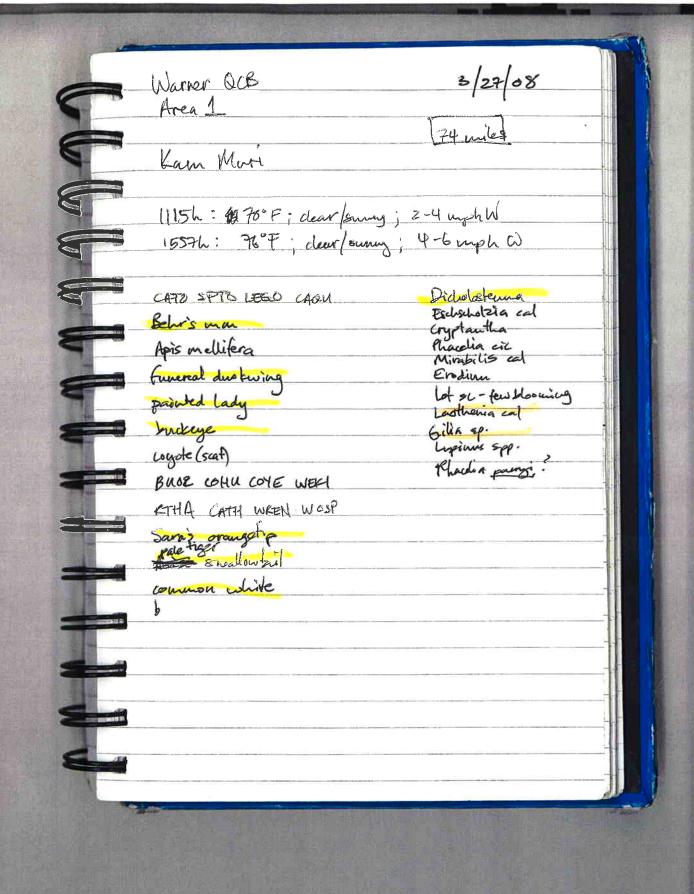


	pot General Form	Surve	y type: Habitat Assess	ment/Adult Su	ırvey	
Surveyor: BAD	Date: 3/1	9/08	Site Visit No. 1234	678910		
Total site acres:_	(mm	(dd/yyyy) ne: Worther Ranch	Site Location:/	76 W		
Time (24 hr)	Sky		Wind (Beaufort)		Temp	For C
11:30	partcloudy/overcast/fog/	drizzle/shower	∠ 1-3 4 → 8-12 >12		69	13
	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12			
	clear/ partcloudy/overcast/fog/o	drizzle/shower .	<1 1-3 4-7 8-12 >12			
	clear/ partcloudy/overcast/fog/o	drizzle/shower	<1 1-3 4-7 8-12 >12			
54 900	clear/ partcloudy/overcast/fog/e	drizzle/shower	<1 1-3 4-7 8-12 >12			. 1
	clear/ partcloudy/overcast/fog/o	irizzie/shower	<1 1-3 4-7 8-12 >12		1	
1530	clear/partcloudy/overcast/fog/o	lrizzle/shower	<1 (-3)4-7 8-12 >12		68	U
escribe, map, an	d estimate areas survey	ed below.				
Host Plants ^a	Patch Size (ft²)	No Plants/ft ²	Sparse/Dense ^b	Map IDc		
ou wal						
Pe	munly along	rdr .				
Се	at upper elev	rd.				
						or .
			200			×
North © South © East N	ses (including adjoining) Per space Per space Per space		Distance ft./m Distance ft./m Distance ft./m	nile nile nile nile nile	Whipsn CAT O WE FEACH SPTO LOYT W LSP LEGO OTW TUVU	**
ctar clay soils	rock outcrops azing agriculture sow		cent fire grading)		- 1090	- -

Number Butterflies Observed (larvae or adults) Pale Swallowtail (Paplio eurymedon) Aniso Swallowtail (P. zeliccon) West Tiger Swallowtail (P. rutulus) Sara Orangetip (Anthocharis sara) Felder's Orangetip (A. cethura) Cabbago White (Artogeia rapae) Sleepy Orange (Eurema nicippe) Common White (Pontia protodice) California Dogface (Zerene eurydice) Alfalfa Butterfly (Colias curytheme) Harford's Sulfur (C. harfordi) California Ringlet (Coenonympha californica) Monarch (Danaus plexippus) Queen (D. gilippus) Henne's Checkerspot (Euphydryas chalcedona hennei) Calcedon Checkerspot (E. chalcedona chalcedona) Quino Checkerspot (E. editha quino) Gabb's Checkerspot (Charidryas gabbii) Leznira Checkerspot (Thessalia leanira wrighti) Mylitta Cresent (Phyciodes mylitta) 20 Painted Lady (Vannessa cardui) West Coast Lady (V. annabella) Virginia Lady (V. viginiensis) Red Admiral (V. atalanta) Buckeye (Junonia coenia) Mourning Cloak (Nymphalis antiopa) California Sister (Adelpha bredowii californica) Satyr Anglewing (Polygonia satyrus) Lorquin's Admiral (Basilerchie lorquini) Western Tailed Blue (Everes amyntula) Southern Blue (Glaucopsyche lygdamus australis) Echo Blue (Celastrina ladon echo) Sonoran Blue (Philotes sonorensis) Marine Blue (Leptotes marina) Acmon Blue (Icaricia acmon) Pygmy Blue (Brephidium exilis) Oray Hainstreak (Strymon melinus) Brown Elfin (Incisalia augustinus) Perplacing Hairstreak (Callophrys perplexa) Grt Purple Hairstreak (Atlides halesus)

Belir's Metalmark (Apodemia mormo virgulti)
Wright's Metalmark (Calephalis wrightii)

1 .



3/31/08 Warner QCB Area 1 Kan Muri 1637h: 68°F; 2-4 uph W; suny/dear 1803h; 61° F; o-1 ungh W; swampfelear painted lady Did cap Ams man WSCI CAOU LEGO SPTO Apris mellifera Caminosome sp. Cryptatha sp. coyote (scat) Lot 800 attle 6 410? (map) Mir cal WREN WEST MODE ATHA Hirsh inc Behr's mm Site-blotched liz Sal col west coast lady Phas cic Phac parnoi Eschedulzia cal CATH Easth cal

Worner Ranch QUB Survey Area 4

4/7/08

6: 1205

10.1.cc

winds L 4kph

7692

E: 1455

51.cc

winds 4-6kph

95°F

checkered white

painted lady

Sara's orangetip

buckeye

cabbage white

west coost lady

Behr's metalmark

monarch (nectaning on blue dicks)

brown elfin

Walner Ranch QUB Survey Area 1

6: 1505

51·cc

winds 10-12 kph

470

E- 1630

3160

winds 9-10 kph

90°F

Behis n talmate Saiss orangelp checkered who buckeye painted to

Warner Runch Area 1 QCB #44
4/9/08

START 12:15 50% clouds; 1-3 mph; 74° T
2:00 10% clouds, 4-7 mph; 82° F
END 4:30 60% light clouds, 0-3 mph; 74

Butterflies
Sava ort.
Buckeye
Bahr's
blue
Pointed lady
Chedwood white

Dic cap
Cry int
Lus cal
Giria cap
Salu col
Jilia ong

Pet mapped & patch of Re ~ 50'x88'
on w-facing stope

Pe 3 - 2'x2' in patch

Pe 4 - 20'x W' among w-facing rocks

4/18/08 Warner QCB Area Safe: 1115-1400 Clear; W 5 kgh; 80% 1300; 937 (Mat ridge top); 45800; kgh 1400; 937; 50% CC, W 8 kgh LEGO, NOMO, WREN Lot- Scop-Yellow fidereck Eupin of Mustard Bondward BEWR, HOTEL, CORA Of popular Bher's mm # fainted & : Coyde (Sc)
Brown Elfin : Monkey flower Chamise Eribg. Jas.

3/20/09 Warner Ranch 2 QCB HI 10:45 O96, 2-4 mph, 64°F 1:30 096, 2-4, 80°F UND 5:00 1096, 3-6 mph, 69°F

Buttenffices

Fainted

CA budgeing:

Printed

Behrs

Buttenfices

Carchered white:

Brown elfin

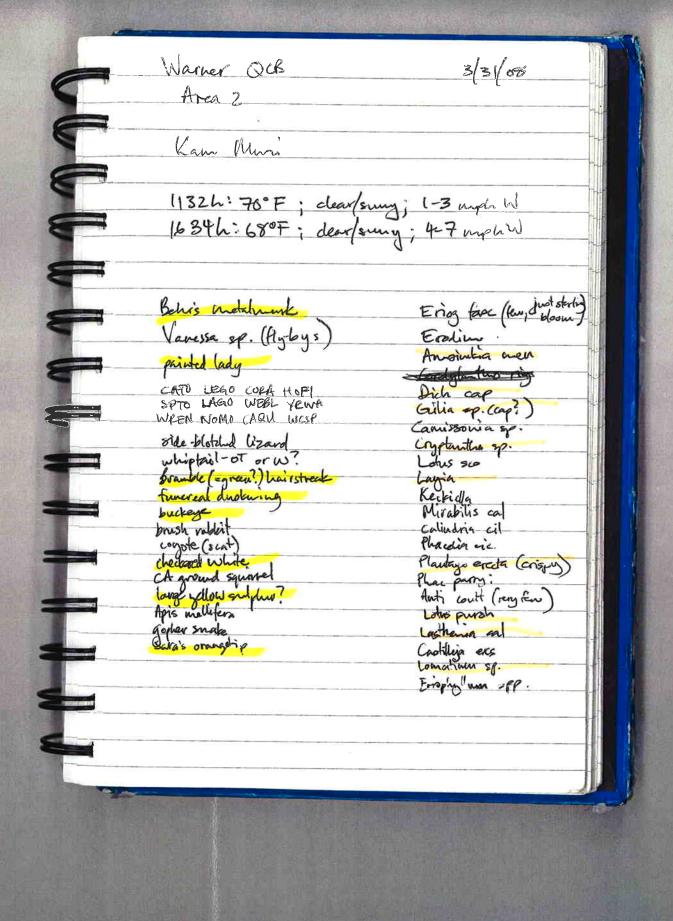
Sul Ful :

Area 7

Pel - scuttered clumps on in men CSS +100 W/ Cryp int, Lot sal Dz cap Pe2 - 125' x 20' patch of dence Pe w/ Cry: nt, Erod, Opintia, Enfa some Di cap Pe3-50'x 30' dense Pe in ce 20 - 20 pured of 20 W Cryp, Gilia Camis bis Pre 4- ~ 2ft2 in Erod, Scalle Pe5-35 x20' dense/mod in open CSS w/ Erica Hazartia, Erocl lulub Cryptumtha hearby

PML 3/25/08 Week Z WARNER RANCH-OCB-AREAZ Offste Onerte 1560 1240 1600 Sties: O'ble 5%cc 5%cc Wind: 5-3 mph 2-4, 5-7gusts 1-3, 5-7gots 84°F Tem : 739 8104 LEGO Common White Ht att 1 Ch gr. squirel Paintel Laly 100's Bekeye 11 Behrs Metalwark Ht 11 KTHA LASP

Buf A Visa 3/25/08 continued Deutar Plantago errecta Brassica nig. Cryptantha Blue Docks Eralum cic Lupine SP. Phacelia SP Black sage Cob buckuteat Papearn flower Lotos scop. CA POPPY



4/2/08

Distre Area Z- QCB- Week 4.

Onste

0940 | 1100 | 1300 | 1500

S: 70% cc | 10% cc | 5% cc | 5% cc

W: 0-3 mph 1-4 mph | 7-5 mph | 3-5, 6-89.

T: 69°F | 73°F | 76°F | 77°F

78

Surate OT 20-30
Common White Z0-30
Behr's Metalmark 50-60
Painted Lady 1000+
Buckeye 40-50
W. Tiger Swalloutail
RSHA
CAQU
W. Whiptail

Warner Ranch Area 2 QCB 215-4/15/08 START 11:20 10% clouds, 3-7mph, 76°F 1:00 10% (hght) clouds, 2-5mph; 86°F 3:00 30% "; 3-7mph; 80°F END 4:30 10% "; 4-7mph; 78°F

Butterflies
Cubbage white
Buckeye
Sara
Behrs
Fainted lady
Sulphur
Checkered white
Acmon blue

Nector

Dic cap

Evrog fau

Cryp int

Sal cal

Layin plala

Quino Checke-spot General Form Survey type: Habitat Assessment/Adult Survey						
Surveyor: V. J.	Date: 00	20/2008 Si	te Visit No(12345	678910		
T-1-1-1		Vdd/yyyy)		ar res		
Total site acres:	Site Nar	ne: A 3	Site Location:	Jane 12		
Time (24 hr)	Sky		Wind (Beaufort)		Temp F or C	The sale
Begin (130	clear/ partcloudy/overcast/fog.		Z-1 1-3 4-7 8-12 >12		27	
ļ	clear/ partcloudy/overcast/fog		<1 1-3 4-7 8-12 >12			
200	clear/ partcloudy/overcast/fog/	/drizzle/shower	<1 1-3 4-7 8-12 >12			
1300	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 (1-3 4-7 8-12 >12		39	
	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12	34)	/	
End O	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12			
1600	clear/partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12	: *	29	
Total hours survey				• •		
Focused Survey A	cres:	Elev Min:	_ft Max:ft			
Describe, man, an	d estimate areas survey	ed below	10n-host 25-75			
	a commute areas barvey	od bolow.	1011 (1001)			
Host Plants ^a	Patch Size (ft²)	No Plants/ft ²	Sparse/Denseb	Map ID ^c		
Re .	GPS partch	bare - 25.75	spare = 5-15,	derex 0-	5 R0301	VT
le		5 non-host 79	-95, sparce -	05, der		
le trans	marp. bure 0-	5 nortosta		- 1	up I	
Pe	N.O. bure o	-5 nontrost 0	-5, sporse -	0-5 A	1 75-95	1
Pe			0-5 "	0-5	11 25-75	06
Pe	E1 11	0-5, 11	595	0.5	-11 87-5	07
Pe	N N	05 (1	75-95 (BUR	le 8-5	09
North	uses (including adjoinin	g properties): D	Distance Distance Distance Distance Distance Distance	3e 0-5 d	J. ()	10
onditions: (e.g.,grather:	5-15	55	the 330303 -	- 250 pol	cnts.	
	15-50 25. 50-75 1 75-859500	95-100	Hp030803			• /

Butterflies Observed (larvae or adults) Pale Swellowteil (Paplio eurymedon) Aniso Swallowtail (P. zelicaon) West Tiger Swallowtail (P. rutulus) Sara Orangetip (Anthocharis sara) Felder's Orangetip (A. cethura) Cabbage White (Artogeia rapae) Sleepy Orange (Eurema nicippe) Common White (Pontia protodice) California Dogface (Zerene eurydice) Alfalfa Butterfly (Colias eurytheme) Herford's Sulfur (C. harfordi) California Ringlet (Coenonympha californica) Monarch (Danaus plexippus) Queen (D. gilippus) Herme's Checkerspot (Euphydryas chalcedona hennei) Calcedon Checkerspot (E. chalcedona chalcedona) Quino Checkerspot (E. editha quino) Gabb's Checkerspot (Charidryas gabbii) Leznira Checkerspot (Thessalia leanira wrighti) Mylitta Cresent (Physiodes mylitta) Painted Lady (Vannessa cardui) West Coast Lady (V. annabella) Virginia Lady (V. viginiensis) Red Admiral (V. atalanta) Buckeye (Junania coenia) Mourning Cloak (Nymphalis antiopa) California Sister (Adelpha bradowii californica) Satyr Anglewing (Polygonia satyrus) Lorquin's Admiral (Basilarchia lorquini) Western Tailed Blue (Everes amyntula) Southern Blue (Glaucopsyche lygdamus australis) Echo Blue (Celastrina ladon echo) Sonoran Blue (Philotes sonorensis) Marine Blue (Leptotes marina) Execut slipped .. Acanon Blue (Icaricia acmon) Pygny Blue (Brephidium exilis) Gray Hairstreak (Strymon melinus) Brown Elfin (Incisalia augustinus) Peoplexing Hairstreak (Callophrys perplexa) Ort Purple Hainstreak (Atlides halesus) Behr's Metalmark (Apodemia mormo virgulti) Wright's Metalmark (Calephelis wrightii)

Warner Ranch QUB Surveys-Area 3 TLW 3/25/08

S: 1012

101 cc

winds 2-4 kmh

69°F

E: 1430

Clear skies

Winds 4-6 wiguests up to 10 kmh

87°F

painted lady
Behr's metalimark
funereal duskywing
Cabbage white

monarch (nectaning on blue dids) unise swallow tail

buckeye Checkered white blue dicks.

Grassier areas are vegetated will bromes + erodium

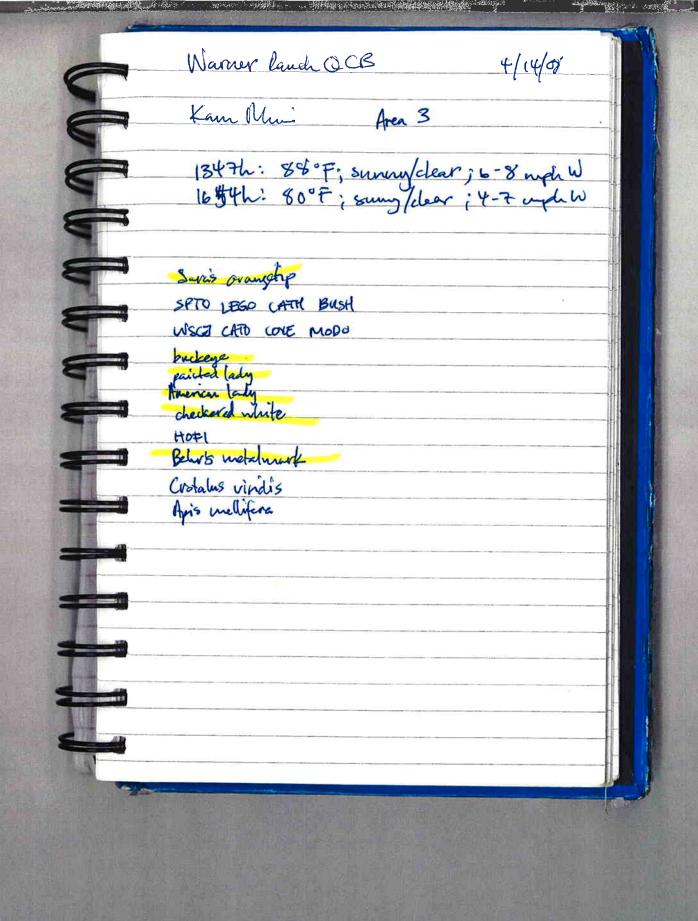
Pe was detected at road confluence, small patch w/ 100-200 plants.

The AGL areas proposed for exclusion support knee deep hordeum + thistle No nector sources were identified here.

A lot of the Pe grew in conjunction with open vocky areas w/low flat rocks, cryptobiotic crust, and dried selaginella.

FML 3/31/68 WARNER ROUCH-Area 3, Wark 3 Offite Dusite Bla 1400 1030 1200 5% cc 5: 10% cc 5%cc 78 3-5,6-89 W: 1-3 mgh Z-5 mpl TOF T: 66°F Tantel Lady 100's Common White IH IHT Below's MM Itt Ill Buckeye Itt Fon Poskywing III Cd Buckarbeat Nectar Erodiem cic Lotes scop Brassica Blacksage Cryptantha sp Bluedicks Lupine sp

JOP 4/9/08 Worner QCB Serven @ Stc: 1100 - 1345 100; 78°F; WO-1 kph; 50% CC (4) W 6 kph; 25% CC; 89°F (5€ fac. slope) 345 Floren Plantas WOLDCIFE Blue Dights SCIA, ANHU, LEGO. CATO, HOFI; PHAIN Prikly Pear Castus Sprice Bush SPTO, Br. rab. Bhers pun o Sara of Is



3/20/08 Warrer Panch QCB Area 4 Kan Mun 1100h: 64°F; 1-2 mph W ; clear (sunny 1630h: 72°P; 3-5 mph W; clear/sum Didolotamia Vanessa sp. SPTO RSHA WREN WSCI Salvin mel Solanum xant painted lady Plantago ercita CORA ACMO CAQUICATO no vew Contamped; only LEGO MOLI(scat) NOPL? last years dead plants. southern the Caldrage Walls) racket ships! Coanothus tomentosno Euro house bee hemlock Camissonia sp.? miner's lettuce OATI Calystogia Phacelia pany Epodium COMA Okalis binglish sp. Echdein cartilling as Keck and (yellowfe) Phacela cic bown eifin Lountin Minulus Cp. (yellow) Cancel
1-2 tallyter folkelylerensed china
whispering both mara
Holi 500 Neuro Camehalagua Behr's mm funered dustyming green hairstreak March was Nemophola Cryptomitha Lotus sco Mirabilis cal Lotus purch Anti const france my Minteur or Jean my so-

Quino Checke spot General Form Survey type: Habitat Assessment/Adult Survey					
Surveyor: V. 3.5	•	/26/2008 Si	te Visit No: 123 4 5	678910	
Total site acres:		ne: Warner	Site Location:	SA #4	
Time (24 hr)	Sicy		Wind (Beaufort)	THE RESERVE TO A PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	Temp For C
Begin (000	clear partcloudy/overcast/fog/	drizzle/shower	(21)1-3 4-7 8-12 >12		79
	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12		
	clear/ partcloudy/overcast/fog/	drizzle/shower .	<1 1-3 4-7 8-12 >12		
	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12		
20. 110	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12		
	clear/ partcloudy/overcast/fog/	drizzle/shower	<1 1-3 4-7 8-12 >12		
End (600	clear partcloudy/overcast/fog/	drizzle/shower	<1 (1-3 4-7 8-12 >12		82
Focused Survey Ac Describe, map, and		**************************************	_ft Max:ft		
Host Plantsa	Patch Size (ft²)	No Plants/ft²	Sparse/Dense ^b	Map IDc	
					9.
					-
				2	
			·	a a	
North North South East West Habitat onsite (circle nectar clay soils Conditions: (e.g.,gra	e): open soils hilltorock outcrops	g properties):	Distance ft./mi Distance ft./mi Distance ft./mi Distance ft./mi ago Castilleja so	ile le le le	roads

Quino Checke spot General Form

Butterflies Observed (larvae or adults) Pale Swallowiail (Paplic eurymedon) Aniso Swallowtail (P. zelicaon) West Tiger Swallowtail (P. rutulus) Sara Orangetip (Anthocharis sara) Felder's Orangetip (A. cethura) Cabbago White (Artogeia rapoe) Sleepy Orzoge (Eurema nicippe) Common White (Pontia protodics) California Dogface (Zerens eurydics) Alfalfa Butterfly (Colias eurytheme) Hisrford's Sulfur (C. harfordi) California Ringlet (Coenonympha californica) Monarch (Danaus plexippus) Queen (D. gilippus) Herma's Checkerspot (Euphydryas chalcedona hennei) Calcedon Checkerspot (E. chalcedona chalcedona) Quino Checketspot (E. editha quino) Gabb's Checkerspot (Charidryas gabbii) Leznira Checkerspot (Thessalia leanira wrighti) Mylitta Cresent (Physiodes mylitta) Painted Lady (Vannessa cardui) West Coast Lady (V. annabella) Virginia Lady (V. viginiensis) Red Admiral (V. atalanta) Buckeye (Junonia coenia) Mourning Cloak (Nymphalis antiopa) California Sister (Adelpha bredowii californica) Satyr Anglewing (Polygonia satyrus) Lorquin's Admiral (Basilarchia lorquini) Western Tailed Blue (Everes amyntula) Southern Blue (Glaucopsyche lygdamus australis) Echo Blue (Celastrina ladon echo) Sonoran Blue (Philotes sonorensis) Marine Blue (Leptotes marina) Acmon Blue (Icaricia acmon) Pygmy Blue (Brephidium exilis) Gray Hainstreak (Strymon melimus) Brown Elfin (Incisalia augustinus) Perplaxing Hairstreak (Callophrys perplexa) Grt Purple Hairstreak (Atlides halesur) Behr's Metalmark (Apodemia mormo virgulti) Wright's Metalmark (Calephalis wrightii)

(107mi)

Warner Ranch QUB Survey Area 4

4/7/08

5: 1205

E: 1455

10.1. CC

51.cc

winds L 4kph

winds 4-6kph

769

95°F

checkered white painted lady

Sara's orangetip buckeye

cabbage white

behrs metalmork

monarch (nectaring on blue dicks)

brown elfin

Walner Ranch QCB Survey Area 1

6: 1505

E- 1630

51·cc

31cc

winds 10-12 kph

vinds 9-10 kph

of 7°F

90°F

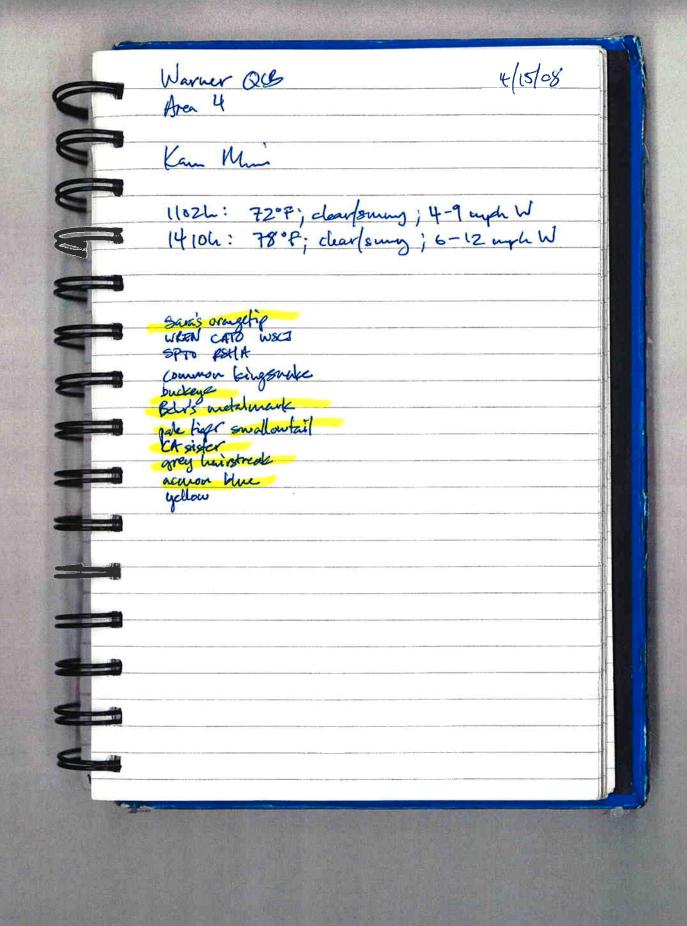
Behis n Admark Sous orangolp

checkered who

buckeye

paintedla

JDP 2/08 Worner Rauch Area 4 DCB C3Ac: 1100 1400 1) 924; Clear; WIOKoh; 1100 (floit) (2) 1218; Clear; WIKph; 894 (NE for slope) (3) 1400; Clear; Workh; 944 (flot) AMKE, HOFI, EUSST Mustard Sora OT : lot scap. porgo. (ma) Birdweed NRWSW PHAIN, LEGO Spire Bush cab. W. : Black Sag Buckeye : bopcom ti Com-W. 8 Blue Dicks Painted l. 00 Dayhodyll-p. Tree tobacco Bher's my. 5 Yellow frolleneck Fun skip. CATO, MODO, BUSH Monkey flower SPTO, WREN, GRAR A poppu St. Queen 9 uta 81. CORA, TUVU, RTHA CAKI, ANHW, CATH BEWR, SCIA Brokere?



Area 5

3/19/08 PML West WARKER ROUGH OCB- AREAS Oriste 1000 1245 1530 Sties: 10% cc 5% cc 5%cc Wind: 25 mph 25, 7-8gut 3-5, 78 Temp: 65°F / 68°F Fainted laby HTHH 50-100 Acmon Blue HT1 Green Harstreak 11 Funescal Diskywing III Brown etfin 1 avata? Nector Plants: Plantago pat? P. erecta, Blue dicks, CA poppy, Eralim, Black Sage. NOFL, RSHA, TOVU Common White Htt 11

3/19/08 contil <u>Nectar</u> Crystantha Area 5 Brassica nig Plantago verecta Chia Blue dicks Cob Poppy Erodium cic Mimelus Chamise CA Buckulat Black Sage

WEEK Z WARNER RANCH-OCB- Area 5 Dusite 1040 1220 1530 Skres: 0%cc 0%00 0%00 Wind: Z-4mph 58grold 2-5, 7-9gst 1-3, 5-8g Temp: 724 Painted Lady 50-100 Buckeye HITI Common White 50-100 Behr's MM Ltt Ht 11 Green Harrtreak 1 West Coast Laby 11 Funercal Diskywing 11 RSHIS

urveyor: <u>BAo</u>	Date:	11.1/2008	Site Visit No: 1 2 3 4 :	5678910	
otal site acres:		nm/dd/yyyy)		210	
Fime (24 hr)	Sky	ame: Volver Syrin	Site Location:	a ia	Ι
legip /000	clear/ partcloudy/overcast/fe	- //	Wind (Beaufort)		Temp F or C
7000		-	24 (1-3 4-7 8-12 >12		60
	clear/ partcloudy/overcast/fo		<1 1-3 4-7 8-12 >12		
·	clear/ partcloudy/overcast/fo		<1 1-3 4-7 8-12 >12		
	clear/ partcloudy/overcast/fo		<1 1-3 4-7 8-12 >12		
2000	clear/ partcloudy/overcast/fo		<1 1-3 4-7 8-12 >12		
ad : C 2 ~	clear/ partcloudy/overcast/fo		<1 1-3 4-7 8-12 >12		
tal hours surve	clear/ partcloudy/overcast/fo	og/drizzle/shower	<1 (1-3)¥-7 8-12 >12	*	65
	d estimate areas surve			T	
lost Plantsa	Patch Size (ft²)	No Plants/ft ²	Sparse/Dense ^b	Map ID ^c	
	1				
* *			1.		
• •					•
- 1			<u></u>		
	,				
	,				
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	,				
arval or nectar resources.	o. Sparse= plan	ts not touching; dense = plants	touching c. Corresponds to pol	ygon on a map.	
25°0	sparse= plant uses (including adjoin		Distanceft./m	nile	
North C South East	uses (including adjoint			iile iile	
North C South East	uses (including adjoint	ing properties):	Distanceft./m	uile uile uile	

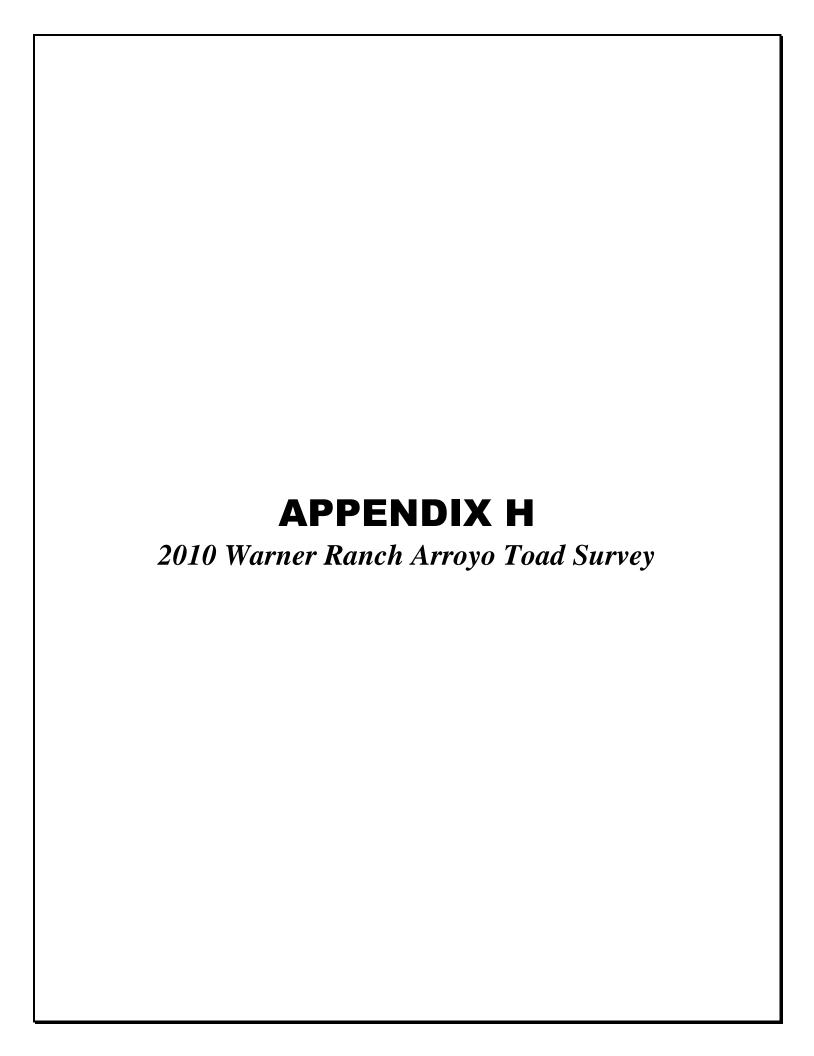
Other: _

Number Butterflies Observed (larvae or adults) Pale Swallowini (Poplio eurymedon)

Pale Swattowent (Capino eurymeaon)		
Anise Swallowtail (P. zelicaon)		
West Tiger Swallowtail (P. rutulus)	7	
Sara Orangetip (Anthocharis sara)	3	
Felder's Orangetip (A. cethuro)		
Cabbago White (Artogeia rapae)	8	
Sleepy Orange (Eurema nicippe)		
Common White (Pontia protodice)		
California Dogface (Zerene eurydice)		
Alfalfa Butterfly (Colias eurytheme)		
Harford's Sulfur (C. harfordi)		
California Ringlet (Coenonympha californica)		
Monarch (Danaus plexippus)		
Queen (D. gilippus)	_	
Herme's Checkerspot (Euphydryas chalcedona hennel)		
Calcodon Checkerspot (E. chalcedona chalcedona)		
Quino Checkerspot (E. editha quino)		
Gabb's Checkerspot (Charidryas gabbii)		
Leanira Checkerspot (Thersalia leanira wrighti)		
Mylitta Cresent (Physiodes mylitta)		
Painted Lady (Vannessa cardul)	78	
West Coast Lady (V. annabella)	10	
Virginia Lady (V. viginiensis)		
Red Admiral (V. atalanta)	1	
Buckeye (Junonia coenia) ## i# i# I# I# I#	30	
Mourning Cloak (Nymphalis antiopa)	1	
California Sister (Adelpha bredowii californica)		
Satyr Anglewing (Polygonia satyrus)		
Lorquin's Admiral (Basilarchia lorquini)		
Western Tailed Blue (Everes amyntula)		
Southern Blue (Glaucopsyche lygdamus australis)		
Echo Bluo (Celastrina ladon echo)		
Sonoran Blue (Philotes sonorensis)		
Marino Blue (Leptotes marina)		
Acmon Blue (Icaricia acmon)	5	
Pygmy Blue (Brephidium exilis)		
Gray Hainstreak (Sirymon melinus)		
Brown Elfin (Iacisalia augustiaus)		
Perplaxing Hairstreak (Callophrys perplexa)	2	
Grt Purple Hairstreak (Atlides halesus)		
Behr's Metalmank (Apodemia mormo virgulti) III III III III III III	22	
Wright's Metakustk (Calephelis wrightii)		

Warner Och 4/7/08 Area 5 Kam Muri 1332h: 74°F; 4-6 mph; Sung 1737h: 68°F; 2-4 mph; sung buckage checkered white Sara's orangetip Anise smallontail NOFL SPTO COYE painted lady huming bird sq.

JDP Worner OCB Area 5 Oste: 1220 - 1550 1220; Clear; wo-3kgh; 84°F/Alat/bore) 1348; Clear; w 19 kgh; 88°F 1558; Clear; w 10 kgh; 85°F (Llot) Wildlife Flowering Clarks WF Liz. Popcorn Bindweed HOFI Blue Dicks UHUA Phacelia so. Bhers mm hamise Cob w Lupin (sp.) 1660 Bedatrow Syste (sc) Reck rose Arpin 10 Painted land o Male Dr/sc) po. 20. (mo.) Orange Sulphur? TWW Wast.



MEMORANDUM

To: Mark Hayden, Capstone Advisors

WHP Warner Ranch, LP 1545 Faraday Avenue Carlsbad, CA 92008

From: Jeff Priest

Subject: Warner Ranch Arroyo Toad Survey of Gomez Creek

Date: November 2, 2011

This memorandum discusses the results of focused surveys for the federally-listed endangered arroyo toad (*Anaxyrus* (=*Bufo*) californicus) conducted by Dudek biologist Jeff Priest (Permit # TE-840619-2). Surveys were conducted in 2010 within Gomez Creek and Pala–Temecula Creek in conformance with currently accepted USFWS survey protocol (USFWS 1999). Gomez Creek is a perennial tributary to the San Luis Rey River (SLRR), within the Warner Ranch site (site) in the community of Pala, San Diego County, California. The site is located northwest of the Pala Casino Resort and Spa, approximately four miles east of Interstate 15, west of Pala Temecula Road, and immediately north of Highway 76. The central portion of the site is about 330 feet in elevation, is relatively flat, as are the 100–200-foot wide stretches of bank along Gomez Creek on the west and the two other small drainages on the eastern portion of the site. The rest of the site consists of hillsides up to 1,000 feet above mean sea level. Below is a brief summary on the surveys conducted and the survey findings.

The USFWS protocol requires six diurnal (daytime) and six nocturnal (nighttime) surveys to be conducted between March 15 and July 1 during non-full-moon situations. Each diurnal/nocturnal survey pair must be completed within 24 hours of each other and paired surveys must occur at least 7 days apart. At least one survey pair must occur in April, May, and June. The creek area was surveyed on 12 paired occasions under appropriate weather and moon conditions. The conditions during each survey listed were appropriate for detecting trout and are presented in Table 1.

Table 1
Survey Conditions

		Conditions (cloud cover; mph wind; air temperature; water temperature) Start: <10% cc; 0–3 mph wind; 59°F;	End: <10% cc, 0–3 mph wind, 55°F;
Date	Hours	N/A	N/A
04/29/10	Diurnal: 1610-2000 Nocturnal: 2000-2300	Start: 64°F air; 57°F water; 20% cc; 0-2 mph wind End: 50°F air; 54°F water; 0% cc; 0-1 mph wind	Start: 50°F air; 54°F water; 0% cc; 0-1 mph wind End: 47°F air; 52°F water; 30% cc; 0-2 mph wind
05/26/10	Diurnal: 1710-2000 Nocturnal: 2000-2210	Start: 68°F air; 60°F water; 5% cc; 0-5 mph wind End: 58°F air; 60°F water; 0% cc; <1 mph wind	Start: 58°F air; 60°F water; 0% cc; <1 mph wind End: 55°F air; 60°F water; 10% cc; 0-1 mph wind
06/02/10	Diurnal: 1045-1315 Nocturnal: 1945-2245	Start: 70°F air; 58°F water; 30% cc; 0-3 mph wind End: 77°F air; 60°F water; 80% cc; 1-5 mph wind	Start: 60°F air; 61°F water; 0% cc; <1 mph wind End: 56°F air; 58°F water; 0% cc; 0- <1 mph wind
06/09/10	Diurnal: 1823-2000 Nocturnal: 2000-2200	Start: 65°F air; 63°F water; 0% cc; 1-4 mph wind End: 60°F air; 63°F water; 50% cc; 0-1 mph wind	Start: 60°F air; 63°F water; 50% cc; 0-1 mph wind End: 58°F air; 61°F water; 100% cc; <1 mph wind
06/30/10	Diurnal: 1750-2030 Nocturnal: 2030-2200	Start: 72°F air; 65°F water; 0% cc; 0-3 mph wind End: 60°F air; 64°F water; 0% cc; <1 mph wind	Start: 60°F air; 64°F water; 0% cc; <1 mph wind End: 59°F air; 63°F water; 0% cc; <1 mph wind
07/06/10	Diurnal: 1620-2000 Nocturnal: 2000-2145	Start: 70°F air; 65°F water; 0% cc; 1-4 mph wind End: 64°F air; 64°F water; 100% cc; 0-1 mph wind	Start: 64°F air; 64°F water; 100% cc; 0-1 mph wind End: 60°F air; 63°F water; 100% cc; <1 mph wind

VEGETATION COMMUNITIES

The following is a description of vegetation communities present within the survey area of Gomez Creek and Pala-Temecula Creek.

Sycamore Alluvial Woodland

This is a winter-deciduous, open, broad-leafed riparian community, with sycamores (*Platanus racemosa*) being the predominate species present and blue elderberry (*Sambucus nigra* ssp. *cerulea*) and California buckeye (*Aesculus californica*) often appearing in the subcanopy. Introduced grasses and mulefat (*Baccharis salicifolia*) comprise the understories of these communities. On site, sycamore alluvial woodland occurs both alongside Gomez Creek and the eastern tributary channel, but clearly above the ordinary high water mark (OHWM) for both

channels. Mature western sycamores are the predominant species, occurring as an open, tall structure with a relatively dense non-native understory along Gomez Creek and a more sparse understory along the eastern tributary channel.

Mulefat Scrub

The mulefat scrub vegetative community is composed of tall, herbaceous riparian shrubs and trees, strongly dominated by mulefat (Holland 1986). This community often occurs in intermittent stream channels exposed to regular flooding. Besides mulefat, several willow species (*Salix exigua* and *S. lasiolepis*), and hoary nettle (*Urtica dioica* ssp. *holosericea*) are characteristic of this community.

Mulefat scrub is found within the southern, downstream segment of Gomez Creek, from just above the existing concrete Arizona crossing of the creek within the ranch, to SR-76 along the southern border. This segment is characterized by an approximately 5–15-foot deep, mostly steeply incised channel. Vegetation cover varies from 5%–100% generally with lower cover, isolated to channel bed margins, occurring in more highly scoured (i.e., less topsoil) situations.

Southern Coast Live Oak Riparian Forest

According to Holland (1986), this community can range from an open to a dense evergreen, riparian, and sclerophyllous woodland. Coast live oak (*Quercus agrifolia*) is the dominant species, and seems to have richer herb diversity and fewer understory shrubs compared to other riparian communities. This community flourishes on fine-grained alluvium in bottomlands and outer floodplains of bigger streams. Big-leaf maple (*Acer macrophyllum*), mugwort (*Artemisia douglasiana*), manroot (*Marah macrocarpus*), California wild rose (*Rosa californica*), blue elderberry, and poison oak (*Toxicodendron diversilobum*) are among the species contained in the southern coast live oak riparian forest.

Southern coast live oak riparian forest occupies the OHWM and slopes above the OHWM on either side of Gomez Creek, along Pala-Temecula Creek, and within the northern tributary to Gomez Creek. In this area, the channel also contains arroyo willow, mulefat, and an herbaceous understory. Along the small stretch of Pala–Temecula Creek on site, oaks occur sparsely along an open sandy channel.

Southern Cottonwood-Willow Riparian Forest

Open, winter-deciduous broadleaved riparian forests with shrubby willow understories and dominating cottonwood (*Populus* spp.) and willow species characterize this community. Frequently overflowed and sub-irrigated lands alongside streams and rivers provide the moist, mineral soil necessary for dominant species recruitment in this seral type, as well recruitment for common species such as mulefat, sycamore, hoary nettle, and big-leaf maple (Holland 1986).

The majority of vegetation within Gomez Creek within the OHWM is mapped as southern cottonwood-willow riparian forest. Species composition includes a mixture of arroyo willow (*S. lasiolepis*), Fremont's cottonwood (*Populus fremontii*), and coast live oak in the tree layer; a shrub layer of mulefat and giant cane (*Arundo donax*), which varies from sparse to dense; and a herbaceous layer that varies in cover according to shrub density and rock exposure and includes dwarf nettle (*Urtica urens*), water speedwell (*Veronica angallis-aquatica*), Parish's monkeyflower (*Mimulus parishii*), narrow-leaved willow (*S. exigua*), and cocklebur (*Xanthium strumarium*).

METHODS

The surveys mentioned were performed on foot and along the reach of Gomez Creek and Pala-Temecula Creek within the project site.

Diurnal surveys consisted of walking slowly along the creek and in adjacent riparian habitat while searching for eggs, larvae, and juveniles. Nocturnal surveys consisted of walking along the creek, stopping frequently, while listening for the arroyo toad's diagnostic trill.

RESULTS

Results of the focused survey were negative. No arroyo toad were detected during 2010 surveys nor during earlier surveys conducted in 2005. CNDDB shows a record from 2000 within one kilometer of the project site in the San Luis Rey River, and it has been known to occur within the San Luis Rey River.

Please feel free to contact me at 760.479.4287 with questions or if you require additional information.

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

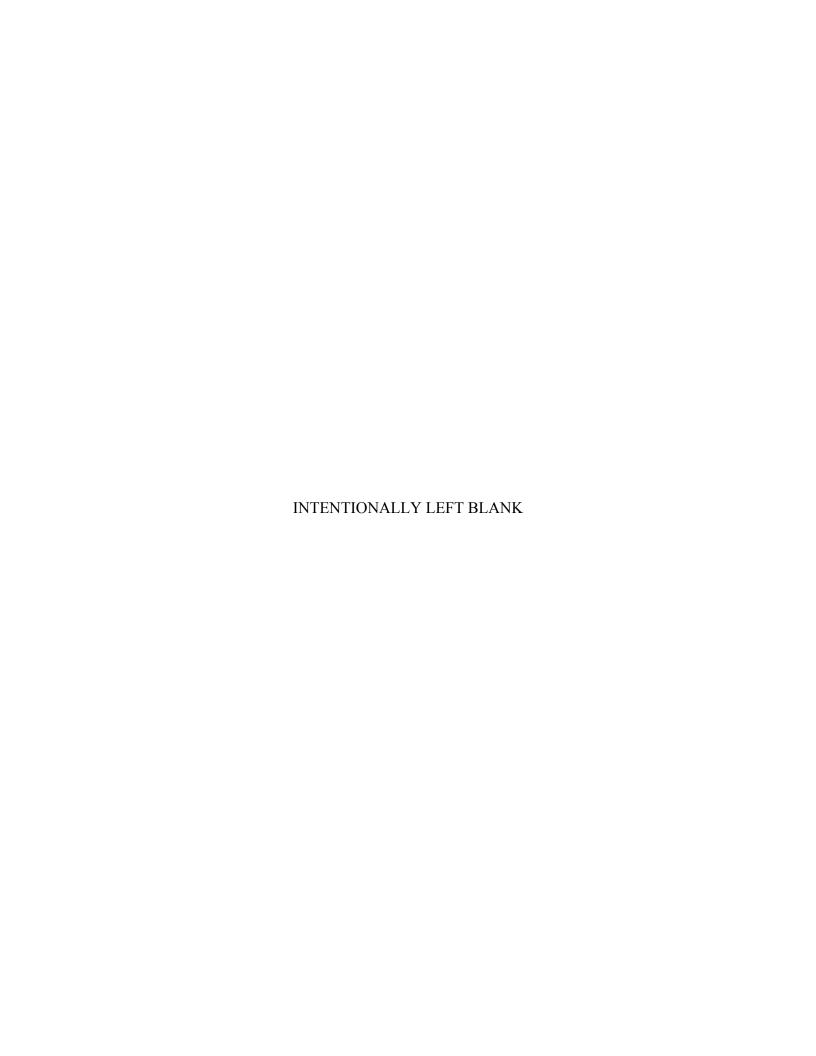
Sincerely,

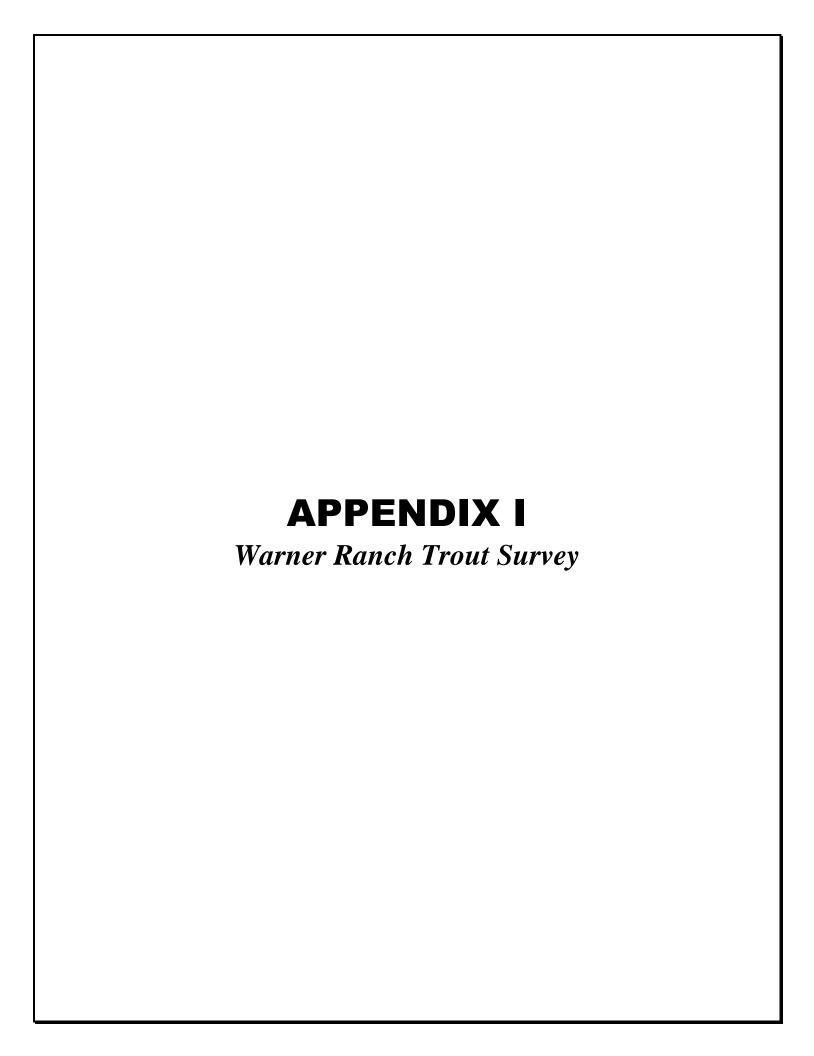
Jeff/Priest

Wildlife Biologist

REFERENCES

- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, CDFG. October 1986.
- USFWS. 1999. Survey protocol for the arroyo toad. May 19. http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/arroyotoad/arroyotoad_surveyprotocol.pdf.







MAIN OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 760.942.5147 T 800.450.1818 F 760.632.0164

MEMORANDUM

To: Mary Larson, Tim Hovey, California Department of Fish and Game

From: Jeff Priest, Thomas Liddicoat, Vipul Joshi, Dudek
Subject: Warner Ranch Trout Survey of Gomez Creek

Date: January 20, 2011

Attachment(s): Figure 1, Regional Map

Figure 2, Vicinity Map Figure 3, Trout Survey Area

Attachment A, Stream Survey Memorandum December 17, 2007

Attachment B, Copy of CDFG Email Correspondence

Attachment C, CDFG Trout Tissue Sample Collection Protocol

Attachment D, Trout Photo Exhibits

This memorandum discusses the presence of trout observed in Gomez Creek and documents an effort to capture and collect a tissue sample per recommendations by the California Department of Fish and Game (CDFG). Gomez Creek is a perennial tributary to the San Luis Rey River (SLRR), within the Warner Ranch site (site) in the community of Pala, San Diego County, California (Figure 1). The site is located northwest of the Pala Casino Resort and Spa, approximately four miles east of Interstate 15, west of Pala Temecula Road, and immediately north of Highway 76. The central portion of the site is about 330 feet in elevation, is relatively flat, as are the 100–200-foot wide stretches of bank along Gomez Creek on the west and the two other small drainages on the eastern portion of the site. The rest of the site consists of hillsides up to 1,000 feet above mean sea level (Figure 2). Below is a brief chronological summary on the stream surveys conducted, the survey findings, and the current status of trout detected.

In September of 2005, Dudek biologists Jeff Priest (JP), Scott Boczkiewicz (SB) and Brock Ortega (BO) conducted an initial presence/absence stream survey for southern steelhead trout (*Oncorhynchus mykiss irideus*) for the project site. In September of 2006, Dudek biologists Jeff Priest and Scott Boczkiewicz conducted another presence/absence stream survey for trout on site. In April 2010, Dudek biologists Jeff Priest and Thomas Liddicoat (TL) conducted a focused survey for special-status species (i.e., arroyo toad) along Gomez Creek on site. In November 2010, ECORP biologists Brian Zitt (BZ), Todd Chapman (TC), CDFG biologist Tim Hovey (TH), and Dudek biologist Thomas Liddicoat conducted a presence/absence stream survey for

trout on site in an attempt to collect a tissue sample. The conditions during each survey listed were appropriate for detecting trout and are presented in Table 1.

Table 1
Survey Conditions

Date	Hours	Personnel	Conditions (cloud cover; mph wind; air temperature; water temperature)
9/19/05	0730–1030	BO, JP, SB	Start: partly cloudy; 0 mph wind; 70°F; 65°F End: partly cloudy, 0 mph wind, 80°F; 65°F
9/12/06	0800–1100	JP, SB	Start: partly cloudy; 0 mph wind; 68°F; 62°F End: partly cloudy, 0 mph wind, 71°F; 62°F
4/29/10	1615–1840	JP, TL	Start:1% cc; 2–5 mph wind; 64°F; 57°F End: 1% cc; 0–3 mph wind, 58°F; 57°F
11/23/10	0700–1120	BZ, TC, TH, TL,	Start: <10% cc; 0–3 mph wind; 59°F; N/A End: <10% cc, 0–3 mph wind, 55°F; N/A

METHODS

The surveys mentioned were performed on foot and along the reach of Gomez Creek within the project site. This section of Gomez Creek is approximately 0.75 of a mile long beginning approximately 1 mile upstream from the confluence with the SLRR and continuing upstream to the northern limits of the site (Figure 3). The headwaters to Gomez Creek occur off-site and were not examined during the surveys. During each survey the biologists carefully and quietly hiked from downstream to upstream along the edges of Gomez Creek to detect any trout and document any potential areas within the reach that may be suitable to support trout. Details regarding the methodology of surveys prior to 2010 are presented in a letter attached to this memorandum (Attachment A).

The survey conducted in April 2010, was performed on foot using the same methods described for surveys conducted in 2005 and 2006; however, the survey focus was for arroyo toad (*Bufo Californicus*) and not for trout. The same 0.75 mile stretch of Gomez Creek was carefully hiked from downstream to upstream along the edges of the creek. Although trout was not the focus, any observations were recorded directly in the field into a notebook. The focused surveys were conducted along the edges of Gomez Creek from the end of April through the end of July.

After correspondence with CDFG in October 2010 (Attachment B), a follow-up survey was recommended and conducted in November 2010. During this survey Mr. Liddicoat led the fish biologists (Mr. Chapman, Mr. Hovey, and Mr. Zitt) on foot to the location where the trout was observed. Nets and an Electrofisher machine were used to aide in the capture, tissue sample

collection, and identification of any trout present. The CDFG recommendation and tissue collection protocol is included as Attachment C. In addition to the Electrofisher machine, a large 15-gallon bucket, hand nets, two gill nets, a tape measure, and a digital fish scale were also carried on site to collect information on any captured fishes. Immediately after arrival to the pools, Mr. Chapman and Mr. Zitt evaluated the area and installed a gill net on the downstream side of the pool to restrict any fishes from escaping the pool downstream. The pool was blocked upstream by existing rocks and tiering, and did not require a gill net. Prior to using the machine within the creek, Mr. Chapman tested the water conductivity and set the correct electronic frequency based on the conductivity and approximate fish size to avoid directly killing fishes present in the pool. Once the Electrofisher was tuned appropriately to the area, Mr. Chapman began probing the stream. While probing, Mr. Hovey and Mr. Zitt were ready to net anything flushed out by the Electrofisher machine. Any aquatic species detected from the Electrofisher probing were captured and immediately placed into a 15-gallon live-well bucket containing water collected at the pool. The Electrofisher was used by Mr. Chapman with assistance from Mr. Zitt and monitored by Mr. Hovey. Only two pools, directly adjacent to each other, were probed with the Electrofisher machine during the survey. Adjacent areas within Gomez Creek, approximately 200 feet upstream and downstream of the two pools probed, were also evaluated by Mr. Hovey for the potential to support trout and none were identified; thus, the Electrofisher machine was not used anywhere else on site.

RESULTS

Results of the surveys from 2005 yielded the detection of two trout species within separate pools, approximately 50–100 yards apart. No fin clips, scales, or any other parts of the fish were collected during the survey, and both of the fish were left in the pools. The subsequent survey in 2006 yielded no trout detected. Further details on these surveys and the results are presented in Attachment A of this memorandum.

During the focused surveys conducted during 2010, only one individual trout was observed swimming in a pool on site. Photo exhibits taken of the trout on site are presented in Attachment D of this memorandum. An analysis of photographs taken from 2005 and in 2010 confirmed that the trout observed in 2005 and 2010 were located in the same pool (Figure 3; Attachment D).

Results of the follow-up survey and tissue collection effort with CDFG were negative. No trout were detected as a result of using the Electrofisher machine in either the pool where the trout was observed repeatedly in 2010 or in the adjacent pool immediately downstream. A single, large sunfish (*Lepomis* sp.) (approximately 9 inches long), a few mosquito fish (*Gambusia* sp.), and a few unknown species of crayfish were captured during the Electrofisher probing and were immediately placed in the live-well buckets. Per recommendation of CDFG biologist Mr. Hovey,

the non-native species captured (i.e., crayfish and sunfish) were euthanized on site and not released back into Gomez Creek.

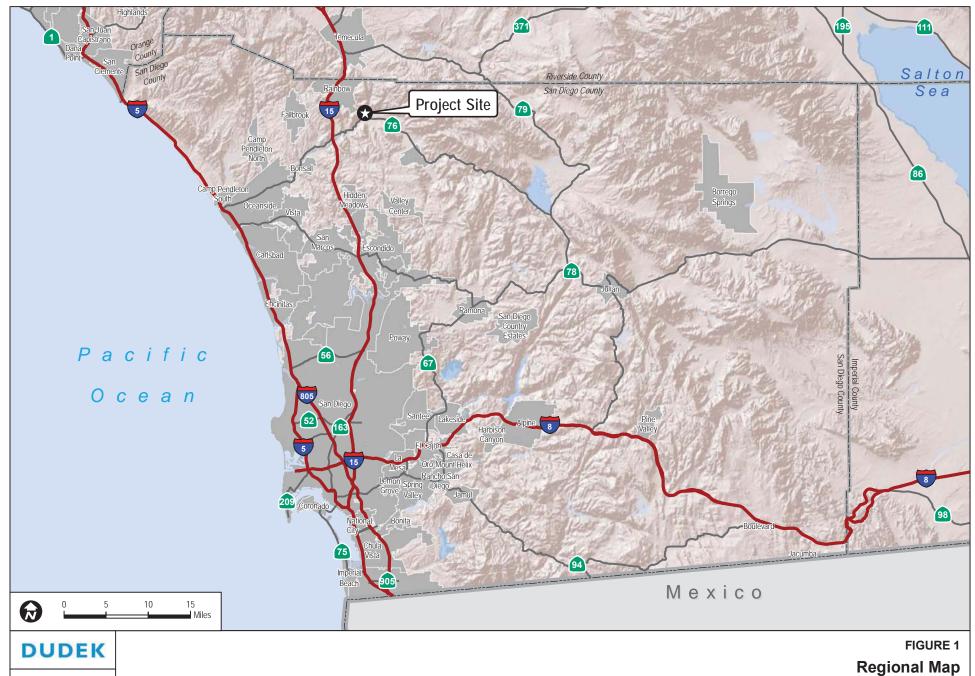
CONCLUSION

It was determined that the trout observed during surveys in 2005 and in 2010 is not a native steelhead trout, but rather a stocked trout. During the survey on November 23, 2010, it was confirmed that historical trout stock ponds are present within Gomez Creek, located immediately upstream of the project site, on the adjacent property to the north. At that time, the property owner, Mr. Murietta, spoke with CDFG representative Tim Hovey and Dudek biologist Thomas Liddicoat. Mr. Murietta informed them that he has multiple ponds upstream of the Warner Ranch project site that he has stocked with trout and steelhead from a hatchery approximately 15 or more years ago. As Mr. Murrieta led the two biologists onto his property and to the stocked ponds, he stated that during past winter storms, very high creek flows breached his ponds and most of the trout/steelhead were washed downstream. In the subsequent years, he attempted to capture his lost fish and retrieved as many as he could find. Mr. Murrieta agreed that the fish observed in Gomez Creek on Warner Ranch is most likely one of his escaped fish and that there are probably a few other pond-locked individuals downstream of his property (i.e., Warner Ranch), and in the retention pond south of Highway 76 (i.e., the old Fenton/Hansen Aggregate Facility) where he has retrieved many of his fish, or in the SLRR.

Additionally, flows within Gomez Creek are historically low and the SLRR is constrained in this area by elevated benches, development and roads. Further, the hydrologic flows and topography of the SLRR have been altered by the Pala casino upstream, and the old Fenton/Hansen Aggregate facility downstream of its intersection with Gomez Creek.

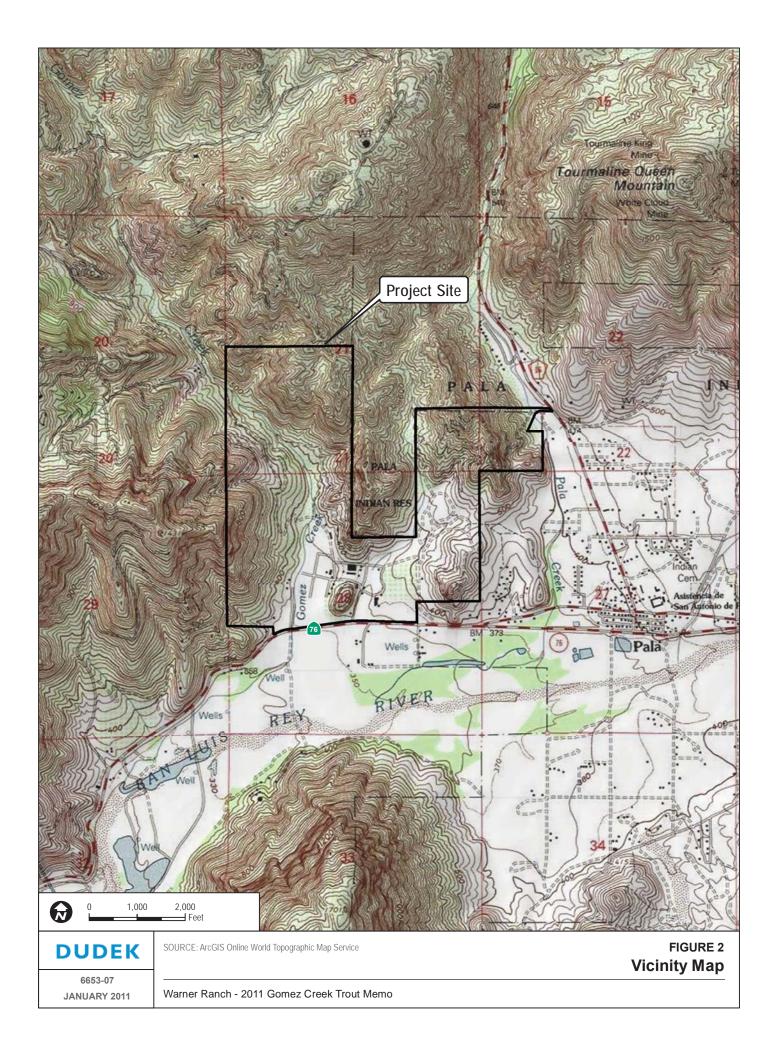
Ultimately, personal communication with CDFG at the end of the last survey was that sufficient evidence was collected to determine that previously observed trout on the Warner Ranch site were washed downstream from artificially stocked ponds and are not steelhead migrating upstream from the Pacific Ocean; thus, no additional surveys or analysis is required. Dudek has requested written confirmation of this conclusion from CDFG which, when provided, will be included as Attachment E to this letter.

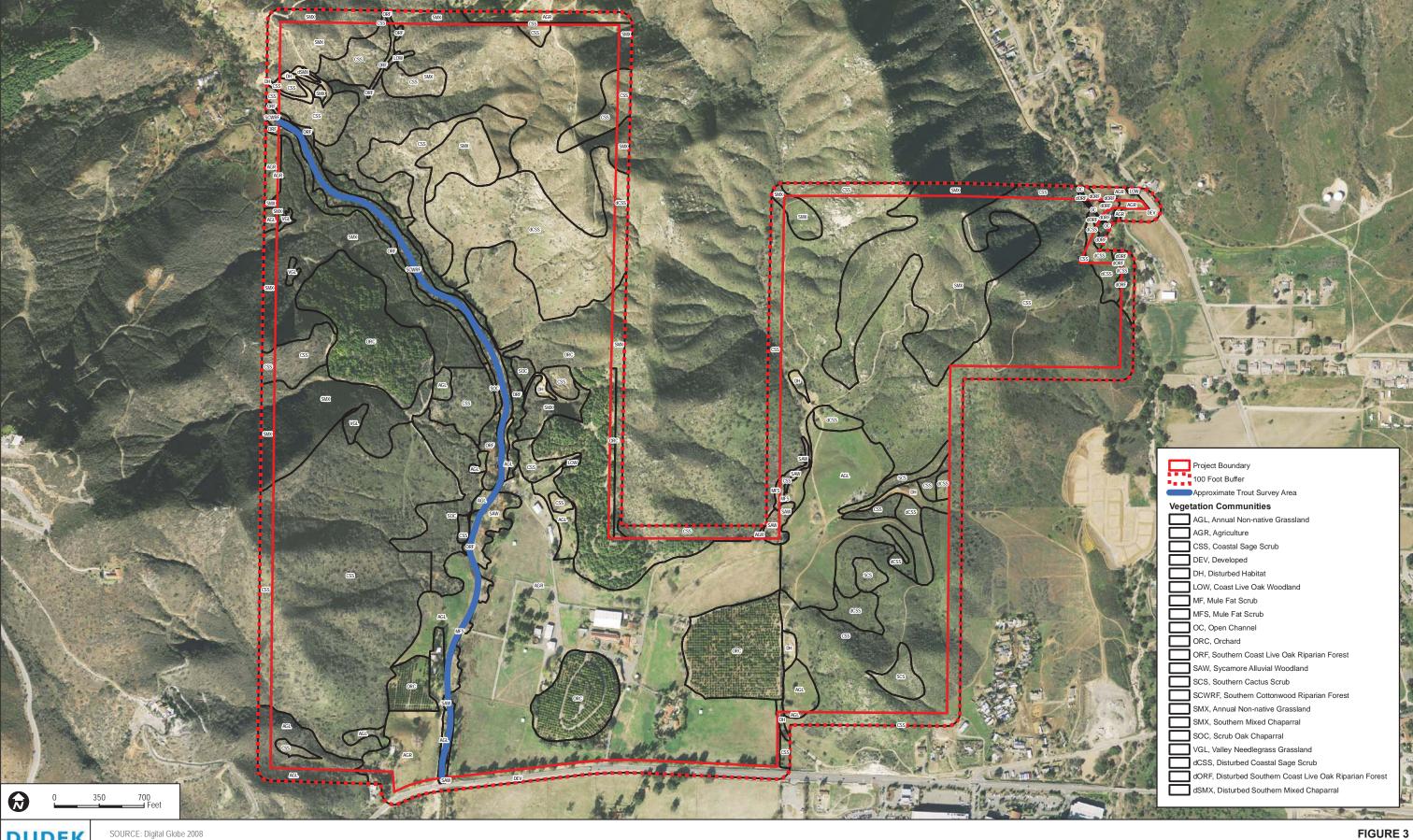
If you have any questions regarding this memorandum or would like additional information about the surveys conducted please contact Jeff Priest 760.479.4287 or Vipul Joshi 760.479.4284.



6653-07 JANUARY 2011

Warner Ranch - 2011 Gomez Creek Trout Memo



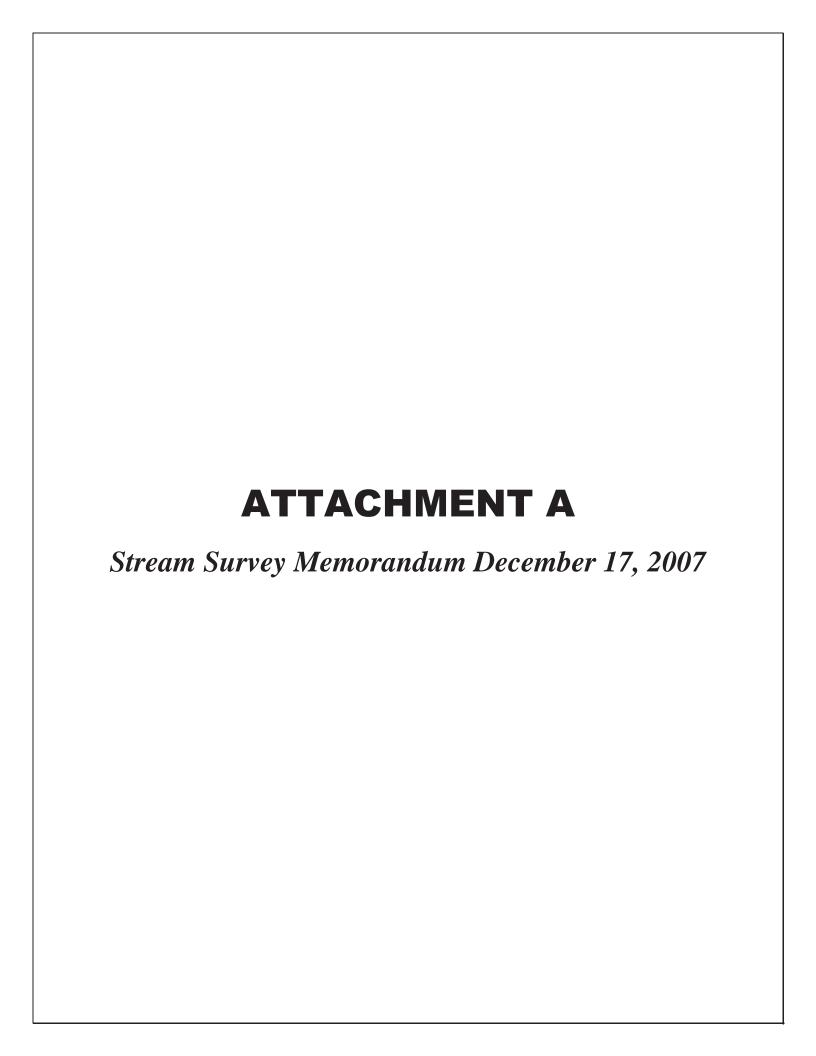


DUDEK 6653-07

JANUARY 2011

SOURCE: Digital Globe 2008

Trout Survey Area





MAIN OFFICE 603 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 760.942.5147 T 800.450.1818 F 760.632.0164

MEMORANDUM

December 13, 2007 4488-01

TO: Dave Kajtaniak, California Department of Fish and Game

FROM: Jeff Priest, Scott Boczkiewicz, Vipul Joshi, Dudek

RE: Warner Ranch Stream Survey of Gomez Creek

Dudek biologists Jeff Priest, Scott Boczkiewicz and Brock Ortega conducted an initial presence/absence stream survey for southern steelhead (*Oncorhynchus mykiss irideus*) trout for the Warner Ranch project on September 19, 2005 between the hours of 0730 and 1030. Environmental conditions included a stream water temperature of 65 degrees Fahrenheit (F), partly cloudy skies and air temperatures between 70 and 80 degrees F. Surveys were conducted on foot along the project reach of Gomez Creek, a perennial tributary to the San Luis Rey River (SLRR) in San Diego County located upstream of the Hanson Aggregate Mining Facility and north of State Highway 76.

The survey location included an approximately 3/4 mile long reach of the stream channel of Gomez Creek, beginning approximately 1 mile upstream from the confluence Gomez Creek and the SLRR and continuing upstream to the Warner Ranch property limits. The headwaters to Gomez Creek occur off of the Warner Ranch property and were not examined for this survey. Visual surveys were conducted along the entire survey reach, and barbless hooks were used at several pool habitats located near the middle of the survey reach. The water column was very clear at the time of the surveys allowing for highly accurate observations. The stream channel was relatively shallow at the time of the initial survey (between 6 and 22 inches deep), with a majority of the reach composed of shallow glides and riffles. Pool habitats within the survey reach were limited to several plunge pools downstream of log jams and several shaded, overhanging banks that provided pools generally less than 10 feet in length and 2 feet in depth. Much of the stream channel is constrained by bedrock outcrops and boulder complexes, with predominantly sandy and rocky substrates. No gravel dominated substrates were observed within the survey reach that may provide appropriate spawning habitat for southern steelhead trout. Note that the stream channel is well shaded during the summer and is surrounded on both sides by a relatively healthy riparian corridor that extends throughout the survey reach.

Dave Kajtaniak, CDFG

Re: Warner Ranch Stream Survey of Gomez Creek

Two individual southern steelhead/rainbow trout were observed within the survey reach of Gomez Creek during the 9/19/05 survey. No other fish were observed in the creek. The two individuals were found in separate pools, approximately 50-100 yards apart. One fish was caught on a barbless hook and examined. The fish appeared to be a very healthy southern steelhead/rainbow trout approximately 15 inches long, with a bright silver body and a narrow, pale pink lateral band. No spots or other markings were present above or below the lateral line. The outer lobes of the caudal fin were slightly rounded, and all other fins were in good condition. Although the fish did not secrete when handled, it was presumed to be an adult female based on size, girth and coloration. No fin clips, scales, or any other parts of the fish were collected, ad the fish was returned to the pool after examination. Mr. Allen Greenwood of San Diego Trout was contacted after the survey to aid in identification of southern steelhead/rainbow trout and to help in the assessment of its condition. Mr. Greenwood noted that southern steelhead trout are not currently documented as occurring in Gomez Creek, but that it is possible several fish moved upstream into the creek during the heavy rains that occurred during the winter of 2005. Several pictures were taken to document the fish captured and are attached to this memo. He also noted a poorly documented history of stocking trout in streams like Gomez Creek along the upper SLRR. Several small pools were noted on a U.S.G.S. Topographic map upstream of the survey area, by this area was not examined so their presence could not be confirmed.

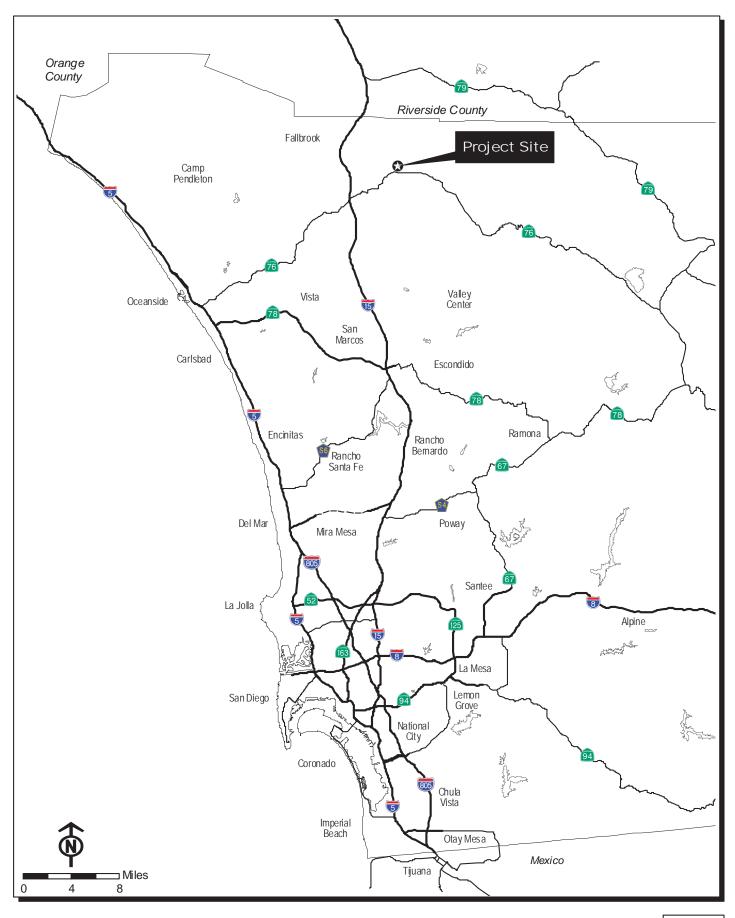
A follow-up presence/absence survey was conducted by Mr. Priest and Mr. Boczkiewicz on September 12, 2006 between the hours of 0800 and 1100. Environmental conditions included a stream temperature of 62 degrees F, partly cloudy skies and air temperatures between 68 and 71 degrees F. Although the water levels were slightly higher than those observed during the initial survey, no fish were observed within the survey reach of Gomez Creek during the second survey. All pools were observed to be empty.

If you have any questions regarding this memo or would like additional information about the surveys conducted, please contact Jeff Priest (760) 479-4287 or Scott Boczkiewicz (760) 479-4266.

Att: Figures 1-2

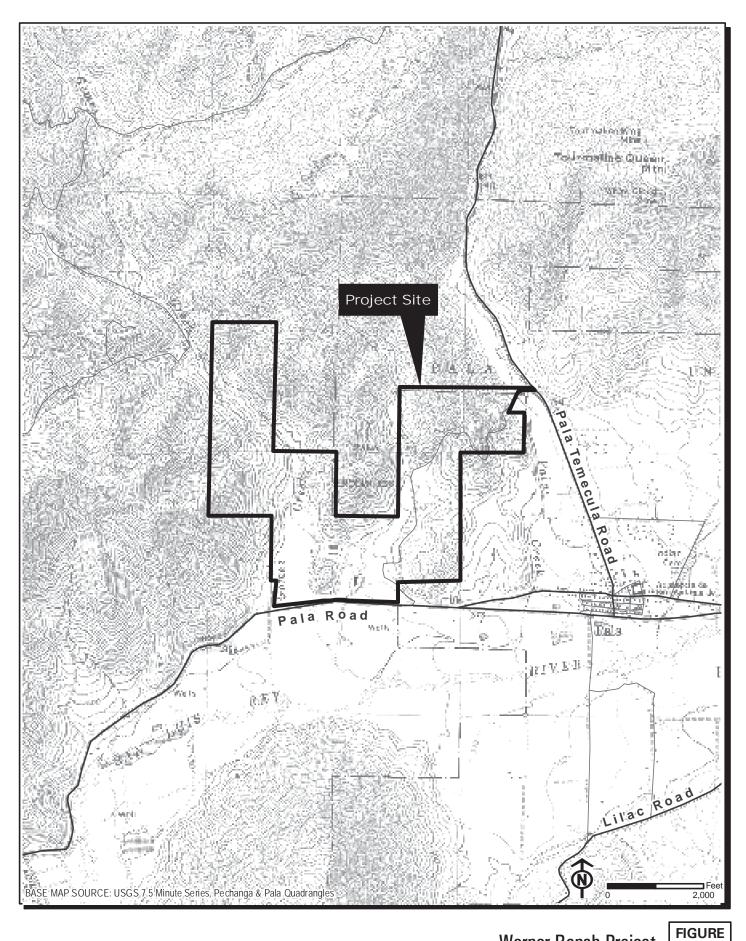
Photos 1-4





Warner Ranch Project
Regional Map

FIGURE 1



Warner Ranch Project
Vicinity Map

дин 2



Photo 1





Photo 2





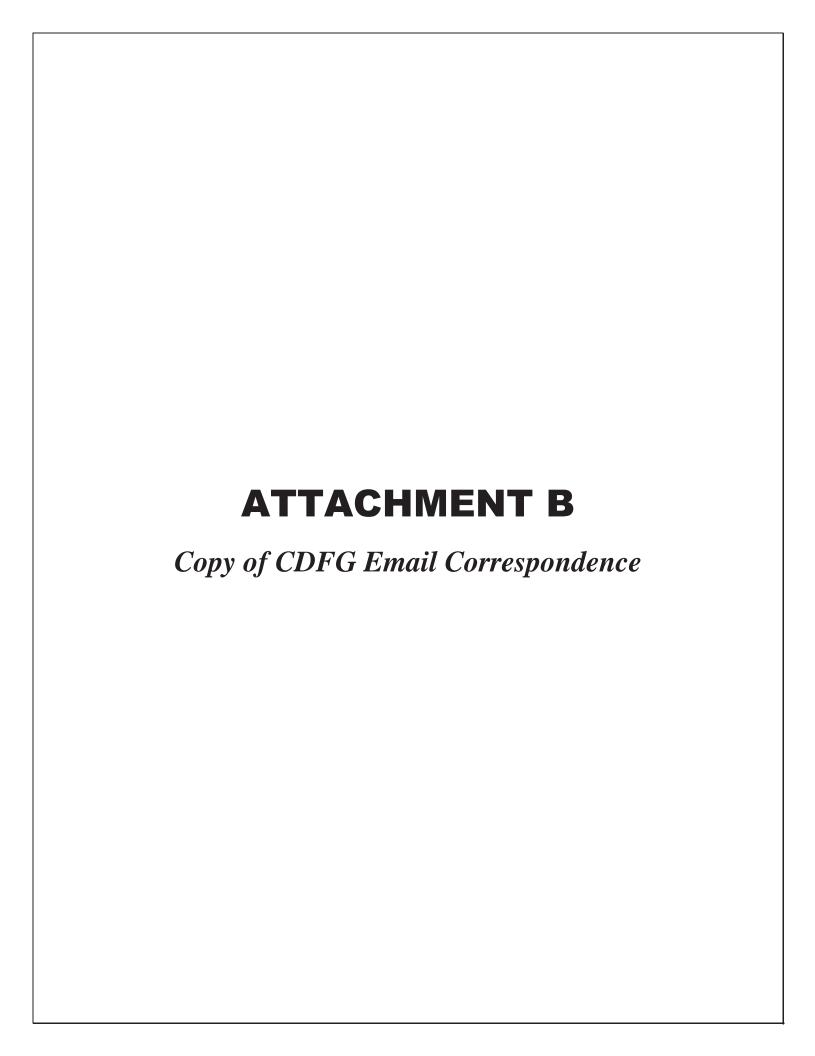
Photo 3





Photo 4 Trout Pool Habitat





Hi Jeff:

Here is the protocol you should use to collect a sample from the trout on Warner Ranch if you should happen to find it. If the fish is small, a smaller genetic sample can be taken so as not to harm the fish's ability to swim. Smallest sample NMFS can use is a 1x1 mm square.

Thank for your help with this.

mary

Mary L. Larson Senior Fisheries Biologist Supervisor South Coast Region 4665 Lampson Avenue, Suite C Los Alamitos, CA 90720 w: 562-342-7186

c: 562-537-8624 f: 562-342-7153

This office will be closed on the 2nd, 3rd, and 4th Friday of every month pursuant to the Governor's Exec Order S-12-10

>>> Jeff Priest <<u>jpriest@dudek.com</u>> 10/14/2010 1:53 PM >>> Hi Mary,

Do you have any feedback on this issue? I will also give you a call to follow up.

Thank you,

Jeff

From: Mary Larson [mailto:MLARSON@dfg.ca.gov]

Sent: Monday, August 30, 2010 10:41 AM

To: Jeff Priest **Cc:** David Kajtaniak

Subject: RE: CDFG Feedback requested; Warner Ranch observed trout in GomezCreek

Hi Jeff:

I was out of the office last week so not able to respond to your first e-mail. Due to workload, I will respond in detail to that e-mail tomorrow afternoon.

Mary

Mary L. Larson
Senior Fisheries Biologist Supervisor
South Coast Region
4665 Lampson Avenue, Suite C
Los Alamitos, CA 90720

w: 562-342-7186 c: 562-537-8624 f: 562-342-7153 >>> Jeff Priest <<u>jpriest@dudek.com</u>> 8/30/2010 10:16 AM >>> Hi Mary and Dave,

I just wanted to follow up on this request. Please let me know your thoughts on this when you have a chance.

Thanks, Jeff

JEFF PRIEST

Project Manager / Wildlife Biologist

DUDEK

605 Third Street Encinitas, CA 92024 T: 760.479.4287 F: 760.942.9976

www.dudek.com

PLEASE NOTE: Dudek uses an email filter to clean viruses and filter Spam. Please take the time to verify receipt of any important or time-sensitive email sent to us.

From: Jeff Priest

Sent: Wednesday, August 18, 2010 12:43 PM **To:** 'mlarson@dfg.ca.gov'; 'David Kajtaniak'

Cc: Brock Ortega; Vipul Joshi

Subject: CDFG Feedback requested; Warner Ranch observed trout in Gomez Creek

Importance: High

Hi Mary,

Dave Kajtaniak (CDFG) referred me to you regarding an observation of a trout within Gomez Creek in the Pala area on the Warner Ranch project site. We are requesting feedback from CDFG regarding this issue.

Based on anecdotal information from residents, as well as comments from Dave Kajtaniak who also gathered anecdotal information from the area, the resident immediately upstream of the Warner Ranch site is likely stocking man-made ponds (or has in the past) with trout within Gomez Creek. Additionally, flows within Gomez Creek are historically low and the San Luis Rey River is constrained in this area by elevated benches, development, roads and the hydrologic flows and topography has been altered by the Pala casino upstream, and the old Fenton/Hansen aggregate facility downstream of it's intersection with Gomez Creek. Based on these factors, we believe it is highly likely that the trout observation on Warner Ranch was an individual trout that was washed (or jumped) from the probable stocking area upstream, and made its way 400-500 feet downstream to the location where it was observed on Warner Ranch.

At the downstream edge of this small ponded area where the trout was observed within Gomez Creek, the creek is cobble with a depth of 1 to 3 inches and the trout was unable to move any further downstream during the course of observations made between April and the end of July, 2010, during

focused surveys for arroyo toad, least Bell's vireo and southwestern willow flycatcher (14 visits). Additionally, the flow within Gomez Creek dwindled and dried up within the Warner Ranch project area in early May (after the first arroyo toad survey and observation of the trout) so the creek has not connected to the San Luis Rey River all season. The trout was approximately 12-15 inches (photos attached). The pond is approximately 2 feet deep at its greatest depth, but averages around 6-12 inches and includes an overhanging bank that the trout uses to hide.

A trout was observed in this exact pond during a survey in 2005. A 2006 survey was negative. A memo is attached which provides details of this observation as well as communication with Dave Kajtaniak on this issue.

We are requesting that CDFG provide feedback on this issue in regard to our preparation of the biotech report in support of an EIR. Although the project will not directly impact Gomez Creek, the trout observation needs to be addressed in the report. We do not have permission to access the upstream property to document the presence of stocking ponds and therefore will be basing our determination on the evidence we have provided you herein (anecdotal information of upstream stocking by residents and CDFG staff and hydrologic conditions in the San Luis Rey River and Gomez Creek). At this point, our conclusion is that it is highly likely that the fish is a stocked rainbow trout that washed down from the upstream stocking area.

We would like to get CDFG feedback on this issue now rather than during the public comment period and make sure we are presenting sufficient evidence for our conclusion. Please let us know what your thoughts are, and any recommendations you have regarding this issue.

Thank you,

Jeff

JEFF PRIEST

Project Manager / Wildlife Biologist

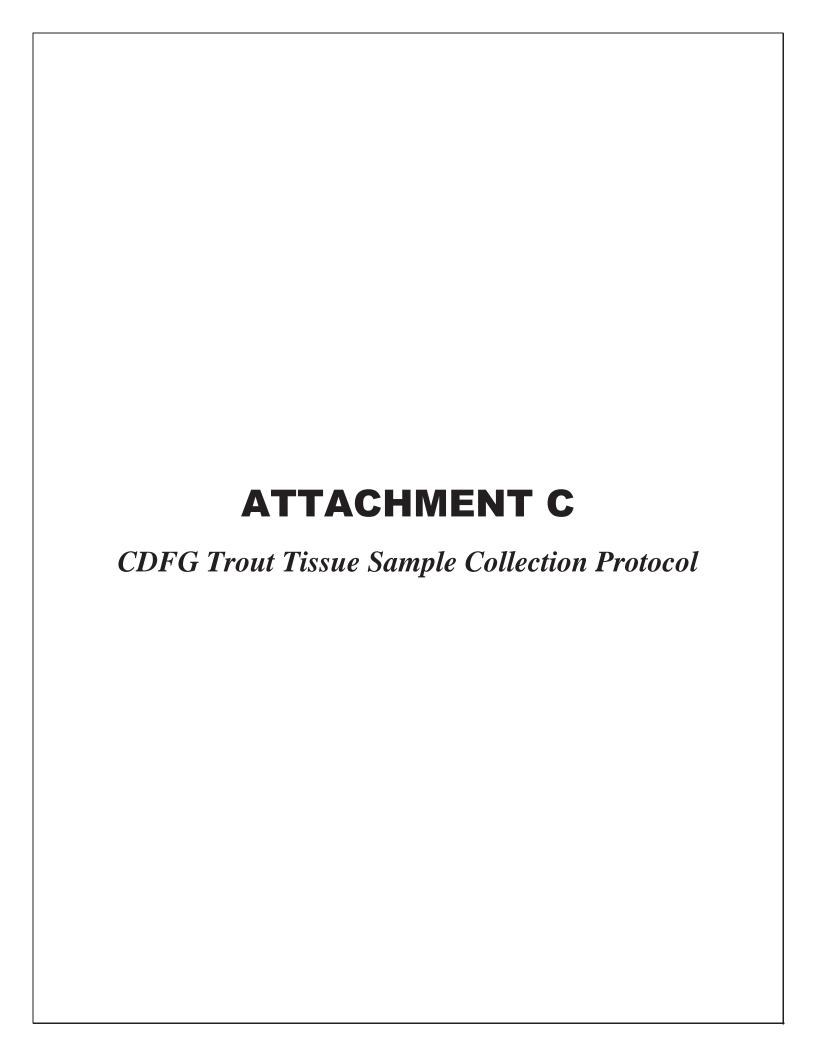
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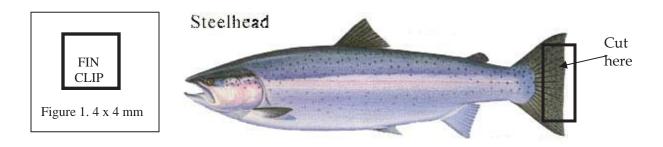


STEELHEAD TISSUE COLLECTION PROTOCOLS

AIR DRIED METHOD

- I. <u>Record all data on the coin envelope</u>. Use only one envelope per fish. If the envelope is not pre-stamped, include the following data: date, location with landmarks, sample ID number GPS coordinates (if available), fork length (mm), sex of fish, collector's name, fin which sample was taken from, species of fish, adipose fin present or absent, and any other information pertaining to the sample.
- II. From each fish, choose a fin (caudal, pectoral, dorsal, etc.) in the best condition. Take a finclip (size indicated in Figure 1) from a clean edge of the fin (Figure 2). Do not take tissue from the adipose fin as there is little DNA provided in that sample.
- III. Place the tissue sample on one piece of filter paper and fold paper over to cover the sample. Place filter paper into the coin envelope.
- IV. Vigorously agitate scissors in water between samples to prevent cross contamination.
- V. If you are dealing with fresh dead fish, cut open each fish and examine the gonad tissue to confirm the sex of the fish. Write any remarks concerning the sample in the notes section of the data sheet (e.g. the fish looks like a male, but has female gonads)
- VI. Either in the field after collection, or in the office immediately upon return from the field, airdry all samples on the same filter paper. The samples are dry when all mucous and moisture has evaporated and the tissue feels dry to the touch. Sun drying in the field works best and can be done quickly. Drying fins indoors usually takes 24 hours.
- VII. Record the appropriate field and lab preservation methods (both will normally be noted in the "other" column as "air dried") on the data sheet.

When completely dry, repackage tissue into its original, <u>dry</u>, envelope and attach to field notes for shipment to our lab. Check all envelopes to ensure that the data is filled out <u>completely</u> and <u>legibly</u>. Send samples to Mary Larson, Senior Biologist, California Dept of Fish and Game 4665 Lampson Avenue, Suite C, Los Alamitos, CA 90720.



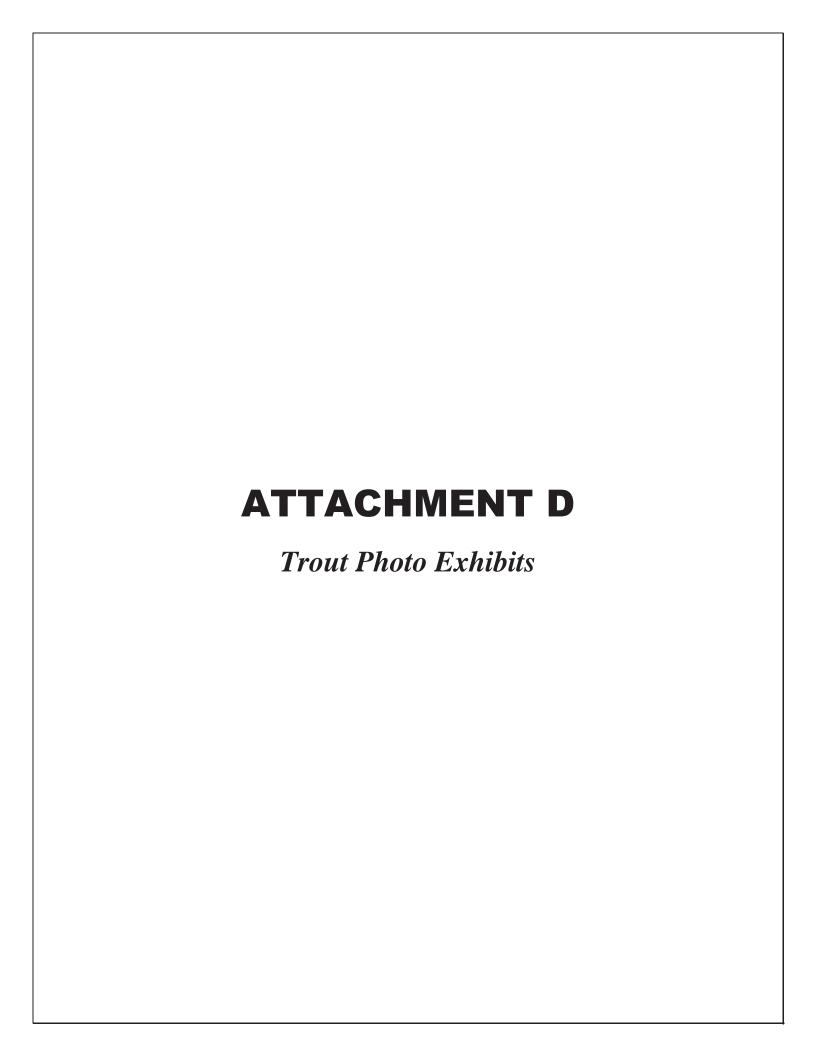


Photo Exhibit 1



Photo Exhibit 1 represents the pool were the trout was observed in 2005. Photo facing downstream within Gomez Creek.

Photo taken 9/19/2005.

Photo Exhibit 2



Photo Exhibit 2 represents the trout captured in 2005 from the pool in Exhibit 1. Photo taken on 9/19/05.

Photo Exhibit 3



Photo Exhibit 3 represents the pool where a trout was observed in 2010. One can see that this is the same pool in Exhibit 1. Photo facing downstream within Gomez Creek.

Photo taken 4/29/10.

Photo Exhibit 4



Photo Exhibit 4 represents the trout swimming within the pool presented in Exhibits 1 and 3. Photo taken facing west within Gomez Creek.

Photo taken 5/11/10.

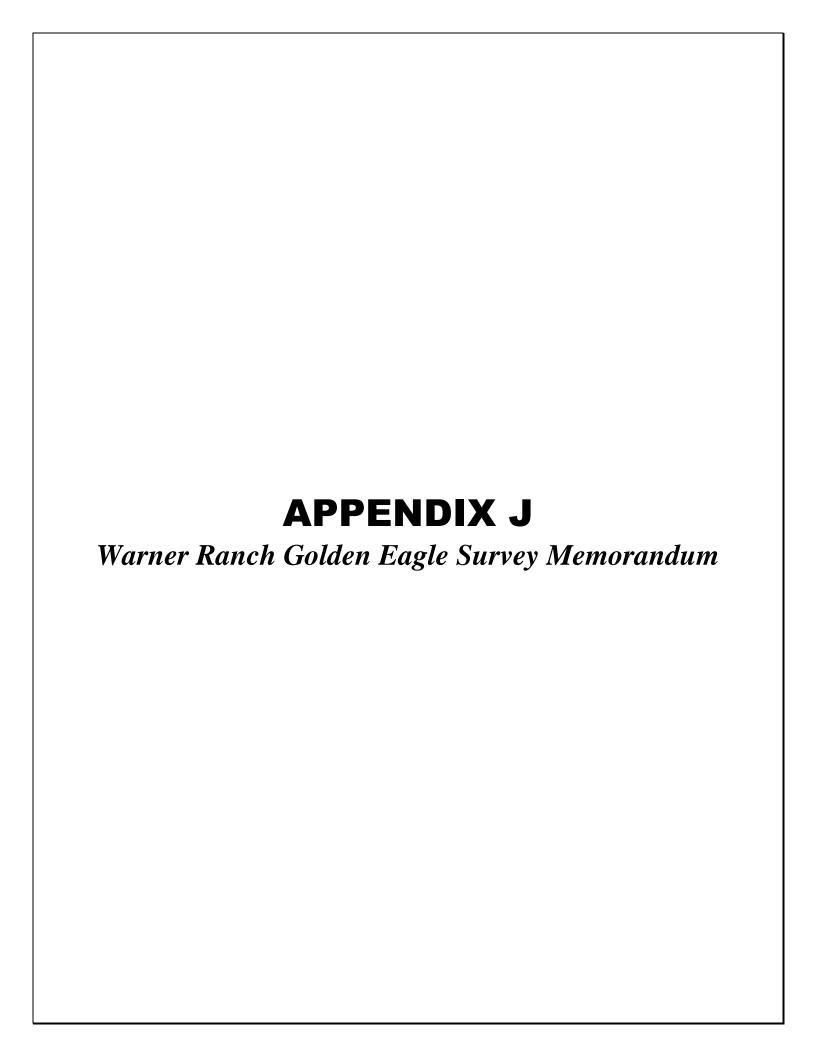
ATTACHMENT D Photo Exhibits

Photo Exhibit 5



Photo Exhibit 5 represents the use of the Electrofisher machine within the pool presented in Photo Exhibits 1 and 3. Photo taken facing downstream within Gomez Creek.

Photo taken 11/23/10.





MEMORANDUM

To: Mark Hayden, Capstone Advisors

From: Vipul Joshi, Dudek

Subject: Warner Ranch Golden Eagle Survey Memorandum

Date: December 27, 2012 cc: Callie Ford, Dudek

Attachment(s): Figures 1–3

This memorandum includes the methods and results of a habitat assessment and nest survey for golden eagle (*Aquila chrysaetos*) conducted for the Warner Ranch Project.

PROJECT LOCATION

The Warner Ranch property is located on State Route-76 (SR-76) in Pala, San Diego County, California, within the U.S. Geological Survey (USGS) 7.5-minute Pala and Pechanga quadrangles; latitude 33°22'18" N, longitude 117°5'23" W (Figures 1 and 2). The project area includes a portion of Gomez Creek and its channel tributaries on the western side of the property, as well as Pala-Temecula Creek on the easternmost portion of the project area. It is located approximately 1,200 feet north of the San Luis Rey River. The region where the property is situated consists primarily of agricultural and undeveloped lands with the exception of the Pala tribal lands to the east of the site and the community of Rainbow to the northwest.

METHODS

In October 2011 and January 2012, Dudek biologist Jeff Priest conducted a golden eagle nest survey and habitat assessment in areas near the project area that had historically-documented golden eagle nests. These locations include the slopes immediately west of the project area and a location within the San Luis Rey River approximately 1,200 feet from the southwest corner of the project site, adjacent to SR-76. The historical locations were provided by the County of San Diego (County) and Technology Associates (TAIC). The survey method for identifying potential golden eagle nest locations included pedestrian surveys using binoculars (10x42 power), assessing large trees for raptor nests, and evaluating potential raptor nests to determine whether they could support nesting golden eagles. Within the San Luis Rey River, a survey buffer of approximately 2,500 feet from the southwest corner of the project site was used, and included all large trees within the river valley and the historical location of the golden eagle nest provided by the County and TAIC.

In January 2012, an additional breeding-season golden eagle nest survey was conducted within the San Luis Rey River, within the 2,500-foot buffer zone described above. In January, raptor nests are readily visible because most trees in the area are deciduous and have dropped their leaves at this time of year. Survey times and conditions are included in Table 1.

Table 1 Schedule of Golden Eagle Nest Surveys

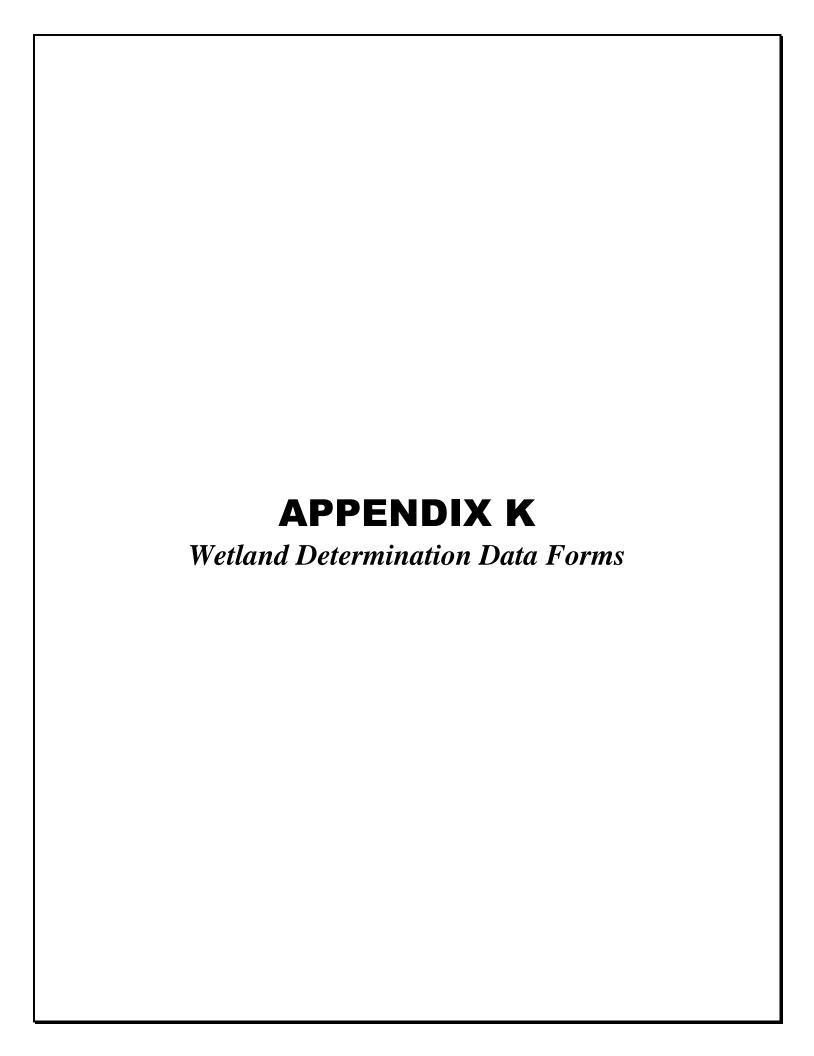
Date	Staff	Time	Conditions
10/20/11	JDP	8:20a-3:45p	Air: 59-74 °F; 60%-0% cc; 0-6 mph
1/5/12	JDP	8:45a-11:00a	Air: 68–75 °F; 25%–5% cc; 0–4 mph

RESULTS

No golden eagle nests were observed at the locations provided by the County or TAIC. Figure 3 shows the areas that were surveyed. Due to past fires, the hills surveyed west of the project area did not have any suitable habitat (e.g., coast live oaks [Quercus agrifolia]) to support golden eagle nests. Part of this area has burned within the last few years and currently supports a mix of coastal sage scrub and southern mixed chaparral with no large trees present.

Habitat in the San Luis Rey River consists of southern cottonwood willow riparian forest, with cottonwoods (*Populus fremontii*), willows (*Salix* spp.), California sycamores (*Platanus racemosa*), and some coast live oaks. Several raptor nests were observed in the San Luis Rey River within the vicinity of the project; however, the nests were not large enough to indicate they were golden eagle nests. The additional survey in January 2012 was conducted in order to maximize detection of raptor nests for two reasons: 1) during the onset of the raptor nesting season, raptor nesting activities are obvious and easily detectible; and 2) because most trees within the San Luis Rey River are deciduous and have dropped their leaves at this time of year, raptor nests are readily visible. This survey did not detect any nests large enough to support golden eagles.

Based on the available data regarding potential golden eagle nest locations and the results of the surveys of these areas, no golden eagles are nesting within 4,000 feet of the Warner Ranch Project Area.



Project/Site: Warner Ranch			City	//County: Pala, Sa	an Diego		Samp	pling Da	te: 5 Aug 10
Applicant/Owner: Warner Ranch				State: CA Sampling Po				pling Po	int: DS-1
Investigator(s): Callie Ford, Vipul Joshi			Sec	ction, Township, F	Range: S2	8, T9S, F	R2W		
Landform (hillslope, terrace, etc.): streambed	Local relief (conc	ave, co	nvex	, none): None		Slope ((%):0-5	5%	
Subregion (LRR):Mediterranean C	Lat: 33°22'18.587	7"N	Long: 117°5'23.36"W Datum: NAD83				83		
Soil Map Unit Name: Ramona Sandy Loam slope RaB					NWI clas	sification	n: Rive	erine stre	eambed
Are climatic / hydrologic conditions on the site typical for this time of year?				No		(If no, e	explain	n in Rem	narks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed?	No	Are	"Normal Circums	tances" p	resent?	Y	′es √	No
Are Vegetation No , Soil No , or Hydrology No natur	rally problematic?	No		(If needed, expl	ain any ar	nswers in	Rema	arks.)	

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

Hydrophytic Vegetation Present?	Yes ✓	No			
Hydric Soil Present?	Yes	No ✓	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No ✓	within a Wetland?	YES	NO ✓
Remarks: Sample point has potential to be considered a CDFG Wetland.	be considered a A	ACOE/RWQCB N	on-wetland Waters, dependent or	a Significant Nexus	s Analysis; it is

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Total Cover: % Percent of Dominant Species That Are OBL, FACW, or FAC:	3.						2 (B)
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Depth (incomarks: cated in a property of the p	GY drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present?	ne) viverine) ne) magery (B7	Sal Bic Aq Hyc Ox Pre Re 7) Oth	uatic Crust (B12) uatic Invertebrates drogen Sulfide Odo idized Rhizosphere esence of Reduced cent Iron Reduction ner (Explain in Rem	r (C1) s along Liv Iron (C4) i in Plowed	ring Roots	Secondar — Wate — Sedin ✓ Drift — Drain — Dry-S (C3) — Thin I — Crayf) — Satur — Shallo	y Indicators (2 r Marks (B1) (Finent Deposits (B3)) age Patterns (Ieason Water Times (Basen Water Times (Basen Water Times (Basen Water Times (Basen Water (Basen	or more required (Riverine) (B2) (Riverine) (B10) (Fable (C2) (C7) (C7) (C8) (A Aerial Imag (C3)	nired)
Depth (incomarks: cated in a DROLO etland Hydromary Indicomary Indicated I	GY drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present?	ne) iverine) ne) magery (B7	Sal Bic Aq Hyı Ox Pre Re Oth No ✓	uatic Crust (B12) uatic Invertebrates drogen Sulfide Odo idized Rhizosphere esence of Reduced cent Iron Reduction ner (Explain in Rem Depth (inches): Depth (inches):	r (C1) s along Liv lron (C4) in Plowed arks)	ring Roots	Secondar — Wate — Sedin — Drift — Drain — Dry-S (C3) — Thin I — Crayf) — Satur — Shalle — FAC-	y Indicators (2 r Marks (B1) (Finent Deposits (B3)) age Patterns (Ieason Water Times (Basen Water Times (Basen Water Times (Basen Water Times (Basen Water (Basen	or more requirements of more requirements of the control of the co	uired) ee) ery (C9
Depth (incomarks: cated in a property of the cated of	GY drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Present? pillary fringe) corded Data (stream	ne) iverine) ne) magery (B7 Yes Yes Yes gauge, mo	Sal — Bic — Aq — Hyu — Ox — Pre — Re 7) Oth No ✓ No ✓	uatic Crust (B12) uatic Invertebrates drogen Sulfide Odo idized Rhizosphere esence of Reduced cent Iron Reduction ner (Explain in Rem Depth (inches): Depth (inches): aerial photos, prev	r (C1) s along Liv lron (C4) in Plowed arks)	ring Roots	Secondar — Wate — Sedin — Drift — Drain — Dry-S (C3) — Thin I — Crayf) — Satur — Shalle — FAC-	y Indicators (2 r Marks (B1) (Finent Deposits (B3)) age Patterns (Ieason Water Times (Basen Water Times (Basen Water Times (Basen Water Times (Basen Water (Basen	or more requirements of more requirements of the control of the co	uired) ee) ery (C9
Depth (incomarks: cated in a property of the cat	GY drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Present?	ne) iverine) ne) magery (B7 Yes Yes Yes gauge, mo	Sal — Bic — Aq — Hyu — Ox — Pre — Re 7) Oth No ✓ No ✓	uatic Crust (B12) uatic Invertebrates drogen Sulfide Odo idized Rhizosphere esence of Reduced cent Iron Reduction ner (Explain in Rem Depth (inches): Depth (inches): aerial photos, prev	r (C1) s along Liv lron (C4) in Plowed arks)	ring Roots	Secondar — Wate — Sedin — Drift — Drain — Dry-S (C3) — Thin I — Crayf) — Satur — Shalle — FAC-	y Indicators (2 r Marks (B1) (Finent Deposits (B3)) age Patterns (Ieason Water Times (Basen Water Times (Basen Water Times (Basen Water Times (Basen Water (Basen	or more requirements of more requirements of the control of the co	uired) e) ery (C9
Depth (incomarks: cated in a property of the cated of	GY drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9) vations: er Present? Present? Present? pillary fringe) corded Data (stream	ne) iverine) ne) magery (B7 Yes Yes Yes gauge, mo	Sal — Bic — Aq — Hyu — Ox — Pre — Re 7) Oth No ✓ No ✓	uatic Crust (B12) uatic Invertebrates drogen Sulfide Odo idized Rhizosphere esence of Reduced cent Iron Reduction ner (Explain in Rem Depth (inches): Depth (inches): aerial photos, prev	r (C1) s along Liv lron (C4) in Plowed arks)	ring Roots	Secondar — Wate — Sedin — Drift — Drain — Dry-S (C3) — Thin I — Crayf) — Satur — Shalle — FAC-	y Indicators (2 r Marks (B1) (Finent Deposits (B3)) age Patterns (Ieason Water Times (Basen Water Times (Basen Water Times (Basen Water Times (Basen Water (Basen	or more requirements of more requirements of the control of the co	uired) ee) ery (C9

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi					State: CA Section, T	iy: Pala, Sa ownship, R	n Diego ange: Sectio	Sampl	ing Point	
Landform (hillslope, terrace, etc.): strea Subregion (LRR):Mediterranean C Soil Map Unit Name: Ramona Sandy Lo			elief (cond 22'18.55	cave, convex 2"N Lor	2W k, none): N ng: 117°5'2	3.419"W NV		e (%): 0% ım: NAD8: ion: River	3	etated
Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Fare Vegetation, Soil, or Fare Vegetation, Soil,	lydrology	significantl	y disturbe			Circumsta	,		es ✓ N	rks.) No
SUMMARY OF FINDINGS – Att	ach site ma	p showin	g samp	oling poir	nt location	ons, tran	sects, im	portant	featur	es, etc.
Hydrophytic Vegetation Present?	Yes	No ✓								
Hydric Soil Present?	Yes	No ✓		Is the Sam						
Wetland Hydrology Present? Remarks: Sample point is considered a	Yes	No ✓		within a W	etland?		YES	N	0 ✓	
VEGETATION						•				
		Absolute % Cover	Domina Species		101		st workshe			
<u>Tree Stratum</u> (Use scientific names.) 1.		<u> ∕₀ Cover</u>	Species	<u>Status</u>	- I TTGII		ninant Specie FACW, or FA		0	(A)
2. 3. 4.					Tota		f Dominant		0	(B)
	Total Cover:						inant Specie			
		Absolute	Domina	ınt Indica		Are OBL,	FACW, or FA	AC:	0	(A/B)
Sapling/Shrub Stratum		% Cover	Species	s? Status	Prev		lex workshe 6 Cover of:	eet:	N/Lul+	tiply by:
1. 2.					OBL	. species	0		x 1 = 0	tiply by:
3. 4.						W species			x 2 =0	
5.						species	0		x 3 =0	
	Total Cover:					U species			x 4 =0	
		Absolute	Domina	ınt Indica		species	0		x 5 =0	
Herb Stratum		% Cover	Species	s? Status	3	ımn Totals:	0	(A)	0	(B)
Artemisia californica Eriogonum fasciculatum		10 30	N Y	NI NI			ex = B/A =	` ,		(-)
3. Bromus diandrus		5	N.	NI			egetation In			
4. 5.					*		e Test is >50			
6.						Prevalence	Index is ≤3.	.0 ¹		
7. 8.							cal Adaptati			
	Total Cover:						Remarks or o			•
		Absolute	Domina	ınt Indica		riobieman	с пушорнуш	ic vegetat	1011 (Exp	iaiii)
Woody Vine Stratum 1. 2.		% Cover	Species				ydric soil and	d wetland	hydrolog	y must be
	Total Cover:									
% Bare Ground in Herb Stratum:55		of Piotio Cr	uot:			rophytic V sent?	egetation	,	⁄es	No ✓
% Bare Ground in Herb Stratum:55 Remarks:	% Cover	of Biotic Cr	uSI.		1.30	-		'		

Drofile Dec	cription: (Describ	o to the depth	noodod te	document th	o indicator or	oonfirm	the absence of		Point: DS-2	
Profile Des		_	i needed to			COMITI	i the absence of	indicators.)		
Danth	Matrix			Redox Fe	atures					
Depth (inches) 0-6	<u>Color (moist)</u> 7.5 YR 6/6	<u>%</u> 33	Color (m	oist) %	Type ¹	Loc ²	<u>Texture</u> Sand	Rixed color the	emarks roughout	
0-6	10 YR 4/4	33					Sand	Mixed colors tl	roughout	
0-6	10 YR 2/1	33					Sand	Darker sand pa	articles	
Hydric Soil I Histosol Histic Ep Black His Hydroge Stratified	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) (LRR	cable to all LR	Rs, unless Sand Stripp Loam Loam Deple	otherwise not y Redox (S5) ed Matrix (S6) y Mucky Minera y Gleyed Matrix eted Matrix (F3)	al (F1)	ning, RC	Indicators for 1 cm Muc 2 cm Muc Reduced Red Pare	M=Matrix. r Problematic F k (A9) (LRR C) k (A10) (LRR B Vertic (F18) nt Material (TF2 plain in Remark)	:
Depleted Thick Da Sandy M	ck (A9) (LRR D) I Below Dark Surfacerk Surface (A12) ucky Mineral (S1) leyed Matrix (S4)	ce (A11)	Deple Redo	x Dark Surface sted Dark Surface x Depressions al Pools (F9)	ce (F7)			hydrophytic veg drology must be		
	ayer (if present):						wottaria riy	arology must be	ргозопа	
Type:										
Depth (inc	ches):					Ну	dric Soil Prese	nt?	Yes	No ✓
HYDROLOG	GY Irology Indicators	:					Seconda	ry Indicators (2	or more requ	ired)
Primary Indic	ators (any one indi	cator is sufficie	nt)				Wate	er Marks (B1) (R	iverine)	
Saturation Water Management Sediment Drift Dep Surface Surface	ter Table (A2) on (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial ained Leaves (B9)	onriverine) erine)	Bioti Aqui Hyd Oxid	Crust (B11) c Crust (B12) atic Invertebrate rogen Sulfide C lized Rhizosphe sence of Reduct ent Iron Reduct er (Explain in Re	edor (C1) eres along Livir ed Iron (C4) ion in Plowed S		Drift Dry- s (C3) Thin Cray 6) Satu Shal	ment Deposits (Deposits (B3) (I ainage Patterns Season Water T Muck Surface (rfish Burrows (C ration Visible or low Aquitard (D3 -Neutral Test (D	Riverine) (B10) Table (C2) (C7) (B) Aerial Imag (B)	
Surface Wate		Yes	No ✓	Depth (inches	١٠					
Water Table		Yes	No ✓	Depth (inches	•					
Saturation Pr (includes cap	esent?	Yes	No ✓	Depth (inches		We	etland Hydrolo	gy Present?	Yes	No ✓
	corded Data (strear	n gauge, monit	oring well, a	aerial photos, p	revious inspect	ions), if	available:			
Remarks: Th	is sample point was	s taken outside	of the char	nnel. Slope and	bank of adjace	ent chan	nel was relative	y flat in this area	а.	

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch?					City/County: Pala, Sar State: CA	•	Sampling Date: 5	•
Investigator(s): Callie Ford, Vipul Joshi					Section, Township, Ra W	ange: Section 2	8, Township 9S,	Range
Landform (hillslope, terrace, etc.): streat Subregion (LRR): LRR C Soil Map Unit Name: Ramona Sandy Lot Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hydrologic conditions on the strength	pam slope RaC e site typical fo ology sig	Lat: 33° 2 or this time o nificantly dis	22'16.83" f year? sturbed?	N Long: Yes ✓ No Are	No e "Normal Circumstar	(If no, ex	NAD83 e (Vegetated stre xplain in Remarks Yes ✔ No	s.)
Are Vegetation, Soil, or Hyd SUMMARY OF FINDINGS – Atta					(If needed, explain a locations, trans	•	,	s. etc.
Hydrophytic Vegetation Present?	Yes ✓	No		9	,	,		-,
Hydric Soil Present?	Yes	No ✓	١,	ls the Sampl	ed Area			
Wetland Hydrology Present?	Yes	No ✓		within a Wet		YES	NO ✓	
Remarks: This sample point does not co	nvey waters of	the U.S. ba	sed on Si	gnificant Nex	us determination, but	it is considered	d a CDFG wetlan	ids.
VEGETATION								
Tree Stratum (Use scientific names.) 1. 2.		Absolute % Cover	Dominar Species		Dominance Tes Number of Dom That Are OBL, F	inant Species	1	_ (A)
3. 4.					Total Number of Species Across		2	_ (B)
	Total Cover:	Absolute	Dominar		Percent of Domi That Are OBL, F		50	(A/B)
Sapling/Shrub Stratum 1. Baccharis salicifolia 2. Malosma laurina 3. 4.		<u>% Cover</u> 50 1	Species Y N	? Status FACW NI	Prevalence Ind Total % OBL species FACW species	ex worksheet: Cover of:	Multip x 1 = x 2 = 100	ly by:
5.	Total Cover:	51 Absolute	Dominar	nt Indicato	FAC species FACU species UPL species	1	x 3 = x 4 = 4 x 5 =	
Herb Stratum 1. Bromus diandrus 2. Ambrosia psilostachya 3.		<u>% Cover</u> 50 1	Species Y N	Status NI FACU*	Column Totals: Prevalence Inde		(A) 104	(B)
4. 5. 6. 7.					Prevalenc	Test is >50% e Index is ≤3.0 cal Adaptations	1 (Provide suppo	
	Total Cover:	51 Absolute	Dominar		Problemation		a separate sheet) egetation ¹ (Expla	
Woody Vine Stratum 1. 2.		% Cover	<u>Species</u>	? Status	¹ Indicators of hy present.	dric soil and we	etland hydrology	must be
	Total Cover:				Hydrophytic Ve	egetation		
% Bare Ground in Herb Stratum: 49 Remarks:	% Cover	of Biotic Cr	ust:		Present?	. 3	Yes ✓	No
Romans.								

Profile Des	cription: (Describe	to the dept	h needed	to document th	e indicator or co	onfirm th	e absence	of indicators.)		
	<u>Matrix</u>			Redox Fe	atures_					
Depth	Color (moist)	<u>%</u>	Color (Loc ²	Texture	F	Remarks	
(inches) 0-8	10 YR 3/2	70 50	<u> </u>	<u>/////////////////////////////////////</u>	1 9 0 0		Sandy	Sandy materia	·	
0-0							silt	-		
0-8	5 YR 7/4	50					Sandy- silt	Sand particles	i	
8+	Rock	100								
	ncentration, D=Deple							I, M=Matrix. or Problematic I	Judria Caila ³	
_	ndicators: (Applica	ible to all Li			tea.)				Tyaric Soils	:
Histosol Histic Ep				dy Redox (S5) oped Matrix (S6)				ick (A9) (LRR C) ick (A10) (LRR B	1)	
Black His				my Mucky Miner	al (F1)			d Vertic (F18)	')	
	n Sulfide (A4)			my Gleyed Matri				ent Material (TF2	2)	
	Layers (A5) (LRR C)		leted Matrix (F3)				xplain in Remark		
	ck (A9) (LRR D)			ox Dark Surface						
	Below Dark Surface	(A11)		leted Dark Surfa	. ,					
	rk Surface (A12) ucky Mineral (S1)			ox Depressions nal Pools (F9)	(F8)	3	Indicators of	hydrophytic veg	etation and	
-	leyed Matrix (S4)			iai F00i5 (F9)		,		ydrology must be		
	ayer (if present):							yarorogy maer at	, p. 666	
Type:	, , ,									
Depth (inc	ches):					Hydri	ic Soil Pres	ent?	Yes	No ✓
Remarks:										
HYDROLO										
HYDROLO							0	la dia - ta (0		:!\
_	Irology Indicators:							ary Indicators (2		<u>irea)</u>
	ators (any one indica	ITOT IS SUITICIE	•	II O (D44)				ter Marks (B1) (F		- \
<u> </u>	Water (A1)			It Crust (B11) otic Crust (B12)				diment Deposits (t Deposits (B3) (e)
nigii vva	ter Table (A2)		DIC	, ,			וווט	r pehosirs (ps) (Kiveriie)	
_	n (Δ3)		Δο		ac (R13)		·	rainaga Dattarne	(R10)	
Saturatio		ne)		uatic Invertebrat	, ,		<u>✓</u> D	rainage Patterns	, ,	
Saturatio	arks (B1) (Nonriverin		Ну	drogen Sulfide C	odor (C1)	Roots (C	D	-Season Water 1	Γable (C2)	
Saturatio Water M Sedimen	arks (B1) (Nonrivering t Deposits (B2) (Non	riverine)	Hy	drogen Sulfide C idized Rhizosph	odor (C1) eres along Living	Roots (C	D Dry Thi	r-Season Water T n Muck Surface (Γable (C2) (C7)	
Saturation Water M Sedimen Drift Dep	arks (B1) (Nonriverin	riverine)	Hy Ox Pro	drogen Sulfide C idized Rhizospho esence of Reduc	odor (C1) eres along Living	,	D Dry (3) Thin Cra	-Season Water 1	Table (C2) (C7) (8)	ery (C9)
Saturation Water M Sedimen Drift Dep Surface	arks (B1) (Nonriveri t Deposits (B2) (Non osits (B3) (Nonriveri	riverine) ine)	Hy Ox Pro Re	drogen Sulfide C idized Rhizospho esence of Reduc	odor (C1) eres along Living ed Iron (C4) ion in Plowed So	,	D Dry Thin Cra Sat	r-Season Water T n Muck Surface (nyfish Burrows (C	Table (C2) (C7) (S8) n Aerial Imag	ery (C9)
Saturatic Water M Sedimen Drift Dep Surface	arks (B1) (Nonriverii t Deposits (B2) (Non osits (B3) (Nonriveri Soil Cracks (B6)	riverine) ine)	Hy Ox Pro Re	drogen Sulfide C idized Rhizosph esence of Reduc cent Iron Reduc	odor (C1) eres along Living ed Iron (C4) ion in Plowed So	,	D Dry Sat Sha	-Season Water T n Muck Surface (nyfish Burrows (C uration Visible on	Table (C2) (C7) (8) n Aerial Imag 3)	ery (C9)
Saturatic Water M Sedimen Drift Dep Surface	arks (B1) (Nonrivering the Deposits (B2) (Noncosits (B3) (Nonrivering Soil Cracks (B6) on Visible on Aerial Instanced Leaves (B9)	riverine) ine)	Hy Ox Pro Re	drogen Sulfide C idized Rhizosph esence of Reduc cent Iron Reduc	odor (C1) eres along Living ed Iron (C4) ion in Plowed So	,	D Dry Sat Sha	-Season Water T n Muck Surface (pyfish Burrows (C uration Visible or allow Aquitard (D	Table (C2) (C7) (8) n Aerial Imag 3)	ery (C9)
Saturatic Water M Sedimen Drift Dep Surface Inundatic Water-St	arks (B1) (Nonrivering the Deposits (B2) (Noncosits (B3) (Nonrivering Soil Cracks (B6) on Visible on Aerial Instanced Leaves (B9) (Vations:	riverine) ine)	Hy Ox Pro Re	drogen Sulfide C idized Rhizosph esence of Reduc cent Iron Reduc	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)	,	D Dry Sat Sha	-Season Water T n Muck Surface (pyfish Burrows (C uration Visible or allow Aquitard (D	Table (C2) (C7) (8) n Aerial Imag 3)	ery (C9)
Saturatic Water M Sedimen Drift Dep Surface Inundatic Water-St	arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B4) (Nonrivering the Deposits (B4) (Nonrivering the Deposits (Nonriver	nriverine) ine) nagery (B7)	Hy Ox Pro Re Ot	drogen Sulfide C idized Rhizosph esence of Reduc cent Iron Reduc ner (Explain in R	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)	,	D Dry Sat Sha	-Season Water T n Muck Surface (pyfish Burrows (C uration Visible or allow Aquitard (D	Table (C2) (C7) (8) n Aerial Imag 3)	ery (C9)
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Observ Surface Water	arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B4) (Nonrivering the Deposits (Nonrivering t	riverine) ine) nagery (B7) Yes	— Hy — Ox — Pro — Re — Ot	drogen Sulfide C idized Rhizosph esence of Reduc cent Iron Reduc ner (Explain in R	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)):	ils (C6)	✓ D Dry Thi Cra Sat Sha FAG	r-Season Water T in Muck Surface (nyfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (E	Table (C2) (C7) (8) n Aerial Imag 3)	
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table	arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B4) on Visible on Aerial Instance Leaves (B9) (Present? Present? Present?	riverine) ine) magery (B7) Yes Yes	— Hy — Ox — Pro — Re — Ot No ✓	drogen Sulfide C idized Rhizosphesence of Reduction Reduction Reduction Reduction Repeated to the Company of th	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)):	ils (C6)	✓ D Dry Thi Cra Sat Sha FAG	-Season Water T n Muck Surface (pyfish Burrows (C uration Visible or allow Aquitard (D	Table (C2) (C7) (8) n Aerial Imag 3)	ery (C9)
Saturation Water M Sedimen Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	arks (B1) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B2) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B3) (Nonrivering the Deposits (B4) on Visible on Aerial Instance Leaves (B9) (Present? Present? Present?	riverine) ine) magery (B7) Yes Yes Yes Yes	— Hy — Ox — Pri — Re — Ot No ✓ No ✓	drogen Sulfide C idized Rhizosphesence of Reduction Reduction Reduction Report (Explain in R Depth (inchest Depth (inchest Depth (inchest Reduction Reducti	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)):):	Wetla	Dry Dry S3) Thi Cra Sat Sha FAG	r-Season Water T in Muck Surface (nyfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (E	Fable (C2) (C7) (8) n Aerial Imag (3) (25)	
Saturation Water M Sedimen Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	arks (B1) (Nonrivering to Deposits (B2) (Nonrivering to Deposits (B2) (Nonrivering to Deposits (B3) (Nonrivering to Deposits (B3) (Nonrivering to Deposits (B4) (Nonrivering to Deposit (B4) (Nonrivering to Deposits (B4) (Nonrivering to Deposit (B4) (Nonrivering to De	riverine) ine) magery (B7) Yes Yes Yes Yes gauge, moni	— Hy — Ox — Pri — Re — Ot No ✓ No ✓ toring well	drogen Sulfide C idized Rhizosphesence of Reduction Reductioner (Explain in R Depth (inchest Depth (inchest Depth (inchest Depth (inchest period))	odor (C1) eres along Living ed Iron (C4) ion in Plowed So emarks)):):	Wetla	Dry Dry S3) Thi Cra Sat Sha FAG	r-Season Water T in Muck Surface (nyfish Burrows (C uration Visible or allow Aquitard (D C-Neutral Test (E	Fable (C2) (C7) (8) n Aerial Imag (3) (25)	

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi					State: 0	unty: Pala/San [CA , Township, Ran		Sampling Date: Sampling Point 8, Township 9S	: DS-4
Landform (hillslope, terrace, etc.): stream Subregion (LRR): LRR C Soil Map Unit Name: Ramona Sandy Loa Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hyd Are Vegetation, Soil, or Hyd SUMMARY OF FINDINGS – Attack	am slope RaC2 e site typical for drology	Lat: 33° 22 r this time of significantly naturally pro	22'16.742 f year? disturbed oblematic	Yes ✔ d? No A	g: 117°5 No Are "Nor (If ne	NWI classifi nal Circumstanceded, explain an	(If no, ex es" present? y answers in F	NAD83 ne (vegetated s plain in Remar Yes ✓ N Remarks.)	ks.) Io
Hydrophytic Vegetation Present?	Yes	No ✓	<u> </u>	<u> </u>		<u> </u>	· •		
Hydric Soil Present?	Yes	No ✓		Is the Sam	nnlad Ar	02			
Wetland Hydrology Present?	Yes	No ✓		within a W	•		ES	NO ✓	
Remarks: This sample point does not cor	ivey waters of	the U.S. bas	sed on Si	gnificant Ne	exus cor	nsideration, but it	is considered	l a CDFG wetla	ands.
/EGETATION									
		Absolute	Domina	nt Indica	ator C	ominance Test	worksheet:		
<u>Tree Stratum</u> (Use scientific names.)		% Cover	Species		atoi	lumber of Domin			
Platanus racemosa		30	Υ	NI	Т	hat Are OBL, FA	CW, or FAC:	0	(A)
2. 3.					Т	otal Number of D	Dominant		
4.					S	pecies Across A	Il Strata:	3	(B)
	Total Cover:	Absolute	Domina		ator T	ercent of Domina hat Are OBL, FA		0	(A/B)
Sapling/Shrub Stratum		% Cover	Species		_ '	revalence Index		N.A16	Carlo da ca
Sambucus nigra ssp caerulea Sambucus nigra ssp caerulea		30	Υ	FACL		Total % (Cover of:		tiply by:
3.						BL species		x 1 =	
4. 5.						ACW species		x 2 =	
	Total Cover:					AC species		x 3 =	
		A basa bata	D	and the street	-1	ACU species	30	x 4 = 12	0
Herb Stratum		Absolute % Cover	Domina Species		-	IPL species		x 5 =	
Bromus diandrus		40	Y	NI	_ c	column Totals:	30 (A	A)	120 (B)
Amsinckia menziesii 3.		1	N	NI	P	revalence Index	= B/A =4	<u>!</u>	
4.					Н	lydrophytic Veg	etation Indica	ators:	
5. 6.					-	Dominance T			
7.					-	_ Prevalence Ir			
8.					-			(Provide supp separate shee	
	Total Cover:							egetation ¹ (Exp	•
		Absolute	Domina	nt Indica	ator -		.,	ogotation (=/ip	,
Woody Vine Stratum 1. 2.		% Cover	Species	<u>S? Statu</u> :	_ '	ndicators of hydresent.	ric soil and we	tland hydrolog	y must be
	Total Cover:								
% Bare Ground in Herb Stratum:	% Cover	of Biotic Cru	ust:			lydrophytic Veg resent?	jetation	Yes	No✓
Remarks:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								

Profile Des	scription: (Describe to	o the depti	h needed to de	ocument the ir	ndicator or c	onfirm t	he absence	of indicators.)		
	Matrix	·		Redox Featu				,		
Depth	Color (moist)	<u>%</u>	Color (mois		Type ¹	Loc ²	<u>Texture</u>		Remarks	
(inches) 0-6	10 YR 3/2	70 50	COIOI (IIIOIS	<u>70</u>	туре	LUC	Sand	Sandy partic		
0-6	10 TR 3/2	50					silt	Sandy partic	162	
0-6	5 YR 7/4	50					Sand silt	Sandy partic	les	
¹ Typo: C-C	oncentration, D=Depleti	ion PM_P	oducod Matrix	² Location:	DI _Doro Lini	na PC-	Poot Channe	I M-Matrix		
	Indicators: (Applicable							r Problematic	Hydric Soils	3:
Histosol				edox (S5)				ck (A9) (LRR C	-	
	pipedon (A2)			Matrix (S6)				ck (A10) (LRR	,	
Black Hi	istic (A3)		Loamy N	Mucky Mineral (I	F1)		Reduced	Vertic (F18)		
	en Sulfide (A4)			Gleyed Matrix (F	2)		Red Par	ent Material (TF	⁻ 2)	
	d Layers (A5) (LRR C)			d Matrix (F3)			Other (E	xplain in Rema	rks)	
	uck (A9) (LRR D)			ark Surface (F6						
-	d Below Dark Surface (A	A11)		Dark Surface						
	ark Surface (A12)			epressions (F8)		31	Charatana da a Caraca	and a Constant	
	Mucky Mineral (S1)		Vernal P	00IS (F9)				hydrophytic ve	-	
	Gleyed Matrix (S4) Layer (if present):						welland n	ydrology must l	be present.	
	Layer (ii present).									
Type:	ali a a N									
Depth (in	CDASI.					11		10	V	NI-
	G1103).					Hyd	ric Soil Pres	ent?	Yes	No _✓
Remarks:	01103).					Hyd	ric Soil Pres	ent?	Yes	No _✓
Remarks:						Hyd	ric Soil Pres	ent?	Yes	No _✓
Remarks:	olesj.					Hyd	ric Soil Pres	ent?	Yes	No _√
						Hyd	ric Soil Pres	ent?	Yes	No _✓
HYDROLO	GY					Hyd				
HYDROLO Wetland Hy	GY drology Indicators:	or is sufficie	unt)			Hyd	Second	ary Indicators (:	2 or more req	
HYDROLO Wetland Hyderimary India	GY drology Indicators: cators (any one indicato	or is sufficie				Hyd	Second Wa	ary Indicators (: ter Marks (B1)	2 or more req (Riverine)	uired)
HYDROLO Wetland Hyden Primary India Surface	GY drology Indicators: cators (any one indicato Water (A1)	or is sufficie	Salt Cri	ust (B11)		Hyd	Second Wa Sec	ary Indicators (: ter Marks (B1) diment Deposits	2 or more req (Riverine) 5 (B2) (Riverin	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa	drology Indicators: cators (any one indicator Water (A1) ater Table (A2)	or is sufficie	Salt Cru Biotic C	Crust (B12)		Hyd	<u>Second</u> Wa Sec Drit	ary Indicators (ter Marks (B1) diment Deposits t Deposits (B3)	2 or more req (Riverine) s (B2) (Riverin (Riverine)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatio	drology Indicators: cators (any one indicator Water (A1) ater Table (A2) on (A3)		Salt Cru Biotic C	Crust (B12) : Invertebrates (Hyd	Second Wa Sec Drit	ary Indicators (: ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern:	2 or more required (Riverine) s (B2) (Riverine) s (Riverine) s (B10)	uired)
HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M	drology Indicators: cators (any one indicator Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriverine	e)	Salt Cru Biotic C Aquatic Hydrog	Crust (B12) Invertebrates (en Sulfide Odo	r (C1)		Second — Wa — Sec — Drit ✓ Dr — Dry	ary Indicators (: ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water	2 or more required (Riverine) is (B2) (Riverine) is (B10)	uired)
HYDROLO Wetland Hyden Primary Indice Surface High Water Mater Mat	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonri	e) verine)	Salt Cru Biotic C Aquatic Hydrog Oxidize	Crust (B12) c Invertebrates (en Sulfide Odo ed Rhizosphere	r (C1) s along Living		Second _	ary Indicators (ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface	2 or more required (Riverine) (Riverine) (Riverine) (Riverine) (Riverine) (B10) (Table (C2)) (C7)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonriverine	e) verine)	Salt Cru Biotic C Aquatic Hydrog Oxidize Presen	Crust (B12) Invertebrates (en Sulfide Odoled Rhizospheres ce of Reduced	r (C1) s along Living Iron (C4)	g Roots (Second _ Wa _ Sec _ Drit _ Dr _ Dry C3) _ Thi _ Cra	ary Indicators (ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (2 or more requirements (Riverine) & (B2) (Riverine) & (Riverine) & (B10) & (Table (C2)) & (C7) & (C8)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriverine int Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6)	e) verine) e)	Salt Cru Biotic C Aquatic Hydrog Oxidize Presen Recent	Crust (B12) Invertebrates (en Sulfide Odored Rhizospheres ce of Reduced Iron Reduction	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _ Wa _ Sec _ Drif _ Dr _ Dry C3) _ Thi _ Cra _ Sat	ary Indicators (: ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) if C8) on Aerial Image	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati	drology Indicators: cators (any one indicator) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Ima	e) verine) e)	Salt Cru Biotic C Aquatic Hydrog Oxidize Presen Recent	Crust (B12) Invertebrates (en Sulfide Odoled Rhizospheres ce of Reduced	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Patterna -Season Water on Muck Surface ayfish Burrows (auration Visible (allow Aquitard (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriverine int Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6)	e) verine) e)	Salt Cru Biotic C Aquatic Hydrog Oxidize Presen Recent	Crust (B12) Invertebrates (en Sulfide Odored Rhizospheres ce of Reduced Iron Reduction	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (: ter Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine) nt Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagestained Leaves (B9)	e) verine) e)	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (Crust (B12) c Invertebrates (en Sulfide Odored Rhizospheres ce of Reduced Iron Reduction Explain in Remarks	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Patterna -Season Water on Muck Surface ayfish Burrows (auration Visible (allow Aquitard (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati Water-S	drology Indicators: cators (any one indicator) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Image stained Leaves (B9)	e) verine) e)	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (Crust (B12) Invertebrates (en Sulfide Odored Rhizospheres ce of Reduced Iron Reduction	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Patterna -Season Water on Muck Surface ayfish Burrows (auration Visible (allow Aquitard (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser	drology Indicators: cators (any one indicator) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonriverine posits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima stained Leaves (B9) evations: are Present?	verine) e) agery (B7)	Salt Cru Biotic C Aquatic Hydrog Oxidize Presen Recent Other (I	Crust (B12) c Invertebrates (en Sulfide Odored Rhizospheres ce of Reduced Iron Reduction Explain in Remarks	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Patterna -Season Water on Muck Surface ayfish Burrows (auration Visible (allow Aquitard (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wat	drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriverine int Deposits (B2) (Nonriverine posits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima stained Leaves (B9) vations: ter Present?	verine) e) agery (B7)	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (i	Crust (B12) c Invertebrates (en Sulfide Odoed Rhizospheres ce of Reduced Iron Reduction Explain in Remarks	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (uration Visible (allow Aquitard (C-Neutral Test	2 or more required (Riverine) (Ri	uired)
HYDROLO Wetland Hyde Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundatia Water-S Field Obser Surface Wate Water Table	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine nt Deposits (B2) (Nonriverine posits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima stained Leaves (B9) evations: ter Present? Present?	verine) e) agery (B7) Yes Yes	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (i	Crust (B12) c Invertebrates (en Sulfide Odoed Rhizospheres ce of Reduced Iron Reduction Explain in Remarkable (inches): epth (inches):	r (C1) s along Living Iron (C4) in Plowed So	g Roots (Second _	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Patterna -Season Water on Muck Surface ayfish Burrows (auration Visible (allow Aquitard (2 or more required (Riverine) is (B2) (Riverine) is (B10) if Table (C2) is (C7) C8) on Aerial Image D3)	uired)
HYDROLO Wetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes cap	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine nt Deposits (B2) (Nonriverine posits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima stained Leaves (B9) evations: ter Present? Present?	verine) e) agery (B7) Yes Yes Yes	Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent Other (I	Crust (B12) c Invertebrates (en Sulfide Odoed Rhizospheres ce of Reduced Iron Reduction Explain in Remiserable (inches): epth (inches): epth (inches):	r (C1) s along Living Iron (C4) in Plowed So arks)	g Roots (poils (C6)	Second — Wa — Second — Second — Drit — Drit — Dry C3) — Thi — Cra — Sat — Sha — FAC	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (uration Visible (allow Aquitard (C-Neutral Test	2 or more required (Riverine) (Ri	uired) ne) gery (C9)
HYDROLO Wetland Hyde Primary Indice — High Water Mand Mandati — Water Mandati — Water Sedimer — Drift Dep — Surface — Inundati — Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Re	drology Indicators: cators (any one indicator) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverine int Deposits (B2) (Nonriverine posits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Image stained Leaves (B9) evations: are Present? Present? Present? pillary fringe)	verine) e) agery (B7) Yes Yes Yes Yes auge, monit	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (I	Crust (B12) c Invertebrates (en Sulfide Odoed Rhizospheres ce of Reduced Iron Reduction Explain in Remarkable (inches): epth (inches): epth (inches): ial photos, previous Invertebrates (inches):	r (C1) s along Living lron (C4) in Plowed So arks)	y Roots (poils (C6) Wet pons), if a	Second — Wa — Second — Second — Drit — Drit — Dry C3) — Thi — Cra — Sat — Sha — FAC	ary Indicators (ater Marks (B1) diment Deposits t Deposits (B3) ainage Pattern -Season Water n Muck Surface yfish Burrows (uration Visible (allow Aquitard (C-Neutral Test	2 or more required (Riverine) (Ri	uired) ne) gery (C9)

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi					State	County: Pala, San : CA on, Township, Ran		Sampling Date Sampling Poin 8, Township 9	t: DS-5
Landform (hillslope, terrace, etc.): terrace Subregion (LRR): LRR C Soil Map Unit Name: Ramona Sandy Lot Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS – Atta	pam slope RaB ne site typical fo drologys drologyn	Lat: 33° r this time of ignificantly of aturally prob	22'16.74 f year? disturbed	Yes ✔ ? No /	g: 117° No Are "No (If n	P5'23.292"W prmal Circumstanceeded, explain an	(If no, exes" present? y answers in l	NAD83 ssification: Up kplain in Rema Yes ✓ N Remarks.)	rks.) No
Hydrophytic Vegetation Present?	Yes	No ✓		,g po			,po		00, 010.
Hydric Soil Present?	Yes	No √		lo the Com	الممامم	\			
Wetland Hydrology Present?	Yes	No ✓		Is the Sam within a W	•		ES	NO ✓	
Remarks: Sample point is considered a									
VEGETATION									
/LOCIATION		Absolute	Domino	unt India	otor	Dominance Test	worksheet:		
Tree Stratum (Use scientific names.) 1. 2.		Absolute <u>% Cover</u>	Domina Species			Number of Domin That Are OBL, FA	ant Species	0	(A)
3. 4.						Total Number of E Species Across A		0	(B)
	Total Cover:	Absolute	Domina			Percent of Domin That Are OBL, FA		0	(A/B)
Sapling/Shrub Stratum 1. 2.		% Cover	Species	s? Statu	<u>IS</u>	Prevalence Index Total % (Cover of:	<u>Mul</u>	tiply by:
3.						OBL species	0	x 1 =	
4. 5.						FACW species	0	x 2 =	
	Total Cover:					FAC species	0	x 3 =	
		Absolute	Domina	ınt Indica	ator	FACU species	0	x 4 =	
Herb Stratum		% Cover	Species			UPL species	0	x 5 =	(D)
Calystegia macrostegia		20	N	NI		Column Totals:	0	(A)	(B)
2. Bromus diandrus3.		50	Υ	NI		Prevalence Index			
4.						Hydrophytic Veg		ators:	
5. 6.						Dominance T Prevalence Ir			
7. 8.	Tatal Ossas					Morphologica	al Adaptations	1 (Provide supparate she	
	Total Cover:					Problematic I	-lydrophytic V	egetation¹ (Exp	olain)
Woody Vine Stratum 1. 2.		Absolute <u>% Cover</u>	Domina Species			¹ Indicators of hydrosent.	ric soil and we	etland hydrolog	y must be
	Total Cover:								
% Bare Ground in Herb Stratum:		of Biotic Cru	ust:			Hydrophytic Veg Present?	jetation	Yes	No <u></u> ✓
Remarks:									

SOIL									Sampiii	ng Point: DS-	,	
Profile Des	cription: (Describe	to the depth	needed to d	locument the ir	dicator or	confi	rm the abse	ence o	indicators.)			
	Matrix			Redox Featu	res							
Depth		0/	Color (moi	at) 0/		Loc	2 Tout			Domorko		
(inches)	Color (moist)	<u>%</u>	Color (moi	<u>st)</u> <u>%</u>	Type ¹	Loc				Remarks		
0-8	10 YR 3/2	100					Silt Ioam		Upland data	station		
							IOaiii					
¹ Type: C=Co	oncentration, D=Depl	etion. RM=Re	educed Matrix	. ² Location:	PL=Pore Li	inina. F	RC=Root Ch	nannel.	M=Matrix.			
	ndicators: (Applica									Hydric Soils	3.	
Histosol	(A1)		Sandy F	Redox (S5)			1 ci	m Mucl	(A9) (LRR C	;)		
	ipedon (A2)			d Matrix (S6)					(A10) (LRR	,		
Black His				Mucky Mineral (I	- 1)				/ertic (F18)	,		
	n Sulfide (A4)			Gleyed Matrix (F					nt Material (TF	-2)		
	Layers (A5) (LRR C	;)		d Matrix (F3)	,				olain in Rema	,		
	ck (A9) (LRR D)		Redox [Dark Surface (F6	6)		<u>—</u>			ŕ		
Depleted	Below Dark Surface	e (A11)	Deplete	d Dark Surface	(F7)							
Thick Da	rk Surface (A12)		Redox [Depressions (F8)							
Sandy M	lucky Mineral (S1)		Vernal F	Pools (F9)			3Indicate	ors of h	ydrophytic ve	getation and		
Sandy G	leyed Matrix (S4)						wetla	and hyd	drology must b	oe present.		
Restrictive L	ayer (if present):											
Type:												
Depth (inc	ches):					l i	Hydric Soil	Prese	nt?	Yes	No	1
Remarks:	,											
Remarks.												
HYDROLO												
Wetland Hyd	drology Indicators:						<u>Se</u>	condar	y Indicators (2	2 or more requ	uired)	
Primary Indic	ators (any one indica	ator is sufficie	nt)					Wate	r Marks (B1)	(Riverine)		
Surface	Water (A1)		Salt Cı	rust (B11)				Sedir	ment Deposits	(B2) (Riverin	ne)	
High Wa	ter Table (A2)		Biotic (Crust (B12)					Deposits (B3)			
Saturation				c Invertebrates (B13)			_	age Patterns	,		
	arks (B1) (Nonriveri	ne)		gen Sulfide Odo					Season Water			
· · · · · · · · · · · · · · · · · · ·	it Deposits (B2) (Nor	•		ed Rhizospheres		na Roa	nts (C3)		Muck Surface	, ,		
	osits (B3) (Nonriver			nce of Reduced	_	ng rtot	010 (00)		ish Burrows (
		ine)			. ,	C-:I- /					(00)	`
	Soil Cracks (B6)	(5-1)		t Iron Reduction		Solis (C6)			on Aerial Imaç	jery (C9))
· · · · · · · · · · · · · · · · · · ·	on Visible on Aerial Ir	magery (B7)	Other	(Explain in Rema	arks)				ow Aquitard (
Water-St	tained Leaves (B9)							_ FAC-	Neutral Test	(D5)		
Field Observ	vations:											
Surface Water	er Present?	Yes	No ✓ □	Depth (inches):								
Water Table	Present?	Yes	No ✓ □	Depth (inches):								
Saturation Pr	esent?	Yes		Depth (inches):								
(includes cap		- -		, . (1	Wetland Hy	drolog	y Present?	Yes	No_	✓
` .	corded Data (stream	gauge, monit	oring well, ae	rial photos, prev	ious inspec	ctions),	if available:	•				
			_			-						
Remarks: Th	is point was taken in	an upland are	ea outside of	the channel.								

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch?					ty/County: Pala/San ate: CA	Diego	Sampling Date: 5 Aug 10 Sampling Point: DS-6
Investigator(s): Callie Ford, Vipul Joshi				Se	ection, Township, Ra	ange: S28 T9S	S R2W
Landform (hillslope, terrace, etc.): Stream	ambed	Local re	elief (cond	cave, convex, r	,	Slope (%): 0-5%
Subregion (LRR): LRR C			°22'14.45	3"N Long: 1	17°5'51.537"W		NAD83
Soil Map Unit Name: Las Posas stony	·						assification: Riverine solidated shore-vegetated)
Are climatic / hydrologic conditions on the			•		No	•	explain in Remarks.)
Are Vegetation, Soil, or Hy					"Normal Circumstar	•	
Are Vegetation, Soil, or Hy	/drologyr	naturally pro	blematic?	No ((If needed, explain a	iny answers in	Remarks.)
SUMMARY OF FINDINGS – Att	ach site ma	p showin	g samp	oling point	locations, trans	sects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes ✓	No					
Hydric Soil Present	Yes ✓	No		Is the Sample			
Wetland Hydrology Present?	Yes✓	No		within a Wetla	and?	YES	NO
Remarks: Sample point has potential to	be considered	a ACOE/RV	VQCB we	tland, depende	ent on a Significant I	Nexus Analysi	s; it is considered a CDFG
Wetland.							
VEGETATION (Use scientific name	s.)						
		Absolute	Domina	nt Indicator	Dominance Tes	st worksheet:	
Tree Stratum Plot size: 10'x10'		% Cover	Species		Number of Dom	inant Species	
1.					That Are OBL, F	FACW, or FAC	: <u> </u>
2. 3.					Total Number of	Dominant	
3. 4.					Species Across		1 (B)
	Total Cover:				Percent of Domi	inant Spacies	
					That Are OBL, F		: <u>100</u> (A/B)
		Absolute % Cover	Domina				
Sapling/Shrub Stratum 1. Tamarix ramosissima		<u>/// Cover</u>	Species N	s? Status FACW	Prevalence Ind	ex worksneer Cover of:	:: Multiply by:
Baccharis salicifolia		30	Y	FACW	OBL species		x 1 =
3.					FACW species	44	x 2 = 88
4. 5.							
	Total Cover:				FAC species	6	x 3 = 18
					FACU species		x 4 =
Herb Stratum		Absolute % Cover	Domina Species		UPL species		x 5 =
1. Picris echioides		2	N	NI	Column Totals:	50	(A) 106 (B)
2. Cirsium vulgare		2	N	FAC	Prevalence Inde	ex = B/A = 2.	<u>12</u>
Xanthium strumarium Polypogon monspeliensis		2	N N	FAC FACW+	Hydrophytic Ve	egetation Indi	cators:
Artemisia douglasiana		2	N	FAC	✓ Dominand	ce Test is >50°	%
6. Rumex crispus		2	N	FACW	✓ Prevalence	e Index is ≤3.	01
7. 8.							s ¹ (Provide supporting a separate sheet)
	Total Cover:				Problemation	: Hydrophytic	Vegetation ¹ (Explain)
		Absolute	Domina				
Woody Vine Stratum 1.		% Cover	Species	s? Status	¹ Indicators of hy present.	dric soil and w	vetland hydrology must be
2.							
	Total Cover:				Hydrophytic Ve	egetation	
% Bare Ground in Herb Stratum: 60%		of Biotic Cr			Present?		Yes ✓ No
Remarks: surveyed in a stream bed, so	bare ground st	ratum was a	bout 60%	ò			

Profile Descri	ption: (Describe	to the dept	h needed to	o documen	t the in	dicator or c	onfirm t	he absence of indica	tors.)	
	<u>Matrix</u>			Redox	(Featur	res_				
	Color (moist) n/a 0 YR 2/1	<u>%</u> 100 100	Color (m		<u>%</u>	Type ¹	Loc ²	<u>Texture</u> Rock Silt	<u>Remarks</u>	
1T	antostica D. Dord	ovier DM D			- dia [Ol. Dave Lini	PC	Door Channel M. Mark	at	
	entration, D≡Depie icators: (Applica						_	Root Channel, M=Mate Indicators for Proble		
Histosol (A1		bic to all El		y Redox (St		,		1 cm Muck (A9) (I	•	
Histic Epipe	,			ed Matrix (S	,			2 cm Muck (A10)		
Black Histic				y Mucky Mi		-1)		Reduced Vertic (F		
Hydrogen S				y Gleyed M				Red Parent Mater		
	ayers (A5) (LRR C)	Deple	eted Matrix ((F3)			Other (Explain in	Remarks)	
1 cm Muck				x Dark Surfa	•	•				
	elow Dark Surface	(A11)		ted Dark Su						
Thick Dark				x Depressio				31		
Sandy Mucl	ed Matrix (S4)		verna	al Pools (F9))			³ Indicators of hydrophy wetland hydrology		
Restrictive Lay								wetiand nydrology	must be present.	
Type:	o. (p. ooo).									
Depth (inche	e).						Hyd	ric Soil Present?	Yes ✓ N	0
Remarks:							,			
HYDROLOGY										
Wetland Hydro	logy Indicators:							Secondary Indica	ators (2 or more required))
	ors (any one indica	tor is sufficie	ent)					_ Water Marks	(B1) (Riverine)	
Surface Wa				Crust (B11)					eposits (B2) (Riverine)	
High Water	Table (A2)		Bioti	c Crust (B1	2)			Drift Deposit	s (B3) (Riverine)	
Saturation (,			atic Inverteb	•	•		✓ Drainage P.		
	s (B1) (Nonriveri i			rogen Sulfid					Water Table (C2)	
	eposits (B2) (Non				•	along Living	g Roots (, 		
	ts (B3) (Nonriveri	ne)		sence of Re		` '	" (00)	Crayfish Bur	` '	(00)
Surface Soi		(DZ)				in Plowed S	oils (C6)		isible on Aerial Imagery ((C9)
· 	Visible on Aerial In	nagery (B7)	Otne	er (Explain i	n Kema	arks)		Shallow Aqu		
	ed Leaves (B9)							FAC-Neutral	Test (D5)	
Field Observat										
Surface Water F		Yes	No ✓	Depth (inc	,					
Water Table Pre		Yes	No ✓	Depth (inc	,					
Saturation Preso (includes capilla Describe Record		Yes gauge, monit	No ✓ toring well, a	Depth (inc		ous inspection		land Hydrology Presovailable:	ent? Yes ✓ N	No
	ice water has beer he delineation, prir						ring focu	ised species surveys a	and therefore, although n	ot
This sample poi	nt was taken in the	e bottom of th	he channel.							

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi				Sta	ty/County: Pala, San Dieg ate: CA ection, Township, Range:	Sampling	g Date: 5 Au g Point: DS- ship 9S, Ra	-7
Landform (hillslope, terrace, etc.): terral Subregion (LRR): LRR C Soil Map Unit Name: Las Posas stony: Are climatic / hydrologic conditions on the Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS — Att.	fine sandy loam he site typical fo rdrologys	Lat: 33° or this time of significantly on the control of the contr	°22'14.588" of year? disturbed? blematic?	ve, convex, r N Long: 1 Yes ✓ N No Are No (none): none 17°5'51.828"W No "Normal Circumstances" If needed, explain any an	swers in Remarks	n: Upland Remarks.) ✓ No	oto
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No ✓ No ✓	Is	s the Sample	ed Area and? YES	NO	✓	
Remarks: Sample point is not considered by the sample point is not con	ed a waters of th	ne U.S. base	ed on lack o	n hydrology a	and hydric soils; it is consi	gered a CDFG W	etland.	
Tree Stratum (Plot size: 20' x 20'.) 1. Quercus agrifolia 2. 3. 4.		Absolute % Cover 50	Dominant Species? Y		Number of Dominant ST That Are OBL, FACW Total Number of Dominant Species Across All Str	Species , or FAC:	,	A) B)
Sapling/Shrub Stratum 1. 2. 3. 4. 5.	Total Cover:	Absolute % Cover	Dominant Species?		Prevalence Index wo Total % Cove OBL species FACW species	or FAC: orksheet: er of: x	Multiply b 1 = 2 =	A/B) by:
Herb Stratum 1. Bromus diandrus 2. 3. 4.	Total Cover:	Absolute % Cover 70	Dominant Species? Y		FAC species FACU species UPL species Column Totals: Prevalence Index = B Hydrophytic Vegetat	x x (A)	3 = 4 = 5 =	(B)
5. 6. 7. 8. Woody Vine Stratum	Total Cover:	Absolute % Cover	Dominant Species?		Problematic Hydro	is ≤3.0 ¹ aptations¹ (Provid ks or on a separat ophytic Vegetatior	te sheet) n1 (Explain)	
1. 2. % Bare Ground in Herb Stratum: 0	Total Cover: % Cover	of Biotic Cr	rust:		¹Indicators of hydric so present. Hydrophytic Vegetat Present?			ist be
Remarks: lots of leaves covering the gro	ound, so no bar	e ground						

SOIL								Sampling Point: DS-7
Profile Des	cription: (Describe	to the depth	needed to docu	ıment the in	dicator or	confirm	the absence of indi	cators.)
	Matrix		F	Redox Featur	es			
Depth		0/	_			. 2	.	5 .
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-6	7.5 YR 3/2	100					Sandy	
							silt	
	oncentration, D=Depl					ning, RC	=Root Channel, M=M	
Hydric Soil I	ndicators: (Applica	ble to all LR	Rs, unless other	wise noted.)		Indicators for Prob	olematic Hydric Soils³:
Histosol	(A1)		Sandy Redo	ox (S5)			1 cm Muck (A9)	(LRR C)
Histic Ep	pipedon (A2)		Stripped Ma	atrix (S6)			2 cm Muck (A10	0) (LRR B)
Black His	stic (A3)		Loamy Muc	ky Mineral (F	1)		Reduced Vertic	(F18)
	n Sulfide (A4)			ed Matrix (F2			Red Parent Ma	
Stratified	Layers (A5) (LRR C	3)	Depleted Ma	atrix (F3)			Other (Explain i	n Remarks)
	ck (A9) (LRR D)			Surface (F6))		•	
	Below Dark Surface	(A11)		ark Surface (l				
	ark Surface (A12)	, ,		ressions (F8)	,			
Sandy M	lucky Mineral (S1)		Vernal Pool				³ Indicators of hydror	ohytic vegetation and
	leyed Matrix (S4)			` ,				yy must be present.
	ayer (if present):						, ,	
Type:	, ,							
	-h \.						uluia Cail Duagauto	Van Na /
Depth (inc	nes):					ну	dric Soil Present?	Yes No _✓
Remarks:								
HYDROLO	GY							
							0	(0, -1, -1, -1, -1, -1, -1, -1, -1, -1, -1
-	drology Indicators:						-	icators (2 or more required)
Primary Indic	ators (any one indica	<u>ator is sufficie</u>	nt)				Water Mar	ks (B1) (Riverine)
Surface	Water (A1)		Salt Crust	(B11)			Sediment	Deposits (B2) (Riverine)
High Wa	ter Table (A2)		Biotic Crus	st (B12)			Drift Depos	sits (B3) (Riverine)
Saturation	on (A3)		Aquatic Inv	vertebrates (E	313)		Drainage F	Patterns (B10)
· 	arks (B1) (Nonriveri	ne)		Sulfide Odor				on Water Table (C2)
	nt Deposits (B2) (Nor		-	Rhizospheres		na Roots		Surface (C7)
				of Reduced I	_	ig rtoote		urrows (C8)
	oosits (B3) (Nonriver	ine)			` '			, ,
	Soil Cracks (B6)			n Reduction		Soils (Ce		Visible on Aerial Imagery (C9)
Inundation	on Visible on Aerial Ir	magery (B7)	Other (Exp	olain in Rema	rks)		Shallow A	quitard (D3)
Water-St	tained Leaves (B9)						FAC-Neuti	ral Test (D5)
Field Observ	vations:							
Surface Wate	er Present?	Yes	No ✓ Dept	h (inches):				
Water Table		Yes		h (inches):				
Saturation Pr		Yes	No ✓ Dept	h (inches):		14/	tland Hudralami Par	esent? Yes No ✓
(includes cap							tland Hydrology Pre	esent? Yes No_✓
Describe Red	corded Data (stream	gauge, monit	oring well, aerial p	onotos, previ	ous inspect	ions), if	available:	
Remarks: Th	is sample point was t	aken nast the	e top of bank of th	e stream cha	nnel The I	nank is a	approximately 3-5' abo	ove the channel
Romano. III	io sumpio point was i	anon past the		o oncam one		Jan 110 C	approximatory 0-0 abo	TO the original

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch?					City/County State: CA	: Pala, San	Diego	Sampling Da		•
Investigator(s): Callie Ford, Vipul Joshi						wnship, Ra	nge: Section 2	28, Township		
Landform (hillslope, terrace, etc.): terrace Subregion (LRR): LRR C		Lat: 33°	elief (cond 22'13.75	•	x, none): Noi g: 117°5'51.4			NAD83	nland	
Soil Map Unit Name: Las Posas stony f Are climatic / hydrologic conditions on th	•		f voor?	Voc 4	No			assification: u	•	
, ,	,,		•	Yes ✓ I? No /		`ircumetan	(II 110, e ces" present?	explain in Rem ' Yes √	No	
Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy							ny answers in		NO	
SUMMARY OF FINDINGS – Atta					•		•	,	ıres,	etc.
Hydrophytic Vegetation Present?	Yes ✔	No		<u> </u>		<u> </u>	<u> </u>			
Hydric Soil Present?	Yes	No ✓		Is the Sam	pled Area					
Wetland Hydrology Present?	Yes	No ✓		within a W	etland?	,	YES	NO ✓		
Remarks: Sample point is not considere	d a waters of th		THE OTHER	, or frydroid	gy and flydic	, 30113, 11 13	considered a	ODI O Wellan	<u></u>	
VEGETATION										
Tree Stratum (Plot size 20' x 20') 1. Platanus racemosa 2. Schinus molle		Absolute % Cover 30 10	Domina Species Y N		S Numb	er of Domi	t worksheet: nant Species ACW, or FAC			(A)
3. 4.		10	IN	INI	II	Number of es Across <i>i</i>		2		(B)
	Total Cover:	Absolute	Domina	ant Indica	That A		nant Species ACW, or FAC	:0		(A/B)
Sapling/Shrub Stratum 1.		% Cover	Specie:	s? Statu	S Preva		ex worksheet Cover of:		ultiply l	by:
2. 3.					OBL s	species		x 1 =		
4.					FACV	V species		x 2 =		
5.					FAC s	species	5	x 3 =		15
	Total Cover:				FACU	l species		x 4 =		
		Absolute			01 6 3	species		x 5 =		
Herb Stratum 1. Bromus diandrus		<u>% Cover</u> 60	Specie:	<u>s?</u> <u>Statu</u> NI		nn Totals:	5	(A)	15	(B)
Cirsium vulgare		5	N	FAC	Preva	lence Inde	x = B/A = <u>3</u>	.0		
3. 4.					Hydro	phytic Ve	getation Indi	cators:		-
5.					D	ominance	Test is >50%			
6. 7.					<u> ✓</u> I	Prevalence	Index is ≤3.0	1		
8.	Total Cover:				M	lorphologic data in R	al Adaptations emarks or on	s ¹ (Provide su a separate sh	pportin eet)	ıg
	Total Cover.					roblematic	Hydrophytic \	/egetation ¹ (E	xplain))
Woody Vine Stratum 1. 2.		Absolute % Cover	Domina Species	_	s .		dric soil and w	etland hydrolo	ogy mu	ıst be
	Total Cover:									
% Bare Ground in Herb Stratum:		of Biotic Cr	ust:		Hydro Prese	ophytic Ve ent?	getation	Yes ✓	No	0
Remarks:									-	

SUIL								•) Point: DS-8	
Profile Des	cription: (Describe	to the depth	n needed to doci	ument the in	dicator or o	confirm	the absence	of indicators.)		
	<u>Matrix</u>		<u> </u>	Redox Feature	<u>es</u>					
Depth	Color (moist)	0/	Color (moist)	0/	Type ¹	Loc ²	Texture		Remarks	
(inches)		<u>%</u>	Color (Illoist)	<u>%</u>	Type	LUC		_		
0-6	7.5 YR 3/2	100					Silt- sand	Uniform throu	ghout	
							Sand			
¹ Type: C=Co	oncentration, D=Deple	etion, RM=Re	educed Matrix.	² Location: P	L=Pore Lin	ing, RC	C=Root Channe	l, M=Matrix.		
	ndicators: (Applica							or Problematic I	lydric Soils ³	:
Histosol	(A1)		Sandy Red	ox (S5)			1 cm Mu	ick (A9) (LRR C)		
	pipedon (A2)		Stripped Ma	. ,			· · · · · · · · · · · · · · · · · · ·	ick (A10) (LRR E	5)	
Black His				ky Mineral (F	1)			d Vertic (F18)		
	n Sulfide (A4)			yed Matrix (F2				ent Material (TF2	2)	
	Layers (A5) (LRR C)	Depleted M					xplain in Remark		
1 cm Mu	ck (A9) (LRR D)		Redox Dark	Surface (F6))					
Depleted	Below Dark Surface	(A11)	Depleted D	ark Surface (F	- 7)					
Thick Da	ark Surface (A12)		Redox Dep	ressions (F8)						
Sandy M	lucky Mineral (S1)		Vernal Pool	ls (F9)			³ Indicators of	f hydrophytic veg	etation and	
Sandy G	leyed Matrix (S4)						wetland h	ydrology must be	e present.	
Restrictive L	ayer (if present):									
Type:										
Depth (inc	ches):					Hy	dric Soil Pres	ent?	Yes	No _✓
Remarks:	·									
	0V									
HYDROLO										
Wetland Hyd	drology Indicators:						Second	ary Indicators (2	or more requ	<u>ired)</u>
Primary Indic	ators (any one indica	tor is sufficie	nt)				Wa	ter Marks (B1) (F	Riverine)	
Surface	Water (A1)		Salt Crust	(B11)			Sec	diment Deposits	(B2) (Riverin	e)
High Wa	ter Table (A2)		Biotic Crus	st (B12)			Dri	t Deposits (B3) (Riverine)	
Saturation	on (A3)		Aquatic In	vertebrates (E	313)		Dra	inage Patterns (B10)	
	arks (B1) (Nonriveri	ne)		Sulfide Odor				-Season Water		
	nt Deposits (B2) (Non			Rhizospheres		a Roots		n Muck Surface		
	oosits (B3) (Nonriver i			of Reduced Ir	•	9		yfish Burrows (C		
	Soil Cracks (B6)			n Reduction i		Soile (C		uration Visible o		any (CQ)
	on Visible on Aerial In	nagery (R7)		olain in Rema		0013 (01		allow Aquitard (D		ory (OO)
	tained Leaves (B9)	nagery (br)	Other (EX	Jiaiii iii Neilia	iks)			C-Neutral Test (E	•	
<u>'</u>						1		C-Neutral Test (L	,3)	
Field Observ										
Surface Water	er Present?	Yes	No ✓ Dept	th (inches):						
Water Table	Present?	Yes	No ✓ Dept	th (inches):						
Saturation Pr	resent?	Yes	No ✓ Dept	th (inches):						
(includes cap	oillary fringe)		·	. ,		W	etland Hydrol	ogy Present?	Yes	No_✓
Describe Red	corded Data (stream	gauge, monit	oring well, aerial	photos, previo	ous inspecti	ions), if	available:			
Remarks: Th	is sample point was t	aken past the	e top of bank of th	ne stream cha	nnel. The b	ank is	approximately 3	3-5' above the ch	annel.	

Project/Site: Warner Ranch				C	City/County: Pala, San Dieg	jo Samplir	ng Date: 5 A	ug 10
Applicant/Owner: Warner Ranch?				S	State: CA	Samplir	ng Point: DS	-9
Investigator(s): Callie Ford, Vipul Joshi				S	Section, Township, Range:	S22 T9S R2W		
Landform (hillslope, terrace, etc.): stream	ambed	Local re	elief (cond	cave, convex,	none): None	Slope (%): 0		
Subregion (LRR): LRR C		Lat: 33°	22'35.35	9"N Long:	117°4'55.65"W	Datum: NAD83	3	
Soil Map Unit Name: Visalia sandy loan	m					NWI classification unvegetated str		;
Are climatic / hydrologic conditions on the	,,		•	Yes ✓	No	(If no, explain in	Remarks.)	
Are Vegetation, Soil, or Hy		-			e "Normal Circumstances"			
Are Vegetation, Soil, or Hy	drologyr	naturally prol	blematic?	? No	(If needed, explain any an	swers in Remark	s.)	
SUMMARY OF FINDINGS – Att	ach site ma	o showin	g samp	oling point	locations, transects	s, important f	features,	etc.
Hydrophytic Vegetation Present?	Yes	No ✓						
Hydric Soil Present?	Yes	No ✓		Is the Sampl	led Area			
Wetland Hydrology Present?	Yes✓	No		within a Wet	land? YES	NC) 🗸	
Remarks: Sample point has potential to	be considered	a ACOE/RW	/QCB/CD	FG/County N	lon-wetland Waters.			
/EGETATION								
		Absolute	Domina		Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 10' x 20')		% Cover	Species		Number of Dominant		0	(4)
 Eucalyptus sp . 		5	N	NI	That Are OBL, FACW	, or FAC:	0	(A)
3.					Total Number of Dom		0	(D)
4.					Species Across All St	rata:	0	(B)
	Total Cover:				Percent of Dominant		0	(A /D)
		Absolute	Domina	ant Indicato	That Are OBL, FACW	, or FAC:	0	(A/B)
Sapling/Shrub Stratum		% Cover	Species	s? Status	Prevalence Index wo			
Baccharis salicifolia Salicifolia		1	N	FACW	Total % Cove	<u>er of:</u>	<u>Multiply</u>	<u>oy:</u>
3.					OBL species	2	x 1 =	
4. 5.					FACW species 1	;	x 2 = 2	
5.	T 0				FAC species	2	x 3 =	
	Total Cover:				FACU species		x 4 =	
		Absolute	Domina	• •	or UPL species	:	x 5 =	
Herb Stratum		% Cover	Species		Column Totals:	1 (A)	2	(B)
Bromus diandrus Centaurea melitensis		1	N N	NI NI	Prevalence Index = E	3/A = <u>2</u>		
Avena barbata Hirschfeldia incana		1 1	N N	NI NI	Hydrophytic Vegetat	ion Indicators:		
5.		1	IN	INI	Dominance Test	is >50%		
6.					Prevalence Index	is ≤3.0 ¹		
7. 8.					Morphological Add	laptations ¹ (Provi	de supportin ate sheet)	ıg
	Total Cover:				Problematic Hydr	ophytic Vegetation	on¹ (Explain)	,
		Absolute	Domina		or			
Woody Vine Stratum		% Cover	Species	s? Status	¹ Indicators of hydric s	oil and wetland h	ydrology mu	ıst be
1. 2.					present.			
	Total Cover:				Undrambutia Vagatat	lian.		
% Bare Ground in Herb Stratum: 90	% Cover	of Biotic Cr	ust:		Hydrophytic Vegetat Present?		es No	o 🗸
Remarks:					1			
Open channel bottom								

	ription: (Describe t	to the depth	needed to docu	ment the indicator or o	onfirm th	he absence c	of indicators.)		
				ledox Features			,		
Depth	<u>Matrix</u>		_		2				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> <u>Type'</u>	Loc ²	<u>Texture</u>	<u>Rema</u>	<u>rks</u>	
0-6	10 YR 4/4	33				Sand	Sandy-rock particle	es	
0-6	10 YR 6/2	33				Sand	Sandy-rock particle	es	
0-6	7.5 YR 4/4	33				Sand	Sandy-rock particle	es	
	ncentration, D=Deplet dicators: (Application)			² Location: PL=Pore Lini			, M=Matrix. r Problematic Hydri	c Soils ³ ·	
Histosol (A		ne to an Erc	Sandy Redo				ck (A9) (LRR C)	c cons .	
· — ·	pedon (A2)		Sandy Redd				ck (A10) (LRR B)		
Black Hist			Loamy Muck			Reduced			
Hydrogen				ed Matrix (F2)			nt Material (TF2)		
	Layers (A5) (LRR C)		Depleted Ma		-		plain in Remarks)		
	k (A9) (LRR D)			Surface (F6)	-	- `			
Depleted I	Below Dark Surface ((A11)	Depleted Da	ark Surface (F7)					
	k Surface (A12)		Redox Depr		_				
	icky Mineral (S1)		Vernal Pools	s (F9)	3		hydrophytic vegetatic		
	eyed Matrix (S4)					wetland hy	drology must be pres	sent.	
Restrictive La	yer (if present):								
Type:									
Depth (inch	nes):				Hydr	ric Soil Prese	ent? Yo	es	No <u></u> ✓
Remarks:									
HYDROLOG	SΥ								
	sY ology Indicators:					Seconda	ry Indicators (2 or mo	ore require	ed)
Wetland Hydr		or is sufficier	nt)			· ·	ry Indicators (2 or mo		<u>ed)</u>
Wetland Hydr	ology Indicators: tors (any one indicate	or is sufficier	nt) Salt Crust ((B11)		Wate		ine)	
Wetland Hydr Primary Indica Surface W	ology Indicators: tors (any one indicate	or is sufficier	-	'		Wate	er Marks (B1) (Riveri	ine) 2) (Riverin	
Wetland Hydr Primary Indica Surface W	tology Indicators: tors (any one indicated dater (A1) or Table (A2)	or is sufficier	Salt Crust ('		Wate _ - ⁄ Se Drift	er Marks (B1) (Riveri ediment Deposits (B2	ine) 2) (Riverin rine)	
Wetland Hydr Primary Indica Surface W High Wate Saturation	tology Indicators: tors (any one indicated dater (A1) or Table (A2)		Salt Crust (Biotic Crus Aquatic Inv	t (B12)		Wate Se Drift _ ✓ Dr	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River	ine) (Riverine)	
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mai	tology Indicators: tors (any one indicate /ater (A1) er Table (A2)	e)	Salt Crust (Biotic Crus Aquatic Inv	t (B12) vertebrates (B13)	g Roots ((Wate Se Drift _ ✓ Dr Dry-	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10	ine) (Riverine)	
Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mat Sediment	tology Indicators: tors (any one indicate /ater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering	e) iverine)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen (Oxidized R	t (B12) vertebrates (B13) Sulfide Odor (C1)	g Roots (0	Wate ✓ Sc Drift _ ✓ Dr Dry- C3) Thin	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table	ine) (Riverine)	
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Man Sediment Drift Depo	tology Indicators: tors (any one indicate /ater (A1) er Table (A2) h (A3) rks (B1) (Nonriverine Deposits (B2) (Nonr	e) iverine)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen (Oxidized R Presence (t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Livin		Wate Se Drift Dr Dry- C3) Thin Cray	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mai Sediment Drift Depo Surface Se	tors (any one indicated vater (A1) or Table (A2) or (A3) or (B1) (Nonrivering Deposits (B2) (Nonrivering sits (B3)	e) iverine) ne)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen (Oxidized R Presence (Recent Iror	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4)		Wate Sc Drift _ ✓ Dr Dry- C3) Thin Cray Satu	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rfish Burrows (C8)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mai Sediment Drift Depo Surface Se Inundation	rology Indicators: tors (any one indicate /ater (A1) er Table (A2) n (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine sits (B3) (Nonriverine oil Cracks (B6)	e) iverine) ne)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen (Oxidized R Presence (Recent Iror	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S		Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rfish Burrows (C8) uration Visible on Aeri	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mai Sediment Drift Depo Surface Se Inundation	tors (any one indicate tors (any one indicate tors (any one indicate to take (A1) Table (A2) To (Nonrivering to take (B3) (Nonrivering to take (B6)) To Visible on Aerial Implication (A2)	e) iverine) ne)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen (Oxidized R Presence (Recent Iror	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S		Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveriediment Deposits (B2) Deposits (B3) (Riverialinage Patterns (B10) Season Water Table Muck Surface (C7) If ish Burrows (C8) Irration Visible on Aericlow Aquitard (D3)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta	rology Indicators: tors (any one indicators) rater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering sits (B3) (Nonrivering sits (B3) (Nonrivering oil Cracks (B6) n Visible on Aerial Imined Leaves (B9) ations:	e) iverine) ne) agery (B7)	Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Other (Exp	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S		Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveriediment Deposits (B2) Deposits (B3) (Riverialinage Patterns (B10) Season Water Table Muck Surface (C7) If ish Burrows (C8) Irration Visible on Aericlow Aquitard (D3)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Mai Sediment Drift Depo Surface Si Inundation Water-Sta	rology Indicators: tors (any one indicator) tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering sits (B3) (Nonrivering oil Cracks (B6) n Visible on Aerial Immined Leaves (B9) ations: Present?	e) iverine) ne) agery (B7)	Salt Crust of Biotic Crust of Biotic Crust of Aquatic Inv Hydrogen of Considered Research Presence of Considered Recent Iron Other (Exp	t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks)		Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveriediment Deposits (B2) Deposits (B3) (Riverialinage Patterns (B10) Season Water Table Muck Surface (C7) If ish Burrows (C8) Irration Visible on Aericlow Aquitard (D3)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Mai Sediment Drift Depo Surface So Inundation Water-Sta Field Observat Surface Water	rology Indicators: tors (any one indicators) terr (A1) er Table (A2) n (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering sits (B3) (Nonrivering oil Cracks (B6) n Visible on Aerial Implied Leaves (B9) ations: Present?	e) iverine) ne) agery (B7) Yes Yes	Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks)		Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveriediment Deposits (B2) Deposits (B3) (Riverialinage Patterns (B10) Season Water Table Muck Surface (C7) If ish Burrows (C8) Irration Visible on Aericlow Aquitard (D3)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observat Surface Water Water Table P	rology Indicators: tors (any one indicate /ater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering istis (B3) (Nonrivering ill Cracks (B6) n Visible on Aerial Implications: Present?	e) iverine) ne) agery (B7) Yes Yes	Salt Crust (Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches):	oils (C6)	Wate Se Drift Dr Dry- C3) Thin Cray Satu Shal	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) (Riverine) (C2) (C2)	e)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observat Surface Water Water Table P Saturation Pre (includes capill	rology Indicators: tors (any one indicators) tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering isits (B3) (Nonrivering id Cracks (B6) n Visible on Aerial Implications: resent? tresent? lary fringe)	e) iverine) ne) agery (B7) Yes Yes Yes	Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iror Other (Exp No ✓ Depth No ✓ Depth	t (B12) rertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches):	oils (C6)	Wate Prift Dry- C3) Thin Cray Satu Shat FAC	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) 2) (Riverin rine) 0) (C2) ial Imager	e) y (C9)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capill Describe Reco	rology Indicators: tors (any one indicate tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering peposits (B2) (Nonrivering total Cracks (B6) n Visible on Aerial Implications: er Present? resent? lary fringe) orded Data (stream g	e) iverine) ne) agery (B7) Yes Yes Yes Yes auge, monite	Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Other (Exp No ✓ Depth No ✓ Depth No ✓ Depth Depth Depth Depth Depth	t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches): n (inches): n (inches):	oils (C6)	Wate Prift Dry- C3) Thin Cray Satu Shat FAC	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) 2) (Riverin rine) 0) (C2) ial Imager	e) y (C9)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capill Describe Reco	rology Indicators: tors (any one indicators) tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering isits (B3) (Nonrivering id Cracks (B6) n Visible on Aerial Implications: resent? tresent? lary fringe)	e) iverine) ne) agery (B7) Yes Yes Yes Yes auge, monite	Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Other (Exp No ✓ Depth No ✓ Depth No ✓ Depth Depth Depth Depth Depth	t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches): n (inches): n (inches):	oils (C6)	Wate Prift Dry- C3) Thin Cray Satu Shat FAC	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) 2) (Riverin rine) 0) (C2) ial Imager	e) y (C9)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capill Describe Reco	rology Indicators: tors (any one indicate tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering peposits (B2) (Nonrivering total Cracks (B6) n Visible on Aerial Implications: er Present? resent? lary fringe) orded Data (stream g	e) iverine) ne) agery (B7) Yes Yes Yes Yes auge, monite	Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Other (Exp No ✓ Depth No ✓ Depth No ✓ Depth Depth Depth Depth Depth	t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches): n (inches): n (inches):	oils (C6)	Wate Prift Dry- C3) Thin Cray Satu Shat FAC	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) 2) (Riverin rine) 0) (C2) ial Imager	e) y (C9)
Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface So Inundation Water-Sta Field Observa Surface Water Water Table P Saturation Pre (includes capill Describe Reco	rology Indicators: tors (any one indicate tater (A1) er Table (A2) n (A3) rks (B1) (Nonrivering peposits (B2) (Nonrivering total Cracks (B6) n Visible on Aerial Implications: er Present? resent? lary fringe) orded Data (stream g	e) iverine) ne) agery (B7) Yes Yes Yes Yes auge, monite	Salt Crust (Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iron Other (Exp No ✓ Depth No ✓ Depth No ✓ Depth Depth Depth Depth Depth	t (B12) vertebrates (B13) Sulfide Odor (C1) hizospheres along Living of Reduced Iron (C4) n Reduction in Plowed S lain in Remarks) n (inches): n (inches): n (inches):	oils (C6)	Wate Prift Dry- C3) Thin Cray Satu Shat FAC	er Marks (B1) (Riveri ediment Deposits (B2 Deposits (B3) (River ainage Patterns (B10 Season Water Table Muck Surface (C7) rish Burrows (C8) aration Visible on Aeri low Aquitard (D3) -Neutral Test (D5)	ine) 2) (Riverin rine) 0) (C2) ial Imager	e) y (C9)

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi Landform (hillslope, terrace, etc.): terrace Subregion (LRR): LRR C Soil Map Unit Name: Visalia sandy loan Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS — Atta	n ne site typical fo drologys drologyn	Lat: 33° r this time o ignificantly o aturally prol	22'35.119 f year? disturbed' blematic?	eave, convex 9"N Long Yes ✓ ? No A	State: (Sectior x, none) g: 117°4 No Are "Nor	n, Township, Rai i: none '55.776"W mal Circumstan eded, explain ar	nge: S22 T9S Slope (% Datum: NWI cla (If no, ex) ces" present? ny answers in	6): 0 NAD83 ssification: upland xplain in Remarks Yes ✓ No Remarks.)	d .)
Hydrophytic Vegetation Present?	Yes	No ✓							
Hydric Soil Present?	Yes	No ✓		Is the Sam					
Wetland Hydrology Present?	Yes	No ✓		within a W	etland?	`	/ES	NO ✓	
VEGETATION		Absolute	Domina		וטוג	Dominance Tes	t worksheet:		
<u>Tree Stratum</u> (Plot size: 10' x 10') 1. 2.		% Cover	Species	s? Status	_ .	lumber of Domii hat Are OBL, Fa	ACW, or FAC:	0	_ (A)
3. 4.						Species Across A		2	_ (B)
	Total Cover:	Absolute	Domina		ator T	Percent of Domir		0	_ (A/B)
Sapling/Shrub Stratum 1. Baccharis salisifolia		% Cover 5	Species N	Status FACV	_ '	Prevalence Inde	x worksheet: Cover of:	Multipl	v bv:
2. 3.		Ü		17.01		OBL species	<u> </u>	x 1 =	, 2,.
4.					F	ACW species	5	x 2 = 10	
5.	Tatal Causan				F	AC species		x 3 =	
	Total Cover:					ACU species	10	x 4 = 40	
Herb Stratum		Absolute <u>% Cover</u>	Domina Species		<u>s</u>	JPL species		x 5 =	
1. Avena barbata		40	Υ	NI		Column Totals:		(A) 50	(B)
 Ambrosia psilostachya Artemisia californica 		10 5	N N	FACU NI		revalence Index			
 Centaurea melitensis . 		15	Υ	NI	'	lydrophytic Ve	getation indic Test is >50%	cators:	
6.						Prevalence I			
7. 8.	Total Cover:				-	data in R	emarks or on a	(Provide support a separate sheet)	
		Absolute	Domina	ınt Indica	ator –	Problematic	Hydrophytic V	egetation ¹ (Explai	n)
Woody Vine Stratum 1. 2.		% Cover	Species	_	<u>S</u> 1	Indicators of hydresent.	dric soil and we	etland hydrology n	nust be
	Total Cover:				١.	lydrophytic Ve			
% Bare Ground in Herb Stratum:	% Cover	of Biotic Cr	ust:			resent?	getation	Yes	No✓
Remarks:									

		to the dent					findicatore \		
Profile Des	scription: (Describe	to the depti	n needed to doci	ument the indicator or	confirm the	ne absence o	i iliulcators.)		
	<u>Matrix</u>		<u> </u>	Redox Features					
Depth	Calan (maaiat)	0/	O-1 (i-t)	0/ Turn = 1	12	T		D	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> Type'	Loc ²	<u>Texture</u>	•	Remarks Programme Remarks	
0-6	10 YR 2/2	100				Silt	Uniform		
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix.	² Location: PL=Pore Li	ning, RC=F	Root Channel,	M=Matrix.		
Hydric Soil	Indicators: (Applica	ble to all LR	RRs, unless other	rwise noted.)		ndicators for	Problematic	Hydric Soils [®]	3:
Histosol	(A1)		Sandy Red	ox (S5)		1 cm Muc	k (A9) (LRR C)	
	oipedon (A2)		Stripped Ma	, ,	-		k (A10) (LRR I	•	
Black Hi				ky Mineral (F1)	-		Vertic (F18)	,	
	en Sulfide (A4)			red Matrix (F2)	-		nt Material (TF	2)	
	d Layers (A5) (LRR C))	Depleted M		-		plain in Remar	,	
	uck (A9) (LRR D)	,		Surface (F6)	-	(-,	
·	d Below Dark Surface	(A11)	· · · · · · · · · · · · · · · · · · ·	ark Surface (F7)					
	ark Surface (A12)	(,	Redox Dep						
	Mucky Mineral (S1)		Vernal Pool		:	Indicators of h	nydrophytic ve	netation and	
-	Gleyed Matrix (S4)			- ()			drology must b	_	
	Layer (if present):							- p	
	_w, o. (p. occ).								
Type:									
Depth (inc	ches):				Hydi	ic Soil Prese	nt?	Yes	No _✓
Remarks:									
	GY drology Indicators:					Secondal	ry Indicators (2	? or more requ	uired)
Wetland Hy		tor is sufficie	ent)				ry Indicators (2 er Marks (B1) (uired <u>)</u>
Wetland Hyd	drology Indicators: cators (any one indica	tor is sufficie		(B11)		Wate	er Marks (B1) (Riverine)	
Wetland Hyd Primary Indic Surface	drology Indicators: cators (any one indica Water (A1)	tor is sufficie	Salt Crust	` '		Wate	er Marks (B1) (ment Deposits	Riverine) (B2) (Riverin	
Wetland Hyd Primary Indic Surface High Wa	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2)	tor is sufficie	Salt Crust	st (B12)		Wate Sedir Drift	er Marks (B1) (ment Deposits Deposits (B3)	Riverine) (B2) (Riverine)	
Wetland Hyd Primary Indic Surface High Wa Saturatio	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3)		Salt Crust Biotic Crus Aquatic In	vertebrates (B13)		Wate Sedii Drift Drair	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns	Riverine) (B2) (Riverin (Riverine) (B10)	
Wetland Hyd Primary India Surface High Wa Saturatia Water M	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriverin	ne)	Salt Crust Biotic Crust Aquatic In Hydrogen	vertebrates (B13) Sulfide Odor (C1)		Wate Sedii Drift Drair Dry-S	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns (Season Water	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2)	
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering)	ne) riverine)	Salt Crust Biotic Crust Aquatic In: Hydrogen Oxidized F	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livi	ng Roots ((Wate Sedii Drift Drair Dry-\$ C3) Thin	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns (Season Water Muck Surface	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7)	
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriverin	ne) riverine)	Salt Crust Biotic Crust Aquatic In: Hydrogen Oxidized F	vertebrates (B13) Sulfide Odor (C1)	ng Roots ((Wate Sedii Drift Drair Dry-\$ C3) Thin	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns (Season Water	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7)	
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering)	ne) riverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livi			er Marks (B1) (ment Deposits Deposits (B3) nage Patterns (Season Water Muck Surface	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8)	e)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Deposits (B3) (Nonrive	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livin of Reduced Iron (C4) n Reduction in Plowed		Wate Sedii Drift Drair Dry-5 C3) Thin Cray Satu	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (ration Visible o	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) (C8) on Aerial Imag	e)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundation	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Noncosits (B3) (Nonrivering Soil Cracks (B6)) on Visible on Aerial Impactors	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livin of Reduced Iron (C4)		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (C ration Visible cow Aquitard (E	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Noncosits (B3) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impation (B9)	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livin of Reduced Iron (C4) n Reduction in Plowed		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (ration Visible o	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S Field Obser	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Instained Leaves (B9) vations:	ne) riverine) ne) nagery (B7)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livit of Reduced Iron (C4) n Reduction in Plowed olain in Remarks)		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (C ration Visible cow Aquitard (E	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hydelight Primary India Surface High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Instained Leaves (B9) vations:	ne) riverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livin of Reduced Iron (C4) n Reduction in Plowed		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (C ration Visible cow Aquitard (E	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-S Field Obser	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Instained Leaves (B9) vations: er Present?	ne) riverine) ne) nagery (B7)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livit of Reduced Iron (C4) n Reduction in Plowed olain in Remarks)		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (C ration Visible cow Aquitard (E	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hyden Primary India Surface High Water Mater Sedimer Unification Surface Inundation Water-S Field Obsertions	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Implementations: er Present?	ne) riverine) ne) nagery (B7) Yes	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livit of Reduced Iron (C4) n Reduction in Plowed blain in Remarks) h (inches):		Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) hage Patterns (Season Water Muck Surface fish Burrows (C ration Visible cow Aquitard (E	Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hyderimary India — Surface — High Water Mage Sedimer — Drift Department Surface — Inundation — Water-S Field Obser Surface Water Table	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impartament Leaves (B9) vations: er Present? Present?	ne) riverine) (ne) nagery (B7) Yes Yes	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) In Reduction in Plowed Iron (C4) In Remarks) h (inches):	Soils (C6)	Wate Sedin Drift Drair Dry-5 C3) Thin Cray Satun Shall	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (C3)	e)
Wetland Hydelian Primary India Surface High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Table Saturation P (includes cap	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impartament Leaves (B9) vations: er Present? Present? resent?	ne) riverine) ne) nagery (B7) Yes Yes Yes	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) In Reduction in Plowed Iron (C4) In Remarks) In (inches):	Soils (C6)	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hydelian Primary India Surface High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Table Saturation P (includes cap	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impartament Leaves (B9) vations: er Present? Present? resent?	ne) riverine) ne) nagery (B7) Yes Yes Yes	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) In Reduction in Plowed Iron (C4) In Remarks) h (inches):	Soils (C6)	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hyderimary India — Surface — High Wa — Saturatio — Water M — Sedimer — Drift Dep — Surface — Inundatio — Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Rec	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impations: er Present? Present? Present? pillary fringe) corded Data (stream general contents)	ne) riverine) ne) nagery (B7) Yes Yes Yes Yes gauge, monit	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept toring well, aerial	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) In Reduction in Plowed Iron (C4) In Remarks) In (inches):	Wetl	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hyderimary India — Surface — High Wa — Saturatio — Water M — Sedimer — Drift Dep — Surface — Inundatio — Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Rec	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impations: er Present? Present? Present? pillary fringe) corded Data (stream general contents)	ne) riverine) ne) nagery (B7) Yes Yes Yes Yes gauge, monit	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept toring well, aerial	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) n Reduction in Plowed Iron (C4) n Remarks) h (inches): h (inches): h (inches):	Wetl	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hyderimary India — Surface — High Wa — Saturatio — Water M — Sedimer — Drift Dep — Surface — Inundatio — Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Rec	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impations: er Present? Present? Present? pillary fringe) corded Data (stream general contents)	ne) riverine) ne) nagery (B7) Yes Yes Yes Yes gauge, monit	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept toring well, aerial	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) n Reduction in Plowed Iron (C4) n Remarks) h (inches): h (inches): h (inches):	Wetl	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hyderimary India Surface High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Rec	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impations: er Present? Present? Present? pillary fringe) corded Data (stream general contents)	ne) riverine) ne) nagery (B7) Yes Yes Yes Yes gauge, monit	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept toring well, aerial	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) n Reduction in Plowed Iron (C4) n Remarks) h (inches): h (inches): h (inches):	Wetl	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)
Wetland Hyderimary India Surface High Wa Saturation Water M Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Table Saturation P (includes cap	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) larks (B1) (Nonrivering Deposits (B2) (Nonrivering Soil Cracks (B6) on Visible on Aerial Impations: er Present? Present? Present? pillary fringe) corded Data (stream general contents)	ne) riverine) ne) nagery (B7) Yes Yes Yes Yes gauge, monit	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp No ✓ Dept No ✓ Dept toring well, aerial	st (B12) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along Livinof Reduced Iron (C4) n Reduction in Plowed Iron (C4) n Remarks) h (inches): h (inches): h (inches):	Wetl	Wate Sedin Drift Drair Thin Cray Satu Shall FAC-	er Marks (B1) (ment Deposits Deposits (B3) nage Patterns Season Water Muck Surface fish Burrows (C ration Visible of ow Aquitard (E Neutral Test (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) (C7) C8) on Aerial Imag (D3) (D5)	ery (C9)

Project/Site: Warner Ranch Applicant/Owner: Warner Ranch? Investigator(s): Callie Ford, Vipul Joshi Landform (hillslope, terrace, etc.): terrace Subregion (LRR): LRR C Soil Map Unit Name: Visalia sandy load Are climatic / hydrologic conditions on the Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy	m ne site typical fo drologys drologyn	Lat: 33° r this time of ignificantly of aturally prob	22'35.63 f year? disturbed blematic	Yes ✓ I? No ? No	State Section ex, nonning: 117' No Are "No (If no	on, Township, Re): None P4'55.296"W ormal Circumstateded, explain	sange: S22 T9S Slope (% Datum: NWI cla (If no, exinces" present? any answers in	%): 0% NAD83 ssification: upla xplain in Remark Yes ✓ Normark Remarks.)	DS-11 und ks.)
SUMMARY OF FINDINGS – Atta			g sam	pling poi	int ioc	ations, tran	sects, impo	rtant reature	etc.
Hydrophytic Vegetation Present?	Yes	No ✓							
Hydric Soil Present?	Yes	No ✓		Is the Sar within a V			YES	NO ✓	
Wetland Hydrology Present? Remarks: Sample point is not considere	Yes	No ✓	d on loo						
VEGETATION									
Tree Stratum (Use scientific names.)		Absolute % Cover	Domina Specie	_		Dominance Te			
Eucalyptus sp		30	Y	NI			FACW, or FAC:	0	(A)
2. 3. 4.						Total Number of Species Across		0	(B)
	Total Cover:	Absolute	Domina			Percent of Dom That Are OBL,	ninant Species FACW, or FAC:	0	(A/B)
Sapling/Shrub Stratum 1.		% Cover	Specie	<u>s?</u> <u>Statı</u>	<u>us</u>		dex worksheet: % Cover of:		iply by:
2.						OBL species	o Cover or.	x 1 =	ріу бу.
3. 4.						FACW species		x 2 =	
5.						FAC species		x 3 =	
	Total Cover:					FACU species		x 4 =	
		Absolute	Domina	ant Indic	cator	UPL species		x 5 =	
Herb Stratum		% Cover	<u>Specie</u>		<u>us</u>	Column Totals:		(A)	(B)
 Bromus diandrus . 		80	Y	NI		Prevalence Ind	ex = B/A =	0	` ,
3. 4.					F	Hydrophytic V	egetation Indic	ators:	
5.						Dominance	e Test is >50%		
6. 7.						Prevalence	e Index is ≤3.0 ¹		
8.	Total Cover:					data in	Remarks or on a	(Provide suppose separate sheet	t)
		Absolute	Domina	ant Indic	cator	Problemati	c Hydropnytic v	egetation ¹ (Expl	ain)
Woody Vine Stratum 1. 2.		% Cover	Specie			¹ Indicators of h present.	ydric soil and we	etland hydrology	must be
	Total Cover:								
% Bare Ground in Herb Stratum: 0	% Cover	of Biotic Cru	ıet·			Hydrophytic V Present?	egetation	Yes	No _✓
Remarks: lots of dead biomass littering									

	1 .1 /- 11	to the dont						
Profile Des	scription: (Describe	to the dept	h needed to docu	ment the indicator or	confirm the	e absence of indicator	rs.)	
	Matrix		R	ledox Features				
Depth	Calan (masiat)	0/	Calan (masiat)	0/ T 1	12	Tandona	Damanda	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> Type'	Loc ²	<u>Texture</u>	<u>Remarks</u>	
0-6	10 YR 2/2	100				SILT Upland da	ta station	
						oot Channel, M=Matrix.		
Hydric Soil I	Indicators: (Applica	ble to all LF	RRs, unless other	wise noted.)	Ir	ndicators for Problema	atic Hydric Soils	' :
Histosol	(A1)		Sandy Redo	x (S5)	_	1 cm Muck (A9) (LRI	R C)	
Histic Ep	pipedon (A2)		Stripped Mat	trix (S6)		_ 2 cm Muck (A10) (LF	RR B)	
Black Hi	stic (A3)		Loamy Muck	ky Mineral (F1)	_	Reduced Vertic (F18	3)	
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (F2)		Red Parent Material	(TF2)	
	d Layers (A5) (LRR C)	Depleted Ma	atrix (F3)		Other (Explain in Re	marks)	
	ick (A9) (LRR D)	,		Surface (F6)		_ ` ` '	,	
·——	d Below Dark Surface	(A11)		rk Surface (F7)				
-	ark Surface (A12)		Redox Depre	essions (F8)				
	lucky Mineral (S1)		Vernal Pools		³ I	ndicators of hydrophytic	vegetation and	
-	Bleyed Matrix (S4)					wetland hydrology mu	ist be present.	
	Layer (if present):							
Type:	, , ,							
Depth (inc	ahaa):				Llydei	c Soil Present?	Yes	No v
	ules).				пушт	C 3011 Fresent:	162	NO V
Remarks:								
HYDROLO	GY							
HYDROLO						Secondary Indicator	rs (2 or more regu	uired)
Wetland Hyd	drology Indicators:	tor in pufficie	not)			Secondary Indicator		uired)
Wetland Hyd	drology Indicators: cators (any one indica	utor is sufficie	-			Water Marks (B	31) (Riverine)	
Wetland Hyd Primary Indic Surface	drology Indicators: cators (any one indica Water (A1)	utor is sufficie	Salt Crust (,		Water Marks (B Sediment Depo	s1) (Riverine) sits (B2) (Riverin	
Wetland Hyd Primary Indic Surface	drology Indicators: cators (any one indica	ntor is sufficie	Salt Crust (t (B12)		Water Marks (B	s1) (Riverine) sits (B2) (Riverin	
Wetland Hyd Primary Indic Surface	drology Indicators: cators (any one indica Water (A1) ater Table (A2)	ntor is sufficie	Salt Crust (,		Water Marks (B Sediment Depo	s1) (Riverine) sits (B2) (Riverin B3) (Riverine)	
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APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:California County/parish/borough: San Diego City: Pala Center coordinates of site (lat/long in degree decimal format): Lat. 33.22.22° N, Long. 117.5.87° W. Universal Transverse Mercator: Name of nearest waterbody: San Luis Rey River
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Luis Rey River Name of watershed or Hydrologic Unit Code (HUC): San Luis Rey River Watershed Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: ☐ Field Determination. Date(s): August 5, 2010
SE(CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce Explain:
В. (CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: 8.97 acres.
	c. Limits (boundaries) of jurisdiction based on: Established by OHWM. Elevation of established OHWM (if known):varies, but site elevation is around 360 feet AMSL.

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 562 square miles
Drainage area: Pick List
Average annual rainfall: 18.4 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 20-25 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Tributary flows into the San Luis Rey River located less than 1 mile south of the project; the San Luis Rey River then flows to the Pacific Ocean (TNW) approximately 20.5 miles west.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary stream order, if known: .					
	(b)	General Tributary Characteristics (check all that apply): Tributary is:					
		Tributary properties with respect to top of bank (estimate): Average width: 10 feet Average depth: 1 feet Average side slopes: Vertical (1:1 or less).					
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: wide, vegetated channel and banks. Presence of run/riffle/pool complexes. Explain: No. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 2 %					
	(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 2-5 Describe flow regime: Flow during and for a brief period after rain events typical of ephemeral channels in the					
region.		Other information on duration and volume: .					
		Surface flow is: Discrete and confined. Characteristics:					
		Subsurface flow: No . Explain findings: No evidence of subsurface flow (emergent wetland vegetation, etc.). Dye (or other) test performed: No.					
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:					
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
(iii)	Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: No water present during delineation. https://doi.org/10.1016/j.nee.20					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: Potential to support fish species during intermittent flows. ☐ Other environmentally-sensitive species. Explain findings: yellow-breasted chat. ☐ Aquatic/wildlife diversity. Explain findings: Area has potential to support variety of species.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Assical Characteristics: General Wetland Characteristics: Properties: Wetland size: 8.97 acres Wetland type. Explain: Mulefat scrub and southern cottonwood willow riparian forest. Wetland quality. Explain: Hydrophitic vegetation and hydric soils present. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain:
			Surface flow is: Discrete and confined Characteristics:
			Subsurface flow: Unknown . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are 20-25 river miles from TNW. Project waters are 20-25 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No water present. Rocky and silty soil with vegetation in channel. ntify specific pollutants, if known:
	(iii)	\square	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):10 feet wide with mature shrubs and trees. Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: see 1 (iv) above. Other environmentally-sensitive species. Explain findings: see 1 (iv) above. Aquatic/wildlife diversity. Explain findings: ee 1 (iv) above.
3.	Cha	aract	reristics of all wetlands adjacent to the tributary (if any)

3.

All wetland(s) being considered in the cumulative analysis: 2
Approximately (8.97) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Y	8.43		
Y	0.54		

Summarize overall biological, chemical and physical functions being performed: The wetland is located within the creek corridor and consists of riparian vegetation (e.g., mulefat), rocky and silty creek bottom, and probably has seasonal flow of water and receives water from upstream tributaries. Functions include water filtration and flow to San Luis Rey River (TNW).

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Hydric soils present.

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 6, 000 linear feet 10-100 width (ft).
	Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	 Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Hydria soils and hydrorbitic property.
	abutting an RPW: Hydric soils and hydrophitic vegetation present. Provide acreage estimates for jurisdictional wetlands in the review area: 8.97 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C. Provide acreage estimates for jurisdictional wetlands in the review area: acres.
	Trovide acreage estimates for jurisdictional wedains in the review area.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:

E.

 ⁸See Footnote # 3.
 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 ¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. SECTION IV: DATA SOURCES. A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: USDA Natural Resources Conservation Service Soil Survey. Citation: USDA. 2010. NRCS. Websoil Survey. . National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

Identify water body and summarize rationale supporting determination:

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:California County/parish/borough: San Diego City: Pala Center coordinates of site (lat/long in degree decimal format): Lat. 33.22.52° N, Long. 117.5.89° W. Universal Transverse Mercator: Name of nearest waterbody: San Luis Rey River
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Luis Rey River Name of watershed or Hydrologic Unit Code (HUC): San Luis Rey River Watershed Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): August 5, 2010
SEC A. 1	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce Explain:
В. (CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 13,538 linear feet: width (ft) and/or 0.86 acres. Wetlands: 0 acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Elevation of established OHWM (if known):varies, but site elevation ranges from 400 to 650 feet AMSL.

Explain:

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

	'N	W

Identify TNW: .

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 562 **square miles**Drainage area: acres

Average annual rainfall: 18.4 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 20-25 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Tributaries flow into Gomez Creek which flows into the San Luis Rey River located less than 1 mile south of the project which then flows into the Pacific Ocean (TNW).

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary stream order, if known: .
	(b)	General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
		Tributary properties with respect to top of bank (estimate): Average width: 1-3 feet Average depth: 1 feet Average side slopes: Vertical (1:1 or less).
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain: .
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: wide, vegetated channel and banks. Presence of run/riffle/pool complexes. Explain: No. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 2 %
	(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 1 Describe flow regime: Flow during rain events typical of ephemeral channels in the region. Other information on duration and volume:
		Surface flow is: Discrete and confined. Characteristics:
		Subsurface flow: No . Explain findings: No evidence of subsurface flow (emergent wetland vegetation, etc.). Dye (or other) test performed: No.
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
(iii)	Cha	emical Characteristics: tracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Explain: No water present. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biol	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Located near habitat that could support sensitive species. Aquatic/wildlife diversity. Explain findings:
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Mulefat scrub and southern cottonwood willow riparian forest. Wetland quality. Explain: Hydrophitic vegetation and hydric soils present. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics: .
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: attify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):10 feet wide with mature shrubs and trees. Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: The wetland is located within the creek corridor and consists of riparian vegetation (e.g., mulefat), rocky and silty creek bottom, and probably has seasonal flow of water and receives water from upstream tributaries. Functions include water filtration and flow to San Luis Rey River (TNW).

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
	TNWs: linear feet width (ft), Or, acres.
	Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that
	tributary is perennial: .
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: Hydric soils present.

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: 13,538 linear feet 1-3 width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Hydric soils and hydrophitic vegetation present.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
SU G	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:

E.

 ⁸See Footnote # 3.
 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 ¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTION IV: DATA SOURCES.
A. ;	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data.
	USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: USDA Natural Resources Conservation Service Soil Survey. Citation: USDA. 2010. NRCS. Websoil Survey National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☐ Aerial (Name & Date):
	or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

Identify water body and summarize rationale supporting determination:

B. ADDITIONAL COMMENTS TO SUPPORT JD: Multiple tributaries that vary in length and width and flow into Gomez Creek.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:California County/parish/borough: San Diego City: Pala Center coordinates of site (lat/long in degree decimal format): Lat. 33.22.52° N, Long. 117.5.89° W. Universal Transverse Mercator: Name of nearest waterbody: San Luis Rey River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Luis Rey River Name of watershed or Hydrologic Unit Code (HUC): San Luis Rey River Watershed Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): August 5, 2010
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 400 linear feet: width (ft) and/or 0.13 acres. Wetlands: 0 acres.
	c. Limits (boundaries) of jurisdiction based on: Established by OHWM. Elevation of established OHWM (if known):varies, but site elevation ranges from 400 to 650 feet AMSL.
	 Non-regulated waters/wetlands (check if applicable):³ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW
1.	TIN VV

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 562 square miles

Drainage area: acres

Average annual rainfall: 18.4 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 20-25 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Channel flows into the San Luis Rey River located less than 1 mile south of the project which then flows into the Pacific Ocean (TNW).

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

		Tributary stream order, if known: .
	(b)	General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
		Tributary properties with respect to top of bank (estimate): Average width: 1-3 feet Average depth: 1 feet Average side slopes: Vertical (1:1 or less).
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain: .
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: wide, vegetated channel and banks. Presence of run/riffle/pool complexes. Explain: No. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 2 %
	(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 1 Describe flow regime: Flow during rain events typical of ephemeral channels in the region. Other information on duration and volume:
		Surface flow is: Discrete and confined. Characteristics:
		Subsurface flow: No . Explain findings: No evidence of subsurface flow (emergent wetland vegetation, etc.). Dye (or other) test performed: No.
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
(iii)	Cha	emical Characteristics: tracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Explain: No water present. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biol	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Located near habitat that could support sensitive species. Aquatic/wildlife diversity. Explain findings:
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Mulefat scrub and southern cottonwood willow riparian forest. Wetland quality. Explain: Hydrophitic vegetation and hydric soils present. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics: .
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: attify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):10 feet wide with mature shrubs and trees. Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: The wetland is located within the creek corridor and consists of riparian vegetation (e.g., mulefat), rocky and silty creek bottom, and probably has seasonal flow of water and receives water from upstream tributaries. Functions include water filtration and flow to San Luis Rey River (TNW).

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and
 other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
	TNWs: linear feet width (ft), Or, acres.
	Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that
	tributary is perennial: .
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: Hydric soils present.
	· · · · · ·

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: 400 linear feet 3-20 width (ft). Other non-wetland waters: 0.13 acres. Identify type(s) of waters: Open channel.
4.	 Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly
	abutting an RPW: Hydric soils and hydrophitic vegetation present. Provide acreage estimates for jurisdictional wetlands in the review area: acres.
	Trovide dereage estimates for jurisdictional wettands in the review area.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
	which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:

E.

 ⁸See Footnote # 3.
 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 ¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Pro	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F. NO	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
fac	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR etors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional legment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such inding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
A. SUI	ON IV: DATA SOURCES. PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below):
\boxtimes	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data.
	 USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: USDA Natural Resources Conservation Service Soil Survey. Citation: USDA. 2010. NRCS. Websoil Survey. National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☐ Aerial (Name & Date): or ☐ Other (Name & Date):
	Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

Identify water body and summarize rationale supporting determination:

B. ADDITIONAL COMMENTS TO SUPPORT JD: Open channel that flows into San Luis Rey River.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I:	BACKGROUND	INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

R	DISTRICT OFFICE	FILENAME	AND NUMBER.

В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:California County/parish/borough: San Diego City: Pala Center coordinates of site (lat/long in degree decimal format): Lat. 33.22.28° N, Long. 117.5.38° W. Universal Transverse Mercator:
	Name of nearest waterbody: San Luis Rey River
	Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: N/A Name of watershed or Hydrologic Unit Code (HUC): San Luis Rey River Watershed Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): August 5, 2010
SEG A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	warea. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: 0 acres.
	c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):
	 Non-regulated waters/wetlands (check if applicable):³ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Waters are isolated and do not have a significant nexus to TNW.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW Identify TNW:	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 562 square miles Drainage area: acres Average annual rainfall: 18.4 inches Average annual snowfall: 0 inches (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through **Pick List** tributaries before entering TNW. Project waters are **Pick List** river miles from TNW. Project waters are **Pick List** river miles from RPW. Project waters are **Pick List** aerial (straight) miles from TNW. Project waters are **Pick List** aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW⁵: Tributary stream order, if known:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b)	General Tributary Characteristics (check all that apply):
	Tributary is: Natural
	Artificial (man-made). Explain:
	Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate):
	Average width: feet
	Average depth: feet
	Average side slopes: Pick List.
	Primary tributary substrate composition (check all that apply):
	☐ Silts ☐ Sands ☐ Concrete ☐ Cobbles ☐ Gravel ☐ Muck
	Bedrock Vegetation. Type/% cover:
	Other. Explain: .
	Guier. Explain.
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: wide, vegetated channel and banks.
	Presence of run/riffle/pool complexes. Explain: No.
	Tributary geometry: Pick List
	Tributary gradient (approximate average slope): %
(c)	<u>Flow:</u>
	Tributary provides for: Pick List
	Estimate average number of flow events in review area/year: Pick List
	Describe flow regime: Flow during rain events typical of ephemeral channels in the region.
	Other information on duration and volume: .
	Surface flow is: Pick List. Characteristics: .
	Surface flow is: Fick List. Characteristics:
	Subsurface flow: Pick List. Explain findings: No evidence of subsurface flow (emergent wetland vegetation, etc.).
	Dye (or other) test performed: No.
	Tributary has (check all that apply):
	Bed and banks
	OHWM ⁶ (check all indicators that apply):
	clear, natural line impressed on the bank the presence of litter and debris
	changes in the character of soil destruction of terrestrial vegetation
	shelving the presence of wrack line
	vegetation matted down, bent, or absent sediment sorting
	☐ leaf litter disturbed or washed away ☐ scour
	sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community
	other (list):
	Discontinuous OHWM. Explain:
	Discontinuous 011 W.W. Explain.
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
	High Tide Line indicated by: Mean High Water Mark indicated by:
	oil or scum line along shore objects survey to available datum;
	fine shell or debris deposits (foreshore) physical markings;
	physical markings/characteristics vegetation lines/changes in vegetation types.
	☐ tidal gauges
	other (list):
-	
	mical Characteristics:
Chai	racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
T.J	Explain: No water present.
iden	tify specific pollutants, if known: None known.

(iii)

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)]	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
2.	Char	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
		Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Mulefat scrub and southern cottonwood willow riparian forest. Wetland quality. Explain: Hydrophitic vegetation and hydric soils present. Project wetlands cross or serve as state boundaries. Explain:
	((b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
		Surface flow is: Pick List Characteristics: .
		Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
	((c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	((d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)]	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):10 feet wide with mature shrubs and trees. Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.		racteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: The wetland is located within the creek corridor and consists of riparian vegetation (e.g., mulefat), rocky and silty creek bottom, and probably has seasonal flow of water and receives water from upstream tributaries. Functions include water filtration and flow to San Luis Rey River (TNW).

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and
 other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
	TNWs: linear feet width (ft), Or, acres.
	Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.
	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that
	tributary is perennial: .
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: Hydric soils present.
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	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Hydric soils and hydrophitic vegetation present.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:

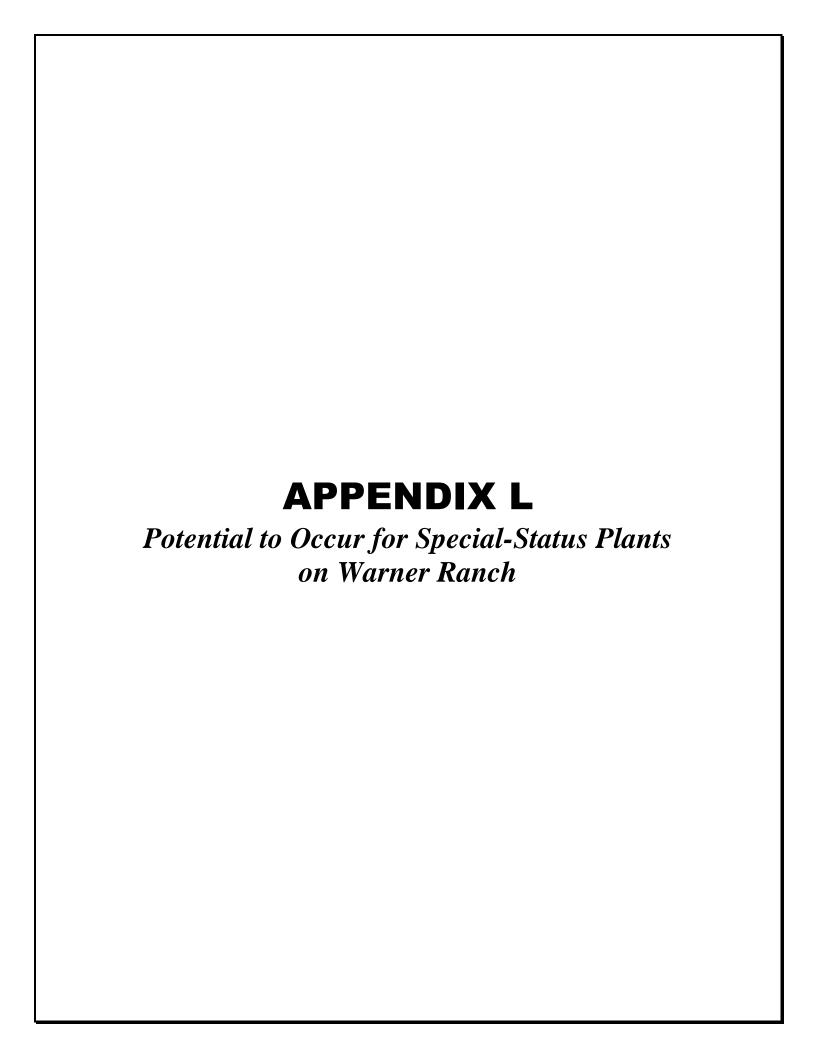
E.

 ⁸See Footnote # 3.
 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 ¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Pro	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
□ □ □ □ □ □ □ □ □ □ □ □ □	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: There is insubstantial physical, chemical, or biological connectivity to waters of the U.S. Other: (explain, if not covered above): The streams do not have hydrologic connectivity with the San Luis Rey River imately 9,000 feet from the closest stream with no evidence of surface or subsurface flows in between). The subject area does not species such as least Bell's vireo that are present in the San Luis Rey River.
fac	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR tors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): 7,023 linear feet, 1-15 width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: 1.95 acres.
<u>SECTIO</u>	ON IV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: USDA Natural Resources Conservation Service Soil Survey. Citation: USDA. 2010. NRCS. Websoil Survey National wetlands inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): or Other (Name & Date):
	Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

 ${\bf Identify\ water\ body\ and\ summarize\ rationale\ supporting\ determination:}$

B. ADDITIONAL COMMENTS TO SUPPOR waters or wetlands of the U.S.	Γ JD: Non-jurisdictional v	vaters and wetlands that ha	ive no hydrological connectivity to



APPENDIX L Potential to Occur for Special-Status Plants on Warner Ranch

Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Abronia villosa var. aurita	chaparral sand- verbena	None/None/ List A	1B.1	Chaparral, Coastal scrub, Desert dunes; sandy/annual herb/ Jan-Sep	Suitable habitat in the project area but determined absent based on focused surveys.
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/List A	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/ annual herb/Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Adolphia californica	California adolphia	None/None/ List B	2.1	Chaparral, Coastal scrub, Valley and foothill grassland; clay/deciduous shrub/ Dec-May	Suitable habitat in the project area but determined absent based on focused surveys.
Allium munzii	Munz's onion	FE/ST/None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; mesic, clay/ bulbiferous herb/Mar-May	Suitable habitat in the project area but determined absent based on focused surveys.
Ambrosia pumila	San Diego ambrosia	FE/None/List A	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/often in disturbed areas, sometimes alkaline/ rhizomatous herb/Apr–Oct	Suitable habitat in the project area but determined absent based on focused surveys.
Arctostaphylos glandulosa ssp. crassifolia	Del Mar manzanita	FE/None/List A	1B.1	Chaparral(maritime, sandy)/ evergreen shrub/Dec-Jun	Not expected to occur; project area is outside of known range. This species would have been detected during plant surveys.
Arctostaphylos rainbowensis	Rainbow manzanita	None/None/ List A	1B.1	Chaparral; evergreen shrub/ Dec-Mar	Occurs in the project area. Seven individuals were observed, primarily in the northwest portion of the project area and one location in the northeast.
Astragalus oocarpus	San Diego milk- vetch	None/None/ List A	1B.2	Chaparral(openings), Cismontane woodland/ perennial herb/May-Aug	Suitable habitat in the project area but determined absent based on focused surveys.
Astragalus pachypus var. jaegeri	Jaeger's bush milk-vetch	None/None/ List A	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky/ perennial shrub/Dec-Jun	Absent; not within elevation range and not detected during focused surveys.



Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Berberis nevinii	Nevin's barberry	FE/SE/List A	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly / evergreen shrub/ Mar-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/List A	1B.1	Chaparral(openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay/ bulbiferous herb/Mar-Jun	Suitable habitat in the project area but determined absent based on focused surveys
Brodiaea orcuttii	Orcutt's brodiaea	None/None/ List A	1B.1	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic, clay, sometimes serpentinite/ bulbiferous herb/May-Jul	Not expected to occur based on lack of suitable habitat and not detected during focused surveys.
Brodiaea santarosae	Santa Rosa Basalt brodiaea	None/None/ None	1B	Valley and foothill grassland; basaltic/ bulbiferous herb/ May-Jun	Not expected to occur; not within elevation range and not detected during focused surveys.
California macrophylla	round-leaved filaree	None/None/ None	1B.1	Cismontane woodland, Valley and foothill grassland; clay/ annual herb/Mar-May	Suitable habitat in the project area but determined absent based on focused surveys.
Calochortus dunnii	Dunn's mariposa lily	None/SR/ List A	1B.2	Closed-cone coniferous forest, Chaparral, Valley and foothill grassland/gabbroic or metavolcanic, rocky; bulbiferous herb/Apr-Jun	Not expected to occur; not within elevation range and not detected during focused surveys.
Calochortus plummerae	Plummer's mariposa lily	None/None/ None	1B.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; granitic, rocky/ bulbiferous herb/May-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Calochortus weedii var. intermedius	intermediate mariposa lily	None/None/ None	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; rocky, calcareous/ bulbiferous herb/May-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Caulanthus simulans	Payson's jewel- flower	None/None/ List D	4.2	Chaparral, coastal scrub; sandy granitic/Mar-May	Suitable habitat in the project area but determined absent based on focused surveys.



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Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Ceanothus cyaneus	Lakeside ceanothus	None/None/ List A	1B.2	Closed-cone coniferous forest, Chaparral/ evergreen shrub/Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Ceanothus ophiochilus	Vail Lake ceanothus	FT/SE/None	1B.1	Chaparral (gabbroic or pyroxenite-rich outcrops)/ evergreen shrub/Feb-Mar	Not expected to occur; not within elevation range and not detected during focused surveys.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/ List B	2.2	Chaparral/ evergreen shrub/Dec-May	Suitable habitat in the project area but determined absent based on focused surveys.
Centromadia parryi ssp. australis	Southern tarplant	None/None/ List A	1B.1	Marshes and swamps, valley and foothill grassland (vernally mesic), vernal pools, often in disturbed sites with alkaline soils near the coast/ annual herb/ May–November	Not expected to occur. Along the California coast this species is typically seen in seasonally mesic areas or along disturbed roads, trails, and habitat edges with alkaline soils. Would have been detected during 2010 surveys if present.
Centromadia pungens ssp. laevis	smooth tarplant	None/None/ List A	1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/ annual herb/Apr-Sep	Suitable habitat in the project area but determined absent based on focused surveys.
Chorizanthe parryi var. parryi	Parry's spineflower	None/None/ None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky, openings/ annual herb/Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/ None	1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; often clay/ annual herb/Apr-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Chorizanthe procumbens	Prostrate spineflower	None/None/ None	None	Chaparral, Valley Grassland, Pinyon-Juniper Woodland, Coastal Sage Scrub/ annual herb	Occurs in the project area. Approximately 410 individuals were observed in the southeast portion of the project area.
Clarkia delicata	delicate clarkia	None/None/ List A	1B.2	Chaparral, Cismontane woodland/often gabbroic; annual herb/Apr-Jun	Not expected to occur based on lack of suitable soils and not detected during focused surveys.



Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Comarostaphylis diversifolia ssp. diversifolia	summer holly	None/None/ List A	1B.2	Chaparral, Cismontane woodland/ evergreen shrub/Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Deinandra mohavensis	Mojave tarplant	None/SE/List A	1B.3	Chaparral, Coastal scrub, Riparian scrub; mesic/ annual herb/ Jun-Oct(Jan)	Not expected to occur; not within elevation range and not detected during focused surveys.
Delphinium hesperium ssp. cuyamacae	Cuyamaca larkspur	None/SR/ List A	1B.2	Lower montane coniferous forest, Meadows and seeps, Vernal pools; mesic/ perennial herb/ May-Jul	Not expected to occur; not within elevation range and not detected during focused surveys.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/None	1B.1	Chaparral, Cismontane woodland, Coastal scrub(alluvial fan); sandy/ annual herb/ Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Dudleya multicaulis	many-stemmed dudleya	None/None/ List A	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/ perennial herb/ Apr-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Dudleya viscida	sticky dudleya	None/None/ List A	1B.2	Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub; rocky/ perennial herb/ May-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Eryngium aristulatum var. parishii	San Diego button-celery	FE/SE/List A	1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/ annual and perennial herb/ Apr-Jun	Suitable habitat in the project area but determined absent based on focused surveys.
Githopsis diffusa ssp. filicaulis	Mission Canyon bluecup	None/None/ List C	3.1	Chaparral(mesic, disturbed areas)/annual herb/Apr-Jun	Not expected to occur; not within elevation range and not detected during focused surveys.
Harpagonella palmeri	Palmer's grapplinghook	None/None/ List D	4.2	Chaparral, Coastal scrub, Valley and foothill grassland; clay/annual herb/Mar-May	Occurs in the project area. Approximately 650 individuals were mapped west of Gomez Creek.
Hesperocyparis forbesii	Tecate cypress	None/None/ None	1B.1	Closed-cone coniferous forest, Chaparral, Valley and foothill grassland; gabbroic or metavolcanic, rocky/ evergreen tree	Not expected to occur. This species would have been observed during 2010 surveys.
Holocarpha virgata ssp. elongata	Graceful tarplant	None/None/ List D	4.2	Coastal scrub, cismontane woodland, chaparral (?), valley and foothill grassland/ annual herb/ Aug-Nov	Occurs in the project area. Approximately 23,500 individuals were mapped in the eastern portion of the project area.



		Status:		Primary Habitat	
Scientific Name	Common Name	Federal/State/ County	CRPR List	Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Horkelia cuneata ssp. puberula	Mesa horkelia	None/None/ List A	1B.1	Chaparral, cismontane woodland, coastal scrub (sandy or gravelly)/ Perennial herb/ February–July	Suitable habitat in the project area but determined absent based on focused surveys.
Horkelia truncata	Ramona horkelia	None/None/ List A	1B.3	Chaparral, Cismontane woodland; clay, gabbroic/ perennial herb/May-Jun	Not expected to occur; not within elevation range and not detected during focused surveys.
Hulsea californica	San Diego sunflower	None/None/ List A	1B.3	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest/openings and burned areas/ perennial herb/ Apr-Jun	Not expected to occur; not within elevation range and not detected during focused surveys.
Isocoma menziesii var. decumbens	decumbent goldenbush	None/None/ List A	1B.2	Chaparral, Coastal scrub(sandy, often in disturbed areas)/ perennial shrub/ Apr-Nov	Suitable habitat in the project area but determined absent based on focused surveys.
Juncus luciensis	Santa Lucia dwarf rush	None/None/ None	1B.2	Coastal bluff scrub, coastal scrub; alkaline/ annual herb/ April–October	Not expected to occur based on lack of alkaline soils in the project area; not detected during focused surveys.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/ List A	1B.1	Marshes and swamps (coastal salt), playas, vernal pools/ Annual herb/ March–June	Not expected to occur within project area based on lack of suitable habitats present.; not detected during focused surveys
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None/None/ List A	1B.2	Chaparral, Coastal scrub; annual herb/Jan-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Lilium parryi	lemon lily	None/None/ List A	1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; mesic/ bulbiferous herb/ Jul-Aug	Not expected to occur; not within elevation range; not detected during focused surveys.
Linanthus orcuttii	Orcutt's linanthus	None/None/ List A	1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland openings/ annual herb/ May-Jun	Not expected to occur; not within elevation range; not detected during focused surveys.



Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Monardella hypoleuca ssp. lanata	felt-leaved monardella	None/None/ List A	1B.2	Chaparral, Cismontane woodland/ rhizomatous herb/Jun-Aug	Suitable habitat in the project area but determined absent based on focused surveys.
Monardella macrantha ssp. hallii	Hall's monardella	None/None/ List A	1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/ rhizomatous herb/ Jun-Oct	Not expected to occur; not within elevation range; not detected during focused surveys.
Monardella nana ssp. leptosiphon	San Felipe monardella	None/None/ List A	1B.2	Chaparral, Lower montane coniferous forest/ rhizomatous herb/ Jun-Jul	Not expected to occur; not within elevation range; not detected during focused surveys.
Myosurus minimus ssp. apus	little mousetail	None/None/ List C	3.1	Valley and foothill grassland, Vernal pools(alkaline)/ annual herb/Mar-Jun	Not expected to occur based on lack of suitable habitat and soils; not detected during focused surveys.
Navarretia fossalis	Moran's nosegay	FT/None/List A	1B.1	Chenopod scrub, Marshes and swamps(assorted shallow freshwater), Playas, Vernal pools/ annual herb/ Apr-Jun	Not expected to occur based on lack of suitable habitat and soils; not detected during focused surveys.
Navarretia prostrata	prostrate vernal pool navarretia	None/None/ List A	1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland(alkaline), Vernal pools; mesic/ annual herb/ Apr-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Nolina cismontana	chaparral nolina	None/None/ List A	1B.2	Chaparral, Coastal scrub/ sandstone or gabbro / evergreen shrub/ May-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Orcuttia californica	California Orcutt grass	FE/SE/List A	1B.1	Vernal pools/ annual herb/ Apr-Aug	Not expected to occur based on lack of suitable habitat; not detected during focused surveys.
Packera ganderi	Gander's ragwort	None/SR/ List A	1B.2	Chaparral(burns, gabbroic outcrops)/ perennial herb/ Apr-Jun	Not expected to occur; not within elevation range; not detected during focused surveys.
Penstemon californicus	California beardtongue	None/None/ None	1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; sandy/ perennial herb/ May-Jun(Aug)	Not expected to occur; not within elevation range; not detected during focused surveys.

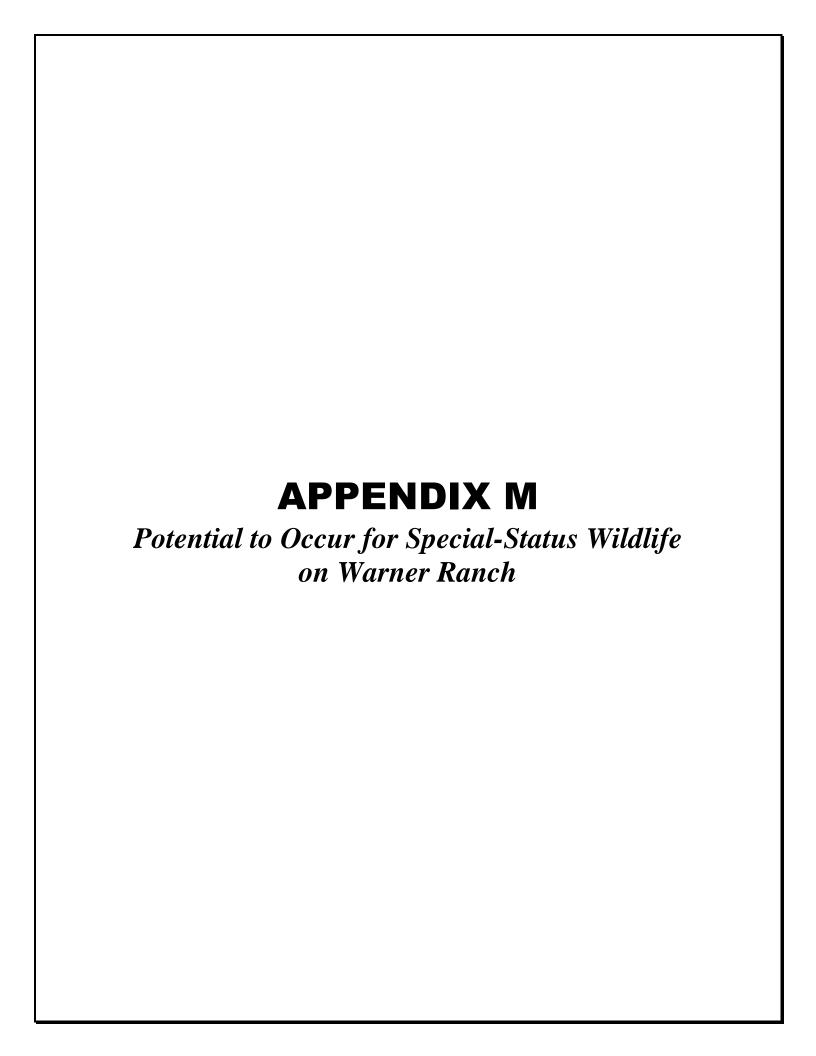


Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Phacelia suaveolens ssp. keckii	Santiago Peak phacelia	None/None/ None	1B.3	Closed-cone coniferous forest, Chaparral/ annual herb/ May-Jun	Not expected to occur; not within elevation range; not detected during focused surveys.
Piperia leptopetala	Narrow-petaled rein orchid	None/None/ List D	4.3	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest/ perennial herb/May- Jul	Not expected to occur; not within elevation range; not detected during focused surveys.
Pseudognaphalium leucocephalum	White rabbit tobacco	None/None/ None	2.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, sandy or gravelly/ Perennial herb/ Aug–Nov	Suitable habitat in the project area but determined absent based on focused surveys
Quercus engelmannii	Engelmann oak	None/None/ List D	4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/ deciduous tree/ Mar- Jun	Occurs in the project area. 12 oaks were mapped along Gomez Creek and 1 in the eastern portion of the project area.
Satureja chandleri	San Miguel savory	None/None/ List A	1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; rocky, gabbroic or metavolcanic/ perennial shrub/ Mar-Jul	Suitable habitat in the project area but determined absent based on focused surveys.
Schizymenium shevockii	Shevock's copper moss	None/None/ None	1B.2	Cismontane woodland (metamorphic, rock, mesic)/ moss	Not expected to occur; not within elevation range; not detected during focused surveys
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	None/None/ List A	1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; mesic/ rhizomatous herb/ Jun-Aug	Not expected to occur; not within elevation range; not detected during focused surveys.
Symphyotrichum defoliatum	San Bernardino aster	None/None/ None	1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic)/ near ditches, streams, springs/ rhizomatous herb/ Jul-Nov	Suitable habitat in the project area but determined absent based on focused surveys.
Tetracoccus dioicus	Parry's tetracoccus	None/None/ List A	1B.2	Chaparral, Coastal scrub/ deciduous shrub/ Apr-May	Occurs in the project area. Approximately 524 were mapped in the western portion of the project area.



Scientific Name	Common Name	Status: Federal/State/ County	CRPR List	Primary Habitat Associations/ Life Form/ Blooming Period	Status Project Area or Potential to Occur
Tortula californica	California screw-moss	None/None/ None	1B.2	Chenopod scrub, Valley and foothill grassland; sandy, soil/moss	Suitable habitat in the project area but determined absent based on focused surveys.
Viola purpurea ssp. aurea	golden violet	None/None/ List B	2.2	Great Basin scrub, Pinyon juniper woodland/Perennial herb/ Apr-Jun	Not expected to occur; not within elevation range; not detected during focused surveys.
Xanthisma junceum	Rush-like bristleweed	None/None/ List D	4.3	Chaparral, coastal scrub/ perennial herb/ June- January/ 240 - 1000 meters	Occurs in the project area. Five locations were mapped in the northwest corner of the project area.





APPENDIX M Potential to Occur for Special-Status Wildlife on Warner Ranch

		Status	Duimann, Habitat	Ctatus in the pusicet area ar		
Scientific Name	Common Name	Federal/State/ County/Other ¹	Primary Habitat Associations	Status in the project area or Potential to Occur		
	Amphibians					
Anaxyrus [=Bufo] californicus	Arroyo toad	FE/SSC/ Group 1	Stream channels for breeding (typically 3rd order); adjacent stream terraces and uplands for foraging and wintering. Requires exposed sandy streamsides with stable terraces to burrow with scattered vegetation and calm pools with sandy/gravel bottoms for breeding	Focused surveys in 2005 and 2010 were negative; not expected to occur in the project area. The nearest CNDDB record is 0.3 miles south of the project area in the San Luis Rey River, and 0.3 miles north of the project area in Pala Creek, Pala quadrangle (2000).		
Spea [=Scaphiopus] hammondi	Western spadefoot	None/SSC/ Group 2	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; riparian habitats with sandy/gravelly soils. Also found within mixed woodlands, chaparral, sandy washes, and foothills. Breed in rainpools that do not have bullfrogs, fish, or crayfish	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB occurrence record is located 5.6 miles north of the project area in the Pechanga quadrangle (2000).		
		Rep	tiles			
Actinemys [=Emys] marmorata	Western pond turtle	None/SSC/ Group 1	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	No potential to occur in the project area; no suitable habitat present in the project area. The nearest CNDDB occurrence record is 9 miles northwest of the project area within the Temecula quadrangle in Riverside Co (1999).		
Anniella pulchra pulchra	Silvery legless lizard	None/SSC/ Group 2	Loose soils (sand, loam, humus) in coastal dune, coastal sage scrub, woodlands, and riparian habitats	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB occurrence record is 37 miles southeast of the project area within the Julian quadrangle (2005).		



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Aspidoscelis hyperythrus	Orange-throated whiptail	None/SSC/ Group 2	Coastal sage scrub, chaparral, chamise-redshank chaparral, mixed chaparral, valley-foothill hardwood, grassland, juniper and oak woodland, especially in areas with summer fog.	High potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 2 miles east of the project area in the Pala quadrangle (1989). Two more recent occurrence records (2000) are 2 miles south of the project area in the Pala quadrangle.
Aspidoscelis tigris stejnegeri	Coastal western whiptail	None/None/ Group 2	Hot and dry open areas with sparse foliage including Coastal sage scrub, chaparral, woodlands, riparian areas; sandy areas, gravelly arroyos, or washes	Detected in the project area. The nearest CNDDB record is 7 miles north of the project area in the Temecula quadrangle (2001).
Coleonyx variegatus abbotti	San Diego banded gecko	None/None/ Group 1	Arid rocky areas at the heads of canyons with large boulders and rock outcrops, sparse vegetation, commonly on arid desert slopes. Habitat includes Cismontane chaparral, coastal sage scrub, desert scrub; granite outcrops	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 10 miles northwest of the project area in the Bachelor Mtn. quadrangle (1997).
Crotalus ruber ruber	Northern red- diamond rattlesnake	None/SSC/ Group 2	Variety of shrub habitats where there is heavy brush, large rocks, or boulders. Chaparral, oak and pine woodland, arid desert, rocky grassland habitats; rocky desert flats on desert slopes of mountains.	Detected in the project area.
Diadophis punctatus similis	San Diego ringneck snake	None/None/ Group 2	Open, rocky areas in moist habitats near intermittent streams: marsh, riparian woodland, sage scrub, rocky hillsides, chaparral, and mixed coniferous forests and woodlands.	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 11 miles west of the project area in the Fallbrook quadrangle (1999).



		Status		
Scientific Name	Common Name	Federal/State/ County/Other ¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Lichanura [=Charina] trivirgata roseofusca	Coastal rosy boa	None/None/ Group 2	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi-desert scrub in hillsides and canyons; scrub flats with good cover, common in riparian areas but does not require permanent water.	Moderate potential to occur. Suitable habitat in the project area. There were no CNDDB records for <i>L. trivirgata roseofusca</i> but the nearest record for <i>L. trivirgata</i> is 11 miles northeast of the project area in the Vail Lake quadrangle (2004). There are two records from the 1920s that are approximately 4.3 miles southwest of the project area.
Phrynosoma blainvillei	Blainville's horned lizard	None/SSC/ Group 2	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest. Areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains sandy areas, frequently near ant hills.	Detected in the project area.
Salvadora hexalepis virgultea	Coast patch- nosed snake	None/SSC/ Group 2	Semi-arid brushy areas, Chaparral, washes, sandy flats, rocky areas in canyons, rocky hillsides, plains	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 14 miles northeast of the project area in the Aguanga quadrangle (1999).
Thamnophis hammondii	Two-striped garter snake	None/SSC/ Group 1	Marshes, meadows, sloughs, ponds, slow-moving water courses including permanent or semi-permanent bodies of water; bordered by dense vegetation in rocky areas, oak woodland, chaparral, brushland, coniferous forest.	Detected in the project area in 2005 (Dudek 2005a).
			rds	
Accipiter cooperii (nesting)	Cooper's hawk	None/WL/ Group 1	Dense stands of live oak, Riparian and oak woodlands, montane canyons, forest habitats near water	Detected foraging in the project area. Suitable nesting habitat in oak woodlands.
Accipiter striatus (nesting)	Sharp-shinned hawk	BCC/SSC/ Group 1	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats	Detected in the project area in October 2010 (Envira 2010). Does not nest on coastal slope in San Diego County; no breeding habitat in the project area.



		Status		
Scientific Name	Common Name	Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Aimophila ruficeps canescens	Southern California rufous- crowned sparrow	None/WL/ Group 1	Sparse mixed chaparral and coastal scrub habitats (especially coastal sage). Found on steep, rocky hillsides with grass and forb patches, and grassy slopes without shrubs, if boulders/rock outcrops are present	Detected in the project area. Assumed nesting based on season of observation.
Ammodramus savannarum	Grasshopper sparrow	None/SSC/ Group 1	Dry, dense grasslands, especially with a variety of grasses and tall forbs, scattered shrubs for singing perches; hillsides and mesas in coastal areas.	Moderate potential to occur in grasslands in the project area. The nearest CNDDB record is 40 miles northwest of the project area in the El Toro quadrangle (2003).
Amphispiza belli belli (nesting)	Bell's sage sparrow	BCC/WL/ Group 1	Coastal sage scrub, and dry chaparral (especially chamise chaparral) along coastal lowlands and inland valleys with low, dense stands of shrubs.	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 6.8 miles northwest of the project area in the Temecula quadrangle (2001).
Aquila chrysaetos (nesting and nonbreeding/wintering)	Golden eagle	BCC/CDF, WL, FP/Group 1	Open country, especially hilly and mountainous regions, rolling foothills; grassland, coastal sage scrub, chaparral, oak savannas, open coniferous forest, desert, sage-juniper flats	Detected in the project area. This species was incidentally observed during small mammal trapping in October 2010 (Envira 2010). Moderate potential to forage in the project area; no suitable nesting habitat in the project area. Golden eagle nest surveys conducted at historical locations (provided by County and TAIC) in October 2011 and January 2012 were negative.
Ardea herodias	Great blue heron	None/None/ Group 2	Variety of habitats, but primarily wetlands; shallow estuaries and fresh and saline emergent wetlands, lakes, rivers, marshes, mudflats, saltmarsh, riparian habitats	Detected in the project area.



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Athene cunicularia (burrow sites and some wintering sites)	Burrowing owl	BCC/SSC/ Group 1	Open, dry grassland and desert habitats, lowland scrub, coastal dunes, artificial open areas including agriculture; grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats	Low potential to occur in the project area. Suitable habitat present in the project area. The nearest CNDDB record is 6.2 miles north of the project area in the Pechanga quadrangle (1999).
Buteo lineatus	Red-shouldered hawk	None/None/ Group 1	Riparian and woodland habitats, also eucalyptus, interspersed with swamps and wetlands found along coast and southern deserts	Detected in the project area.
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	Coastal cactus wren	BCC/SSC/ Group 1	Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub in arid parts on westward-draining slopes	Detected in the project area.
Cathartes aura	Turkey vulture	None/None/ Group 1	Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting and resting	Detected in the project area.
Circus cyaneus (nesting)	Northern harrier	None/SSC/ Group 1	Open wetlands (nesting), pasture, old fields, dry uplands, grasslands, rangelands, coastal sage scrub; breeds at marsh edge in shrubby vegetation	Detected in the project area in 2005.
Dendroica petechia brewsteri	Yellow warbler	None/SSC/ Group 2	Nests in lowland and foothill riparian woodlands dominated by cottonwoods, alders and willows, montane chaparral; winters in a variety of habitats	Detected in the project area.
Elanus leucurus (nesting)	White-tailed kite	None/FP/ Group 1	Open grasslands, savanna- like habitats, agriculture, wetlands, oak woodlands, riparian, herbaceous and open stages of most habitats in cismontane California, often near agricultural areas.	Detected in the project area during the non-breeding season, September and October 2010.



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Empidonax traillii extimus (nesting)	Southwestern willow flycatcher	FE/SE/Group 1	Riparian woodlands along streams and rivers with mature, dense stands of willows or alders; may nest in thickets dominated by tamarisk. Also broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	Focused surveys in 2005 and 2010 were negative; expected to occur low potential to breed in proposed open space within the project area. The nearest CNDDB record 0.3 miles south of the project area in the Pala quadrangle (2005).
Eremophila alpestris actia	California horned lark	None/WL/ Group 2	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, fallow grain fields	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 8.7 miles north of the project area in the Bachelor Mtn. quadrangle (1997).
Falco mexicanus	Prairie falcon	BCC/WL/ Group 1	Grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Moderate potential to forage over site. No suitable nesting habitat in the project area. The nearest CNDDB record is 23 miles east of the project area in the Warner Springs quadrangle (1980).
Icteria virens (nesting)	Yellow-breasted chat	None/SSC/ Group 1	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush. Breeds in coastal areas and valley foothill riparian	Low potential to occur based on lack of willow habitat in the project area; further, this species was not observed during numerous riparian bird surveys. The nearest CNDDB record is 0.3 miles south of the project area in the Pala quadrangle (2000).
Lanius Iudovicianus	Loggerhead shrike	BCC/SSC/ Group 1	Foothills and lowlands with open habitats with scattered shrubs, trees or other suitable perches; highest density in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, agriculture, and Joshua tree habitats	Moderate potential to occur. Suitable habitat in the project area. The nearest CNDDB record is 14 miles north of the project area in the Lake Elsinore quadrangle (2001).



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur	
Larus californicus	California gull	None/WL/ Group 2	Coast: sandy beaches, mudflats, rocky intertidal and pelagic areas of marine and estuarine habitats, fresh and saline emergent wetlands. Inland: lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. Nests in alkali and freshwater lacustrine habitats; adults roost along shorelines, landfills, pastures, and on islands.	Low potential to forage in the project area. The nearest CNDDB record is 84 miles southeast of the project area in the Obsidian Butte quadrangle (1999).	
Polioptila californica californica	Coastal California gnatcatcher	FT/SSC/ Group 1	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	Focused surveys in 2005 and 2010 were negative; not expected to occur in the project area. The nearest CNDDB record is 3.7 miles west of the project area in the Bonsall quadrangle (1996).	
Sialia mexicana	Western bluebird	None/None/ Group 2	Open forests of deciduous, coniferous or mixed trees, savanna, edges of riparian woodland	Detected in the project area.	
Tyto alba	Common barn- owl	None/None/ Group 2	Open habitats including grassland, chaparral, riparian, and other wetlands.	Detected in the project area.	
Vireo bellii pusillus (nesting)	Least Bell's vireo	FE/SE/Group 1	Nests in southern willow scrub with dense cover within 1-2 meters of the ground; habitat includes willows, cottonwoods, baccharis, wild blackberry or mesquite on desert areas, commonly in valley foothill riparian habitat and lower portions of canyons	One migrant detected in the project area in October 2010 during focused mammal surveys; focused LBVI surveys in 2005 and 2010 were negative; low potential not expected to breed in the project area. The nearest CNDDB record is 1.2 miles south of the project area in the Pala quadrangle (2000).	
	Mammals				
Antrozous pallidus	Pallid bat	None/SSC/ Group 2/ WBWG:H	Rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Most common in open dry habitats: grasslands, shrublands, woodlands, forests	Moderate potential to occur in the project area. The nearest CNDDB record is 10.5 miles southeast of the project area in the Boucher Hill quadrangle (2002).	



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Bassariscus astutus	Ringtail	None/None/ Group 2	Mixed forests and shrublands near rocky areas or riparian habitats. Forages near water and is seldom found more than 1km from a water source	High to moderate potential to occur in the project area; high quality suitable habitat present in the project area. There are no CNDDB records for this species.
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC/ Group 2	Coastal sage scrub, chaparral, more mesic areas Open habitat, coastal sage scrub, chaparral, oak woodland, chamise chaparral, mixed conifer habitats, riparian-scrub ecotone; is a disturbance specialist	Moderate potential to occur in suitable scrub and chaparral habitat. Not detected during small mammal trapping; however, the trapping was not within this species' suitable habitat. The nearest CNDDB record is 18 miles east of the project area in the Aguanga quadrangle (2002). There are closer records to the project area (3.5 miles) but they are older (1971).
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC/ Group 2	Coastal sage scrub, grassland, sage scrub- grassland ecotones, sparse mixed and chamise chaparral; rocky and gravelly areas with yucca overstory, rocky substrates, loams and sandy loams	Detected in the project area during small mammal trapping survey (Envira 2010).
Corynorhinus townsendii	Townsend's big- eared bat	None/SSC/ Group 2/ WBWG:H	Mesic habitats, gleans from brush or trees or feeds along habitat edges in all habitats except alpine and subalpine	Moderate potential to occur in the project area. The nearest CNDDB record is 28 miles southeast of the project area in the Santa Ysabel quadrangle (2003).
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST/Group 1	Open habitat, grassland, sparse coastal sage scrub, sandy loam and loamy soils with low clay content; gentle slopes (<30%) and sparse vegetative cover	Focused surveys in 2010 were negative; not expected to occur in the project area. The nearest CNDDB record is 5.6 miles north of the project area in the Pechanga quadrangle (2002).
Eumops perotis californicus	Western mastiff bat	None/SSC/ Group 2/ WBWG: H	Roosts in small colonies in cracks and small holes, seeming to prefer manmade structures	Moderate potential to occur in the project area. The nearest CNDDB record is 7.8 miles south of the project area in the Pala quadrangle (1996).



		Status		
Scientific Name	Common Name	Federal/State/ County/Other ¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Lasiurus blossevillii	Western red bat	None/None/ Group 2/ WBWG: M/	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding. Roosts in woodlands and forests; forages over grasslands, shrublands, woodlands, forests, and croplands.	Moderate potential to occur in the project area. The nearest CNDDB record is 20 miles south of the project area in the San Pasqual quadrangle (2003).
Lepus californicus bennettii	San Diego black- tailed jackrabbit	None/SSC/ Group 2	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, rangelands	Low potential to occur in the project area; would have been readily detected during numerous wildlife surveys throughout the project area. Suitable habitat present in the project area. The nearest CNDDB record is 6 miles north of the project area in the Pechanga quadrangle (2001).
Macrotus californicus	California leaf- nosed bat	SSC/Group 2/ WBWG:H	Desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, and palm oasis	Not expected to occur in the project area based on lack of Suitable habitat. The nearest CNDDB record is 56 miles southeast of the project area in the Barret Lake quadrangle (2003).
Myotis ciliolabrum	Western small- footed myotis	None/None/ Group 2/ WBWG:M	Deserts, chaparral, riparian zones, western coniferous forest; most common above pinyon-juniper forest. Roosts in Caves, old mines, abandoned buildings	Moderate potential to occur in the project area. The nearest CNDDB record is 19 miles southeast of the project area in the Rodriguez Mtn. quadrangle (2002).
Myotis yumanensis	Yuma myotis	None/None/ Group 2/ WBWG:LM	Closely tied to open water which is used for foraging; open forests and woodlands are optimal habitat	Moderate potential to occur in the project area. The nearest CNDDB record is 12.5 miles east of the project area in the Morro Hill quadrangle (1996).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/ Group 2	Coastal sage scrub, Joshua tree, mixed and chamise-redshank chaparral, sagebrush, pinyon-juniper woodland; with rock outcrops, cactus thickets, dense undergrowth	Detected in the project area during small mammal trapping survey (Envira 2010).



Scientific Name	Common Name	Status Federal/State/ County/Other¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Nyctinomops femorosaccus	Pocketed free- tailed bat	None/SSC/ Group 2/ WBWG:M	Rocky desert areas with high cliffs or rock outcrops; pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oasis	Not expected to occur based on lack of suitable habitat. Rare in California. The nearest CNDDB record is 10 miles southeast of the project area in the Boucher Hill quadrangle (2002).
Nyctinomops macrotis	Big free-tailed bat	None/SSC/ Group 2/ WBWG:MH	Rugged, rocky canyons	Low potential to occur based on lack of suitable habitat. The nearest CNDDB record is 17 miles south of the project area in the Escondido quadrangle (1988). More recent records for this species (2002) are located in Julian, Warner's Ranch, and Escondido quadrangles.
Odocoileus hemionus	Southern mule deer	None/None/ Group 2	Coastal sage scrub, chaparral, riparian, woodlands, forest; often browses in open areas adjacent to cover; found in most habitats except deserts and intensely farmed areas	Detected in the project area.
Onychomys torridus ramona	Southern grasshopper mouse	None/SSC/ Group 2	Alkali desert scrub and other desert scrub habitats, sparse coastal scrub, grassland especially with friable soils	Low potential to occur. Not detected during focused small mammal trapping surveys in 2010. The nearest CNDDB record is 15 miles northeast of the project area in the Sage quadrangle (2004).
Perognathus Iongimembris brevinasus	Los Angeles pocket mouse	None/SSC/ Group 2	Grassland, coastal sage scrub, disturbed habitats; fine, sandy soils	Not expected to occur in the project area. The project area is outside of known range for this species. Not observed during focused small mammal trapping surveys in 2010. The nearest CNDDB record is 6 miles north of the project area in the Pechanga quadrangle (1993).
Puma concolor	Mountain lion	None/None/ Group 2	coastal sage scrub, chaparral, riparian, woodlands, forest; rests in rocky areas, and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats	Detected in the project area.

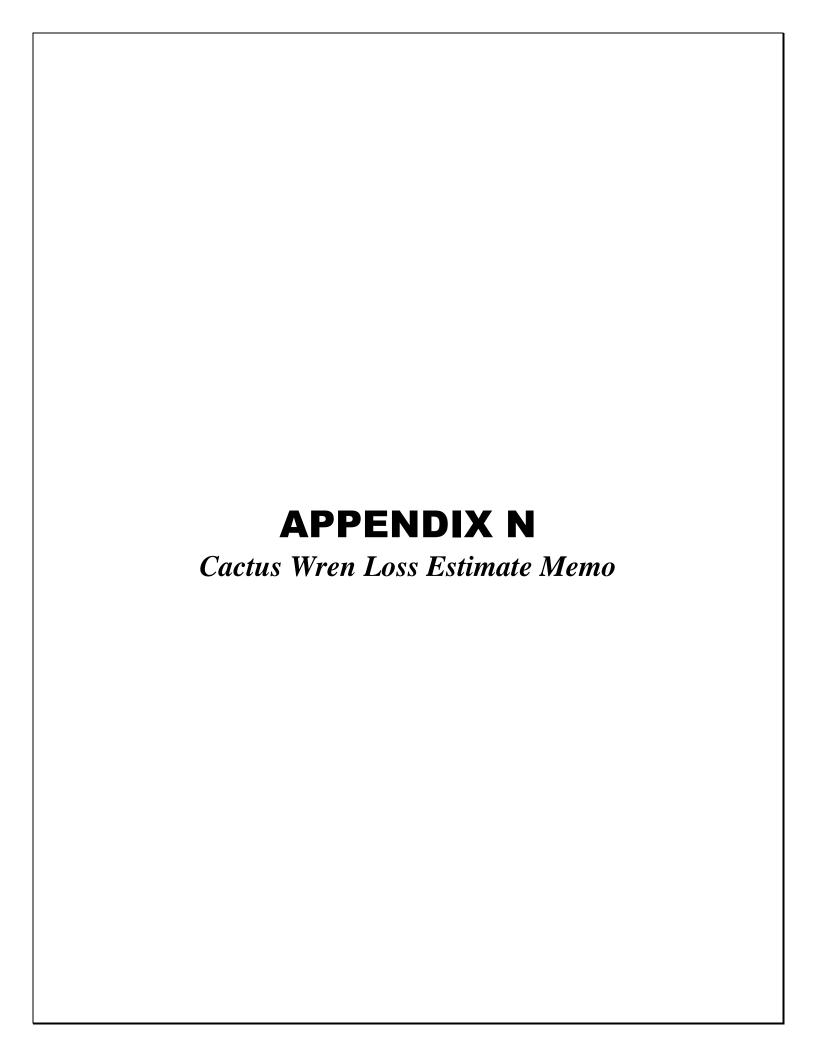


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Scientific Name	Common Name	Status Federal/State/ County/Other ¹	Primary Habitat Associations	Status in the project area or Potential to Occur
Taxidea taxus	American badger	None/SSC/ Group 2	Dry, open treeless areas, grasslands, coastal sage scrub, especially areas with friable soils	Moderate potential to occur. Suitable habitat in the project area; however, there is poor connectivity to off-site open space, a high degree of human disturbance in the area, and no badger sign was detected during surveys. The nearest CNDDB is 13 miles south of the project area in the San Marcos quadrangle, although no date is associated with this record. The nearest CNDDB record with a recent date (1997) is 28.5 miles northwest of the project area in the Canada Gobernadora quadrangle.
		Inverte	ebrates	
Danaus plexippus	Monarch butterfly	None/None/ Group 2	Overwinters in eucalyptus groves	Detected in the project area.
Euphydryas editha quino	Quino checkerspot butterfly	FE/None/ Group 1	Sparsely vegetated hilltops, ridgelines, occasionally rocky outcrops; host plant Plantago erecta and nectar plants must be present	Focused surveys conducted in 2008 were negative. Low potential to occur. Only one location is known from approximately 6 miles north of the project area in 1997. The nearest CNDDB record is 8.7 miles north of the project area in the Bachelor Mtn. quadrangle (1998).
Streptocephalus woottoni	Riverside fairy shrimp	FE/None/ Group 1	Deep, long-lived vernal pools, vernal pool-like seasonal ponds, stock ponds; warm water pools that have low to moderate dissolved solids; in patches of grassland or agriculture interspersed in coastal sage scrub vegetation	Not expected to occur. No vernal pool habitat in the project area. The nearest CNDDB record is 6 miles north of the project area in the Temecula quadrangle (2003).



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SHAPOURI & ASSOCIATES

PROJECT MANAGEMENT SERVICES

ENGINEERING • ARCHITECTURE • PLANNING

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June 14, 2013

DUDEK

Attn: Mr. Vipul Joshi, Senior Project Manager/Ecologist Via email: vjoshi@dudek.com
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024

Re: Warner Ranch Lot Loss Estimate if additional Cactus Wren was to be preserved and RPO Buffer has no Encroachments

Dear Mr. Joshi,

Pursuant to your request, we have analyzed the proposed project development plans and in order to preserve the cactus wren habitat in the eastern portion of the project (Please see attached Exhibit "A") the proposed residential lots would be reduced by approximately 60 Units. This large reduction results from the fact that some of the proposed roads will be cut off as well. A loss of this magnitude is significant and would not be feasible.

The affected lot numbers are highlighted in Magenta color Box. Also highlighted in Yellow are the Street Lot No. 643, 645 and a portion of Street Lot no. 642 which will be affected. The existing cactus wren habitat is shown with a Red hatch.

In addition, on the East side of the proposed project, we have analyzed the possibility of constructing the proposed water line from the water tank reservoir to the development area, the Fire Management Zone encroachments and the Trails completely outside of the Resource Protection Ordinance (RPO) Buffers and the resulting disturbance is actually increased.

The waterline is currently designed to be placed within the existing access road which is already disturbed thus avoiding further disturbance of habitat, please refer to "Exhibit B". Rainbow Municipal Water District has also agreed to minimize their required easement for these portions of the waterline from 30 feet wide to 20 feet wide to minimize future impacts. We have also considered using other existing

DUDEK, Attn: Mr. Vipul Joshi, Senior Project Manager/Ecologist

Via email: vjoshi@dudek.com

Re: Warner Ranch Lot Loss Estimate if additional Cactus Wren was to be preserved and RPO Buffer has no

Encroachments Page 2 of 2

roads within the Orchards but due to proposed grading and the resulting steep cut slopes adjacent to the Orchard this alignment would not be feasible.

The proposed trails are all following the existing trails to minimize impacts, moving the trails outside of the RPO buffer would also result in greater habitat disturbance.

The Fire Management Zones are also mostly outside of the RPO buffer area, there are 3-4 areas that a portion of Zone 3 (50 feet Non-Irrigated and Thinned Zone) encroaches on the RPO Buffer. This encroachment is minor and the RPO Buffer area is currently completely clear of any vegetation at this time due to ongoing agricultural activity. We have also consulted with the fire district about reducing the width of this fire management zone and this is the minimum requirement allowed by the Fire Chief. The other option considered was to shift the proposed development (trails, roads, homes and park) easterly however this option would result in significant loss of homes (approximately 24 homes) and realignment of roads which was infeasible.

Please let me know if you need any additional information.

Sincerely,

M. H. Shapouri, RCE

