



Appendix A

USFWS, CNDDDB, AND CNPS LISTS OF
REGIONALLY-OCCURRING SPECIAL-STATUS
SPECIES

CNPS *California Native Plant* **Rare and Endangered Plant Inventory**

Plant List

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

Search Criteria
 Found in Quad 38121G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u>Clarkia biloba ssp. brandegeeeae</u>	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
<u>Gratiola heterosepala</u>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 22 April 2014].



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California Department of Fish and Game
 Natural Diversity Database
 Orchard at Penryn - Rocklin Quad

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060		Endangered	G2	S2	1B.2
2 Brandegees clarkia <i>Clarkia biloba ssp. brandegeeeae</i>	PDONA05053			G4G5T4	S4	4.2
3 California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041		Threatened	G4T1	S1	
4 California linderiella <i>Linderiella occidentalis</i>	ICBRA06010			G3	S2S3	
5 Northern Volcanic Mud Flow Vernal Pool	CTT44132CA			G1	S1.1	
6 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	
7 purple martin <i>Progne subis</i>	ABPAU01010			G5	S3	SC
8 steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209K	Threatened		G5T2	S2	
9 valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened		G3T2	S2	
10 vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened		G3	S2S3	
11 white-tailed kite <i>Elanus leucurus</i>	ABNKC06010			G5	S3	

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
ROCKLIN (527C)
U.S.G.S. 7 1/2 Minute Quad

Report Date: April 22, 2014

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardii
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (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

Rana draytonii
California red-legged frog (T)

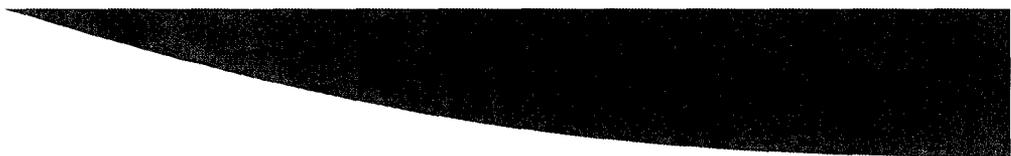
Reptiles

Thamnophis gigas
giant garter snake (T)

Key:

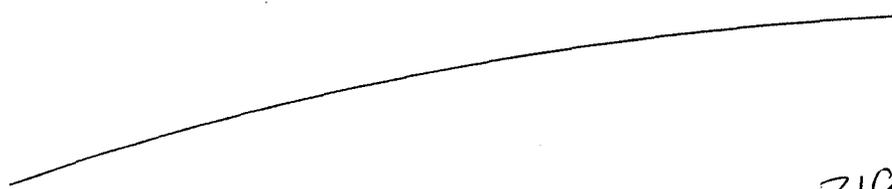
- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National 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

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Appendix B

REGIONALLY OCCURRING SPECIAL-STATUS
SPECIES TABLE



Appendix B
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Invertebrates				
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/--/--	Vernal pools ranging from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. It is most frequently found in pools measuring less than 0.05 acre; although has been collected from vernal pools exceeding 25 acres. The known range within California includes the Central Valley and southern California. (USFWS 2005).	Absent	There are no vernal pools or other suitable wetland habitats in the project site.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT/--/--	Endemic to elderberry shrubs (<i>Sambucus</i> spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys, riparian habitats in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Bakersfield (USFWS 1984).	Present	One elderberry shrub is present in the project site. The elderberry shrub is located within riparian habitat but represents low quality habitat for the VELB because it is small and no other elderberry shrubs are present in the vicinity. No evidence of VELB was observed on the shrub.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	FE/--/--	Vernal pools from 54 square feet to 89 acres, containing clear- to highly-turbid water. Its known range is within the Central Valley of California and in the San Francisco Bay area (USFWS 2005).	Absent	There are no vernal pools or other suitable wetland habitats in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish				
<p><i>Hypomesus transpacificus</i> Delta smelt</p>	<p>FT/--/--</p>	<p>Delta smelt are tolerant of a wide salinity range. They have been collected from estuarine waters up to 14 ppt (parts per thousand) salinity. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface), where the salinity is approximately 2 ppt. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edgewater. Although spawning has not been observed in the wild, the eggs are thought to attach to substrates such as cattails, tules, tree roots and submerged branches. Delta smelt are found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties (USFWS 1995).</p>	<p>Absent</p>	<p>There is no suitable habitat for this species in the project site and the project site is outside of this species' known geographic range.</p>

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**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish (cont.)				
<i>Oncorhynchus mykiss</i> Central Valley Steelhead	FT, CH/--/--	This distinct population segment includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (NMFS 2014a). Steelhead spawn in rivers and streams with cool, clear, water and suitable substrate.	Absent	There is no suitable habitat for this species in the project site.
<i>Oncorhynchus tshawytscha</i> Central Valley spring-run Chinook salmon	FT, CH/--/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Central Valley spring-run Chinook ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River (64 FR 50394; September 16, 1999). One artificial propagation program is considered part of the ESU: The Feather River Hatchery spring run Chinook program (NMFS 2014b).	Absent	There is no suitable habitat for this species in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish (cont.)				
<i>Oncorhynchus tshawytscha</i> Winter-run Chinook salmon	FE, CH/--/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Sacramento winter-run Chinook ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (59 FR 440; January 1, 1994), as well as two artificial propagation programs: Winter-run Chinook from the Livingston Stone National Fish Hatchery (NFH), and winter run Chinook in a captive broodstock program maintained at Livingston Stone NFH and the University of California Bodega Marine Laboratory (NMFS 2014b).	Absent	There is no suitable habitat for this species in the project site.

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**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Amphibians				
<p><i>Rana aurora draytonii</i> California red-legged frog</p>	<p>FT/SSC/--</p>	<p>The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (<i>Salix</i> spp.) and an intermixed fringe of cattails (<i>Typha latifolia</i>). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red-legged frogs aestivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. Studies have indicated that this species can not inhabit water bodies that exceed 70° F, especially if there are no cool, deep portions (USFWS 2002).</p>	<p>Absent</p>	<p>There is no suitable habitat for this species in the project site. Although the project site contains small patches of emergent riparian vegetation, there is no deep, still or slow moving water in the project site that could provide potential breeding habitat for this species.</p>

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**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Reptiles				
<i>Thamnophis gigas</i> Giant garter snake	FT/ST/--	The giant garter snake is endemic to the San Joaquin and Sacramento Valley floors. Counties include Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Madera, Merced, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs. May be found in slow-moving creeks but are absent from large rivers. They are generally aquatic but often bask on emergent vegetation such as cattails and tules (USFWS 1999b).	Absent	There is no suitable habitat for this species in the project site.
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	--/SSC/--	This species typically nests and forages in broken woodland and habitat edges near open water or riparian vegetation. Cooper's hawk is seldom found in areas without dense tree stands or patchy woodland habitat.	Present	Potential nesting habitat for this species occurs in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Birds (cont.)				
<i>Elanus leucurus</i> White-tailed kite	--/FP/--	Occurs primarily in rolling foothills and valley margins with scattered oaks as well as river bottomlands or marshes next to deciduous woodland. Uses isolated, dense topped, trees in open areas for nesting and perching and forages in a variety of habitats including grassland, marshes, and agricultural fields (CDFW 2014). Feeds on rodents, snakes, and insects.	Present	Potential nesting habitat for this species occurs in the project site.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--/ST/--	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about one inch that does not fluctuate during the year and dense vegetation for nesting habitat (CDFW 2014).	Absent	There is no suitable habitat for this species in the project site.
<i>Pandion haliaetus</i> Osprey	--/--/--	Breeds from the Cascade Ranges south to Lake Tahoe, and along the North Coast Ranges south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging such as rivers, lakes, reservoirs, bays, estuaries, and surf zones.	Absent	There is no suitable habitat for this species in the project site.

Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Birds (cont.)				
<i>Progne subis</i> Purple martin	--/SSC/--	Inhabits woodlands and low elevation coniferous forests of Douglas fir, Ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, but also nests in human-made structures. Nests are often located in a tall, isolated tree or dead snag (CDFW 2014). Also documented in "weep holes" in freeway and street overpasses.	Absent	There is no suitable habitat for this species in the project site.
Plants				
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Big-scale Balsamroot	--/--/CRPR 1B.2	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soil, from an elevation of 90 to 1,555 meters. Blooms March to June (CNPS 2014).	Present	Suitable habitat for this species is present in the openings in the oak woodland and in the annual grassland habitat in the project site.
<i>Clarkia biloba</i> ssp. <i>brandegeae</i> Brandege's clarkia	--/--/CRPR 4.2	Annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest - often in roadcuts - from an elevation of 75 to 915 meters. Blooms May to July (CNPS 2014).	Present	Suitable habitat for this species is present in the oak woodland habitat in the project site.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	--/SE/CRPR 1B.2	Habitat consists of marshes and swamps (lake margins), vernal pools/clay; elevation 10 to 2,375 meters. Blooms April to August (CNPS 2014).	Absent	There is no suitable habitat for this species in the project site.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--/--/CRPR 1B.2	Habitat consists of assorted, shallow, freshwater, marshes and swamps from 0 to 650 meters in elevation. Currently known to occur in Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties. Blooms May to October (CNPS 2014).	Present	The seasonal wetlands and intermittent stream in the project site provide suitable habitat for this species.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Plants (cont.)				
<i>Viburnum ellipticum</i> Oval-leaved viburnum	--/--/CRPR 2B.3	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from an elevation of 215 to 1,400 meters. Blooms May to June (CNPS 2014).	Present	Marginal habitat for this species is present in the oak woodland habitat in the project site.

Note: Shading indicates a species with suitable habitat and a potential to occur in the project site. The shaded species are evaluated in detail in the body of the report.

*FE – federally endangered; FT – federally threatened; FC – federally candidate; FD – federally delisted; SE – state endangered; ST – state threatened; SSC – state species of special concern; FP – CDFW fully protected. CRPR – California Rare Plant Rank (formerly California Native Plant Society List)

CRPR categories:

1B = Rare, threatened, or endangered in California and elsewhere

1B.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

4 = Plants of Limited Distribution - A Watch List.

4.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)



Appendix C

PLANTS AND WILDLIFE OBSERVED

Appendix C
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED		
FAMILY	SCIENTIFIC NAME	COMMON NAME
GYMNOSPERMS		
Pinaceae	<i>Pinus sabiniana</i>	foothill pine
ANGIOSPERMS -DICOTS		
Adoxaceae	<i>Sambucus nigra</i>	black elderberry
Amaranthaceae	<i>Chenopodium album</i>	white pigweed
	<i>Dysphania ambrosioides</i>	Mexican tea
Anacardiaceae	<i>Pistacia chinensis</i>	Chinese pistache
	<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	<i>Anthriscus caucalis</i>	bur-chervil
	<i>Daucus carota</i>	Queen Anne's lace
	<i>Torilis arvensis</i>	field hedge-parsley
Aristolochiaceae	<i>Aristolochia californica</i>	Dutchman's pipe
Araliaceae	<i>Hedera helix</i>	English ivy
Asteraceae	<i>Ambrosia psilostachya</i>	Western ragweed
	<i>Artemisia douglasiana</i>	California mugwort
	<i>Baccharis pilularis</i>	coyote brush
	<i>Carduus pycnocephalus</i>	Italian thistle
	<i>Centaurea solstitialis</i>	yellow star thistle
	<i>Chondrilla juncea</i>	skeleton weed
	<i>Cirsium vulgare</i>	bull thistle
	<i>Conyza canadensis</i>	horseweed
	<i>Euthamia occidentalis</i>	Western goldenrod
	<i>Helminthotheca echioides</i>	bristly ox-tongue
	<i>Hypochaeris glabra</i>	smooth cat's-ear
	<i>Lactuca serriola</i>	prickly lettuce
	<i>Madia elegans</i>	common madia
	<i>Pseudognaphalium californicum</i>	California everlasting
	<i>Silybum marianum</i>	milk thistle
	<i>Sonchus asper</i>	prickly sow thistle
	<i>Sonchus oleraceus</i>	common sow thistle
	<i>Tragopogon dubious</i>	salsify
	<i>Wyethia angustifolia</i>	narrowleaf mules ears
Boraginaceae	<i>Amsinckia menziesii</i>	fiddleneck
Brassicaceae	<i>Cardamine oligosperma</i>	few-seeded bitter-cress
	<i>Hirschfeldia incana</i>	short-podded mustard
	<i>Raphanus sativus</i>	wild radish
	<i>Sisymbrium officinale</i>	hedge mustard

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Callitrichaceae	<i>Callitriche marginata</i>	winged water-starwort
Caprifoliaceae	<i>Lonicera interrupta</i>	chaparral honeysuckle
Caryophyllaceae	<i>Spergularia sp.</i>	sand-spurrey
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed
Cucurbitaceae	<i>Marah fabacea</i>	California man-root
Crassulaceae	<i>Crassula connata</i>	pygmy-weed
Ebenaceae	<i>Diospyros kaki</i>	persimmon
Euphorbiaceae	<i>Chamaesyce maculata</i>	spotted spurge
	<i>Croton setigerus</i>	turkey mullein
Fabaceae	<i>Lotus purshianus var. purshianus</i>	Spanish-clover
	<i>Lupinus bicolor</i>	lupine
	<i>Medicago polymorpha</i>	bur Clover
	<i>Trifolium dubium</i>	little hop clover
	<i>Trifolium glomeratum</i>	clover
	<i>Trifolium hirtum</i>	rose clover
	<i>Vicia sativa</i>	common vetch
	<i>Vicia villosa</i>	hairy vetch
Fagaceae	<i>Quercus douglasii</i>	blue oak
	<i>Quercus lobata</i>	valley oak
	<i>Quercus wislizenii</i>	interior live oak
Gentianaceae	<i>Zeltnera muehlenbergii</i>	June centaury
Geraniaceae	<i>Erodium botrys</i>	filaree
	<i>Erodium cicutarium</i>	filaree
	<i>Geranium dissectum</i>	geranium
	<i>Geranium molle</i>	Crane's-bill geranium
Hypericaceae	<i>Hypericum perforatum</i>	klamathweed
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut
Lamiaceae	<i>Lamium amplexicaule</i>	dead nettle
	<i>Stachys stricta</i>	hedge nettle
Montiaceae	<i>Claytonia perfoliata</i>	Miner's lettuce
Moraceae	<i>Ficus carica</i>	edible fig
Myrsinaceae	<i>Anagallis arvensis</i>	scarlet pimpernel
Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash
Onagraceae	<i>Clarkia unguiculata</i>	canyon clarkia
	<i>Epilobium brachycarpum</i>	summer cottonweed
	<i>Epilobium ciliatum</i>	hairy willow-herb

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Papaveraceae	<i>Eschscholzia californica</i>	California poppy
Phymaceae	<i>Mimulus guttatus</i>	seep spring monkeyflower
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain
Polygonaceae	<i>Polygonum aviculare</i>	knotweed
	<i>Rumex crispus</i>	curly dock
	<i>Rumex pulcher</i>	fiddle dock
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon
	<i>Malus sp</i>	apple tree
	<i>Potentilla sp.</i>	cinquefoil
	<i>Prunus sp.</i>	prunus
	<i>Rubus armeniacus</i>	Himalayan blackberry
	<i>Sanguisorba minor subsp. muricata</i>	garden burnet
Rubiaceae	<i>Galium aparine</i>	rough bedstraw
	<i>Galium parisiense</i>	wall bedstraw
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood
	<i>Salix exigua</i>	narrow leaved willow
	<i>Salix gooddingii</i>	Goodding's willow
	<i>Salix laevigata</i>	red willow
	<i>Salix lasiolepis</i>	arroyo willow
Sapindaceae	<i>Aesculus californica</i>	California buckeye
Scrophulariaceae	<i>Collinsia multicolor</i>	San Francisco collinsia
	<i>Verbascum blattaria</i>	moth mullein
	<i>Veronica anagallis-aquatica</i>	water speedwell
Simaroubaceae	<i>Ailanthus altissima</i>	tree of heaven
Zygophyllaceae	<i>Tribulus terrestris</i>	puncture vine
MONOCOTS		
Alismataceae	<i>Alisma plantago-aquatica</i>	water plantain
Cyperaceae	<i>Cyperus eragrostis</i>	tall flatsedge
	<i>Eleocharis macrostachya</i>	creeping spikerush
	<i>Eleocharis pachycarpa</i>	black sand spikerush
Juncaceae	<i>Juncus effusus</i>	soft rush
	<i>Juncus mexicanus</i>	Mexican rush
	<i>Juncus xiphioides</i>	iris-leaved rush
Liliaceae	<i>Chlorogalum pomeridianum var. pomeridianum</i>	soap plant

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Poaceae	<i>Aegilops triuncialis</i>	barbed goatgrass
	<i>Aira caryophylla</i>	silver European hairgrass
	<i>Andropogon virginicus</i> var. <i>virginicus</i>	broomsedge bluestem
	<i>Avena barbata</i>	slender oats
	<i>Avena fatua</i>	wild oats
	<i>Briza maxima</i>	quaking grass
	<i>Briza minor</i>	small quaking grass
	<i>Bromus diandrus</i>	rip-gut brome
	<i>Bromus hordeaceus</i>	soft chess
	<i>Cynosurus echinatus</i>	hedgheg dogtail
	<i>Elymus caput-medusae</i>	Medusa head
	<i>Festuca perennis</i>	Italian rye grass
	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley
	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	foxtail barley
	<i>Paspalum dilatatum</i>	dallis grass
	<i>Phalaris aquatica</i>	canary grass
	<i>Poa annua</i>	annual bluegrass
	<i>Polypogon monspeliensis</i>	rabbit's foot grass
	<i>Sorghum halpense</i>	Johnson grass
<i>Vulpia myuros</i>	rattail fescue	
Themidaceae	<i>Brodiaea elegans</i> subsp. <i>elegans</i>	harvest brodiaea
Typhaceae	<i>Typha latifolia</i>	broad-leaved cattail

**Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED**

ANIMAL SPECIES OBSERVED	
SCIENTIFIC NAME	COMMON NAME
BIRDS	
<i>Aphelocoma californica</i>	Western scrub-jay
<i>Baeolophus inornatus</i>	oak titmouse
<i>Bubo virginianus</i>	great horned owl
<i>Callipepla californica</i>	California quail
<i>Carduelis psaltria</i>	lesser goldfinch
<i>Cathartes aura</i>	turkey vulture
<i>Carpodacus mexicanus</i>	house finch
<i>Colaptes auratus</i>	Northern flicker
<i>Melanerpes formicivorus</i>	acorn woodpecker
<i>Melospiza crissalis</i>	California towhee
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
<i>Pipilo maculatus</i>	spotted towhee
REPTILE	
<i>Sceloporus occidentalis</i>	Western fence lizard
AMPHIBIANS	
<i>Pseudacris regilla</i>	Pacific chorus frog
<i>Rana catesbeiana</i>	bullfrog
MAMMAL	
<i>Sciurus griseus</i>	Western gray squirrel
FISH	
<i>Gambusia affinis</i>	mosquitofish



Appendix D

RARE PLANT SURVEY LETTER REPORT,
JUNE 2014

HELIX Environmental Planning, Inc.
11 Natoma Street
Suite 155
Folsom, CA 95630
916.365.8700 tel
www.helixepi.com



June 24, 2014

Mr. Mike Mahoney
Penryn Development, LLC.
3990 Ruffin Road, Suite 100
San Diego, CA 92123

RE: Rare Plant Survey Letter Report Orchard at Penryn Project, Community of Penryn,
Placer County, California

HELIX Environmental Planning, Inc. (HELIX) has conducted focused rare plant surveys for the approximately 15-acre project site located in the community of Penryn, Placer County (County), CA. This letter report, which documents the results of those surveys, has been prepared in response to the pre-development meeting checklist prepared by Placer County on February 25, 2014 regarding the proposed development project. The rare plant surveys were conducted in compliance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009), and California Native Plant Society's botanical survey guidelines (CNPS 2001).

PROJECT LOCATION AND DESCRIPTION

The approximately 15-acre project site consists of two parcels located in the community of Penryn, in Placer County, California. The project site is bounded by Penryn Road to the east, and rural residential land uses to the north and west. Taylor Road is adjacent to the northwest corner of the project site and a church facility is located south of the site. Interstate 80 is located approximately 0.3 mile south of the project site. The project site is located in Township 11 North, Range 7 East, Section 2 on the "Rocklin, California" 7.5 minute USGS topographic quadrangle. The approximate longitude and latitude for the center of the site are 38° 50.306' north and 121° 10.178' west. Figure 1 is a project location map. Figure 2 is an aerial photograph of the project site and surrounding areas.

ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The project site is located in a rural residential setting in the western portion of the Horseshoe Bar/Penryn Community Plan area, which covers approximately 25 square miles (16,620 acres) in the Sierra Nevada foothills. The area is comprised of a mixture of natural habitats and disturbed areas, at elevations ranging between 200 and 1,200 feet above mean sea level (North Fork Associates 2011). The Community Plan notes that through the 1980s and 1990s, the predominant land use pattern in the Community Plan area changed from rural-agricultural to residential developments on small acreages. Ongoing development has decreased the extent of natural habitats throughout the Plan area and the region (North Fork Associates 2011).

The project site is situated in the Sierra Nevada foothills. The elevation of the project site ranges between 460 and 500 feet above mean sea level. The topography of the site can be described as mainly flat with a gentle slope from north to south. Adjacent land uses include rural residential, roads, an undeveloped parcel, and a church with a private school. The project site itself is undeveloped and is comprised primarily of oak woodland and annual grassland communities with smaller amounts of riparian woodland.

As a result of the development that has occurred in the region over the last two to three decades, the project site and immediate vicinity have been subjected to a high level of human disturbance and the biological communities once present on the site are in a highly altered state. The annual grassland as well as the understory of the oak woodland has a higher percent cover of non-native weedy species than would be expected of similar habitats in the region with lesser amounts of on-going human disturbance. Based on the high percent cover of non-native weedy species in the annual grassland (e.g., yellow star thistle [*Centaurea solstitialis*]), it is likely the site has been disced at some time in the past. Site photographs are included as Attachment A.

METHODS

Determination of Regionally-Occurring Special-Status Plants

Current lists of regionally-occurring special-status plant species were obtained from the California Native Plant Society, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife and reviewed to determine the potential for special-status plants to occur on the project site; these lists are included as Attachment B.

Survey Methods

Focused rare plant surveys were conducted by HELIX botanist/biologist Stephen Stringer M.S. on April 28, 2014 and by Mr. Stringer and Catherine Silvester, HELIX botanist, on June 11, 2014. Transects were walked within the project site to obtain 100 percent visual coverage. All plant species encountered during the surveys were identified to the taxonomic level necessary to determine whether or not they were special-status species. A list of plant species observed is included as Attachment C.

RESULTS

Vegetation Communities

Vegetation communities/habitat types in the project site include oak woodland, annual grassland, riparian, seasonal wetland, wetland swale, and intermittent stream. These habitats are described below. Figure 3 is a habitat map of the project site.

Oak Woodland

A total of 6.59 acres of oak woodland habitat occurs within the project site. Dominant tree species within the oak woodland on the project site include interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), and foothill pine (*Pinus sabiniana*). Native shrubs and vines are present within the understory including poison oak (*Toxicodendron diversilobum*), coyote bush (*Baccharis pilularis*), and Dutchman's pipe (*Aristolochia californica*). Herbaceous species are relatively sparse in areas where the canopy is dense but are more abundant along the edges of the oak woodland where it intergrades with annual grassland. Herbaceous species within the oak woodland are similar to the herbaceous species found in the annual grassland areas.

Annual Grassland

A total of 6.02 acres of annual grassland habitat is present in the project site, primarily in the driest portions of the site furthest from the intermittent stream and wetland swale. The annual grassland is comprised largely of non-native weedy species such as ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), medusa head (*Taeniatherum caput-medusae*), wild oat (*Avena fatua*), yellow star-thistle, rose clover (*Trifolium hirtum*), and filaree (*Erodium* spp.). Yellow star-thistle comprised greater than 75 percent cover within large portions of the annual grassland at the time of the June 11, 2014 survey.

Riparian

A total of 2.34 acres of riparian habitat is present on the project site, located primarily along the edges of the intermittent stream and wetland swale. The dominant trees within the riparian habitat include valley oak, Fremont's cottonwood (*Populus fremontii*), and willow (*Salix* spp.). Himalayan blackberry (*Rubus armeniacus*) is also prevalent within this habitat.

Seasonal Wetland

A total of 0.255 acre of seasonal wetland occurs on the project site. The seasonal wetland occurs in four separate locations adjacent to the intermittent stream in the central portion of the project site as well as in one location in the northeast corner of the project site adjacent to the wetland swale. The seasonal wetland along the intermittent stream occurs in areas outside of the stream channel that are saturated or shallowly inundated (>6 inches in depth) during the growing season. In these areas the seasonal wetland is primarily vegetated with sedges (*Cyperus* spp.) and rushes

(*Juncus* spp.). Along the wetland swale, the seasonal wetland ponds water to a depth of approximately 12 to 18 inches and is vegetated with cattail (*Typha* sp.).

Wetland Swale

A total of 0.196 acre of wetland swale occurs in the project site, primarily along the eastern side. Wetland swale also occurs at the headwaters of the intermittent stream in the central portion of the project site. The wetland swale is differentiated from the intermittent stream by a lack of a defined bed and bank. The wetland swales in the project site occur in low points in the topography that carry stormwater and remain saturated for a significant portion of the growing season but likely do not hold water for very long after storm events. Much of the wetland swale is sparsely vegetated due to the dense canopy cover. Vegetation within the wetland swale consists primarily of herbaceous species typical of disturbed areas.

Intermittent Stream

Approximately 800 linear feet of intermittent stream totaling 0.08 acre occurs in the central portion of the project site consisting of a main channel and a small tributary. The main channel of the intermittent stream ranges from 2 to 6 feet in width and 2 to 12 inches in depth with an average width of approximately 4 feet and an average depth of approximately 6 inches. The main channel of the intermittent stream appears to carry water nearly year-around, likely enhanced through much of the summer by urban runoff (irrigation runoff from upstream residences etc.). The tributary ranges from 1 to 4 feet in width with an average width of approximately 2 feet and an average depth of approximately 6 inches. The tributary does not receive urban runoff and appears to carry water only during the winter and early spring. The bed of the main channel of the stream and its tributary are comprised primarily of sand and silts. In-stream aquatic vegetation such as water-plantain (*Alisma* sp.) and water cress (*Rorripa nasturtium aquaticum*) are present in the main channel and in the lower portions of the tributary at the confluence with the main channel. The upper portions of the tributary largely lack in-stream aquatic vegetation due to the shorter period and lower frequency of inundation. The banks of the intermittent stream as well as its tributary are mostly vegetated with Himalayan blackberry and herbaceous species typical of the annual grassland habitat.

Special Status Plants

Suitable habitat was identified on the project site for four of the regionally-occurring special-status plant species identified by USFWS, CNDDB, and CNPS. These species are discussed below. However, no special-status plant species were observed in the project site during botanical surveys. Species for which habitat is not present in the project site and/or the project site is outside of their known geographic or elevational range are not discussed in this report.

Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *Macrolepis*)

Big-scale balsamroot is a perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentine soil, from an elevation of 90 to 1,555 meters. This species blooms from March to June (CNPS 2014). The oak woodland and annual grassland

on the project site provides marginally suitable habitat for this species. There are no reported occurrences of big-scale balsamroot on the Rocklin, California USGS quadrangle.

Brandegee's Clarkia (*Clarkia biloba ssp. Brandegeae*)

Brandegee's clarkia is an annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest - often in roadcuts - from an elevation of 75 to 915 meters. This species blooms from May to July (CNPS 2014). The oak woodland on the project site provides limited suitable habitat for this species. There is one reported occurrence of Brandegee's clarkia on the Rocklin, California USGS quadrangle. The reported occurrence is from 1933 and the exact location is listed as "unknown."

Sanford's Arrowhead (*Sagittaria sanfordii*)

Sanford's arrowhead is a rhizomatous emergent (aquatic) herb that is found in shallow water within a variety of freshwater habitats, including standing or slow moving freshwater ponds, marshes, and ditches. The known range is within Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties at elevations ranging from 0 to 1,950 feet amsl. This species blooms from May to October (CNPS 2014). The seasonal wetlands and intermittent stream in the project site provide suitable habitat for this species. There are no reported occurrences of Sanford's arrowhead on the Rocklin, California USGS quadrangle.

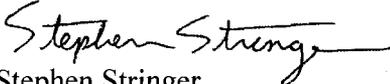
Oval-Leaved Viburnum (*Viburnum ellipticum*)

Oval-leaved viburnum is a perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from an elevation of 215 to 1,400 meters. This species blooms from May to June (CNPS 2014). Marginally suitable habitat for this species is present in the oak woodland in the project site. There are no reported occurrences of oval-leaved viburnum on the Rocklin, California USGS quadrangle.

SUMMARY/CONCLUSION

No special-status plant species were observed in the project site during focused botanical surveys conducted during the blooming season. Therefore, special-status plants are presumed absent from the site. Rare plant surveys are typically considered valid for a period of two years. Rare plant surveys should be re-conducted if construction does not commence on or before June 2016.

Sincerely,


Stephen Stringer
Senior Scientist

Letter to Mr. Mike Mahoney
June 24, 2014

Page 6 of 7

Enclosures:

Figure 1 Project Location Map

Figure 2 Aerial Photograph

Figure 3 Habitat Map

Attachment A Site Photographs

Attachment B USFWS, CNPS, and CNDDDB Lists of Regionally-Occurring Special-Status
Species

Attachment C List of Plant Species Observed

REFERENCES

California Department of Fish and Wildlife. 2009. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. State of California, California Natural Resources Agency.

California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. Available online < http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf>

California Native Plant Society (CNPS). 2014. Inventory of Rare and Endangered Plants (online edition, v7-12apr 4-11-12). California Native Plant Society. Sacramento, CA. Accessed online April 2014.

North Fork Associates. 2011. Draft Environmental Impact Report for the Orchard at Penryn Project. Prepared for Penryn Development LLC.

I:\PROJECTS\PPUED-01_Penryn_Paved_Permitting\Penryn\paved_GIS\2014\MAXD\BRE_April_2014\Figure 2.BRE_aerial.mxd



Project Site

Aerial Source: Placer County (2011)

Figure 2 - Aerial
ORCHARD AT PENRYN

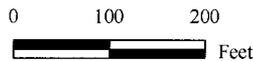




Figure 3 - Habitat
ORCHARD AT PENRYN

Placer County, CA

215

Attachment A
SITE PHOTOGRAPHS



Photo 1. View of the annual grassland within the central portion of the project site.



Photo 2. View of the riparian habitat along the eastern wetland swale in the project site.



Photo 3. View of riparian habitat along the wetland swale in the central portion of the site.



Photo 4. View of the western fork of the intermittent stream in the project site.



Photo 5. View of the main fork of the intermittent stream in the project site.



Plant List

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

Search Criteria
 Found in Quad 38121G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u>Clarkia biloba ssp. brandegeeeae</u>	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
<u>Gratiola heterosepala</u>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 22 April 2014].



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California Department of Fish and Game
 Natural Diversity Database
 Orchard at Penryn - Rocklin Quad

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060		Endangered	G2	S2	1B.2
2 Brandegee's clarkia <i>Clarkia biloba ssp. brandegeeeae</i>	PDONA05053			G4G5T4	S4	4.2
3 California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041		Threatened	G4T1	S1	
4 California linderiella <i>Linderiella occidentalis</i>	ICBRA06010			G3	S2S3	
5 Northern Volcanic Mud Flow Vernal Pool	CTT44132CA			G1	S1.1	
6 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	
7 purple martin <i>Progne subis</i>	ABPAU01010			G5	S3	SC
8 steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209K	Threatened		G5T2	S2	
9 valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened		G3T2	S2	
10 vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened		G3	S2S3	
11 white-tailed kite <i>Elanus leucurus</i>	ABNKC06010			G5	S3	

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
ROCKLIN (527C)
U.S.G.S. 7 1/2 Minute Quad

Report Date: April 22, 2014

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardii
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (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

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

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

Attachment C
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
GYMNOSPERMS		
Pinaceae	<i>Pinus sabiniana</i>	foothill pine
ANGIOSPERMS –DICOTS		
Adoxaceae	<i>Sambucus nigra</i>	black elderberry
Amaranthaceae	<i>Chenopodium album</i>	white pigweed
	<i>Dysphania ambrosioides</i>	Mexican tea
Anacardiaceae	<i>Pistacia chinensis</i>	Chinese pistache
	<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	<i>Anthriscus caucalis</i>	bur-chervil
	<i>Daucus carota</i>	Queen Anne's lace
	<i>Torilis arvensis</i>	field hedge-parsley
Aristolochiaceae	<i>Aristolochia californica</i>	Dutchman's pipe
Araliaceae	<i>Hedera helix</i>	English ivy
Asteraceae	<i>Ambrosia psilostachya</i>	Western ragweed
	<i>Artemisia douglasiana</i>	California mugwort
	<i>Baccharis pilularis</i>	Coyote brush
	<i>Carduus pycnocephalus</i>	Italian thistle
	<i>Centaurea solstitialis</i>	yellow star thistle
	<i>Chondrilla juncea</i>	skeleton weed
	<i>Cirsium vulgare</i>	bull thistle
	<i>Coryza canadensis</i>	horseweed
	<i>Euthamia occidentalis</i>	Western goldenrod
	<i>Helminthotheca echioides</i>	bristly ox-tongue
	<i>Hypochaeris glabra</i>	smooth cat's-ear
	<i>Lactuca serriola</i>	prickly lettuce
	<i>Madia elegans</i>	common madia
	<i>Pseudognaphalium</i>	California everlasting
	<i>Silybum marianum</i>	milk thistle
	<i>Sonchus asper</i>	prickly sow thistle
	<i>Sonchus oleraceus</i>	common sow thistle
	<i>Tragopogon dubious</i>	salsify
<i>Wyethia angustifolia</i>	narrowleaf mules ears	
Boraginaceae	<i>Amsinckia menziesii</i>	fiddleneck
Brassicaceae	<i>Cardamine oligosperma</i>	few-seeded bitter-cress
	<i>Hirschfeldia incana</i>	short-podded mustard
	<i>Raphanus sativus</i>	wild radish
	<i>Sisymbrium officinale</i>	hedge mustard
Callitrichaceae	<i>Callitriche marginata</i>	winged water-starwort
Caprifoliaceae	<i>Lonicera interrupta</i>	chaparral honeysuckle

Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Caryophyllaceae	<i>Spergularia</i> sp.	sand-spurrey
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed
Cucurbitaceae	<i>Marah fabacea</i>	California man-root
Crassulaceae	<i>Crassula connata</i>	pygmy-weed
Ebenaceae	<i>Diospyros kaki</i>	persimmon
Euphorbiaceae	<i>Chamaesyce maculata</i>	spotted spurge
	<i>Croton setigerus</i>	turkey mullein
Fabaceae	<i>Lotus purshianus</i> var.	Spanish-clover
	<i>Lupinus bicolor</i>	lupine
	<i>Medicago polymorpha</i>	bur Clover
	<i>Trifolium dubium</i>	little hop clover
	<i>Trifolium glomeratum</i>	clover
	<i>Trifolium hirtum</i>	rose clover
	<i>Vicia sativa</i>	common vetch
	<i>Vicia villosa</i>	hairy vetch
Fagaceae	<i>Quercus douglasii</i>	blue oak
	<i>Quercus lobata</i>	valley oak
	<i>Quercus wislizenii</i>	interior live oak
Gentianaceae	<i>Zeltnera muehlenbergii</i>	June centaury
Geraniaceae	<i>Erodium botrys</i>	filaree
	<i>Erodium cicutarium</i>	filaree
	<i>Geranium dissectum</i>	geranium
	<i>Geranium molle</i>	Crane's-bill geranium
Hypericaceae	<i>Hypericum perforatum</i>	klamathweed
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut
Lamiaceae	<i>Lamium amplexicaule</i>	dead nettle
	<i>Stachys stricta</i>	hedge nettle
Montiaceae	<i>Claytonia perfoliata</i>	Miner's lettuce
Moraceae	<i>Ficus carica</i>	edible fig
Myrsinaceae	<i>Anagallis arvensis</i>	scarlet pimpernel
Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash
Onagraceae	<i>Clarkia unguiculata</i>	canyon clarkia
	<i>Epilobium brachycarpum</i>	summer cottonweed
	<i>Epilobium ciliatum</i>	hairy willow-herb
Papaveraceae	<i>Eschscholzia californica</i>	California poppy
Phymaceae	<i>Mimulus guttatus</i>	seep spring monkeyflower
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain

Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Polygonaceae	<i>Polygonum aviculare</i>	knotweed
	<i>Rumex crispus</i>	curly dock
	<i>Rumex pulcher</i>	fiddle dock
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon
	<i>Malus sp</i>	apple tree
	<i>Potentilla sp.</i>	cinquefoil
	<i>Prunus sp.</i>	prunus
	<i>Rubus armeniacus</i>	Himalayan blackberry
	<i>Sanguisorba minor subsp. muricata</i>	garden burnet
Rubiaceae	<i>Galium aparine</i>	rough bedstraw
	<i>Galium parisiense</i>	wall bedstraw
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood
	<i>Salix exigua</i>	narrow leaved willow
	<i>Salix gooddingii</i>	Goodding's willow
	<i>Salix laevigata</i>	red willow
	<i>Salix lasiolepis</i>	arroyo willow
Sapindaceae	<i>Aesculus californica</i>	California buckeye
Scrophulariaceae	<i>Collinsia multicolor</i>	San Francisco collinsia
	<i>Verbascum blattaria</i>	moth mullein
	<i>Veronica anagallis-aquatica</i>	water speedwell
Simaroubaceae	<i>Ailanthus altissima</i>	tree of heaven
Zygophyllaceae	<i>Tribulus terrestris</i>	puncture vine
MONOCOTS		
Alismataceae	<i>Alisma plantago-aquatica</i>	water plantain
Cyperaceae	<i>Cyperus eragrostis</i>	tall flatsedge
	<i>Eleocharis macrostachya</i>	creeping spikerush
	<i>Eleocharis pachycarpa</i>	black sand spikerush
Juncaceae	<i>Juncus effusus</i>	soft rush
	<i>Juncus mexicanus</i>	Mexican rush
	<i>Juncus xiphioides</i>	iris-leaved rush
Liliaceae	<i>Chlorogalum pomeridianum</i> <i>var. pomeridianum</i>	soap plant

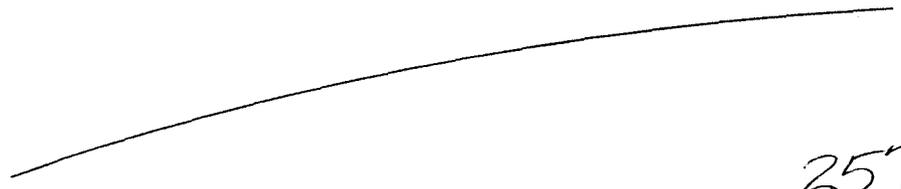
Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
MONOCOTS (cont.)		
Poaceae	<i>Aegilops triuncialis</i>	barbed goatgrass
	<i>Aira caryophyllea</i>	silver European hairgrass
	<i>Andropogon virginicus</i> var.	broomsedge bluestem
	<i>Avena barbata</i>	slender oats
	<i>Avena fatua</i>	wild oats
	<i>Briza maxima</i>	quaking grass
	<i>Briza minor</i>	small quaking grass
	<i>Bromus diandrus</i>	rip-gut brome
	<i>Bromus hordeaceus</i>	soft chess
	<i>Cynosurus echinatus</i>	hedgehog dogtail
	<i>Elymus caput-medusae</i>	Medusa head
	<i>Festuca perennis</i>	Italian rye grass
	<i>Hordeum marinum</i> ssp.	Mediterranean barley
	<i>Hordeum murinum</i> ssp.	foxtail barley
	<i>Paspalum dilatatum</i>	dallis grass
	<i>Phalaris aquatica</i>	canary grass
	<i>Poa annua</i>	annual bluegrass
	<i>Polypogon monspeliensis</i>	rabbit's foot grass
	<i>Sorghum halpense</i>	Johnson grass
	<i>Vulpia myuros</i>	rattail fescue
Themidaceae	<i>Brodiaea elegans</i> subsp.	harvest brodiaea
Typhaceae	<i>Typha latifolia</i>	broad-leaved cattail



Appendix E

PRELIMINARY JURISDICTIONAL
DETERMINATION MAP, APRIL 2013





Source: Esri, Intel, USDA, USGS, AeroGRID, IGN, ICR, and the GIS User Community

PREPARED BY:

HELIX
Environmental Planning

11 Natoma St.
Folsom, CA 95630
(916) 365 - 8700

PREPARED FOR:

Penryn Development LLC
3990 Ruffin Road
Suite 100
San Diego, CA 92123
Phone: (858) 614-7342
Attn: Mike Mahoney

WATERS OF THE UNITED STATES

Feature	Length (ft)	Ave Width (ft)	*Area (acres)/ Square Feet
Wetlands			
Seasonal Wetland	N/A	N/A	0.255/11,108
Wetland Swale	N/A	N/A	0.196/8,538
Other Waters of the U.S.			
Intermittent Stream	798.81	4.36	0.980/3,485
Total acreage of Potentially Jurisdictional Wetlands and other Waters of the U.S. within the Delineation Boundary			0.531/23,131

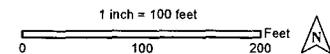
WETLAND DELINEATION MAP

Penryn Development
Placer County, California
May 2013

DRAWN BY: M. Fremont, D. Caziarc
DELINEATORS: S. Stringer, C. Silvester
DATE OF FIELDWORK: April 2013

USACE REGULATORY FILE #: SPK-200100019
VERIFIED BY: TBD
DATE OF VERIFICATION: TBD

- Upland data point
- Wetland data point
- Study Area (±15 acres)
- ① Photo point
- ⊗ Culvert



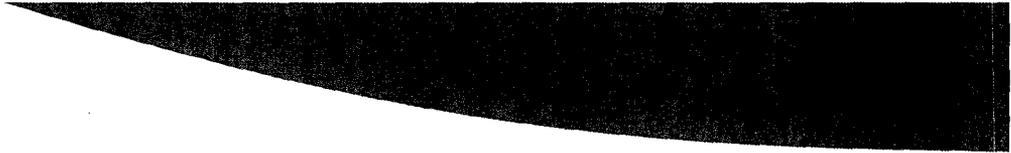
REVISIONS

DATE	DESCRIPTION	BY

NOTES:

The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers

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Appendix F

GROUND PHOTOGRAPHS

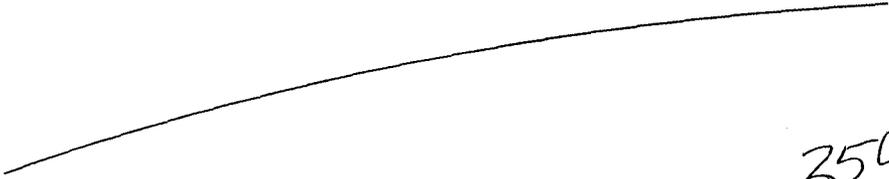




Photo 1. View of annual grassland within the central portion of the project site.



Photo 2. View of the riparian habitat along the eastern wetland swale in the project site.

G/PROJECTS/P/PED-01/Appx F photo pages

Ground Photographs
BIOLOGICAL RESOURCES EVALUATION FOR THE
ORCHARD AT PENRYN PROJECT
Appendix F



Photo 3. View of riparian habitat along the wetland swale in the central portion of the site.



Photo 4. View of the western fork of the intermittent stream in the project site.

G/PROJECTS/P/PED-01/Appx F photo pages

Ground Photographs
BIOLOGICAL RESOURCES EVALUATION FOR THE
ORCHARD AT PENRYN PROJECT
Appendix F



Photo 5. View of the main fork of the intermittent stream in the project site.



Photo 6. View of the elderberry shrub (red arrow) in riparian habitat along the southern boundary of the project site.

G/PROJECTS/P/PED-01/Appx F photo pages

Ground Photographs
BIOLOGICAL RESOURCES EVALUATION FOR THE
ORCHARD AT PENRYN PROJECT
Appendix F

Attachment C

Trip Generation

To: Katherine Waugh, AICP
From: Matt Weir, P.E., T.E., PTOE
Re: **Trip Generation Evaluation**
The Orchard at Penryn – Placer County, California
Date: December 12, 2014

Per your request we have prepared this trip generation evaluation for the above referenced project. The purpose of this evaluation is to document the anticipated difference in trip generation characteristics between the originally proposed project¹ and a current project concept. The original proposed project included 150 apartment dwelling units while the currently proposed project concept would replace the apartments with 54 single-family dwelling units.

The number of trips anticipated to be generated by the proposed project was derived using data included in *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE). **Table 1** presents the trip generation data for both proposed project concepts using the average trip rates for each land use.

Table 1 – Trip Generation Comparison

Land Use (ITE Code)	Size (# units)	Daily Trips	AM Peak-Hour				PM Peak-Hour					
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Low-Rise Apartment (221)	150	990	69	21%	14	79%	55	87	65%	57	35%	30
Single-Family Detached Housing (210)	54	516	41	25%	10	75%	31	54	63%	34	37%	20
Difference (Current - Original)		(474)	(28)		(4)		(24)	(33)		(23)		(10)

Source: *Trip Generation, 9th Edition*, ITE.

As depicted in **Table 1**, the currently proposed project (54 single-family detached units) would be anticipated to result in 474 fewer daily trips, and approximately 30 fewer peak-hour trips. These reductions equate to approximately 50 percent fewer daily trips and approximately 40 percent fewer peak-hour trips.

As a result of these findings, the currently proposed project's environmental impacts to transportation facilities would not be anticipated to exceed the previously documented effects of the originally proposed project. In fact, considering the approximate 40 to 50 percent reduction in trips, the transportation impacts previously document may actually be overstated if the smaller, 54-unit single-family project is pursued.

¹ *Traffic Impact Analysis, The Orchard at Penryn*, Kimley-Horn and Associates, Inc., February 7, 2011.