary jurisdictional delineation was conducted to determine if potential wetlands or other waters of the U.S. occur in the PSA.

B. Literature Search

Information on the biology, distribution, taxonomy, legal status, and other aspects of the special-status species was obtained from documents on file in the library of Sycamore Environmental. Standard references used for the biology and taxonomy of plants included Abrams (1923-1960); California Native Plant Society (2005); California Department of Fish and Game (2003, 2006b, d); Hickman, ed. (1993); Mason (1957); Munz (1959); and Sawyer and Keeler-Wolf (1995). Standard references used for the biology and taxonomy of wildlife included Behler and King (1979); California Department of Fish and Game (2006a, 5c); Ehrlich et al. (1988); Jameson and Peeters (2004); Jennings and Hayes (1994); Mayer and Laudenslayer, eds. (1988); McGinnis (1984); Peterson (1990); Sibley (2003); Stebbins (2003); Udvardy (1977); Verner and Boss (1980); Whitaker (1980); and Zeiner et al. (1988; 1990a, b).

A search of the California Natural Diversity Database (database release date 6 September 2006) was conducted for the Placerville USGS quad and the eight surrounding quads to determine if known records of federal- or state-listed species occur in, or in the vicinity of the PSA (Appendix A).

Sycamore Environmental obtained a list, dated 13 October 2006, from the U.S. Fish and Wildlife Service (USFWS), Sacramento Field Office that identifies special-status species that potentially occur in or could be affected by projects on the Placerville USGS quad (Appendix B)

C. Survey Dates and Personnel

Fieldwork for the jurisdictional delineation and biological survey was conducted by Adam Forbes, M.S. on 9 and 10 September 2006.

D. Survey Methods

Field surveys consisted of walking through the PSA to assess potential habitat for special-status species, sensitive communities, and potential wetlands and other waters of the U.S. Plant and animal species and vegetative communities were identified and recorded. A list of plant and wildlife species observed during the surveys is in Appendix D. Photographs of the PSA are in Appendix E.

E. Jurisdictional Delineation

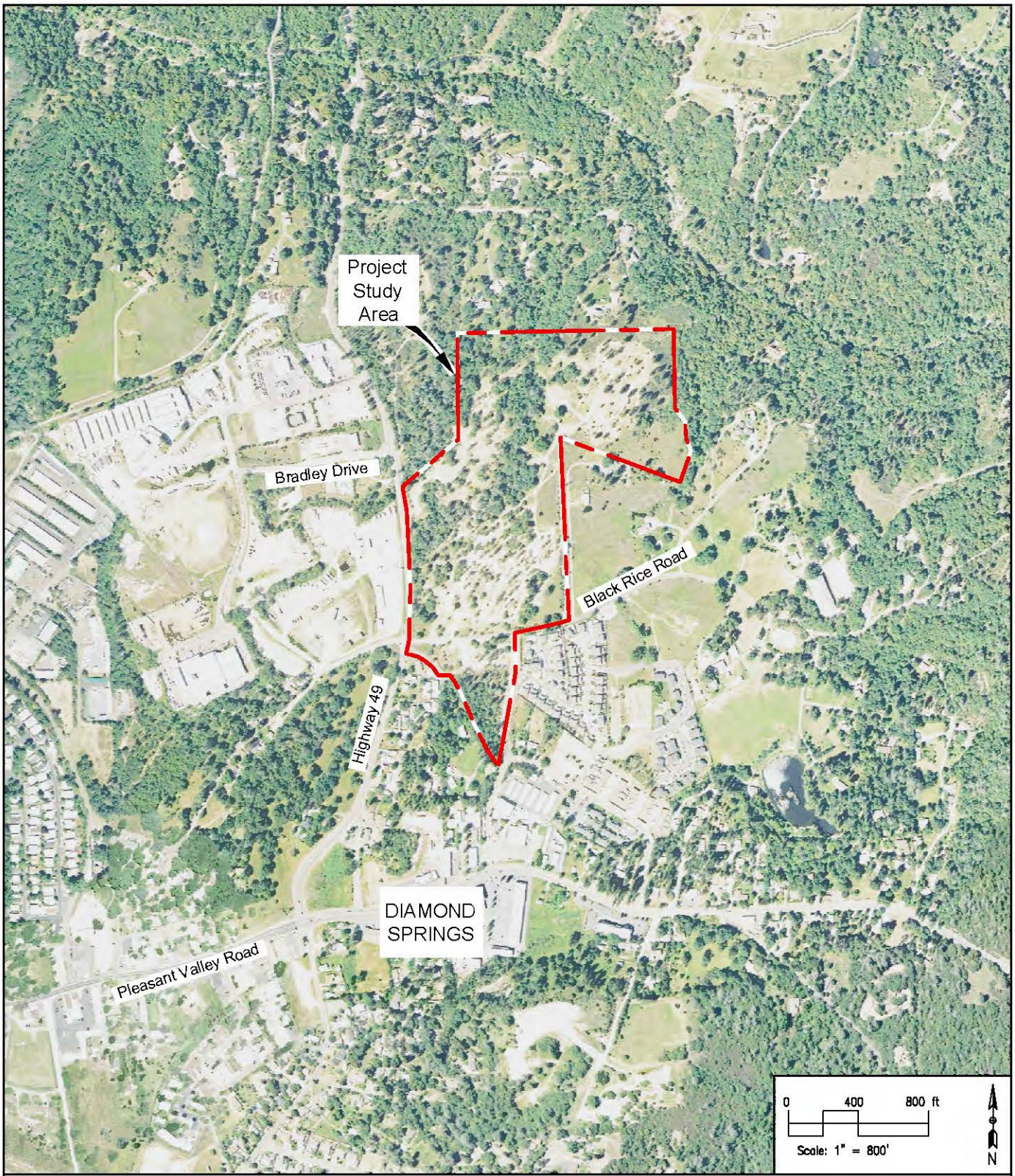
The jurisdictional delineation was conducted in accordance with Corps guidelines (1987). The results are in Section VI of this document.

F. Problems Encountered and Limitations That May Influence Results

Biological surveys of the PSA were conducted outside the documented blooming period of Pleasant Valley mariposa lily (*Calochortus clavatus* var. *avius*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*), and oval-leaved viburnum (*Viburnum ellipticum*). These species may not have been detected during the general biological survey of the PSA. No other problems or limitations were encountered that may have influenced the results.

G. Mapping

Biological and potential jurisdictional features observed by Sycamore Environmental were mapped using a Trimble GeoXT™ sub-meter accurate GPS. The 1 May 2006 aerial photo in Figures 2 and 3 was downloaded from the GlobeXplorer® website. The AutoCAD® base map used for Figure 5 was provided by Gene E. Thorne & Associates, Inc. The GPS data were exported to AutoCAD® and placed on the aerial photo (Figure 3) and AutoCAD® base map (Figure 5).



Piedmont Oak Estates
El Dorado County, CA
9 April 2007

= Project Study Area (PSA)

SYCAMORE Environmental Consultants, Inc.

Figure 2.
Aerial Photograph of the PSA

Photograph:
1 May 2006

06039_Aerial.pdf

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IV. ENVIRONMENTAL SETTING

The PSA is located in the western foothills of the Sierra Nevada north of the community of Diamond Springs in El Dorado County, CA. Elevation in the PSA ranges from 1,735 to 1,835 ft above sea level. Topography in the PSA consists of gentle to moderately steep slopes of varying aspect. Land use adjacent to the PSA consists of residential housing and undeveloped land.

A. Biological Communities and Other Features in the PSA

Biological communities are defined by species composition and relative abundance. Biological communities described below correlate where applicable with the list of California terrestrial natural communities recognized by the California Natural Diversity Database (DFG 2003) and the El Dorado County General Plan EIR (2004). Biological communities and other features are mapped in Figure 3; their acreages are in Table 1.

Table 1. Biological communities and other features in the PSA.

Feature Type	DFG Code [1]	El Dorado County Major Habitat Type [2]	Acreage [3] (ac)
Biological Community			
Mixed Oak Woodland	71.000.00	Blue Oak-Foothill Pine	19.16
California Annual Grassland	42.040.00	Annual Grassland	4.43
Manzanita Chaparral	37.300.00	Mixed Chaparral	1.24
Channels	--	--	0.21
Seasonal Wetland	--	--	0.12
Other Features			
Partially Cleared Land	--	--	21.20
Total:			**46.36**

[1] DFG 2003
[2] El Dorado County 2004
[3] Acreages were calculated using AutoCAD® functions.

1. Mixed Oak Woodland

This biological community occurs in the west central, northwest, northeast, and southern portions of the PSA. Tree species present include interior live oak (*Quercus wislizenii var. wislizenii*), blue oak (*Quercus douglasii*), Valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), Pacific ponderosa pine (*Pinus ponderosa*), and foothill pine (*Pinus sabiniana*). Canopy cover in this community is generally open. Native shrubs present include coyote brush (*Baccharis pilularis*), buck brush (*Ceanothus cuneatus* var. *cuneatus*), western poison oak (*Toxicodendron diversilobum*), manzanita (*Arctostaphylos* sp.), and toyon (*Heteromeles arbutifolia*). Species present in the herb layer include hedgehog dogtail

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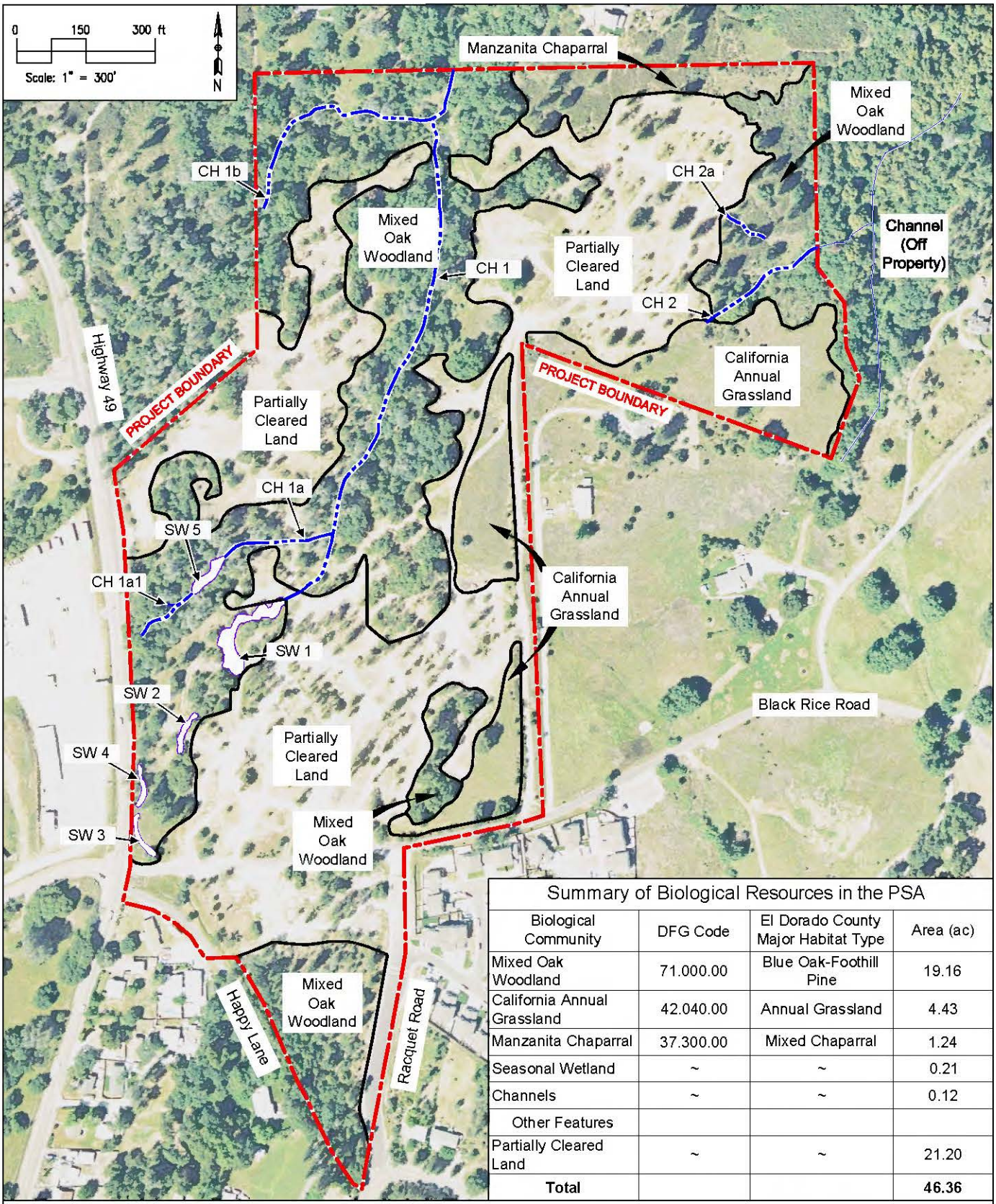

Summary of Biological Resources in the PSA

Biological Community	DFG Code	El Dorado County Major Habitat Type	Area (ac)
Mixed Oak Woodland	71.000.00	Blue Oak-Foothill Pine	19.16
California Annual Grassland	42.040.00	Annual Grassland	4.43
Manzanita Chaparral	37.300.00	Mixed Chaparral	1.24
Seasonal Wetland	~	~	0.21
Channels	~	~	0.12
Other Features			
Partially Cleared Land	~	~	21.20
Total			**46.36**

Piedmont Oak Estates
El Dorado County, CA
9 April 2007

= Project Boundary
= Channel (CH)
= Seasonal Wetland (SW)

SYCAMORE Environmental Consultants, Inc.

Figure 3.
Biological Resources Map

Photograph:
1 May 2006

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(*Cynosurus echinatus*), blue wildrye (*Elymus glaucus*), *Torilis arvensis*, wall bedstraw (*Galium parisiense*), and silver European hairgrass (*Aira caryophyllea*). Mixed oak woodland is given no special designation by DFG (2003). Oak woodlands under County jurisdiction are subject to California Public Resources Code (PRC) §21083.4.

2. California Annual Grassland

This biological community occurs in the eastern portion of the PSA. Species present include hedgehog dogtail, blue wildrye, wild oat (*Avena fatua*), Italian ryegrass (*Lolium multiflorum*), soft brome (*Bromus hordeaceus*), silver European hairgrass, *Torilis arvensis*, nit grass (*Gastridium ventricosum*), yellow star-thistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), and Klamath weed (*Hypericum perforatum*). Scattered trees and scrub species present in this community included pear (*Pyrus* sp.), coyote brush, tree of heaven (*Ailanthus altissima*), and buck brush. California annual grassland is given no special designation by DFG (2003).

3. Manzanita Chaparral

This community occurs in a small area in the north central portion of the PSA. Manzanita is the dominant shrub species. Other shrub species present include coyote brush and buck brush. The herb layer is poorly developed due to the closed canopy of the shrub layer. Manzanita chaparral is given no special designation by DFG (2003).

4. Channels

Six ephemeral channels occur in the PSA. No riparian corridor is associated with the six ephemeral drainages in the PSA. Species present in and adjacent to the ephemeral channels include western poison oak, interior live oak, and California buckeye (*Aesculus californica*). Channels in the PSA are potential jurisdictional features and are discussed Section VI.H.

5. Seasonal Wetland

Five seasonal wetlands occur in the PSA. Closed depressional wetlands, such as vernal pools, do not occur in the PSA. Seasonal wetlands in the PSA consist of open sloped depressions that drain to the adjacent ephemeral channels. Species present in seasonal wetland habitat include Himalayan blackberry, deer grass (*Muhlenbergia rigens*), curly dock (*Rumex crispus*), toad rush (*Juncus bufonius*), Italian ryegrass, Baltic rush (*Juncus balticus*), *Lythrum hyssopifolium*, quaking grass (*Briza minor*), spikerush (*Eleocharis macrostachya*), and nutsedge (*Cyperus eragrostis*). Seasonal wetlands in the PSA are potential jurisdictional features and are discussed Section VI.H.

6. Partially Cleared Land

Prior to the September 2006 biological surveys approximately 21.20 ac of the PSA had been partially cleared of vegetation. A review of aerial photographs indicates that the prior to the removal vegetation in these areas approximately 50% of the area was composed of mixed oak

woodland. Approximately 40% of the area was likely vegetated with manzanita chaparral and scattered pine trees. The remaining 10% of the area was composed of nonnative grassland. Not all of the vegetation was cleared from the 21.20 ac. Scattered tree and shrub species present include Ponderosa pine, blue oak, interior live oak, coyote brush, and buck brush. Ruderal herbaceous species present include hedgehog dogtail, dove weed (*Eremocarpus setigerus*), vinegar weed (*Trichostema lanceolatum*), and woolly mullein (*Verbascum thapsus*). Multiple unpaved roads occur in the areas were vegetation was removed. Most of these roads appear to have been created during vegetation removal activities.

B. The Existing Level of Disturbance

The PSA is composed of undeveloped land located in a rural residential setting. A total of 21.20 ac of the PSA have been partially cleared of vegetation. Two ditches, likely associated with previous mining activities, occur in the PSA. Piles of spoils associated with previous mining activities occur at various locations in the PSA.

V. BIOLOGICAL RESOURCES IN THE PROJECT STUDY AREA

A. Determination of Special-Status Species in the Project Study Area

File data from CNDDB records, USFWS, and field surveys were used to determine the species that could occur in the PSA. The CNDDB/ RareFind summary report for the Placerville quad and the eight adjacent quads is in Appendix A. The USFWS list of special-status species that could occur on the Placerville quad and in El Dorado County is in Appendix B. Field surveys were conducted to determine if habitat for special-status species identified in file data is present in the PSA. Special-status species for which suitable habitat is present are listed in Table 2.

B. Special-Status Species not in the Project Study Area

Special-status species for which suitable habitat is not present, or whose distributional limits preclude the possibility of their occurrence in the PSA, are not discussed further in this report. These species are evaluated in Appendix C.

Table 2. Special-status species for which suitable habitat occurs in the PSA

Special-Status Species	Common Name	Federal Listing Status/ USFWS Codes [a]	State Listing Status/ DFG Code or CNPS List [b]	Source [c]	Habitat Present? / Species Observed?
Amphibian					
Rana aurora draytonii	California red-legged frog	T	CSC	1, 2	No/ No
Birds					
Migratory birds/ Birds of prey/	--	--/ --	--/ --	3	Yes/ Yes
Plants		**USFWS**	**State/ CNPS**		
Arctostaphylos nissenana	Nissenan Manzanita	--	--/ 1B.2	2	--
Calochortus clavatus var. *avius*	Pleasant Valley mariposa lily	--	--/ 1B.2	2	Yes/ No
Clarkia biloba ssp. *brandegeae*	Brandegee's clarkia	--	--/ 1B.2	2	Yes/ No
Viburnum ellipticum	Oval-leaved viburnum	--	--/ 2.3	2	Yes/ No

[a] **Listing Status** Federal status determined from USFWS letter. State status determined from DFG (2006 c, d). Codes used in table are:
E = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **R** = California Rare; **CH** = Critical Habitat

[b] **Other Codes** Other codes determined from USFWS letter, DFG (2006 a, b), and CNPS (2005). Codes used in table are as follows:
CSC = DFG Species of Special Concern
CNPS List (plants only): **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere
CNPS List Decimal Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in California (20-80% occurrences threatened); **.3 =** Not very endangered in California (<20% of occurrences threatened or no current threats known).

[c] **Sources 1** = From USFWS letter. **2** = From CNDDB/ RareFind. **3** = Observed during survey.

C. Evaluation of Special-Status Wildlife Species

1. Amphibians

California red-legged frog (***Rana aurora draytonii***)

HABITAT AND BIOLOGY: CRLF habitat combines both a specific aquatic and riparian component. The adults typically require dense, shrubby, or emergent riparian vegetation closely associated with deep (>2.3 ft) still or slowly moving water. Deep-water pools with dense stands of overhanging willows intermixed with cattails support the highest densities of CRLF. Well-vegetated terrestrial areas within a riparian corridor may provide important sheltering habitat during the winter. Frogs spend considerable time resting and feeding in riparian vegetation when it is present (USFWS 2002a; 2005).

CRLF require water to breed. Female CRLF deposit egg masses on emergent vegetation so that the masses float on the surface of the water. Breeding habitats for CRLF vary from deep still or slow moving water with dense riparian or emergent vegetation to shallow sections of streams that are not covered with riparian vegetation. While frogs successfully breed in streams, high flows and cold temperatures in streams during the spring often make these sites risky environments for eggs and tadpoles. Stock ponds that have vegetative cover and few

nonnative predators may be used by CRLF for breeding. CRLF do not occupy water that exceeds temperatures of 70° F (USFWS 2002a).

During summer, CRLF often disperse upstream or downstream from their breeding habitat to forage or seek aestivation habitat if water is not available. Aestivation habitat is essential for the survival of CRLF within a watershed. During dry periods, CRLF are rarely encountered far from water. Summer habitat could include spaces under boulders or rocks and organic debris, such as downed trees or logs; or industrial debris, such as drains and watering troughs. CRLF use small mammal burrows and moist leaf litter to aestivate during the summer if water is not available. CRLF use large cracks in the bottom of dried ponds as refugia. CRLF are frequently encountered in seeps and springs located in open grasslands. Such bodies may not be suitable for breeding but may function as foraging habitat or refugia for frogs (USFWS 2002a; 2005).

RANGE: CRLF are endemic to CA and Baja California, Mexico. The known elevation range extends from near sea level to elevations of about 5,200 ft (USFWS 2002a). Nearly all sightings have occurred below 3,500 ft (USFWS 2002a). CRLF historically occurred through Pacific slope drainages from the vicinity of Redding (Shasta Co.) inland, west to Point Reyes (Marin Co., CA), and southward to the Santo Domingo River drainage in Baja California, Mexico (Jennings and Hayes 1994). CRLF are now known only from isolated localities in the Sierra Nevada, northern Coast, and northern Transverse Ranges (USFWS 2002a).

KNOWN RECORDS: There are no CNDDB records for CRLF on the Placerville or 8 surrounding quads. The closest record to the PSA is from 2005 and is located approximately 14.8 mi west-northwest of the PSA on the east side of Folsom Lake, southwest of Iron Mountain on the Clarksville quad. One juvenile CRFL was observed on a footbridge that that crosses a small watercourse. USFWS has determined that this is an unsubstantiated record (pers. comm. Pete Trenham, USFWS). The closest known breeding population is located approximately 11.6 mi northeast of the PSA. The record is located at Spivey Pond, on the North Fork of Weber Creek on the Sly Park quad in El Dorado County.

HABITAT PRESENT IN THE PSA: There is no CRLF breeding habitat in the PSA.

DISCUSSION: The PSA is outside the dispersal range of the nearest known breeding population and there is no breeding habitat for CRLF in the PSA.

2. Birds

Birds of prey and other migratory bird nests

HABITAT PRESENT IN THE PSA: Trees and shrubs in the PSA provide potential nesting habitat for birds of prey and migratory birds.

DISCUSSION: No birds of prey or their nests were observed in the PSA. Several migratory birds were observed in or soaring above the PSA. No migratory bird nests were observed in the PSA. Fish and Game Code 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes

it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA.

D. Evaluation of Special-Status Plant Species

Nissenan manzanita (*Arctostaphylos nissenana*)

HABITAT AND BIOLOGY: Evergreen shrub found in rocky closed-cone coniferous forest and chaparral from 1,475 to 3,610 ft in elevation. Blooms February through March (CNPS 2005).

RANGE: Known from El Dorado and Tuolumne cos.

KNOWN RECORDS: There closest CNDDB record is from 1938 and is located approximately 1.2 mi east-southeast of the PSA on the Placerville quad. The record is located at the head of Martinez Creek approximately 2 mi southeast of Diamond Springs.

HABITAT PRESENT IN THE PSA: The manzanita chaparral community in the PSA provides habitat for this species.

DISCUSSION: This species was not observed in the PSA during the general biological survey. Although the survey was conducted after the blooming period, Nissenan manzanita is a perennial evergreen shrub that is identifiable year-round. Nissenan manzanita does not occur in the PSA.

Pleasant Valley mariposa lily (*Calochortus clavatus* var. *avius*)

HABITAT AND BIOLOGY: This bulbiferous herb occurs in lower montane coniferous forest from 1,000 to 5,900 feet in elevation (CNPS 2005). Blooms May through July (CNPS 2005).

RANGE: Amador, Calaveras, El Dorado, and Mariposa cos (CNPS 2005).

KNOWN RECORDS: There are no CNDDB records for this species on the Placerville quad. The closest record for this species is 7.2 mi east of the PSA. The record is located on a ridge top between Avinsino Corner and Newton, approximately 2.5 air mi south of Camino on the Camino quad.

HABITAT PRESENT IN THE PSA: Habitat for this species occurs in the portions of the PSA dominated by mixed oak woodland.

DISCUSSION: Pleasant Valley mariposa lily was not observed in the PSA during biological surveys. The general biological survey was conducted at a time of year when this species may not have been identifiable. Although this species was not observed in the PSA during the biological survey, its potential to occur in the PSA cannot be excluded.

Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*)

HABITAT AND BIOLOGY: This annual herb is found in chaparral and cismontane woodland, often in road cuts, from 740 to 3,000 ft in elevation (CNPS 2005). Blooms May through July (CNPS 2005).

RANGE: This species is known from Butte, El Dorado, Nevada, Placer, Sierra, and Yuba cos (CNPS 2005).

KNOWN RECORDS: There is one CNDDB record for this species on the Placerville quad. The record is from 1943 and is approximately 4 mi northeast of the PSA. The record is located west of the Institute for Forest Genetics on a dry hillside of a wooded ravine.

HABITAT PRESENT IN THE PSA: Habitat for this species occurs in the PSA.

DISCUSSION: Brandegee's clarkia was not observed in the PSA during biological surveys. The general biological survey was conducted at a time of year when this species may not have been identifiable. Although this species was not observed in the PSA during the biological survey, its potential to occur in the PSA cannot be excluded.

Oval-leaved viburnum (*Viburnum ellipticum*)

HABITAT AND BIOLOGY: This deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 700 to 4,600 ft elevation (CNPS 2005, Hickman 1993). Blooms May through June (CNPS 2005).

RANGE: Contra Costa, Fresno, El Dorado, Glenn, Humboldt, Mendocino, Napa, Placer, Shasta, and Sonoma cos and north to Oregon and Washington.

KNOWN RECORDS: There is one CNDDB record for this species on the Placerville quad. The record is from 1901 and the location of the record is listed as "Placerville".

HABITAT PRESENT IN THE PSA: Habitat for this species occurs in the PSA.

DISCUSSION: Oval-leaved viburnum was not observed in the PSA during biological surveys. The general biological survey was conducted at a time of year when this species may not have been identifiable. Although this species was not observed in the PSA during the biological survey, its potential to occur in the PSA can not be excluded.

VI. JURISDICTIONAL DELINEATION

A. Literature Review

Sycamore Environmental reviewed the Placerville USGS quadrangle, the USFWS wetlands online mapper for the Placerville quad (USFWS 13 October 2006), the Soil Survey of El Dorado Area, CA, and aerial photograph map sheets (Soil Conservation Service (SCS) 1974).

B. Delineation Methods

Jurisdictional data were recorded using the Routine On-Site Determination Method (Corps 1987). Six channel data sheets were completed. Five wetland and 22 upland data points were taken. Soil pits were dug to observe the chroma, texture, degree of saturation, and other characteristics. Plant species were identified by Adam Forbes, M.S. Hydrophytic classifications of plants were determined from the U.S. Fish and Wildlife Service national list of plant species that occur in wetlands (USFWS 1988). Data sheets are in Appendix F. Color photos of the PSA are in Appendix E. This jurisdictional delineation is preliminary until verified by the Corps.

This jurisdictional delineation report has been prepared in accordance with the Sacramento District minimum standards (Corps 2001). This report was prepared prior to the implementation of the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (the supplement) (Corps 2006). The supplement is intended to bring the Corps Manual (Corps 1987) up to date with current knowledge and practice in the region and not to change wetland boundaries. Use of the Corps Manual in combination with the supplement is intended to improve the accuracy and efficiency of wetland-delineation procedures in the Arid West Region. Sycamore Environmental has reviewed the delineation data compiled for this report in light of the Interim Arid West Manual. The acreage of potential jurisdictional wetlands in the PSA would not change as a result of the wetland indicator procedures contained in the supplement.

C. Definitions

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into "waters of the United States" under Section 404 of the Clean Water Act (33 U.S.C. 1344). The Corps issues permits for certain dredge and fill activities in waters of the U.S. pursuant to the regulations in 33 CFR 320-330.

The lateral limits of jurisdiction in those waters may be divided into three categories. The categories include the territorial seas, tidal waters, and non-tidal waters (see 33 CFR 328.4 (a), (b), and (c), respectively). The term "waters of the U.S." is defined at 33 CFR 328.3(a) as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section.

The limits of jurisdiction are identified in 33 CFR 328.4 as:

a. Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)
b. Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:
    1. Extends to the high tide line, or
    2. When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.
c. Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:
    1. In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or

2. When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
3. When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

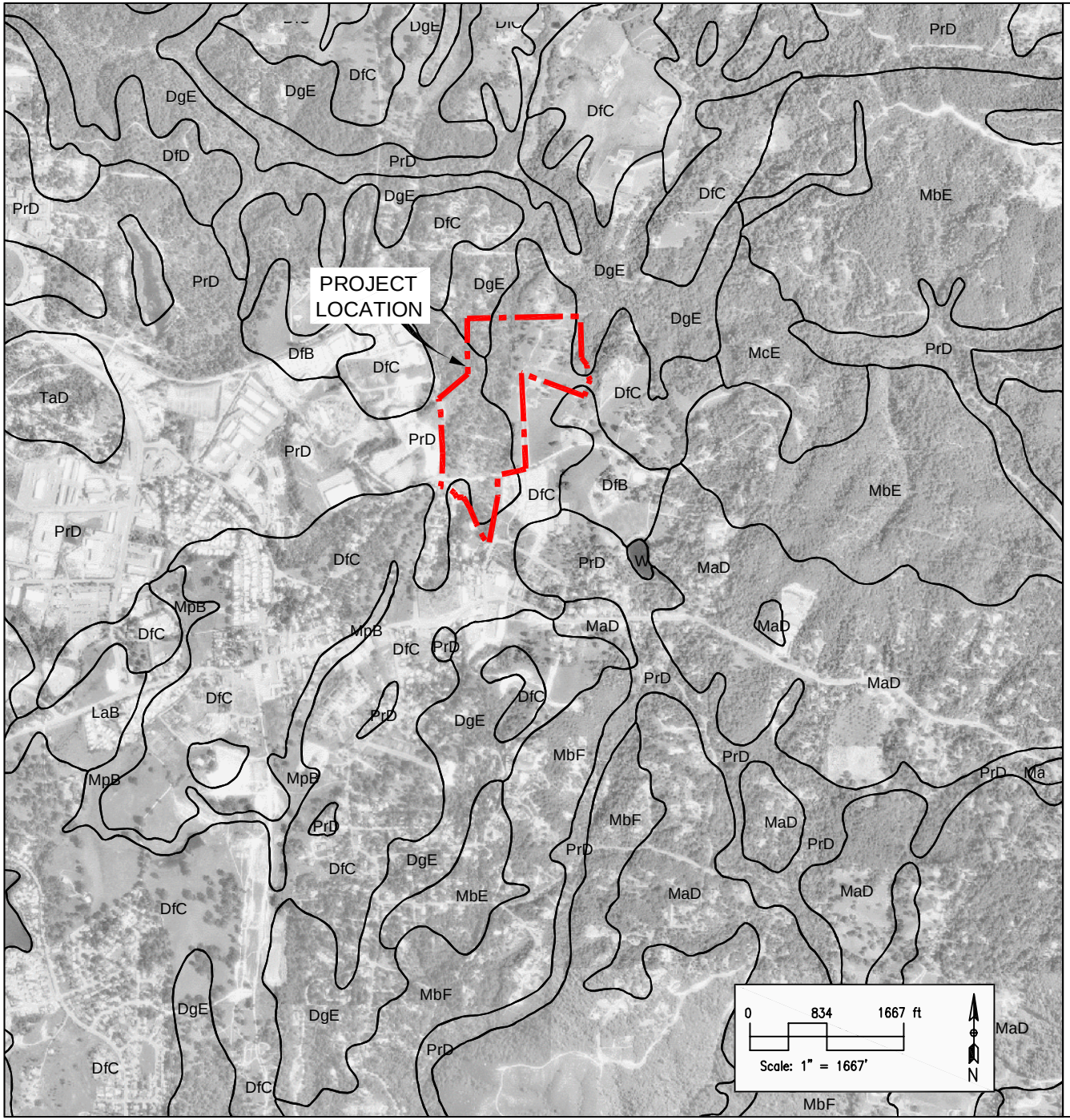
Wetlands, as defined by the Corps for regulatory purposes, are identified using a three-parameter test that considers whether hydrophytic vegetation, hydric soils, and hydrology are present (Corps 1987). Wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3, 40 CFR 230.3). Wetlands also include less conspicuous wetland types such as vernal pools and other seasonal wetlands.

An ephemeral stream has flowing water only during and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow. However, an intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow (66 FR 42099).

D. Soils

Mapped soil units in the PSA were determined using the Soil Survey of El Dorado Area (SCS 1974). Four soil mapping units occur in the PSA: Diamond Springs very fine sandy loam, 3-9% slopes, Diamond Springs very fine sandy loam, 9-15% slopes, Diamond Springs very rocky very fine sandy loam, 3-50% slopes, and placer diggings (Figure 4). Placer diggings located in channels are listed as hydric (NRCS 25 October 2006). The three remaining soil units are not listed as hydric (NRCS 25 October 2006). The soil descriptions provided below are from SCS (1974) with editing.

Diamond Springs very fine sandy loam, 3-9% slopes, Diamond Springs very fine sandy loam, 9-15% slopes, Diamond Springs very rocky very fine sandy loam, 3-50% slopes: The Diamond Springs series consists of well-drained soils underlain by fine-grained acidic igneous rocks at a depth of 24 to 50 inches. A typical profile of Diamond Springs very fine sandy loam, 3-9% slopes has pale-brown (10YR 6/3) very fine sandy loam from 0 to 3 inches, very pale brown (10YR 7/3) loam from 3 to 9 inches, very pale brown (10YR 8/4) light clay loam from 9 to 14 inches, very pale brown (10YR 8/4, 7/4) clay loam from 14 to 20 inches, white (10YR 8/2) clay loam from 28 to 36 inches and well-weathered meta-dacite below 40 inches. Permeability is moderately slow, surface runoff is medium, and the erosion hazard is slight to moderate. Diamond Springs very fine sandy loam. 9-15% slopes similar to the profile described above, except it occurs on slopes ranging from 9 to 15 %. Diamond Springs



Piedmont Oak Estates
El Dorado County, CA
9 April 2007

Figure 4.
Soil Map

Soil Types in the PSA:

PrD Placer Diggings

DfC Diamond Springs Very Fine Sandy Loam, 9 to 15 percent slopes

DgE Diamond Springs Very Rocky Very Fine Sandy Loam, 3 to 50 percent slopes

DfB Diamond Springs Very Fine Sandy Loam, 3 to 9 percent slopes

= Project Location

SYCAMORE
Environmental
Consultants, Inc.

Photograph:
1 May 1993

Soil Data:
NRCS Soil Data Mart
Soil Survey of El Dorado Area, CA 1974
http://www.soildatamart.nrcs.usda.gov

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very rocky very fine sandy loam is similar to the profile described above, except 5-25% of the surface is rock outcrops.

Placer Diggings: This soil type consists of areas of stony, cobbly, and gravelly material, commonly in beds of creeks and other streams, or of areas that have been placer mined and contain enough fine sand or silt to support some grass for grazing. Material included in this land type is derived from a mixture of rocks and commonly is stratified or poorly sorted.

E. Hydrology

A detailed description of the hydrology of potential jurisdictional features is in Section IV.H.

F. National Wetlands Inventory (NWI) Map

No mapped wetlands or waters occur in the PSA.

G. Existing Field Conditions

The average accumulated precipitation for the National Weather Service, Placerville gauge through August is 37.73 inches. Prior to the delineation, the Placerville gauge had received 59.00 inches of precipitation, or 156% of average accumulated precipitation (CDWR 2006).

H. Wetlands and Other Waters of the U.S. in the PSA

The U.S. Supreme Court, in its decision in Rapanos et ux., et. al. v. United States (19 June 2006), left open the possibility that certain wetlands and waters may not be regulated under section 404 of the Clean Water Act unless there is a "significant nexus" to traditionally navigable waters of the U.S. The Corps and U.S. Environmental Protection Agency (EPA) have not released new guidance for how to evaluate whether ephemeral or intermittent waters have a "significant nexus." The Sacramento District of the Corps is currently using the presence of a surface water connection, no matter how distant, to establish "adjacency." As a result, the District regulates most ephemeral and intermittent channels as "waters of the U.S." and wetlands adjacent to other waters. Potential jurisdictional features are shown on Figure 5 and their acreages are shown in Table 3.

1. Waters of the U.S.

Channel 1 (CH 1): CH 1 is an ephemeral channel located in the western portion PSA. CH 1 did not contain water on the day of the delineation. Hydrology for CH 1 is provided by surface runoff from surrounding upland areas and from its three ephemeral tributaries. The bed of CH 1 is composed of scoured soil, cobble, and bedrock. There is no riparian corridor associated with CH 1.

Channel 1a (CH 1a): CH 1a is an ephemeral channel located in the western portion of the PSA. CH 1a is a tributary of CH 1 and did not contain water on the day of the delineation.

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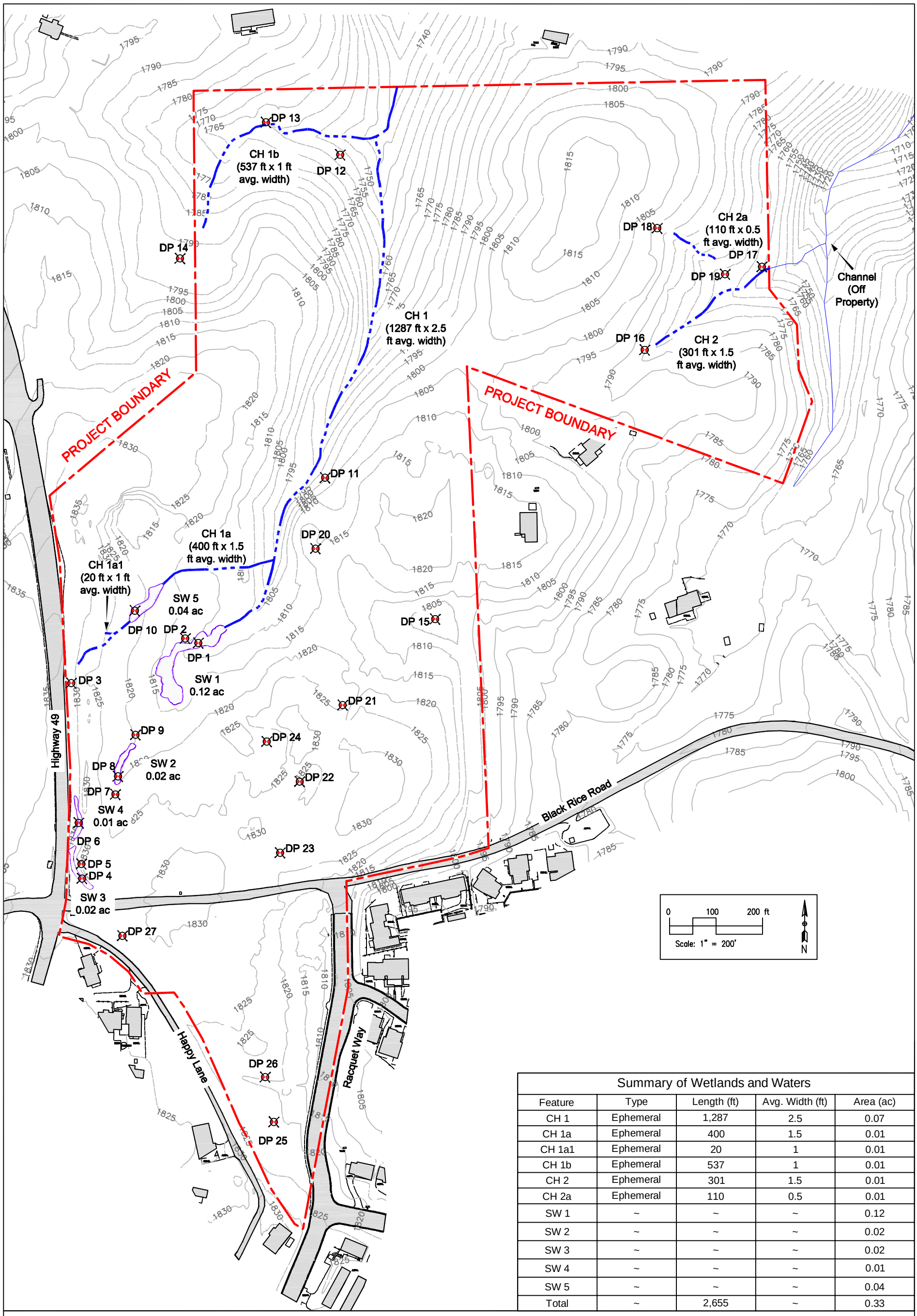

Summary of Wetlands and Waters				
Feature	Type	Length (ft)	Avg. Width (ft)	Area (ac)
CH 1	Ephemeral	1,287	2.5	0.07
CH 1a	Ephemeral	400	1.5	0.01
CH 1a1	Ephemeral	20	1	0.01
CH 1b	Ephemeral	537	1	0.01
CH 2	Ephemeral	301	1.5	0.01
CH 2a	Ephemeral	110	0.5	0.01
SW 1	~	~	~	0.12
SW 2	~	~	~	0.02
SW 3	~	~	~	0.02
SW 4	~	~	~	0.01
SW 5	~	~	~	0.04
Total	~	2,655	~	0.33

Piedmont Oak Estates
El Dorado County, CA
9 April 2007

= Project Boundary
= Channel (CH)
= Seasonal Wetland (SW)
DP 1 = Soil Point

Figure 5.
Preliminary Jurisdictional Delineation Map

SYCAMORE
Environmental
Consultants, Inc.

Date	Submittal	Delineators
9 Apr 07	Original	ACF

Basemap:
Piedmont.dwg
Gene Thorne & Associates, Inc.

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Hydrology for CH 1a is provided by flow from a concrete box culvert and by surface runoff from surrounding upland areas in the PSA. The concrete box culvert is located west of and upslope from the upstream terminus of CH 1a. The concrete box culvert is associated with an old ditch segment that was likely related to previous mining activities. Within the PSA the ditch segment extents from the intersection of Highway 49 and Black Rice Road north approximately 500 ft to a culvert that extends under Highway 49. The culvert under Highway 49 is damaged and it is unknown if the culvert is functioning. No culvert was observed at the southern terminus of the ditch segment. As water collects in the ditch it appears to flow through the concrete box culvert and drop approximately 10 vertical ft and enter CH 1a. Additional flow is provided by surface runoff from upland areas surrounding CH 1a. The upper reach of CH 1a drains to seasonal wetland 5 (SW 5). At the downsteam end of SW 5 flow reenters CH 1a and drains to CH 1. The bed of CH 1a is composed of scoured soil. Spoils piles are located adjacent to the upstream portions of CH 1a. There is no riparian corridor associated with CH 1a.

Table 3. Potential Wetlands and Other Waters of the U.S. in the PSA.

Wetland Feature	Hydrology/ Wetland Data Points/ Paired Upland Point	Length (ft)	Avg. Width (ft)	Area (ac) [1]
Wetlands				
SW 1	1/ 2	--	--	0.12
SW 2	8/ 7, 9	--	--	0.02
SW 3	4/ 5	--	--	0.02
SW 4	6/ 5	--	--	0.01
SW 5	10/ 2, 3	--	--	0.04
Subtotal Wetlands:		--	--	**0.21**
Other Waters of the U.S.				
CH 1	Ephemeral	1,287	2.5	0.07
CH 1a	Ephemeral	400	1.5	0.01
CH 1a1	Ephemeral	20	1	0.01
CH 1b	Ephemeral	537	1	0.01
CH 2	Ephemeral	301	1.5	0.01
CH 2a	Ephemeral	110	0.5	0.01
Subtotal Waters of the U.S.:	--			**0.12**
Total Waters of the U.S.:	--	**2,655**	--	**0.33**

[1] Acreages of jurisdictional features were calculated with AutoCAD® functions.

Channel 1a1 (CH 1a1): CH 1a1 is an ephemeral channel located in the western portion of the PSA. CH 1a1 did not contain water on the day of the delineation. Hydrology for CH 1a1 is provided by surface runoff from surrounding upland areas within the PSA. The bed of CH 1a1 is composed of scoured soil. Spoils piles are located adjacent to CH 1a1. There is no riparian corridor associated with CH 1a1.

Channel 1b (CH 1b): CH 1b is an ephemeral channel located in the northwestern portion of the PSA. CH 1b did not contain water on the day of the delineation. Hydrology for CH 1b is provided by surface runoff from surrounding upland areas within and immediately adjacent to the PSA. The bed of CH 1b is composed of scoured soil. There is no riparian corridor associated with CH 1b.

Channel 2 (CH 2): CH 2 is an ephemeral channel located in the northeast potion of the PSA. CH 2 did not contain water on the day of the delineation. CH 2a drains to an unnamed channel east of and outside the PSA. Hydrology for CH 2 is provided by surface runoff from surrounding upland areas in the PSA. The bed of CH 2 is composed of scoured soil and bedrock. There is no riparian corridor associated with CH 2.

Channel 2a (CH 2a): CH 2a is an ephemeral channel located in the northeast potion of the PSA. CH 2a did not contain water on the day of the delineation. Hydrology for CH 2a is provided by surface runoff from surrounding upland areas in the PSA. The downstream terminus of CH 2a is located approximately 60 ft north west of CH 2. Upland data point 19 (DP 19) was taken between the terminus of CH 2a and CH 2. No defined surface connection between CH 2a and CH 2 was observed. The bed of CH 2a is composed of scoured soil. There is no riparian corridor associated with CH 2a.

2. Wetlands

Seasonal Wetland 1 (SW 1): SW 1 is located in the west central portion of the PSA immediately south of the upstream terminus of CH 1. SW 1 is an open sloped depression that drains to CH 1. Hydrology for SW 1 is provided by surface runoff from surrounding uplands and likely includes runoff from SW 2. A dirt road crosses the central portion of SW 1. Hydrophytic species present include curly dock, yellow monkey flower (*Mimulus guttatus*), Italian ryegrass, and toad rush. Hydric soils in SW 1 are characterized by a brown (7.5YR 4/2) matrix color with common/ prominent yellowish red (5YR 4/6) mottles.

Seasonal Wetland 2 (SW 2): SW 2 is located in the western portion of the PSA approximately 120 ft southwest of SW 1. SW 2 is an open sloped depression that drains to SW 2. Hydrology for SW 2 is provided by surface runoff from surrounding upland areas. Hydrophytic species present include curly dock, yellow monkey flower, Italian ryegrass, *Ranunculus* sp., and toad rush. Hydric soils in SW 2 are characterized by a dark grayish brown (2.5Y 4/2) matrix color with common/ prominent yellowish red (5YR 5/8) mottles.

Seasonal Wetland 3 (SW 3): SW 3 is in the southwestern portion of the PSA approximately 30 ft north of the intersection of Highway 49 and Black Rice Road. SW 3 is an open sloped depression located in an old ditch segment that was likely related to previous mining activities. Hydrology for SW 3 is provided by surface runoff from surrounding uplands and likely includes runoff from Highway 49. Hydrophytic species present include deer grass, curly dock, Baltic rush, *Lythrum hyssopifolium*, and spikerush. Hydric soils in SW 3 are

characterized by a dark gray (2.5Y 4/1) matrix color with common/ prominent yellowish red (5YR 4/6) mottles.

Seasonal Wetland 4 (SW 4): SW 4 is an open sloped depression located approximately 20 ft north of SW 3 in the same ditch segment. Hydrology for SW 4 is provided by surface runoff from surrounding uplands and likely includes runoff from Highway 49. Hydrophytic species present include nutsedge, Bermuda grass (*Cynodon dactylon*), Italian ryegrass, spikerush, annual beard grass (*Polypogon monspeliensis*), and curly dock. Hydric soils in SW 4 are characterized by a dark grayish brown (2.5Y 4/2) matrix color with common/ prominent reddish brown (5YR 4/4) mottles.

Seasonal Wetland 5 (SW 5): SW 5 is an open depression located in the western portion of the PSA. Hydrology for SW 5 is provided by flow from CH 1a and surface runoff from surrounding upland areas. Hydrophytic species present include dock (*Rumex conglomeratus*), willow, Baltic rush, mugwort (*Artemisia douglasii*), and Himalayan blackberry. Hydric soils in SW 5 are characterized by a dark grayish brown (10YR 4/2) matrix color with common/ prominent strong brown (7YR 5/6) mottles.

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B. Personal Communications

Mr. Pete Trenham, Biologist, USFWS, Sacramento, CA.

VIII. PREPARERS

R. John Little, Ph.D., Botany, Claremont Graduate School, Claremont, CA. Over 26 years experience managing and conducting environmental projects involving impact assessment and preparation of numerous NEPA/CEQA compliance documents, Biological Assessments, and Caltrans Natural Environmental Studies. Experience includes conducting special-status plant and wildlife species surveys, jurisdictional wetland delineations, general biological surveys, permitting and biological report preparation.
Responsibilities: Senior technical lead.

Jeffery Little, A.A., Sacramento City College, Sacramento, CA. Over 14 years of experience with preparation of NES, BA, and NEPA/CEQA compliance documents, and impact analysis, and project management. Consultations for Corps 404 permit issues and DFG Streambed Alteration Agreements; USFWS for both formal and informal section 7 consultations. Conducts special-status species surveys, jurisdictional delineations, and prepares mitigation and monitoring plans. CAD/ GIS Manager.
Responsibilities: Project manager; Report and figure preparation.

Adam C. Forbes, M.S., Range Science (emphasis on plant systematics), New Mexico State University, Las Cruces, NM. Over six years experience conducting biological studies for the public and private sector. As a botanist/ biologist with Sycamore Environmental, Mr. Forbes conducts plant and wildlife surveys, prepares and edits reports, serves as assistant project manager, and conducts informal consultations with regulatory agency personnel. Responsibilities also include assisting with proposal preparation and marketing activities. Provides technical support for wetland delineations, biological resource evaluations, mitigation plans, and other documents used in the CEQA/NEPA process.
Responsibilities: Biological surveys, jurisdictional delineation, and report preparation.

Stephanie Brown, B.S., Industrial Engineering, Cal Poly San Luis Obispo, San Luis Obispo, CA. Prepares CAD/ GIS and ArcView® figures, assists with general project planning, and assists with the maintenance of project performance feedback.
Responsibilities: Figure preparation.

Cynthia Little, Principal, Sycamore Environmental.
Responsibilities: Senior editor, quality control.

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APPENDIX A.

California Natural Diversity Database (CNDDB)/
RareFind Summary Report for the Placerville and eight adjacent quads

Piedmont Oak Estates

El Dorado County, CA

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Landscape
Placerville, Coloma, Garden Valley, Slate Mt., Shingle Springs, Camino, Latrobe, Fiddletown, and Aukum quads

	Scientific Name	Common Name	Element Code	Federal Status	State Status	Global Rank	State Rank	CNPS	R-E-D	CDFG
1	***Accipiter gentilis***	northern goshawk	ABNKC12060			G5	S3			SC
2	***Agelaius tricolor***	tricolored blackbird	ABPBXB0020			G2G3	S2			SC
3	***Allium jepsonii***	Jepson's onion	PMLIL022V0			G1	S1.2	1B	3-2-3	
4	***Arctostaphylos nissenana***	Nissenan manzanita	PDERI040V0			G2	S2.2	1B	3-2-3	
5	***Calochortus clavatus var. avius***	Pleasant Valley mariposa lily	PMLIL0D095			G4T3	S3.2	1B	2-2-3	
6	***Calystegia stebbinsii***	Stebbins's morning-glory	PDCON040H0	Endangered	Endangered	G1	S1.1	1B	3-3-3	
7	***Ceanothus roderickii***	Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G2	S2.1	1B	3-2-3	
8	***Central Valley Drainage Hardhead/Squawfish Stream***	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA			G?	S?			
9	***Central Valley Drainage Resident Rainbow Trout Stream***	Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA			G?	S?			
10	***Chlorogalum grandiflorum***	Red Hills soaproot	PMLIL0G020			G2	S2.2	1B	2-2-3	
11	***Clarkia biloba ssp. brandegeeae***	Brandegee's clarkia	PDONA05053			G4G5T2	S2.2	1B	2-2-3	
12	***Emys (=Clemmys) marmorata marmorata***	northwestern pond turtle	ARAAD02031			G3G4T3	S3			SC
13	***Fremontodendron decumbens***	Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1.2	1B	3-2-3	
14	***Galium californicum ssp. sierrae***	El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1.2	1B	3-2-3	
15	***Helianthemum suffrutescens***	Bisbee Peak rush-rose	PDCIS020F0			G2Q	S2.2	3	2-2-3	
16	***Horkelia parryi***	Parry's horkelia	PDROS0W0C0			G2	S2.2	1B	2-2-3	
17	***Lasionycteris noctivagans***	silver-haired bat	AMACC02010			G5	S3S4			SC
18	***Myotis yumanensis***	Yuma myotis	AMACC01020			G5	S4?			
19	***Packera layneae***	Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2.1	1B	2-2-3	
20	***Phrynosoma coronatum (frontale population)***	Coast (California) horned lizard	ARACF12022			G4G5	S3S4			SC
21	***Rana boylii***	foothill yellow-legged frog	AAABH01050			G3	S2S3			SC
22	***Sacramento-San Joaquin Foothill/Valley Ephemeral Stream***	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA			G?	S?			
23	***Viburnum ellipticum***	oval-leaved viburnum	PDCPR07080			G5	S2.3	2	2-1-1	
24	***Wyethia reticulata***	El Dorado County mule ears	PDAST9X0D0			G2	S2.2	1B	2-2-3	

APPENDIX B.

USFWS Online Species List

Piedmont Oak Estates

El Dorado County, CA

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

October 13, 2006

Document Number: 061013110815

R. John Little, Ph.D.
Sycamore Environmental Consultants, Inc.
6355 Riverside Blvd., Suite C
Sacramento, CA 95831

Subject: Species List for Piedmont Oak Estates

Dear: Dr. Little

We are sending this official species list in response to your October 13, 2006 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be January 11, 2007.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 061013110815
Database Last Updated: October 3, 2006

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation became final on May 15, 2006. See our map index.

Species

Listed Species

Invertebrates

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana aurora draytonii
California red-legged frog (T)

Birds

Haliaeetus leucocephalus
bald eagle (T)

Plants

Senecio layneae
Layne's butterweed (=ragwort) (T)

Candidate Species

Fish

Oncorhynchus tshawytscha
Central Valley fall/late fall-run chinook salmon (C) (NMFS)

Selected Quads

PLACERVILLE (510A)

County Lists

El Dorado County

Listed Species

Invertebrates

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Oncorhynchus (=Salmo) clarki henshawi
Lahontan cutthroat trout (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana aurora draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Thamnophis gigas
giant garter snake (T)

Birds

Haliaeetus leucocephalus
bald eagle (T)

Plants

Calystegia stebbinsii
Stebbins's morning-glory (E)

Ceanothus roderickii
Pine Hill ceanothus (E)

Fremontodendron californicum ssp. decumbens

Pine Hill flannelbush (E)

Galium californicum ssp. sierrae
El Dorado bedstraw (E)

Senecio layneae
Layne's butterweed (=ragwort) (T)

Candidate Species

Amphibians

Bufo canorus
Yosemite toad (C)

Rana muscosa
mountain yellow-legged frog (C)

Mammals

Martes pennanti
fisher (C)

Plants

Rorippa subumbellata
Tahoe yellow-cress (C)

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be

carried to their habitat by air currents.

- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys includ any proposed and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepa for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally liste wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, tra capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by o of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that n result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together t avoid or minimize the impact on listed species and their habitat. Such consultation would resu in a biological opinion by the Service addressing the anticipated effect of the project on listed proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and a likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct a indirect impacts to listed species and compensates for project-related loss of habitat. You sho include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, wat

air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are n restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See o critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end o your project.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be January 11, 2007.

APPENDIX C.

Species Evaluated Table

Piedmont Oak Estates

El Dorado County, CA

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Invertebrates					
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	T/ --	--	1	Requires an elderberry shrub (*Sambucus mexicana* or *Sambucus racemosa* var. *microbotrys*) as a host plant (USFWS 1991).	No. No elderberry shrubs were observed in the PSA.
Lepidurus packardi Vernal pool tadpole shrimp	E/ --	--	1	Occurs in a variety of vernal pool habitats (USFWS 1994a).	No. No vernal pools occur in the PSA.
Fish					
Hypomesus transpacificus Delta smelt	T, CH/ T	--	1	Euryhaline (tolerant of a wide salinity range) species that spawns in freshwater dead-end sloughs and shallow edge-waters of channels of the Delta (USFWS 1994b).	No. Habitat for this species does not occur in the PSA.
Oncorhynchus clarki henshawi Lahontan cutthroat trout	T/ --	--	1	There are three populations of this species known: 1) Western Lahontan basin comprised of Truckee, Carson, and Walker river basins; 2) Northwestern Lahontan basin comprised of Quinn River, Black Rock Desert, and Coyote Lake basins; and 3) Humboldt River basin (USFWS 1994c).	No. The PSA is outside the geographic distribution of this species. Habitat for this species does not occur in the PSA.
Oncorhynchus mykiss Central Valley steelhead ESU	T/ --	--	1	Historically, this species was widely distributed in the Sacramento and San Joaquin drainages. While steelhead are found elsewhere in the Sacramento River system, the principal remaining wild populations are a few hundred fish that spawn annually in Deer and Mill Creeks in Tehama County and a population of unknown size in the lower Yuba River (Moyle 2002). With the possible exception of a small population in the lower Stanislaus River, steelhead appears to have been extirpated from the San Joaquin basin (Moyle 2002). Spawning occurs in small tributaries on coarse gravel beds in riffle areas (Busby 1996).	No. Habitat for this species does not occur in the PSA.
Oncorhynchus tshawytscha Central Valley fall/late fall-run chinook salmon ESU	C/ --	CSC	1	This anadromous species enters the Sacramento/San Joaquin Basin from July through April and spawns from October through February. Adult female chinook will prepare a spawning bed in a stream with suitable gravel composition, water depth, and velocity (McGinnis 1984).	No. Habitat for this species does not occur in the PSA.

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Oncorhynchus tshawytscha Central Valley spring-run chinook salmon ESU	T/ T	--	1	Extant populations of this ESU spawn in the Sacramento River and its tributaries. Populations in the San Joaquin River are believed to be extirpated (NMFS 1998). Enters the Sacramento River from March to July and spawns from late August through early October. Adult female chinook will prepare a spawning bed in a stream with suitable gravel composition, water depth, and velocity. After hatching, fry and subyearlings return to the ocean and complete their development (McGinnis 1984).	No. Habitat for this species does not occur in the PSA.
Amphibians					
Ambystoma californiense California tiger salamander	PT/ --	CSC	1	Frequents grassland, oak savannah, and edges of mixed woodland and lower elevation coniferous forest. Spends much time underground in mammal burrows. Usually breeds in temporary ponds such as vernal pools but may also breed in slower parts of streams and some permanent waters (Stebbins 2003). Ponds with large populations of this species larvae usually contain very few larvae of other amphibian species (Zeiner et al. 1988).	No. The PSA is outside the geographic distribution of this species. Habitat for this species does not occur in the PSA.
Bufo canorus Yosemite toad	C/ --	CSC	1	Restricted to the vicinities of wet meadows in the central high Sierra. Occurs at elevations of 6,400 to 11, 300 ft. Frequents montane wet meadows, but also occurs in seasonal ponds associated with lodgepole pine and sub-alpine conifer forests (Zeiner et al. 1988).	No. The PSA is outside the elevational range of this species. Habitat for this species does not occur in the PSA.
Rana aurora draytonii California red-legged frog	T, CH/ --	CSC	1	Inhabits quiet pools of streams, marshes, and occasionally ponds. Requires permanent or nearly permanent pools for larval development (Zeiner et al. 1988).	No. See text.
Rana boylii Foothill yellow-legged frog	--/ --	CSC	1	Occurs in woodland and forest areas near streams and rivers, especially near riffles where there are exposed rocks. Requires permanent streams in which to reside (Zeiner et al. 1988).	No. Habitat for this species does not occur in the PSA.
Rana muscosa Mountain yellow-legged frog	C/ --	CSC	1	Occurs primarily at elevations above 5,900 ft in the Sierra Nevada from Plumas County to southern Tulare County. Associated with streams, lakes, and ponds in montane riparian, lodgepole pine, sub-alpine conifer, and wet meadow habitat types. Always encountered within a few feet of water (Zeiner et al. 1988).	No. The PSA is outside the elevational range of this species. Habitat for this species does not occur in the PSA.
Reptiles					
Emys (=Clemmys) marmorata marmorata Northwestern pond turtle	--/ --	CSC	2	Prefers aquatic habitats with abundant vegetative cover and exposed basking sites such as logs. They are associated with permanent or nearly permanent water in a wide variety of habitat types, normally in ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams (Zeiner et al. 1988).	No. Habitat for this species does not occur in the PSA.

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Phrynosoma coronatum frontale California horned lizard	--/ --	CSC	2	Occurs in valley-foothill hardwood, conifer, and riparian habitats, as well as in pine-cypress, juniper and annual grass habitats. Common in the lowlands along sandy washes where scattered low shrubs provide cover. Also needs open areas for sunning and fine, loose soil where it can bury itself (Stebbins 2003).Ranges in the Central Valley from southern Tehama Co. south; in the Sierra foothills from Butte Co. to Tulare Co. below 4,000 ft; below 6,000 ft in the mountains of southern California exclusive of desert regions; throughout the Coast Ranges south from Sonoma Co. An isolated population occurs in Siskiyou Co. (Stebbins 2003).	No. Habitat for this species does not occur in the PSA.
Thamnophis gigas Giant garter snake	T/ T	--	1, 2	Habitat requisites consist of 1) adequate water during the snake's active season (early spring through mid-fall) to provide food and cover; 2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; 3) grassy banks and openings in waterside vegetation for basking; and 4) higher elevation uplands for cover and refuge from flood waters during the snake's winter dormant season (Stebbins 2003).	No. Habitat for this species does not occur in the PSA. The PSA is outside the geographic distribution of this species.
Birds					
Accipiter gentilis Northern goshawk	--/ --	CSC	2	Breeds in the North Coast Ranges and through the Sierra Nevada, Klamath, Cascade, and Warner Mountains. Possibly also breeds in Mt. Piños, San Jacinto, San Bernardino, and White Mts. Remains yearlong in breeding areas as a scarce to uncommon resident. Prefers middle and higher elevations, and mature, dense conifer and deciduous forests. Usually nests on north slopes, near water, in densest parts of stands, but close to openings (Zeiner et al. 1990a).	No. Habitat for this species does not occur in the PSA.
Agelaius tricolor Tricolored blackbird	--/ --	CSC	2	Nomadic, breeds near freshwater, preferably in emergent marsh of dense cattails or tules, and also in thickets of willow, blackberry, and wild rose. Highly colonial; nesting area must be large enough to support a minimum colony of about 50 pairs (Zeiner et al. 1990a).	No. Habitat for this species does not occur in the PSA.
Haliaeetus leucocephalus Bald eagle	T/ E	FP	1	Restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity Counties. More widespread as a winter migrant. Occurs along coasts, rivers, and large, deep lakes and reservoirs inland. Requires large, stoutly limbed trees, snags, broken topped trees, or high rock ledges for perches (Zeiner et al. 1990a).	No. Habitat for this species does not occur in the PSA.
Mammals					

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Lasionycteris noctivagans Silver-haired bat	--/--	CSC	2	Primarily a forest dweller, feeding over streams, ponds, and open brushy areas. Summer distribution includes coastal and montane forests from Oregon border along the coast to San Francisco Bay and along the sierra Nevada and Great Basin region to Inyo County. Also in Stanislaus and Monterey Counties. Summer habitats include coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats below 2,750 m (9000 ft) May be found anywhere in California during spring and fall migrations (Zeiner et al. 1990b).	No. There is no habitat for this species in the PSA.
Martes pennanti Fisher	C/ --	CSC	1	Permanent resident of Sierra Nevada, Cascades, Klamath Mountains, and the North Coast Range. Occurs above 3,200 ft in the Sierra Nevada and Cascades (Jameson and Peeters 2004). Prefers coniferous or deciduous riparian habitats with intermediate to large trees and closed canopies. Dens in tree/ log cavities and brush piles. Active yearlong, mostly nocturnal. Young born February through May (Zeiner et al. 1990b).	No. The PSA is outside the elevational range of this species. Habitat for this species does not occur in the PSA.
Myotis yumanensis Yuma myotis bat	--/ --	--	1	Closely associated with water in a wide variety of habitats; optimal in open forests and woodlands with sources of water (ponds, streams) over which to feed. Roosts in buildings, mines, caves, or crevices; also in abandoned swallow nests and under bridges. May form large colonies, roosting with some other bat species (Zeiner et al. 1990b).	No. Habitat for this species does not occur in the PSA.
Special-Status Species/ Common Name	**Listing Status [a] Federal/State**	**Other DFG Codes [b] / CNPS [d]**	**Source [c]**	**Habitat Requirements**	**Potential to Occur within the Project Study Area?**
Plants					
Allium jepsonii Jepson's onion	--/ --	--/ 1B.2	2	Bulbiferous perennial herb found in serpentine or volcanic soils of chaparral, cismontane woodland, and lower montane coniferous forest from 950 to 4,350 ft. Blooms May through August (CNPS 2005).	No. Habitat for this species does not occur in the PSA.
Arctostaphylos nissenana Nissenan Manzanita	--/ --	--/ 1B.2	2	Evergreen shrub found in rocky closed-cone coniferous forest and chaparral from 1,475 to 3,610 ft in elevation. Known from El Dorado and Tuolumne counties. Blooms February through March (CNPS 2005).	Yes. See text.
Calochortus clavatus var. avius Pleasant Valley mariposa lily	--/ --	--/ 1B.2	2	Bulbiferous herb found in lower montane coniferous forest from 1,000-5,900 ft in elevation. Known from Amador, Calaveras, El Dorado, and Mariposa Cos. Blooms May through July (CNPS 2005).	Yes. See text.
Calystegia stebbinsii Stebbins' morning-glory	E/ E	--/ 1B.1	1	A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral openings and cismontane woodland from 600 to 2,400 ft elevation. Known from El Dorado and Nevada Counties. Blooms April through July (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Ceanothus roderickii Pine Hill Ceanothus	E/ R	--/ 1B.2	1	Evergreen shrub found in serpentine or gabbroic soils in chaparral and cismontane woodland from 850 to 2,100 ft elevation. Known from El Dorado County. Blooms May through June (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Chlorogalum grandiflorum Red Hills soaproot	--/ --	--/ 1B.2	2	Perennial bulbiferous herb found in serpentine or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 3,300 ft. Blooms May through June (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Clarkia biloba ssp. brandegeae Brandegee's clarkia	--/ --	--/ 1B.2	2	Annual herb found in chaparral and cismontane woodland, often on roadcuts, from 735 to 3,000 ft in elevation. Blooms May through July (CNPS 2005).	Yes. See text.
Fremontodendron californicum ssp. decumbens Pine Hill flannelbush	E/ R	--/ 1B.2	1	Evergreen shrub found in rocky areas of serpentine or gabbroic soils in chaparral and cismontane woodland from 1,400 to 2,500 ft in elevation. Known from El Dorado, Nevada, and Yuba counties. Blooms April through July (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Galium californicum ssp. sierrae El Dorado bedstraw	E/ R	--/ 1B.2	1	Perennial herb found in gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,900 ft in elevation. Known from El Dorado County. Blooms May through June (CNPS 2005).	No. The PSA is above the elevational range of this species. The soil in the PSA is unsuitable for this species.
Helianthemum suffrutescens Amador (Bisbee Peak) rush-rose	--/ --	--/ 3.2	2	Evergreen shrub found in chaparral from 150 to 2,750 ft elevation. Often found on serpentine, gabbroic or Ione soils. Blooms April through June (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Horkelia parryi Parry's horkelia	--/ --	--/ 1B.2	2	Perennial herb found in chaparral and cismontane woodland, especially of the Ione formation, from 260 to 3,400 ft in elevation. Blooms April through June (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Rorippa subumbellata Tahoe yellow-cress	C/ E	--/ 1B.1	1	Perennial herb found in decomposed granitic beaches of lower montane coniferous forest and meadows and seeps from 6,200 to 6,250 ft in elevation. Known only from Lake Tahoe area. Blooms May through September (CNPS 2005).	No. The PSA is outside the elevational range of this species. Habitat for this species does not occur in the PSA.
Senecio (=*Packaera*) *layneae* Layne's butterweed (ragwort)	T/ R	--/ 1B.2	1	Perennial herb found in rocky areas with serpentine or gabbroic soils in chaparral and cismontane woodland from 650 to 3,300 ft in elevation. Known from El Dorado, Tuolumne, and Yuba counties. Blooms April through July (CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Viburnum ellipticum Oval-leaved viburnum	--/ --	--/ 2.2	2	Deciduous shrub found in chaparral, cismontane woodland and lower montane coniferous forest from 705 to 4,593 ft in elevation. Blooms May through June (CNPS 2005).	Yes. See text.
Wyethia reticulata El Dorado County mule ears	--/ --	--/ 1B.2	2	Perennial rhizomatous herb found in clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,050 ft elevation. Known from El Dorado Co. Blooms May through July (Ayres and Ryan 1999, CNPS 2005).	No. The soil in the PSA is unsuitable for this species.
Natural Communities					
Central Valley Drainage Resident Rainbow Trout	--/ --	--/ --	2	This community classification identifies drainages in the Central Valley that contain resident rainbow trout. This species requires near permanent waterbodies.	The channels in the PSA do not provide habitat for rainbow trout.
Central Valley Drainage Hardhead/ Squawfish Stream	--/ --	--/ --	2	Hardhead occur in low- to mid-elevation streams and the mainstem Sacramento River. Sacramento pikeminnow (squawfish) occur in similar streams with clear water (Moyle 2002).	The channels in the PSA do not provide habitat for Hardhead.

Special-Status Species/ Common Name	Listing Status [a] Federal/State	Other DFG Codes [b]	Source [c]	Habitat Requirements	Potential to Occur within the Project Study Area?
Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	--/ --	--/ --	2	This community classification apparently identifies perennial streams that contain a diverse group of aquatic invertebrates. The meaning "ephemeral" as used in the title of this community classification is unknown. The one CNDDB record for this community is located on a solid blueline stream (Jackass Canyon) on the Camino USGS 7.5" quad. The solid blueline indicates that this stream is perennial.	This community does not occur in the PSA.

[a] Listing Status: Federal status determined from USFWS letter. State status determined from DFG (2006c, d). Codes used in table are as follows:
E = Endangered; **T** = Threatened; **CH** = Critical Habitat; **P** = Proposed; **PT** = Proposed Threatened; **PE** = Proposed Endangered; **R** = California Rare; ***** = Possibly extinct.
C = Candidate: Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.

[b] **CSC** = State Species of Special Concern, **FP** = Fully Protected.

[c] Sources. 1 = Compiled from USFWS letter; 2 = From CNDDB Lists or RareFind; 3 = Observed during survey.

[d] CNPS List. **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution.

[e] CNPS List Decimal Extensions: **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in California (20-80% occurrences threatened); **.3 =** Not very endangered in California (<20% of occurrences threatened or no current threats known).

APPENDIX D.

Plant and Wildlife Species Observed

Piedmont Oak Estates

El Dorado County, CA

Plant Species Observed.

Family	Scientific Name	Common Name	*
FERNS & ALLIES			
Pteridaceae	*Pentagramma triangularis*	Goldback fern	N
CONIFERS			
Pinaceae	*Pinus ponderosa*	Pacific ponderosa pine	N
	Pinus sabiniana	Gray pine	N
	Pseudotsuga menziesii	Douglas fir	N
DICOTS			
Amaranthaceae	*Amaranthus* sp.	Pigweed	--
Anacardiaceae	*Toxicodendron diversilobum*	Western poison oak	N
Apiaceae	*Daucus carota*	Carrot	I
	Torilis arvensis		I
Asteraceae	*Achillea millefolium*	Yarrow	N
	Artemisia douglasiana	Mugwort	N
	Baccharis pilularis	Coyote brush	N
	Carduus pycnocephalus	Italian thistle	I
	Centaurea solstitialis	Yellow star-thistle	I
	Cichorium intybus	Chicory	I
	Cirsium vulgare	Bull thistle	I
	Gnaphalium sp.	Cudweed	--
	Holocarpha virgata		N
	Lactuca serriola	Prickly lettuce	I
	Micropus californicus var. *californicus*	Slender cottonweed	N
	Tragopogon sp.	Goat's beard	I
Bignoniaceae	*Catalpa* sp.		I
Brassicaceae	*Rorippa* sp.**	Water cress	N
Caprifoliaceae	*Lonicera* sp.		N
Caryophyllaceae	*Spergularia* sp.	Sand-spurrey	--
	Stellaria media	Common chickweed	I
Ericaceae	*Arctostaphylos* sp.	Manzanita	N
Euphorbiaceae	*Eremocarpus setigerus*	Dove weed; Turkey mullein	N
Fabaceae	*Trifolium hirtum*	Rose clover	I
	Trifolium sp.		--
	Vicia villosa ssp. *villosa*	Hairy vetch	I
Fagaceae	*Quercus douglasii*	Blue oak	N
	Quercus kelloggii	California black oak	N
	Quercus lobata	Valley oak	N
	Quercus wislizenii var. *wislizenii*	Interior live oak	N
Geraniaceae	*Erodium cicutarium*	Filaree	I
Hippocastanaceae	*Aesculus californica*	California buckeye	N
Hypericaceae	*Hypericum perforatum*	Klamathweed	I
Lamiaceae	*Mentha* sp.		--
	Stachys sp.	Hedge nettle	N
	Trichostema lanceolatum	Vinegar weed	N
Lythraceae	*Lythrum hyssopifolium*		I

Malvaceae	*Sidalcea* sp.		N
Onagraceae	*Epilobium brachycarpum*	Fireweed	N
Papaveraceae	*Eschscholzia californica*	California poppy	N
Plantaginaceae	*Plantago lanceolata*	English plantain	I
Polygonaceae	*Polygonum arenastrum*	Common knotweed	I
	Polygonum sp.		--
	Rumex conglomeratus	Dock	I
	Rumex crispus	Curly dock	I
Ranunculaceae	*Ranunculus* sp.		--
Rhamnaceae	*Ceanothus cuneatus* var. *cuneatus*	Buck brush	N
	Rhamnus tomentella ssp. *tomentella*	Hoary coffeeberry	N
Rosaceae	*Heteromeles arbutifolia*	Toyon	N
	Prunus sp.		I
	Pyrus sp.	Pear	I
	Rubus discolor	Himalayan blackberry	I
Rubiaceae	*Galium aparine*	Goose grass	N
	Galium parisiense	Wall bedstraw	I
Salicaceae	*Salix* sp.	Willow	N
Scrophulariaceae	*Kickxia elatine*	Fluellin	I
	Mimulus guttatus	Yellow monkeyflower	N
	Verbascum thapsus	Woolly mullein	I
Simaroubaceae	*Ailanthus altissima*	Tree of heaven	I
Verbenaceae	*Verbena litoralis*	Verbena	I
Vitaceae	*Vitis californica*	California wild grape	N
MONOCOTS			
Cyperaceae	*Carex sp.*		N
	Cyperus eragrostis	Nut sedge	N
	Eleocharis macrostachya	Spikerush	N
Juncaceae	*Juncus balticus*	Baltic rush	N
	Juncus bufonius	Toad rush	N
	Juncus sp.	Rush	N
Liliaceae	*Chlorogalum grandiflorum*	Red Hills soaproot	N
Poaceae	*Aegilops triuncialis*	Barbed goatgrass	I
	Aira caryophyllea	Silver European hairgrass	I
	Avena fatua	Wild oat	I
	Briza minor	Quaking grass	I
	Bromus diandrus	Ripgut grass	I
	Bromus hordeaceus	Soft brome	I
	Bromus madritensis ssp. *rubens*	Foxtail chess	I
	Cynodon dactylon	Bermuda grass	I
	Cynosurus echinatus	Hedgehog dogtail	I
	Deschampsia danthonioides	Annual hairgrass	N
	Elymus glaucus	Blue wildrye	N
	Gastridium ventricosum	Nit grass	I
	Hordeum marinum ssp. *gussoneanum*	Mediterranean barley	I
	Lolium multiflorum	Italian ryegrass	I
	Muhlenbergia rigens	Deergrass	N
	Phalaris sp.		--
	Poa bulbosa	Bulbous bluegrass	I
	Polypogon monspeliensis	Annual beard grass	I
	Taeniatherum caput-medusae	Medusa head	I
	Vulpia myuros var. *myuros*	Vulpia	I

* N = Native to CA; I = Introduced
** Not *Rorippa subumbellata*: *R. subumbellata* is a perennial species; the *Rorippa* sp. observed in the PSA was an annual.

Wildlife Species Observed.

Common Name	**Scientific Name**
BIRDS	
Acorn woodpecker	*Melanerpes formicivorus*
California quail	*Callipepla californica*
Common raven	*Corvus corax*
Bushtit	*Psaltriparus minimus*
Mourning dove	*Zenaida macroura*
Scrub jay	*Aphelocoma coerulescens*
Wild turkey	*Meleagris gallopavo*
MAMMALS	
California ground squirrel	*Spermophilus beecheyi*
Black-tailed jackrabbit	*Lepus californicus*
Mule deer/ black-tailed deer	*Odocoileus hemionus*

APPENDIX E.

Photographs of the Project Study Area

Piedmont Oak Estates

El Dorado County, CA

Photo 1. View from southwestern portion of PSA looking west at SW 3 (white arrow). Red arrow shows location of State Highway 49. 9 September 2006.

Photo 2. View from northwest central portion of the PSA looking downstream (north) at CH 1 (white arrow). 9 September 2006.

Photo 3. View from west central portion of PSA looking southeast at mixed oak woodland community (background). 9 September 2006

Photo 4. View from south central portion of PSA looking southeast a graded/ excavated area. 9 September 2006.

Photo 5. View from southern PSA looking north at mixed oak woodland community. 10 September 2006.

Photo 6. View from southwestern portion of PSA looking northeast at SW 1 (white arrow). 9 September 2006.

APPENDIX F.

Channel & Wetland Data Sheets

Piedmont Oak Estates

El Dorado County, CA

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel: Adam Forbes M.S. Channel #: 1

Project/ Site: Piedmont Oak Estates Date: 9 Sept 2006

Applicant/ Owner: Piedmont Oak Estates LLC County, State: El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-1	2.5 ft	Scoured soil, sand, gravel and bedrock	*Lolium multiflorum, Aesculus californica, Juncus bufonius*	Ephemeral	Yes
Photos taken? Yes		**Data Points Mapped?** Yes	**Are hydrophytic species present?** Marginal		

Other comments/ observations:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present. Evidence of flow.

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel: Adam Forbes M.S. Channel #: 1a &1a1

Project/ Site: Piedmont Oak Estates Date: 9 Sept 2006

Applicant/ Owner: Piedmont Oak Estates LLC County, State: El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-1a & 1a1	1a = 1.5 ft 1a1 = 1 ft	Scoured soil	*Pinus sabiniana, Elymus glaucus, Toxicodendron diversilobum*	Ephemeral	Yes
Photos taken?		**Data Points Mapped?** Yes	**Are hydrophytic species present?** Marginal		

Other comments/ observations:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present. Evidence of flow.

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel: Adam Forbes M.S. Channel #: 1b

Project/ Site: Piedmont Oak Estates Date: 9 Sept 2006

Applicant/ Owner: Piedmont Oak Estates LLC County, State: El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-1c	1 ft	Scoured soil	*Toxicodendron diversilobum, Elymus glaucus, Pinus sabiniana*	Ephemeral	Yes
Photos taken?		**Data Points Mapped?** Yes	**Are hydrophytic species present?** No		

Other comments/ observations:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present.

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel:	Adam Forbes M.S.	Channel #:	2
Project/ Site:	Piedmont Oak Estates	Date:	9 Sept 2006
Applicant/ Owner:	Piedmont Oak Estates LLC	County, State:	El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-2	4.5 ft	Cobble, sand, gravel, bedrock	*Rubus discolor, Vitis californica, Aesculus californica, Quercus kelloggii*	Intermittent	Yes

Photos taken?	Data Points Mapped?	Are hydrophytic species present?
Yes	Yes	Yes

Other comments/ observations: Shallow ponded water throughout, trickle of flow in some areas.

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present.

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel: Adam Forbes M.S. Channel #: 2

Project/ Site: Piedmont Oak Estates Date: 9 Sept 2006

Applicant/ Owner: Piedmont Oak Estates LLC County, State: El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-2a	1.5 ft	Scoured soil, bedrock	*Quercus kelloggii, Lolium multiflorum, Toxicodendron diversilobum, Aesculus californica*	Ephemeral	Yes
Photos taken? Yes		**Data Points Mapped?** Yes	**Are hydrophytic species present?** Marginal		

Other comments/ observations:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present.

DATA FORM FOR CHANNELS/ WATERS OF THE U.S.

Field Personnel: Adam Forbes M.S. Channel #: 2a

Project/ Site: Piedmont Oak Estates Date: 9 Sept 2006

Applicant/ Owner: Piedmont Oak Estates LLC County, State: El Dorado, CA

CONDITION OF CHANNEL

Channel #:	Average Width: (ft)	Condition of channel bed:	Vegetation present:	Does water flow appear permanent/ intermittent/ unknown?	Is a defined bed and bank present?
CH-2a1	1 ft	Scoured soil	*Elymus glaucus, Torilis arvensis, Bromus diandrus, Arctostaphylos* sp.	Ephemeral	Yes
Photos taken?		**Data Points Mapped?** Yes	**Are hydrophytic species present?** No		

Other comments/ observations:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is this channel jurisdictional? Yes

Rationale for jurisdictional decision: Defined bed and bank present.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 1**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Seasonal Wetland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Lolium multiflorum*	H	FAC	5. *Bromus hordeaceus*	H	FACU
2. *Juncus* sp. (at least FACW)	H	FACW	6. *Micropus californicus* var. *californicus*	H	--
3. *Rumex crispus*	H	FACW-	7. *Juncus bufonius*	H	FACW+
4. *Mimulus guttatus*	H	OBL			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/7 = 71%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☒ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks:

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		7.5YR 4/2	5YR 4/6	Common/ Prominent	Sandy loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this sampling point within a wetland? ☒ Yes ☐ No

Remarks/Rationale: Criteria met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 2**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus hordeaceus*	H	FACU	5. *Bromus diandrus*	H	--
2. *Cynosurus echinatus*	H	--	6. *Toxicodendron diversilobum*	S	--
3. *Lolium multiflorum*	H	FAC	7.*Trifolium* sp.	H	--
4. *Quercus wislizenii* var. *wislizenii*	T	--	8. *Aira caryophyllea*	H	--

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/8 =13 %
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		7.5YR 4/4	--	--	Sandy loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 3**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Cynosurus echinatus*	H	--	5. *Carduus pycnocephalus*	H	--
2. *Lolium multiflorum*	H	FAC	6. *Arctostaphylos* sp.	S	--
3. *Toxicodendron diversilobum*	S	--			
4. *Quercus wislizenii* var. *wislizenii*	T	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/6 = 17%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase):
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type?
☐ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Soil pit unnecessary (1987 Manual, Fig. 14, Step 9).

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 4**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Seasonal Wetland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Eleocharis macrostachya*	H	OBL	5. *Lythrum hyssopifolium*	H	FACW
2. *Muhlenbergia rigens*	H	FACW	6. *Vitis californica*	V	FACW
3. *Carex* sp.(at least FACW)	H	FACW	7. *Rumex crispus*	H	FACW-
4. *Juncus balticus*	H	OBL			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 7/7 = 100%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☒ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☒ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks:

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		2.5Y 4/1	5YR 4/6	Common Prominent	Sandy Clay Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this sampling point within a wetland? ☒ Yes ☐ No

Remarks/Rationale: Criteria met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 5**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Centaurea solstitialis*	H	--	5. *Tragopogon* sp.	H	--
2. *Bromus diandrus*	H	--	6. *Lolium multiflorum*	H	FAC
3. *Lactuca serriola*	H	FAC	7. *Ceanothus cuneatus* var. *cuneatus*	S	--
4. *Bromus hordeaceus*	H	FACU-	8. *Torilis arvensis*	H	--

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/8 = 25%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type?
☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		7.5YR 4/4	--	--	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 6**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Seasonal Wetland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Cynodon dactylon*	H	FAC	5. *Cynosurus echinatus*	H	--
2. *Rumex crispus*	H	FACW-	6. *Carex* sp.(at least FACW)	H	FACW
3. *Cyperus eragrostis*	H	FACW	7. *Polypogon monspeliensis*	H	FACW+
4. *Eleocharis macrostachya*	H	OBL	8. *Lolium multiflorum*	H	FAC

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 7/8 = 88%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☒ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☒ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks:

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		2.5Y 4/2	5YR 4/4	Common Prominent	Sandy Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this sampling point within a wetland? ☒ Yes ☐ No

Remarks/Rationale: Criteria met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 7**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Lolium multiflorum*	H	FAC	5. *Torilis arvensis*	H	--
2. *Juncus* sp. (at least FACW)	H	FACW	6. *Bromus diandrus*	H	--
3. *Cynosurus echinatus*	H	--	7. *Quercus wislizenii* var. *wislizenii*	T	--
4. *Avena fatua*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/7 = 29%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☒ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: Only one secondary indicator present.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type?
☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/3	2.5YR 4/6	Common Prominent	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 8**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Seasonal Wetland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Juncus* sp. (at least FACW)	H	FACW	5. *Cynosurus echinatus*	H	--
2. *Juncus bufonius*	H	FACW+	6. *Ranunculus* sp. (at least FACW)	H	FACW
3. *Mimulus guttatus*	H	OBL	7. *Polypogon monspeliensis*	H	FACW+
4. *Lolium multiflorum*	H	FAC			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 6/7 = 86%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☒ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☒ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks:

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		2.5Y 4/2	5YR 5/8	Common Prominent	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this sampling point within a wetland? ☒ Yes ☐ No

Remarks/Rationale: Criteria met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 9**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Cynosurus echinatus*	H	--	5. *Bromus diandrus*	H	--
2. *Torilis arvensis*	H	--	6. *Trifolium* sp.	H	--
3. *Lolium multiflorum*	H	FAC	7. *Vicia villosa* ssp. *villosa*	H	--
4. *Toxicodendron diversilobum*	S	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/7 = 14%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☐ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☒ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: Only one secondary indicator present.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type?
☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/4	5YR 4/6	Few Prominent	Sandy Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 10**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Seasonal Wetland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Rubus discolor*	H	FACW	5. *Toxicodendron diversilobum*	S	--
2. *Artemisia douglasiana*	H	FACW	6. *Juncus balticus*	H	OBL
3. *Carex* sp.(at least FACW)	H	FACW	7. *Salix* sp. (at least FACW)	H	FACW
4. *Mentha* sp.	H	FAC	8. *Rumex conglomeratus*	H	FACW

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 7/8 = 88%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☒ Sediment deposits
☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks:

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		10YR 4/2	7.5YR 5/6	Few Prominent	Loam (over sand)

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☒ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this sampling point within a wetland? ☒ Yes ☐ No

Remarks/Rationale: Criteria met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 11**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Cynosurus echinatus*	H	--	5. *Torilis arvensis*	H	--
2. *Toxicodendron diversilobum*	S	--	6. *Quercus wislizenii* var. *wislizenii*	T	--
3. *Elymus glaucus*	H	--	7. *Bromus diandrus*	H	--
4. *Pinus sabiniana*	T	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/7 = 0%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		7.5YR 4/4	NA	--	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 12**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Elymus glaucus*	H	FACU	5. *Toxicodendron diversilobum*	S	--
2. *Cynosurus echinatus*	H	--	6. *Heteromeles arbutifolia*	S	--
3. *Bromus hordeaceus*	H	FACU-	7. *Torilis arvensis*	H	--
4. *Aesculus californica*	T	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/7 = 0%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☒ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: Data point is old ditch dug in upland. Only one secondary indicator present.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/6	--	--	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 13**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Bromus hordeaceus*	H	FACU-	6. *Torilis arvensis*	H	--
2. *Artemisia douglasiana*	H	FACW	7. *Trifolium* sp.	H	--
3. *Lolium multiflorum*	H	FAC	8. *Lactuca serriola*	H	FAC
4. *Hordeum marinum* ssp. *gussoneanum*	H	FAC	9. *Centaurea solstitialis*	H	--
5. *Elymus glaucus*	H	FACU			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 4/9 = 44%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☒ No Recorded Data Available

Field Observations:
Depth of Surface Water: -- (in.)
Depth to Free Water in Pit: -- (in.)
Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☐ Saturated in upper 12 inches
☐ Water marks
☐ Drift lines
☐ Sediment deposits
☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
☐ Oxidized root channels in upper 12 inches
☐ Local soil survey data
☐ FAC-Neutral Test
☐ Other (explain in remarks)
☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Diamond Springs very rocky fine sandy loam 3 to 50% slopes
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		10YR 3/4	--	--	Loam

Hydric Soil Indicators:
☐ Histosol
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Aquic Moisture Regime
☐ Reducing Conditions
☐ Gleyed or Low-Chroma Colors
☐ Concretions
☐ High Organic Content in Surface Layer Sandy Soils
☐ Organic Streaking in Sandy Soils
☐ Listed on Local Hydric Soils List
☐ Listed on National Hydric Soils List
☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 9 September 06 **DP No.: 14**
Project/Site: Piedmont Oak Estates State: CA
Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland
Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:
Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Avena fatua*	H	--	5. *Elymus glaucus*	H	FACU
2. *Toxicodendron diversilobum*	S	--	6. *Bromus hordeaceus*	H	FACU-
3. *Torilis arvensis*	H	--	7. *Aira caryophyllea*	H	--
4. *Cynosurus echinatus*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/7 = 0%
Remarks:

HYDROLOGY
☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase):
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soil pit unnecessary (1987 Manual, Fig. 14, Step 9).

WETLAND DETERMINATION
Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 15**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Lolium multiflorum*	H	FAC	5. *Verbascum thapsus*	H	--
2. *Eremocarpus setigerus*	H	--	6. *Taeniatherum caput-medusae*	H	--
3. *Plantago lanceolata*	H	FAC-	7. *Juncus bufonius*	H	FACW+
4. *Centaurea solstitialis*	H	--	8. *Vulpia myuros* var. *myuros*	H	FACU

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 2/8 = 25%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: Only one secondary indicator present.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 5/4	5YR 4/6	Few Prominent	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 16**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Lolium multiflorum*	H	FAC	5. *Artemisia douglasiana*	H	FACW
2. *Elymus glaucus*	H	--	6. *Cynosurus echinatus*	H	--
3. *Avena fatua*	H	--	7. *Verbena litoralis*	H	FACW
4. *Taeniatherum caput-medusae*	H	--	8. *Bromus hordeaceus*	H	FACU-

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/8 = 38%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: Only one secondary indicator present.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-6		7.5YR 4/4	--	--	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 17**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Torilis arvensis*	H	--	5. *Aesculus californica*	T	--
2. *Toxicodendron diversilobum*	S	--	6. *Cynosurus echinatus*	H	--
3. *Lolium multiflorum*	H	FAC	7. *Pentagramma triangularis*	H	--
4. *Quercus kelloggii*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/7 = 14%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: Data point in old mining ditch that runs cross slope. No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Diamond Springs very rocky fine sandy loam 3 to 50% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/4	--	--	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 18**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Aira caryophyllea*	H	--	5. *Plantago lanceolata*	H	FAC
2. *Avena fatua*	H	--	6. *Rhamnus tomentella* ssp. *tomentella*	S	--
3. *Gastridium ventricosum*	H	--	7. *Elymus glaucus*	H	FACU
4. *Centaurea solstitialis*	H	--	8. *Hypericum perforatum*	H	--

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/8 = 13%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/4	--	--	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 19**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Elymus glaucus*	H	FACU	5. *Trifolium hirtum*	H	--
2. *Cynosurus echinatus*	H	--	6. *Centaurea solstitialis*	H	--
3. *Avena fatua*	H	--	7. *Arctostaphylos* sp.	S	--
4. *Bromus diandrus*	H	--	8. *Hypericum perforatum*	H	--

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/8 = 0%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Diamond Springs very rocky fine sandy loam 3 to 50% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		7.5YR 4/4	--	--	Sandy Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 20**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Juncus bufonius*	H	FACW+	5. *Deschampsia danthonioides*	H	FACW
2. *Lythrum hyssopifolium*	H	FACW	6. *Gastridium ventricosum*	H	FACU
3. *Lolium multiflorum*	H	FAC	7. *Cynosurus echinatus*	H	--
4. *Hordeum marinum* ssp. *gussoneanum*	H	FAC	8. *Torilis arvensis*	H	--

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 5/8 = 63%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: Only one secondary indicator present.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-6		10YR 4/4	5YR 4/6	Few/ Prominent	Loam
>6 bed rock					

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Highly disturbed area adjacent to dirt road, high point in topo. Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 21**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Cynosurus* sp.	H		5. *Vulpia myuros* var. *myuros*	H	--
2. *Aira caryophyllea*	H	--	6. *Juncus bufonius*	H	FACW+
3. *Quercus wislizenii* var. *wislizenii*	T	--	7. *Torilis arvensis*	H	--
4. *Bromus madritensis* ssp. *rubens*	H	FACU			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/7 = 14%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name (Series and Phase): Placer Diggings

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		7.5YR 4/6	--	--	Sandy loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not Hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 22**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Hordeum marinum* ssp. *gussoneanum*	H	FAC	5. *Avena fatua*	H	--
2. *Lolium multiflorum*	H	FAC	6. *Amaranthus* sp. (at least FACW)	H	FACW
3. *Quercus wislizenii* var. *wislizenii*	T	--	7. *Eremocarpus setigerus*	H	--
4. *Verbascum thapsus*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/7 = 43%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☒ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology. Area has been excavated.

SOILS Map Unit Name (Series and Phase):

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soil pit unnecessary (1987 Manual, Fig. 14, Step 9).

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 23**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Lolium multiflorum*	H	FAC	5. *Quercus wislizenii* var. *wislizenii*	T	--
2. *Cynosurus echinatus*	H	--	6. *Avena fatua*	H	--
3. *Torilis arvensis*	H	--	7. *Bromus diandrus*	H	--
4. *Bromus hordeaceus*	H	FACU			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/7 = 14%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-10		2.5YR 4/3	7.5YR 5/8	Few Prominent	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 24**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Rumex crispus*	H	FACW-	5. *Eremocarpus setigerus*	H	--
2. *Amaranthus* sp.	H	FACW+	6. *Toxicodendron diversilobum*	S	--
3. *Hordeum marinum* ssp. *gussoneanum*	H	FAC	7. *Cynosurus echinatus*	H	--
4. *Trichostema lanceolatum*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 3/7 = %

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☐ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology. Area has been excavated.

SOILS Map Unit Name (Series and Phase): Placer Diggings

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/4	--	--	Sandy Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 25**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Heteromeles arbutifolia*	S	--	5. *Cynosurus echinatus*	H	--
2. *Lonicera hispidula*	S	--	6. *Elymus glaucus*	H	FACU
3. *Toxicodendron diversilobum*	S	--	7. *Bromus diandrus*	H	--
4. *Quercus wislizenii* var. *wislizenii*	T	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/7 = 0%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☒ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase):
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Soil pit unnecessary (1987 Manual, Fig. 14, Step 9).

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 26**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Heteromeles arbutifolia*	S	--	5. *Vulpia myuros* var. *myuros*	H	FACU
2. *Pinus sabiniana*	T	--	6. *Torilis arvensis*	H	--
3. *Quercus douglasii*	T	--	7. *Aira caryophyllea*	H	--
4. *Cynosurus echinatus*	H	--			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0/7 = 0%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: No evidence of wetland hydrology.

SOILS Map Unit Name
(Series and Phase): Placer Diggings
Taxonomy (Subgroup):
Drainage Class:

Field Observations Confirm Mapped Type? ☒ Yes ☐ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 4/4	--	--	Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.

Data Form
Routine Wetland Determination
(1987 COE Wetlands Delineation Manual)

Field Investigator(s): Adam Forbes M.S. Date: 10 September 06 **DP No.: 27**

Project/Site: Piedmont Oak Estates State: CA

Applicant/Owner: Piedmont Oak Estates LLC County: El Dorado

Do Normal Circumstances exist on the site? Yes ☒ No ☐ Community ID: Upland

Is the site significantly disturbed (Atypical Situation)? Yes ☐ No ☒ Transect ID:

Is the site a potential Problem Area? (If needed, explain below) Yes ☐ No ☒ Plot ID:

VEGETATION Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Polygonum arenastrum*	H	FAC	5. *Amaranthus* sp. (at least FACW)	H	FACW
2. *Poa bulbosa*	H	--	6. *Quercus douglasii*	T	--
3. *Rumex crispus*	H	FACW-	7. *Cyperus eragrostis*	H	FACW
4. *Lolium multiflorum*	H	FAC	8. *Mimulus guttatus*	H	OBL

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 6/8 = 75%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:
- Depth of Surface Water: -- (in.)
- Depth to Free Water in Pit: -- (in.)
- Depth to Saturated Soil: -- (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☒ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☒ Drainage patterns in wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized root channels in upper 12 inches
- ☐ Local soil survey data
- ☐ FAC-Neutral Test
- ☐ Other (explain in remarks)
- ☐ Water-stained leaves

Remarks: Data point located in old mining ditch.

SOILS Map Unit Name (Series and Phase): Diamond Springs very fine sandy loam 9 to 15% slopes

Taxonomy (Subgroup):

Drainage Class:

Field Observations Confirm Mapped Type? ☐ Yes ☒ No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-4		2.5YR 4/2	--		Loam

Hydric Soil Indicators:
- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Not hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Hydric Soils Present? ☐ Yes ☒ No

Is this sampling point within a wetland? ☐ Yes ☒ No

Remarks/Rationale: Criteria not met.