Sampling Point: <u>SP3</u>

Profile Des	cription: (Describe t	o the de	pth needed to docur	nent the	indicator	or confir	m the abs	ence of	f indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	k Feature	es Type ¹		Textu	re ³	Remarks		
0.12"	5 VP 3/4	00	5 VP 3/1	5	<u></u>	<u></u>	Sandy lor		Liniform soil stratum		
0-12	<u>5 TK 5/4</u>	- 90	$\frac{J I K J I}{10 N D 5/2}$	- <u> </u>							
			<u>10 YR 5/2</u>		<u> </u>	M					
12" =											
Bottom							<u> </u>				
				• •••••••••	• •••••••••						
				• •	• •••••••••••••••••••••						
¹ Type: C=C	oncentration, D=Depl	etion, RI	M=Reduced Matrix.	² Locatio	n: PL=Poi	e Lining, F	RC=Root (Channel	, M=Matrix.		
³ Soil Texture	es: Clay, Silty Clay, S	andy Cla	ay, Loam, Sandy Clay	Loam, S	andy Loar	n, Clay Lo	am, Silty (Clay Loa	am, Silt Loam, Silt, Loamy Sand, Sand.		
Hydric Soil I	ndicators: (Applicabl	e to all L	RRs, unless otherwise	noted.)			Indica	ators for	r Problematic Hydric Soils:		
Histoso	I (A1)		Sandy Redo	x (S5)				cm Mu	ick (A9) (LRR C)		
Histic E	pipedon (A2)		Stripped Ma	atrix (S6) kv Minor) (51/E1)			cm Mu	ick (A10) (LRR B) 1 Vortio (E18)		
Hvdroa	en Sulfide (A4)			ved Matr	ix (F2)			Red Par	ent Material (TF2)		
Stratifie	d Layers (A5) (LRR C	;)	Depleted M	atrix (F3)		Ĥ	Other (E	xplain in Remarks)		
1 cm M	uck (A9) (LRR D)		Redox Darl	surface	e (F6)						
Deplete	ed Below Dark Surface	e (A11)	Depleted D	ark Surfa	ace (F7)						
	ark Sufface (A12) Mucky Mineral (S1)			ressions (e (Fa)	(F8)		⁴ Indic	atore of	f bydronbytic vegetation and		
Sandy	Gleved Matrix (S4)			ia (i a)			We	etland h	vdrology must be present.		
Restrictive	Layer (if present):								, <u> </u>		
Туре:На	rdpan layer										
Depth (ir	nches):12"						Hydri	c Soil P	Present? Yes 💿 🛛 No 🔿		
Remarks: R	ed Parent Material	(TF2) i	ndicator present, as	red lay	er entirel	y within	top 12" o	f test p	it. Hardpan layer at 12" prevented		
d	eeper excavation a	ıd evalı	ation. Some deplet	ion visi	ble in this	s sample.					
)GY										
Wetland Hy	drology Indicators:							Second	any Indicators (2 or more required)		
Primary Ind	icators (any one indic	ator is su	(fficient)						iter Marks (B1) (Riverine)		
	Water (A1)		Salt Crust	(B11)					diment Denosits (B2) (Riverine)		
High W	ater Table (A2)		Biotic Cru	(= · · ·) st (B12)					ft Deposits (B3) (Riverine)		
Saturat	ion (A3)		Aquatic In	vertebra	tes (B13)			Dra	ainage Patterns (B10)		
Water I	Marks (B1) (Nonriveri	ne)	Hydrogen	Sulfide	Odor (C1)		Dry-Season Water Table (C2)				
Sedime	ent Deposits (B2) (No r	riverine) 🗍 Oxidized I	Rhizospł	neres along	g Living Ro	oots (C3)	Thi	in Muck Surface (C7)		
Drift De	eposits (B3) (Nonrive	ine)	Presence	of Redu	ced Iron (C	24)		Cra	ayfish Burrows (C8)		
Surface	e Soil Cracks (B6)		Recent Iro	n Redu	ction in Plo	wed Soils	(C6)	Sal	turation Visible on Aerial Imagery (C9)		
	tion Visible on Aerial I	magery (B7) Other (Ex	plain in F	(emarks)				allow Aquitard (D3)		
Field Obee	stallieu Leaves (B9)								C-Neutral Test (D5)		
Surface Ma	tor Procent? V	\sim	No 🙃 Depth (in	choe).							
Water Table	Present? V	େ () ଜ ()	No (Depth (in	ches):							
Saturation F	Present? V		No 🕢 Depth (in	ches).							
(includes ca	apillary fringe)	es (We	tland Hyd	rology	Present? Yes 🔿 No 💽		
Describe Re	ecorded Data (stream	gauge, i	nonitoring well, aerial	photos,	previous ir	spections)), if availat	le:			
Google Ea	rth satellite imager	y dated	6/13/2011.								
Remarks:Sa	ample point taken a	t a high	point. No wetland	hydrol	ogy indic	ators wer	e present	at this	location.		
98 Army Corp	os or Engineers										

Project/Site: Scheiber Biological Re	sources Asses	sment	City/County:Lincol	n / Placer		Sampling Date: 9/19/2011		
Applicant/Owner:			-	St	ate:CA	Sampling F	oint:SP4	
Investigator(s): Sam Bacchini & Dan	Neal		Section, Township,	Range:S17,	T12N, R6E	MDB&M		
Landform (hillslope, terrace, etc.): Terr	Local relief (conca	/e, convex, n	e Slope (%):1-2%		(%):1-2%			
Subregion (LRR):C - Mediterranean	California	Lat:	_	Long:			Datum:	NAD83
Soil Map Unit Name: 182, San Joaqui	n-Cometa san	dy loams, 1 t	to 5 percent slopes		NWI classi	ication:Hydri	ic	
Are climatic / hydrologic conditions on t	he site typical fo	or this time of y	rear?Yes 💽 🛛 N	٥ <mark>ᢕ</mark> (If	no, explain in	Remarks.)		
Are Vegetation 🗙 Soil 🗍 or H	lydrology	significantl	y disturbed? A	re "Normal C	ircumstances'	present? Ye	es 💽	No 🔿
Are Vegetation Soil 🗙 or H	fydrology	naturally p	roblematic? (f needed, ex	plain any answ	ers in Remar	ks.)	
SUMMARY OF FINDINGS - A	ttach site m	ap showing	g sampling poin	t location	s, transect	s, importa	nt feat	ures, etc.
Hydrophytic Vegetation Present?	Yes 🔘	No 💽						
Hydric Soil Present?	Yes 🛞	No 🛞	Is the Sam	led Area				
Wetland Hydrology Present?	Yes 🛞	No 🔘	within a We	tland?	Yes C) No 🧿	9	
Remarks:Parcel was mowed in co material of the soil is nat appeared to be in a wetla	nnection with turally problem and, but conta	normal farm natic, but rec ins borderline	ing practices, mak l parent indicator h e upland vegetation	ing identific ydric soil iı 1.	cation of veg idicator (TF2	etation diffic ?) is present.	cult. The . This sa	e red paren imple point
VEGETATION								
	\	Absolute	Dominant Indicate	r Domin	ance Test wo	rksheet:		
LICE SUBLUM (USE SCIENUIC NAMES	.)	70 Cover	opecies rotatus	Mumbe	r of Dominant	Spaciae		

1. <i>N/A</i>				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 2 (B)
4.				- Percent of Dominant Species
Total Cover: Sapling/Shrub Stratum	%			That Are OBL, FACW, or FAC: 50.0 % (A/B)
1. <i>N/A</i>				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				FAC species 60 x 3 = 180
Total Cover:	%			FACU species x 4 = 0
Herb Stratum				UPL species 40 x 5 = 200
¹ Lolium multiflorum	60	Yes	FAC	Column Totals: 100 (A) 380 (B)
² ·Avena fatua	37	Yes	Not Listed	
³ . Croton setigerus	2	No	Not Listed	Prevalence Index = B/A = 3.80
⁴ . <i>Hemizonia congesta</i>	1	No	Not Listed	Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0'
7				 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	100%			
<u> </u>				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total Cover: % Bare Ground in Herb Stratum 0 % % Cover (of Biotic C	Crust	0 %	─ Hydrophytic Vegetation Present? Yes No ●
Pomarke: The successful in this complementation		h	<u></u>	the dominance test. The property symperiodicated
that parcel normally contains dry-farmed v	vild oat,	and was	es not, satisf	owed pursuant to his normal farming practices.

Profile Des	cription: (Describe t	to the de	pth needed to doc	ument the	e indica	tor or confi	rm the absence of	indicators.)			
Depth (inches)	Matrix Color (moist)	%	Rec Color (moist)	lox Featur	es Typ	be1 Loc2	Texture ³	Remarks			
0-4"	5 YR 3/4	74	5 YR 5/8	2.5	 C	M	Loam				
		<u> </u>	10 YR 2/2		- <u>-</u>	<u></u>					
4-6"	10 YR 4/3	65	10 YR 2/2		- <u>~</u>	<u></u>					
	10 1 K 4/3		10 TK 2/2		- <u>C</u>						
	5 ND 4/2		<u>10 YK 5/3</u>		- <u>D</u>	<u>M</u>					
0-8"	<u>5 YK 4/3</u>	/4	<u>10 YR 2/1</u>	25	- <u>C</u>	<u></u> <u>M</u>		· · · · · · · · · · · · · · · · · · ·			
7.5 YR 5/8 1 C M											
<u>8"</u> =											
Bottom											
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. ³ Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay, Loam, Sandy Loam, Silty Clay, Loam, Silty Clay, Sandy Clay, Loam, Sandy Clay, Sandy Clay, Loam, Sandy Clay,											
Hydric Soil	Indicators: (Applicabl	e to all 1	RRs unless otherwi	ise noted)	Sanuy L	.oani, Osay L	Indicators for	Problematic Hydric Soils			
Histoso	I (A1)		Sandy Re	dox (S5)			1 cm Mu	ck (A9) (LRR C)			
Histic Epipedon (A2)						2 cm Mu	ck (A10) (LRR B)				
Black H	listic (A3)		Loamy M	ucky Mine	ral (F1)		Reduced	l Vertic (F18)			
Hydrog	en Sulfide (A4)		Loamy G	leyed Mati	rix (F2)		× Red Pare	ent Material (TF2)			
	ed Layers (A5) (LRR C	(ت		Matrix (F3	5) 0 (EB)		U Other (E	xplain in Remarks)			
	uuk (A9) (LKK D) ed Below Dark Surface	e (A11)		ark Suffac Dark Surf	е (го) ace (F7	'n					
	ark Surface (A12)	e (evil)		epressions	605 (F8) 6 (F8)	/					
Sandy	Mucky Mineral (S1)		Vernal Po	ools (F9)	~~/		⁴ Indicators of	hydrophytic vegetation and			
Sandy	Gleyed Matrix (S4)		<u>1</u>				wetland h	ydrology must be present.			
Restrictive	Layer (if present):										
Type:Ha	rdpan layer										
Depth (ir	1ches):8"						Hydric Soil P	resent? Yes 💽 🛛 No 🔿			
Remarks: R	Red Parent Material	(TF2) i	ndicator present,	as first re	ed layer	r entirely w	vithin top 12" of t	est pit. Hardpan layer at 8"			
p	revented deeper ex	cavation	n and evaluation.	Distinct s	stratific	eation with	some depletion v	isible at this sample pit.			
HYDROLO	DGY										
Wetland Hy	drology Indicators:	,,				******	Second	ary Indicators (2 or more required)			
Primary Ind	icators (any one indic	ator is su	fficient)				Wa	Water Marks (B1) (Riverine)			
Surface	e Water (A1)		Sait Cru	ıst (B11)			Sediment Deposits (B2) (Riverine)				
High W	/ater Table (A2)		Biotic C	rust (B12)			Drif	t Deposits (B3) (Riverine)			
🗍 Saturat	tion (A3)		Aquatic	Invertebra	ates (B1	3)	Dra	inage Patterns (B10)			
Water I	Marks (B1) (Nonriver i	ine)	Hydroge	en Sulfide	Odor (C	C1)	Dry	-Season Water Table (C2)			
Sedime	ent Deposits (B2) (No r	nriverine) 🗙 Oxidized	d Rhizospl	heres al	long Living F	Roots (C3) 🔲 Thi	n Muck Surface (C7)			
Drift De	eposits (B3) (Nonrive i	rine)	Present	e of Redu	iced Iroi	n (C4)	Cra	yfish Burrows (C8)			
Surface	e Soil Cracks (B6)		Recent	Iron Redu	ction in	Plowed Soils	s (C6) 🗌 Sat	uration Visible on Aerial Imagery (C9)			
Inunda	tion Visible on Aerial I	magery (B7) 🗌 Other (E	Explain in I	Remark	s)	Sha	allow Aquitard (D3)			
Water-	Stained Leaves (B9)						FAC	C-Neutral Test (D5)			
Field Obse	rvations:										
Surface Wa	ater Present? Y	es C	No 💽 Depth	(inches):							
Water Table	e Present? Y	es C	No 💽 Depth	(inches):							
Saturation I	Present? Y	es C	No 💽 Depth	(inches):		w	etland Hydrology	Present? Yes 💽 No 🔿			
Describe R	ecorded Data (stream	gauge, r	monitoring well, aeri	al photos,	previou	is inspection	s), if available:				
Google Ea	arth satellite imager	y dated	6/13/2011.	-							
Remarks:S	ample point taken a	it a depr	ession visible in (Google E	arth sa	tellite imag	ery.				
				-			-				
1											
US Army Corj	ps of Engineers							A & West and a second			

Project/Site: Scheiber Biological Resources Assessment	City/County:Lincoln / Placer	Sampling Date:9/19/2011			
Applicant/Owner:	State:CA	Sampling Point:SP5			
Investigator(s):Sam Bacchini & Dan Neal	Section, Township, Range:S17, T12N, R6E MDB&M				
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none):None	Slope (%):0%			
Subregion (LRR): C - Mediterranean California Lat:	Long:	Datum:NAD83			
Soil Map Unit Name: 182, San Joaquin-Cometa sandy loams, 1 to	5 percent slopes NWI classi	fication:Hydric			
Are climatic / hydrologic conditions on the site typical for this time of year Are Vegetation Soil or Hydrology significantly Are Vegetation Soil or Hydrology naturally properties Are Vegetation Soil or Hydrology naturally properties SUMMARY OF FINDINGS - Attach site map showing	ear? Yes i No (If no, explain in disturbed? Are "Normal Circumstances" oblematic? (If needed, explain any answ sampling point locations, transect	Remarks.) ' present? Yes			
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:Parcel was mowed in connection with normal farmin wetland indicators, including the red parent material	Is the Sampled Area within a Wetland? Yes C ng practices, making identification of veg soil indicator, were present at this sample	No () etation difficult. None of the e point.			

	VE	EG	E	T/	٩T	10	ΟN
--	----	----	---	----	----	----	----

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant Species
1. <i>N/A</i>				That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.				
Total Cove	r' %			- Percent of Dominant Species
Sapling/Shrub Stratum	·			
1. <i>N/A</i>				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				FAC species 25 x 3 = 75
Total Cover	: %			FACU species x 4 =
Herb Stratum	1101000100			UPL species 75 x 5 = 375
1-Avena fatua	75	Yes	Not Listed	Column Totals: 100 (A) 450 (B)
2.Lolium multiflorum	25	Yes	FAC	
3.				Prevalence Index = B/A = 4.50
4.	·			Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7.				Morphological Adaptations ¹ (Provide supporting
8.	-			data in Remarks or on a separate sneet)
Total Cover	100%			Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	100 /0			
1. <i>N/A</i>				¹ Indicators of hydric soil and wetland hydrology must
2				be present.
Total Cover	: %			Hydrophytic
% Bare Ground in Herb Stratum0 % Cover	of Biotic C	Crust 0	%	Present? Yes No 💿
Remarks: The property owner indicated that parcel	normally	contains o	lry-farmed	wild oat, and was recently mowed pursuant to his
normal farming practices.				

Depth	Matrix			Redox	Feature	es					
(inches)	Color (moist)	%	Color ((moist)	%	Type1	_Loc ²	Textu	re ³	Remarks	
0-14"	7.5 YR 3/4	98	7.5 YR 2	2/1	2	С	М	Loam		Uniform stratum.	
148 -					·	•		·			
14" =					*****			·			
Bottom	<u>k-d</u>				·····			<u> </u>			
			·				-	·			
			·				<u> </u>	· ·			
		lation DN	I⊯Bodupod	Motrix	² Leoptic				bornel		
oil Texture	es: Clay Silty Clay S	Sandy Cla	v Loam S	andy Clav I	Locaiit Loam S	andv Loan	e ∟ininy, ⊧ n_Clav Lo:	am Silty C	lav Loar	m≕maunx. n Silt Loam Silt Loamv San	t San
vdric Soil la	dicators: (Applicabl	le to all 1	Rs unless	s of herwise	noted)	andy Loan	n, olay Los	Indica	tors for	Problematic Hydric Soils	4, Oan
Histosol	(A1)			Sandv Redox	(S5)				cm Muc	k (A9) (LRR C)	
_] Histic E∣	pipedon (A2)			Stripped Ma	trix (S6))		2	cm Muc	k (A10) (LRR B)	
🖥 Black H	istic (A3)			_oamy Muc	ky Minei	ral (F1)		R	Reduced	Vertic (F18)	
☐ Hydroge	en Sulfide (A4)			_oamy Gley	ed Matr	ix (F2)		R	Red Pare	nt Material (TF2)	
] Stratifie	d Layers (A5) (LRR (C)		Depleted Ma	atrix (F3)			Other (Ex	plain in Remarks)	
] 1 cm Mı	JCK (A9) (LRR D)		F	Redox Dark	Surface	e (F6)					
Deplete	d Below Dark Surfac	e (A11)		Depleted Da	ark Surfa	ace (F7)					
Sandy N	ark Sunace (A12) Auchy Mineral (S1)			Redox Depr	essions	(F8)		⁴ India	atora of i	hydrophytic vocatation and	
Sandy (Reved Matrix (S4)			venar roon	5(19)			muic	ations on atland hy	drology must be present	
estrictive	Laver (if present):										
Tyne [.]											
Type: Depth (in	ches):							Hydric	- Soil Pr	esent? Yes 🔿 No 🤇	
Type: Depth (in Remarks: T	ches): he Red Parent Mat	terial (TI	-2) soil in	dicator is	not pre	sent, as tl	ie red lay	Hydric ver extend	z Soil Pr ls deepe	esent? Yes () No (or than the first 12" of the t	• test pi
Type: Depth (in emarks: T /DROLO	ches): he Red Parent Mat GY drology Indicators:	terial (TI	²) soil in	dicator is	not pre	sent, as th	ne red lay	Hydric ver extend	s Soil Pro	esent? Yes () No (er than the first 12" of the t	test pi
Type: Depth (in emarks: T /DROLO /etland Hy	ches): he Red Parent Mat GY drology Indicators: cators (any one indic	terial (TI	2) soil in	dicator is	not pre	sent, as th	ne red lay	Hydric ver extend	Soil Professional Seconda	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine)	• test pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1)	terial (TI	fficient)	dicator is	not pre	sent, as th	ie red lay	Hydric ver extend	Seconda	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine	etest pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) afer Table (A2)	ator is su	fficient)	dicator is Salt Crust	(B11)	sent, as th	ne red lay	Hydric ver extend	s Soil Pri ls deepe Seconda Wate Sedi	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi] Surface] High Wi Saturati	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3)	ator is su	fficient)	dicator is Salt Crust Biotic Crus	(B11) (B12) (etebra	sent, as th	ne red lay	Hydric ver extend	Seconda	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) page Patterns (B10)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface High Water M	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriver	ator is su	fficient)	dicator is Salt Crust Biotic Crust Aquatic Inv Hydrogen	(B11) (B12) vertebra Sulfide (tes (B13)	ne red lay	Hydric ver extend	Seconda Seconda Wate Sedi Drift Drai Drv-	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2)	est pi
Type: Depth (in emarks: T /DROLC /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No	ator is su ine)	fficient)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F	(B11) (B11) st (B12) vertebra Sulfide (tes (B13)	ne red [ay	Hydric /er extend	Seconda Seconda Wate Seci	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requirer marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7)	est pi
Type: Depth (in iemarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime Drift De	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive	terial (TI ator is su ine) nriverine rine)	(12) soil in	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence ((B11) (B11) (B12) vertebra Sulfide (Rhizosph	tes (B13) Odor (C1) neres along ced Iron (C	te red lay	Hydric ver extend	Seconda Seconda Seconda Sedi Drift Drain Dry- Thin Crav	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8)	est p
Type: Depth (in iemarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime Drift De Surface	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	ator is su ine) nriverine rine)	fficient)	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduk n Reduk	tes (B13) Odor (C1) neres along ced Iron (C	te red lay	Hydric /er extend	Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) ration Visible on Aerial Image	erv (CS
Type: Depth (in emarks: T /DROLC /etland Hy rimary-Indi Surface High Wa Saturati Water M Sedime Drift De Surface	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial	ator is su ine) nriverine rine)	fficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exc	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro Living Ro :4)	Hydric ver extend	Seconda Seconda Seconda Seconda Orifi Draii Dry- Thin Cray Satu Shal	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) aration Visible on Aerial Image low Aquitard (D3)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9)	ine) ine) iniverine ine)	fficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Rc (4) wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Sedi Drain Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est provident
Type: Depth (in temarks: T YDROLO Yetland Hy Yrimary Indi Surface High Wa Saturati Vater M Saturati Drift De Surface Inundat Water-S ield Obsei	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations:	ine) ine) ine) ine) inagery (Ficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc n Reduc olain in F	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks)	tiving Rc Living Rc (4) wed Soils	Hydric /er extend	Seconda Seconda Seconda Seconda Seconda Drain Drain Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Yrimary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Sield Obser	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present?	ine) nriverine rine)	Ficient)	dicator is Salt Crust Biotic Crust Aquatic Im Hydrogen Oxidized R Presence o Recent Iro Other (Exp Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro (4) wed Soils	Hydric /er extend	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Surface Wal Surface Wal	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y	ine) nriverine rine) Imagery (Soil in Fricient) Fricie	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ind Depth (ind	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduk n Reduk olain in F ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Rc Uving Rc (4) wed Soils	Hydric ver extend	Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Water Surface Water Surface Mater S	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Y	ine) nriverine rine) Imagery (res () res ()		dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro (24) Wed Soils	Hydric ver extend (C6) Hydric (C6) (C6) (C6)	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Surface Wal Surface Wal Vater Table Saturation F includes ca	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Present? Y Present? Y	ine) nriverine rine) Imagery ('es () 'es ()	2) soil in fficient) Image: state	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	I Living Ro (4) wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Sedi Drift Drain Dry- Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Wal Vater Table Saturation F includes ca Describe Re	ches): he Red Parent Mat GY drology Indicators: <u>cators (any one indic</u> Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y pillary fringe) corded Data (stream	ine) nriverine rine) Imagery ('es () 'es () i gauge, r	2) soil in (1) (1) (2) (2) (3) (3) (4) (4) (5) (5) (5) (5) (5) (5	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino Depth (ino Depth (ino Depth (ino	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C tion in Plo Remarks) previous in	tiving Ro Living Ro (4) wed Soils	Hydric ver extend (C6) [(C6) [(tland Hyd	Seconda Seconda Seconda Seconda Seconda Sedi Draii Draii Dry- Thin Satu Shal FAC rology P Ie:	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Sedime Surface Inundat Water A Sedime Surface Surface Water Table Saturation F includes ca Describe Re Boogle Ear	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present Present Present Present Present P	ine) nriverine rine) Imagery ('es () 'es () 'es () 'es () 'es ()	2) soil in fficient) fficient) B7) No (No (No (No (No (No (13/2011	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth	(B11) (B11) (B12) vertebra Sulfide (hizosph of Redu n Redu n Redu olain in F ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in	tiving Rc (24) wed Soils wed Soils	Hydric ver extend	Seconda Second	esent? Yes No (er than the first 12" of the f ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) aration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Unundat Water Sedime Surface Surface Wal Water Table Saturation F includes ca Describe Re Boogle Ear Remarks: T	ches): the Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y Present? Y pillary fringe) corded Data (stream rth satellite imager	ine) nriverine rine) Imagery (res () res ()	2) soil in fficient) fficient) B7) No No No No No No No No No N	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino Mell, aerial p L. point adja	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc of	tes (B13) Odor (C1) Deres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro Living Ro (4) wed Soils wed Soils wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Seconda Drift Draii Dry- Thin Cray Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Nater Table Saturation F includes ca Describe Re Google Eat Remarks: Th	ches): the Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y pillary fringe) icorded Data (stream rth satellite imager his sample point with	ine) nriverine rine) Imagery (res () res () res () ry dated as taken	2) soil in fficient) fficient) 1	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches): ches):	tes (B13) Odor (C1) Deres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro (24) wed Soils spections) sample p	Hydric /er extend //er extend //er /////////////////////////////////	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5) Present? Yes No	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Vater Table Saturation F Includes ca Describe Re Boogle Ear Remarks:Th	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y Present? Y pillary fringe) coorded Data (stream rth satellite imager is sample point without the statellite imager the satellite imager of the statellite imager the satellite imager of the statellite imager of the s	ine) nriverine rine) /magery (/es () /es () /es () / gauge, r y dated as taken	2) soil in fficient) fficient) B7) No () No () No () No () No () nonitoring v 6/13/2011 at a high p	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind well, aerial p L. point adja	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro (4) wed Soils spections) sample p	Hydric ver extend	Seconda Seconda Wate Sedi Drift Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Water Vater Table Saturation F includes ca Secribe Re Soogle Eas Remarks: T	ches): he Red Parent Mat A Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Present? Y Present? Y Present? Y pillary fringe) icorded Data (stream rth satellite imager is sample point wo	ine) nriverine rine) /magery (/es () /es () /es () /es () /es () /as taken	2) soil in fficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind well, aerial p I. point adja	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	I Living Ro Living Ro 4) wed Soils wed Soils weetions) sample j	Hydric ver extend	Seconda Seconda Seconda Vate Sedi Drift Drain Dry- Thin Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in iemarks: T /DROLC /etland Hy rimary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser urface Water Vater Table aturation F ncludes ca iescribe Re ioogle Eai emarks: Th	ches): he Red Parent Mat GY drology Indicators: <u>cators (any one indic</u> Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y pillary fringe) corded Data (stream rth satellite imager his sample point w	ine) nriverine rine) Imagery ('es () 'es () 'es () 'es () a gauge, r y dated as taken	2) soil in fficient) Image: state	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Rc (24) wed Soils wed Soils wed Soils spections) sample p	Hydric ver extend	Seconda Seconda Seconda Seconda Seconda Sedi Drift Drain Dry- Thin Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	eed) red) ory (C9

Project/Site: Peery Property	City/	County:Placer C	ounty	Sampling Date:10-19-12	
Applicant/Owner:			State:CA	Sampling Point:SP6	
Investigator(s):Sam Bacchini and Ammon Rice	Sed	tion, Township, Ra	ange:Sec17, T12N, R6E	7	
Landform (hillslope, terrace, etc.): Terrace	Loc	al relief (concave,	convex, none):Concave	Slope (%):1-5%	
Subregion (LRR):C - Mediterranean California	Lat:38.8862		Long:-121.3308	Datum:NAD 83	
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to	9 percent slop	oes	NWI classific	ation:None	
Are climatic / hydrologic conditions on the site typical for this	s time of year?	Yes 🕢 No ((If no, explain in R	emarks.)	
Are Vegetation Soil or Hydrology	ignificantly distu	Irbed? Are	"Normal Circumstances" p	present? Yes 🕥 No 🙃	
Are Vegetation Soil or Hydrology r	aturally problem	natic? (If n	leeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing sar	nplina point l	ocations, transects.	important features, etc.	
	~		,,,		
Hydrophytic Vegetation Present? Yes 🍘 N	o 💽				
Wetland Hydrology Present?	0 (®)	Is the Sample	d Area	N= C	
Remarks: The parcel has been used as a used as an a	oricultural fiel	d for growing o	and for the res ()	NO ()	
constructed through the site and after cons	truction was c	ompleted, the se	easonal wetlands were r	econtured.	
VEGETATION					
	Absolute Dor	minant Indicator	Dominance Test work	sheet:	
Tree Stratum (Use scientific names.)	% Cover Spe	cies? Status	Number of Dominant S	pecies	
2				JIFAC. (A)	
3			 Total Number of Domin Species Actors All Strategy 	ant to:	
4				а. (D)	
" Total Cove			 Percent of Dominant Sp That Are OBL_EACIAL 	Decies	
Sapling/Shrub Stratum			marvie obe, i viov, i	(A/B)	
1			Prevalence Index wor	ksheet:	
2			Total % Cover of:	Multiply by:	
3			OBL species	x1= 0	
4			FACVV species	x 2 = 0	
D				x3= 0	
Herb Stratum	70		UPI species	x5 = aca	
1.Croton setiger	30	Not Listed	Column Totale:	το (Δ) 250 (B)	
2. Avena sp.		Not Listed		M (A) 200 (B)	
3.			Prevalence Index	= B/A = 5.00	
4			Hydrophytic Vegetatio	on Indicators:	
5			Dominance Test is	>50%	
6				S≤3.U'	
7.			data in Remark	plations (Provide supporting s or on a separate sheet)	
8	1.75 (000 K 7 1		Problematic Hydro	phytic Vegetation ¹ (Explain)	
Voody Vine Stratum	r. <u>50</u> %			- • • •	
1.			¹ Indicators of hydric so	il and wetland hydrology must	
2.			be present.		
Total Cove	r: %		Hydrophytic		
8 Bare Ground in Herb Stratum 50 % % Cove	r of Biotic Crust	40 %	Present? Ye	s 🔿 No 🙆	

Depth	Matrix	07		Redox Featu	'es 1	1?	Taudu	Doweda	
(incries)		%		noist) <u>%</u>	iype'			Remarks	
0-6	<u>10YR 3/2</u>		5YR 4/6	50	- <u>D</u>	- <u>M</u>	Clay Loam		
6	<u>10YR 3/1</u>	50	7.5YR 4/6	5 50	D	M	Clay -		
			-						
			_						
			_						
Type: C=	Concentration, D=Dep	bletion, RI	 M≃Reduced I	Matrix. ² Locat	on: PL=Por	e Lining, F	RC=Root Channel, M	I=Matrix.	
Soil Textu	ires: Clay, Silty Clay,	Sandy Cla	ay, Loam, Sa	andy Clay Loam,	Sandy Loan	n, Clay Lo	am, Silty Clay Loam,	Silt Loam, Silt, Loamy Sand, Sa	
Hydric Soil	I Indicators: (Applicat	ole to all L	RRs, unless	otherwise noted.)		Indicators for P	roblematic Hydric Soils ⁴ :	
Histos	iol (A1) Eninodon (A3)			andy Redox (S5)	4		1 cm Muck	(A9) (LRR C)	
Black	Histic (A3)			amy Mucky Mine	eral (F1)		Reduced V	(ATU) (LRK B) ertic (F18)	
Hydro	gen Sulfide (A4)			amy Gleyed Mai	rix (F2)		Red Parent	t Material (TF2)	
Stratifi	ied Layers (A5) (LRR	C)	X Di	epleted Matrix (F	3)		Other (Expl	lain in Remarks)	
<u>1 cm M</u>	Muck (A9) (LRR D)	<i></i>		edox Dark Surfac	e (F6)				
Deplet	ted Below Dark Surface	ce (A11)		epleted Dark Sur	ace (F7)				
Sandy	Mucky Mineral (S1)			ernal Pools (F9)	s (1 0)		⁴ Indicators of hy	/drophytic vegetation and	
- Sandy	Gleyed Matrix (S4)		L				wetland hydr	rology must be present.	
Restrictiv	e Layer (if present):								
Type:C	lay pan								
Depth ((inchas): 6						Distanting Orall Days		
	(inches). 0						Hydric Soli Pres	sent? Yes 💽 No 🖯	
Remarks:							Hydric Soil Pres		
Remarks:							Hydric Soil Pres	sent? Yes 🂽 NO 🌔	
Remarks: YDROL	OGY								
Remarks: YDROL Wetland F	OGY	:	fficient				Secondary	/ Indicators (2 or more required)	
YDROL Wetland F	OGY Hydrology Indicators dicators (any one indic	: cator is su	ifficient)				Secondary	<u>/ Indicators (2 or more required)</u> Marks (B1) (Riverine)	
Primary In Surfac	OGY Hydrology Indicators dicators (any one indic ce Water (A1)	: cator is su	ifficient)	Salt Crust (B11)			Secondary Water Sedim	/ Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine)	
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3)	: cator is su	(fficient)	Salt Crust (B11) Biotic Crust (B12)	ates (B13)		Secondary Secondary Water Sedim Draina	<u>Andicators (2 or more required)</u> Marks (B1) (Riverine) tent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10)	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3)	: cator is su	ifficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide	ates (B13) Odor (C1)		Secondary Secondary Water Sedim Drift D Draina Dry-Se	A lndicators (2 or more required) Marks (B1) (Riverine) Nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2)	
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura Water Sedim	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No	: cator is su rine) porriverine	(fficient) □ 5 □ 4 □ 4	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp	ates (B13) Odor (C1) heres along	Living Rc	Secondary Secondary Sedim Sedim Drift D Draina Dry-Se sots (C3) Thin M	A Indicators (2 or more required) Marks (B1) (Riverine) Marks (B2) (Riverine) Marks (B3) (Riverine) Marks (B3) (Riverine) Mage Patterns (B10) Muck Surface (C7)	
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura Vater Sedim Drift D	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No	: cator is su rine) prriverine priverine)	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red	ates (B13) Odor (C1) heres along iced Iron (C	Living Rc	Secondary Secondary Sedirr Sedirr Sedirr Drift D Draina Dry-Si oots (C3) Thin M	<u>Andrease (C7)</u> An Harrows (C8) <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u>	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surfac	OGY Hydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver the Soil Cracks (B6)	: cator is su rine) porriverine erine)	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se toots (C3) Thin M Crayfi (C6) Satura	Arks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C	
YDROL Wetland F Primary In Surfac High V Satura Water Drift D Drift C X Surfac Inunda	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat	: cator is su rine) parriverine prine) Imagery ((fficient) X X	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	Living Ro 4) wed Soils	Secondary Sedim Sedim Sedim Drift D Draina Dry-Se (C6) Satura Shallo	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C w Aquitard (D3)	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Vater Sedim Drift D X Surfac Unuda Water Water	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No Deposits (B3) (Nonrive ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9)	: cator is su rine) pariverine erine) Imagery ((B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se (C6) Satura Shallo FAC-N	<u>Andicators (2 or more required)</u> Marks (B1) (Riverine) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Ment Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C ww Aquitard (D3) Neutral Test (D5)	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surfac Inunda Water Field Obs	OGY Hydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver the Deposits (B2) (No Deposits (B3) (Nonriver the Solid Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) the revations:	: cator is su rine) prriverine prine) Imagery ((fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Secondary Water Sedim Sedim Drift D Draina Dry-Se oots (C3) Thin M Crayfit (C6) Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peroperturbation (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C pw Aquitard (D3) Neutral Test (D5)	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Drift D Surface W Surface W	OGY Jydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) servations: /ater Present?	: cator is su rine) porriverine erine) Imagery (Yes O	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se Crayfi (C6) Satura FAC-N	Arrian Ar	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surface Water Tab	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) rervations: /ater Present?	rine) parriverine parriverine parrine) Imagery (Yes C	(B7) (0 No () No ()	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Second	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surface Water Field Obs Surface W Water Tab Saturation	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) rervations: /ater Present? Deposent? Present?	rine) prine) prriverine prine) Imagery (Yes C Yes C	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Other (Explain in Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plor Remarks)	Living Ro 4) wed Soils	Secondary Secondary Sedirr Sedirr Sedirr Sedirr Drift D Draina Dry-Se oots (C3) Thin N Crayfi (C6) Satura Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface Water Tab Saturation (includes of Describe F	OGY iydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat -Stained Leaves (B9) rervations: /ater Present? De Present? Present? Present? A Present? Capillary fringe) Recorded Data (stream	rine) priverine priverine priverine rine) Imagery (Yes C Yes C Yes C	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Ro 4) wed Soils	Secondary Secondary Secondary Water Soft Drift D Draina Dry-Se ots (C3) Thin M Crayfi (C6) Satura Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C Divertical Test (D5) Easent? Yes No	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Surface W Water Tab Saturation (includes of Describe F	OGY dydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver Ce Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) servations: //ater Present? Depresent? Present? Present? Action Strained Cata (stream	rine) priverine prine) Imagery (Yes () Yes () Yes () Yes ()	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	I Living Ro 4) wed Soils	Secondary Secondary Secondary Water Solar Prese Secondary Water Secondary Se	Arian Antice (Constraints) (Co	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface W Water Tab Saturation (includes of Describe F Remarks:	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat r-Stained Leaves (B9) nervations: /ater Present? Depresent? Present? Capillary fringe) Recorded Data (stream	rine) pariverine priverine prine) Imagery (Yes C Yes C Yes C n gauge, r	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plor Remarks) previous in	Living Ro 4) wed Soils	Secondary Secondary Secondary Water Sedim Drift D Draina Dry-Se Sots (C3) Thin M Crayfil (C6) Satura Shallo FAC-M	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface Water Tab Saturation (includes of Describe F Remarks:	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) rervations: /ater Present? Depresent? Present? Present? Capillary fringe) Recorded Data (stream	rine) prriverine prriverine prine) Imagery (Yes C Yes C n gauge, r	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Rc 4) wed Soils	Secondary Sedim Sedim Sedim Sedim Drift D Draina Dry-Si Dry-Si Dry-Si Crayfi (C6) Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift C Surface Water Tab Saturation (includes of Describe F Remarks:	OGY Jydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver Coeposits (B3) (Nonriver Coep	rine) porriverine porriverine prine) Imagery (Yes C Yes C Yes C n gauge, r	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): eli, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Ro 4) wed Soils	Secondary Secondary Water Solid Press Secondary Water Secondary Se	Arks (B1) (Riverine) Marks (B1) (Riverine) Marks (B1) (Riverine) Marks (B1) (Riverine) Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C Diversible on Aer	
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Drift C X Surface W Water Tab Saturation (includes of Describe F Remarks:	OGY dydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat r-Stained Leaves (B9) rervations: /ater Present?	rine) priverine prine) Imagery (Yes C Yes C Yes C	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	I Living Ro 4) wed Soils	Secondary Sedim Water Solt Pres Sedim Sedim Drift D Draina Dry-Se Sots (C3) Thin M Crayfi (C6) Satura FAC-N Manad Hydrology Pre Ti available:	Arrischer Steiner Stei	

Project/Site: Peery Property	City/County:	Placer County	5	Sampling Date: 10-19-12		
Applicant/Owner:		State:	CA S	Sampling Point:SP7		
Investigator(s):Sam Bacchini and Ammon Rice	Section, Tov	Section, Township, Range:Sec17, T12N, R6E				
Landform (hillslope, terrace, etc.): Terrace	Local relief	concave, convex, none):Concave	Slope (%):1-5%		
Subregion (LRR):C - Mediterranean California	Lat:38.8862	Long:-121.	.3308	Datum:NAD 83		
Soil Map Unit Name: Cometa-Fiddyment complex,	2 to 9 percent slopes		VWI classifica	lion:None		
Are climatic / hydrologic conditions on the site typical for Are Vegetation Soil or Hydrology	or this time of year? Yes 💽 significantly disturbed?	No C (If no, Are "Normal Circu	explain in Rei imstances" pro	marks.) esent? Yes 🏹 🛛 No 💽		
Are Vegetation Soil or Hydrology Soil SUMMARY OF FINDINGS - Attach site m	naturally problematic? ap showing sampling	(If needed, explain point locations, t	n any answers r ansects, i	in Remarks.) mportant features, etc.		
Hydrophytic Vegetation Present? Yes (%) Hydric Soil Present? Yes (%) Wetland Hydrology Present? Yes (%)	No 🕢 No 🕥 Isthe No 🕥 withi	Sampled Area	Yes O	No 💽		
Remarks: The parcel has been used as a used as constructed through the site and after o	an agricultural field for g construction was complet	owing oats and has l ed, the seasonal weth	oeen disked. ands were re	A haul road was contured.		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				- Total Number of Dominant
3.				Species Across All Strata: 0 (B)
Total C Sapling/Shrub Stratum	Cover: 🦉 %			Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.			**	FAC species x 3 =
Total C	Cover:			FACU species x 4 =
Herb Stratum	-3-28199921.3-1			UPL species x 5 = 300
1.Avena sp.	60		Not Listed	Column Totals: 60 (A) 300 (B)
2.				
3.				Prevalence Index = B/A = 5.00
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7				- Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
OTotal C				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	50 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total C	Cover: %			Hydrophytic Vegetation
% Bare Ground in Herb Stratum 40 % %	Cover of Biotic C	rust	%	Present? Yes C No 💽
Remarks: Oat in the field had been recently mo	wed.			. 1

Sampling Point: <u>SP7</u>

Profile Des	cription: (Describe	to the depth	needed to docur	nent the	indicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redox	<pre>K Feature</pre>	s	<u>~</u>	—
(inches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture [®] Remarks
0-6	7.5YR 4/3	95 7.:	5YR 4/6	5	D	<u>M</u>	Sandy Clay Loam
6	7.5YR 3/4	100					Clay Loam
	-						
				,			
		,					
		·		·			·
$\frac{1}{1}$		lation DM-D	aduced Metrix	21		- Lining D	
³ Soil Textur	es: Clav Silty Clav S	Sandy Clay 1	oam Sandy Clav	Locano Loam S	andv Loan	e cining, ro n Clav Loa	am Silfy Clay Loam Silt Loam Silt Loamy Sand Sand
Hydric Soil	Indicators: (Applicab	le to all I RRs	unless otherwise	noted)	unay coun	1, 014y 200	Indicators for Problematic Hydric Soils
Histosc	d (A1)		Sandy Redo	x (S5)			1 cm-Muck (A9) (LRR C)
	Epipedon (A2)		Stripped Ma	atrix (S6)			2 cm Muck (A10) (LRR B)
Black I	Histic (A3)		Loamy Muc	ky Miner	al (F1)		Reduced Vertic (F18)
Hydrog	jen Sulfide (A4)		Loamy Gley	ed Matri	x (F2)		Red Parent Material (TF2)
Stratifie	ed Layers (A5) (LRR (C)	Depleted M	atrix (F3))		Other (Explain in Remarks)
🗂 1 cm M	luck (A9) (LRR D)		Redox Dark	surface	• (F6)		Kuulaya
Deplete	ed Below Dark Surfac	e (A11)	Depieted D	ark Surfa	ice (F7)		
Thick E	Dark Surface (A12)		Redox Dep	ressions	(F8)		
Sandy	Mucky Mineral (S1)		Vernal Poo	ls (F9)			*Indicators of hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)						wetland hydrology must be present.
Restrictive	Layer (if present):						
Type:Cl	ay pan						
Depth (ii	nches): 6						Hydric Soil Present? Yes 🔿 No 💿
Remarks:							
							· · · · · · · · · · · · · · · · · · ·
Wetland Hy	ydrology Indicators:						Secondary Indicators (2 or more required)
Primary Ind	licators (any one indic	ator is suffici	ent)				Water Marks (B1) (Riverine)
Surfac	e Water (A1)		Salt Crust	(B11) ·			Sediment Deposits (B2) (Riverine)
High W	/ater Table (A2)		Biotic Cru	st (B12)			Drift Deposits (B3) (Riverine)
Satura	tion (A3)		Aquatic In	vertebrat	tes (B13)		Drainage Patterns (B10)
Water	Marks (B1) (Nonriver	ine)	Hydrogen	Sulfide (Odor (C1)		Dry-Season Water Table (C2)
Sedime	ent Deposits (B2) (No	nriverine)	Oxidized I	Rhizosph	eres along	I Living Ro	oots (C3) 🔲 Thin Muck Surface (C7)
Drift De	eposits (B3) (Nonrive	rine)	Presence	of Reduc	ed fron (C	4)	Crayfish Burrows (C8)
Surface	e Soil Cracks (B6)		Recent Iro	n Reduc	tion in Plo	wed Soils ((C6) Saturation Visible on Aerial Imagery (C9)
🔄 Inunda	tion Visible on Aerial	lmagery (B7)	Other (Ex	olain in R	temarks)		Shallow Aquitard (D3)
Water-	Stained Leaves (B9)						FAC-Neutral Test (D5)
Field Obse	ervations:						
Surface Wa	ater Present? Y	′es 🔿 — Ni	o 💽 🔹 Depth (in	ches):			
Water Tabl	e Present? γ	′es 🎧 🛛 No	Depth (in	ches):			
Saturation	Present? Y	(es 🔿 Ni	Depth (in	ches):			
(includes c	apillary fringe)			· —		Wet	tland Hydrology Present? Yes 🔿 No 💿
Describe R	ecorded Data (stream	i gauge, mon	itoring well, aerial	photos, p	previous in	spections).	, if available:
Remarks:							

Project/Site: Peery Property	City/County:Placer Cou	nty	Sampling Date:10-19-12
Applicant/Owner:		State:CA	Sampling Point:SP8
Investigator(s):Sam Bacchini and Ammon Rice	Section, Township, Rang	e:Sec17, T12N, R	.6E
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, co	nvex, none):Conve	x Slope (%):1-5%
Subregion (LRR):C - Mediterranean California Lat:3	8.8862	Long:-121.3308	Datum:NAD 83
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to 9 perce	ent slopes	NWI class	sification:None
Are Vegetation X Soil or Hydrology significar Are Vegetation X Soil or Hydrology naturally SUMMARY OF FINDINGS - Attach site map showing	ntly disturbed? Are "N problematic? (If nee ng sampling point loc	ormal Circumstance ded, explain any ans ations, transec	s" present? Yes A No () wers in Remarks.) ts, important features, etc.
Hydrophytic Vegetation Present? Yes No Present? Yes Present? Yes Present? Yes Present? Yes Present?	Is the Sampled A within a Wetland	Area ? Yes (
constructed through the site and after construction	i was completed, the seas	s and has been dish sonal wetlands we	re recontured.

	\bsolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	_Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.		********		- Demonst of Deminant Chassics
Sapling/Shrub Stratum	%			That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.			1 h 	Total % Cover of: Multiply by:
3.		,		OBL species x 1 = 0
4.			·	FACW species x 2 = 0
5.				FAC species x 3 = 0
Total Cover:	%			FACU species 20 x 4 = 80
Herb Stratum	.5.09991.			UPL species x 5 =
¹ .Centromadia fitchii	20		FACU	Column Totals: 20 (A) 80 (B)
2. Avena sp.			Not Listed	
3.				Prevalence Index = $B/A = 4.00$
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.			· <u> </u>	Prevalence index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	20 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.		b		be present.
Total Cover:	%	·		 Hydrophytic
% Bare Ground in Herb Stratum65 % % Cover	of Biotic C	crust2	0 %	Vegetation Present? Yes No •
Remarks: Oat in the field had been recently mowed.				

Depth	cription: (Describe Matrix	to the de	ptn needed to docum Redox	Featur	e indicator es	or confiri	n the absence of i	ndicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture ³	Remarks
0-6	7.5YR 4/1	20	7.5YR 4/4	80	<u>D</u>	<u>M</u>	Sandy Clay Loam	Red parent material
6	7.5YR 3/2	20	7.5YR 4/6	80	<u>D</u>	<u>M</u>	Clay Loam	
¹ Type: C=C ³ Soil Texture Hydric Soil I Histoso Histic E Black H Hydrogr Stratifie 1 cm M Deplete Thick D Sandy I	oncentration, D=Dep es: Clay, Silty Clay, S ndicators: (Applicab l (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) (LRR 0) d Layers (A5) (LRR D) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1)	Letion, RM Sandy Cla le to all L1 C) e (A11)	A=Reduced Matrix. ny, Loam, Sandy Clay I Rs, unless otherwise Sandy Redox Stripped Ma Loamy Much Loamy Gley X Depleted Ma Redox Dark Depleted Da Redox Depr Vernal Pools	² Locatio _oam, S noted.) (S5) trix (S6) trix (S6) trix (S6) trix (S7) atrix (F3) Surface ark Surf- essions s (F9)) ral (F1) ix (F2) s) e (F6) ace (F7) 5 (F8)	e Lining, F	C=Root Channel, am, Silty Clay Loan Indicators for I 2 cm Muc Reduced Y Red Parei Other (Ex	M=Matrix. n, Silt Loam, Silt, Loamy Sand, Sand. Problematic Hydric Soils ⁴ : k (A9) (LRR C) k (A10) (LRR B) Vertic (F18) nt Material (TF2) plain in Remarks) hydrophytic vegetation and
Sandy (Gleyed Matrix (S4)			/			wetland hy	drology must be present.
Type:Cls	w pan							
Depth (ir	iches): 6						Hydric Soil Pre	esent? Yes 💽 👘 No 🔿
HYDROLC)GY						Coopda	nu Indicatora (2) or more required)
Primary Indi	cators (any one indic	ator is su	fficient)				Seconda Wate	er Marks (B1) (Riverine)
Surface High W Saturati Water M Sedime Drift De Surface Inundat Water-S	Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No iposits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations:	ine) nriverine rine) Imagery (Salt Crust Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iron B7) Other (Exp	(B11) t (B12) vertebra Sulfide thizospl of Redu n Redu lain in F	ites (B13) Odor (C1) neres along iced Iron (C ction in Ploo Remarks)	Living Ro 4) ved Soils	(C6)	ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)
Surface Wa Water Table Saturation F (includes ca Describe Re Remarks:	ter Present? Y Present? Y Present? Y pillary fringe) ecorded Data (strean	res () res () res () n gauge, r	No Depth (ind No Depth (ind No Depth (ind nonitoring well, aerial p	ches): ches): ches): ches): ohotos,	previous in	Wet spections)	land Hydrology P , if available:	resent? Yes 💽 No 💭
JS Army Corp	os of Engineers							

Project/Site: Peery Property	(City/County	Placer Co	ounty	Sampling Date: 10	-19-12
Applicant/Owner:				State:CA	Sampling Point:SI	»9
Investigator(s): Sam Bacchini and Ammon Rice		Section, To	wnship, Ra	nge:Sec17, T12N, R6I	3	
Landform (hillslope, terrace, etc.): Terrace		Local relief	(concave,	convex, none):Convex	Slop	e (%):1-5%
Subregion (LRR):C - Mediterranean California	Lat:38.8	862		Long:-121.3308	Datun	n:NAD 83
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to 9	percent	slopes		NWI classific	cation:None	,
Are climatic / hydrologic conditions on the site typical for this t	time of yea	ar? Yes 💽	: No () (If no, explain in F	Remarks.)	
Are Vegetation Soil or Hydrology sig	inificantly	disturbed?	Are	"Normal Circumstances"	present? Yes 🔿	No 🙆
Are Vegetation Soil or Hydrology nat	turally pro	blematic?	(If ne	eded, explain any answe	ers in Remarks.)	
	houdha	oomolin	, n noint l	postiono transsoto	important for	turoo oto
Sommart OF Findings - Attach site map si	iowing :	samping	J point is		, important lea	luies, elc.
Hydrophytic Vegetation Present? Yes 💽 No	۲					
Hydric Soil Present? Yes 🍙 No	۲	ls th	e Sampleo	l Area		
Wetland Hydrology Present? Yes 💿 No	۲	with	in a Wetla	nd? Yes 🔿	No 💽	
Remarks. The parcel has been used as a used as an agr	icultural	tield for g	rowing o	ats and has been diske	d. A haul road w	as
VEGETATION A	bsolute	Dominant	Indicator	Dominance Test work	ksheet:	
Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant S That Are OBL, FACW,	or FAC:	(A)
2.				Total Number of Domir	nant	-14: "
3				Species Across All Stra	ata: 0	(B)
4				- Percent of Dominant S	pecies	
Sapling/Shrub Stratum	%			That Are OBL, FACW,	or FAC: 0	% (A/B)
1.				Prevalence Index wo	rksheet:	
2.				Total % Cover of:	Multiply	by:
3.				OBL species	x 1 =	0
4				FACW species	x 2 =	0
5				FAC species	x 3 =	0
Total Cover:	%			FACU species	x 4 =	0
1 Avena an	80		Not Listed	UPL species	80 x 5 =	400
2.				_ Column Totals:	80 (A)	400 (B)
3				Prevalence Index	k = B/A =	5.00
4				Hydrophytic Vegetati	on Indicators:	
5.	<u> </u>			- Dominance Test is	s >50%	
6.		,		Prevalence Index	is ≤3.0¹	
7.				Morphological Ada	aptations ¹ (Provide :	supporting
9				- uata in Kemark	s or on a separate	sneet)

Total Cover:

Total Cover:

20 %

Remarks: Oat in the field had been recently mowed.

80 %

%

% Cover of Biotic Crust

US Army Corps of Engineers

% Bare Ground in Herb Stratum

Woody Vine Stratum

8.

1.

2.

No 💽

Problematic Hydrophytic Vegetation¹ (Explain)

Yes 🔿

be present.

Hydrophytic

Vegetation Present?

%

¹Indicators of hydric soil and wetland hydrology must

Profile Des	cription: (Describe	o the de	pth needed to docum	ent the	e indicator	or confirm	n the absence of indicators.)	
Depth (inchor)	Matrix	0/	Redox	Feature	es Turci	1.002	Toxturo ³	Pomorko
	7 5VD 2/4	- 70		- 70		 M	Condu Clau Larra	nemarks
10	7.51K 3/4		7.5 LK 4/0	20	<u> </u>	<u>IVI</u>		
10	7.5 Y K 3/4		<u>/.5YR 4/6</u>	_40	<u>D</u>	<u>M</u>	Clay Loam	
						·	AL_10	
		·						
							Adv. Addition of the second	
			. <u></u>	·				
			· ······					
		······						
'Type: C=C ³ Soil Textur	Concentration, D=Dep	letion, RN	I≂Reduced Matrix. v. Loam, Sandy Clay I	Locatio	on: PL=Pon Sandy Loan	e Lining, R D. Clay Los	RC=Root Channel, M≏Matrix. am, Silty Clay Loam, Silt Loam, S	Silt Loomy Sand Sand
Hydric Soil I	Indicators: (Applicabl	e to all LF	RRs. unless otherwise	noted.)	anuy Loan		Indicators for Problematic H	vdric Soils:
Histoso	l (A1)		Sandy Redox	(S5)			1 cm Muck (A9) (LRR C	;)
Histic E	pipedon (A2)		Stripped Ma	trix (S6))		2 cm Muck (A10) (LRR	B)
Black H	listic (A3) en Sulfide (A4)		Loamy Much	ky Minei ed Matr	ral (F1) ix (F2)		Reduced Vertic (F18)	-2)
Stratifie	en ounde (A4) ed Lavers (A5) (LRR (2)	Depleted Ma	atrix (F3))		Other (Explain in Rema	z) rks)
🔚 1 cm M	uck (A9) (LRR D)		Redox Dark	Surface	e (F6)			·
Deplete	ed Below Dark Surface	e (A11)	Depleted Da	irk Surfa	ace (F7)			
Sandy I	Ark Surface (A12) Mucky Mineral (S1)			essions s (E9)	(F8)		⁴ Indicators of bydrophytic ve	netation and
Sandy	Gleyed Matrix (S4)			, (, 0)			wetland hydrology must l	pe present.
Restrictive	Layer (if present):							
Type:Cla	ay pan							
Depth (ir	nches): 10						Hydric Soil Present? Yes	• • • • • • • • • • • • • • • • • • •
Remarks:								
ļ								
HYDROLC	DGY							
Wetland Hy	drology Indicators:						Secondary Indicators (2 or more required)
Primary Indi	icators (any one indic	ator is sut	fficient)				Water Marks (B1)	(Riverine)
Surface	e Water (A1)		Salt Crust	(B11)			Sediment Deposits	s (B2) (Riverine)
Hign W	ater Table (A2)			t (B12) ortobra	ton (P12)		Drift Deposits (B3)	(Riverine)
	Marks (B1) (Nonriver	(ne)		Sulfide (Odor (C1)		Drv-Season Water	Table (C2)
C Sedime	ent Deposits (B2) (No	nriverine) Oxidized R	hizosph	ieres along	Living Ro	ots (C3) Thin Muck Surface	e (C7)
Drift De	eposits (B3) (Nonrive	rine)	Presence of	of Redu	ced Iron (C	4)	Crayfish Burrows ((C8)
Surface	e Soil Cracks (B6)		Recent Iron	n Reduc	ction in Ploy	wed Soils ((C6) Saturation Visible	on Aerial Imagery (C9)
Inundat	tion Visible on Aerial I	magery (I	B7) Other (Exp	lain in F	Remarks)		Shallow Aquitard (D3)
Vater-	Stained Leaves (B9)						FAC-Neutral Test	(D5)
Surface Wa	i vauoris: iter Present?		No 🍙 👘 Denth (inc	hes).				
Water Table	e Present? Y		No 🕢 Depth (inc	thes):				
Saturation F	Present?		No C Depth (inc	hes):				
(includes ca	apillary fringe)			<u> </u>		Wet	land Hydrology Present? Ye	s 💽 No 💭
	ecorded Data (stream	gauge, n	nonitoring well, aerial p	10105,	previous in:	spections)	, ir avalladie:	
Remarks: E	Castura is a tanagra	nhia dan	reasion					
	caute is a topogra	pine uep	10331011					
US Army Corp	os of Engineers							

Project/Site: Peery Property		City/County:P1	acer County		Sampling Date: 10-19-12
Applicant/Owner:				State:CA	Sampling Point:SP10
Investigator(s): Sam Bacchini and Ammon Rice		Section, Town	ship, Range:Se	c17, T12N, R	6E
Landform (hillslope, terrace, etc.): Terrace		Local relief (co	oncave, convex	, none):Convex	x Slope (%):1-5%
Subregion (LRR):C - Mediterranean California	Lat:38.8	3862	Long	:-121.3308	Datum:NAD 83
Soil Map Unit Name: Cometa-Fiddyment complex, 2	2 to 9 percent	slopes		NWI class	ification:None
Are climatic / hydrologic conditions on the site typical for	r this time of ye	ar? Yes 💽	NOC	(If no, explain ir	n Remarks.)
Are Vegetation Soil or Hydrology	significantly	disturbed?	Are "Norma	Il Circumstances	s" present? Yes 🎧 🛛 No 💽
Are Vegetation Soil or Hydrology	naturally pro	oblematic?	(If needed,	explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing	sampling p	oint locatio	ons, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes	No 🙆				
Hydric Soil Present? Yes 🙆	No 🌘	Is the S	Sampled Area		
Wetland Hydrology Present? Yes 💽	No 🛞	within	a Wetland?	Yes (🗋 No 💽
Remarks: The parcel has been used as a used as a constructed through the site and after construc	n agricultural onstruction w	l field for gro as completed	wing oats and l, the seasonal	l has been disk I wetlands wer	xed. A haul road was re recontured.

VEGETATION

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				. Total Number of Dominant
3.				Species Across All Strata: 0 (B)
4.				Porcent of Dominant Spacing
Total Cove Sapling/Shrub Stratum	r: %			That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of:Multiply by:
3.				OBL species x 1 = 0
4.			·	FACW species x 2 = 0
5.				FAC species x 3 =
Total Cover	%			FACU species to x 4 = 40
Herb Stratum				UPL species X6 x 5 = 200
1.Avena sp.	30		Not Listed	Column Totals: 50 (A) 240 (B)
² .Centromadia fitchii	10		FACU	
³ . Croton setiger	10		Not Listed	Prevalence Index = B/A = 4.80
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.	· ·			Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				Problematic Hydronbytic Vegetation ¹ (Explain)
Total Cover Woody Vine Stratum	^{::} 50 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.	·	·		be present.
Total Cover	r: %	a . <u></u>		Hydrophytic Vegetation
% Bare Ground in Herb Stratum 50 % % Cover	r of Biotic C	Crust	%	Present? Yes O No 💿
Remarks: Trichostema lanceolatum present outside mowed.	of the sar	nple poin	t, elsewher	e in the feature. Oat in the field had been recently

Profile Des	cription: (Describe	to the de	pth neede	u to uocum	ent the	mulcator		n the absence	of indicators.)
Depth	Matrix			Redox	Feature	es			
(inches)	Color (moist)		Color (moist)		Type1			Remarks
0-8	<u>10YR 3/2</u>		7.5YR 4	/6		<u>D</u>	<u>M</u>	Sandy Clay Loa	m
8	10YR 3/3	60	7.5YR 4	/6	40	D	RC	Clay Loam	
						······			
									· · · · · · · · · · · · · · · · · · ·
									· · · · · · · · · · · · · · · · · · ·
		·				·			
¹ Type: C=C	oncentration, D=Dep	letion, RM	I=Reduced	Matrix.	² Locatio	n: PL=Pore	e Lining, R	C=Root Chann	el, M=Matrix.
³ Soil Texture	es: Clay, Silty Clay, S	Sandy Cla	y, Loam, S	andy Clay L	₋oam, S	andy Loam	i, Clay Loa	am, Silty Clay Lo	oam, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicabl	le to all Li	Rs, unless	s otherwise	noted.)			Indicators f	or Problematic Hydric Soils:
Histoso	l (A1)			andy Redox	(S5)				luck (A9) (LRR C)
	ipipedon (A2) listic (A3)			oamy Muck	(NX (S6) V Miner	ral (E1)			IUCK (A1U) (LRR B) ed Vertic (E18)
Hydrog	en Sulfide (A4)			oamy Gleye	ed Matri	ix (F2)		Red Pa	arent Material (TF2)
Stratifie	d Layers (A5) (LRR 0	C)		Depleted Ma	ıtrix (F3)		Other (Explain in Remarks)
🗍 1 cm M	uck (A9) (LRR D)		F F	Redox Dark	Surface	e (F6)			
	ed Below Dark Surface	e (A11)		Depleted Da	rk Surfa	ace (F7)			
	Mucky Mineral (S1)			redox Depre	essions	(F8)		⁴ Indicators	of hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)			official conc	, (, 0)			wetland	hydrology must be present.
Restrictive	Layer (if present):								
Type:Cla	ay pan								
Depth (ir	nches): 8							Hydric Soil	Present? Yes 💽 No 🔿
Remarks:								— — — — — — — — — —	
HYDROLO	DGY								
Wetland Hy	/drology Indicators:							Secor	dary Indicators (2 or more required)
Primary Ind	icators (any one indic	ator is su	fficient)					<u> </u>	/ater Marks (B1) (Riverine)
	e Water (A1)			Salt Crust ((B11)				adiment Deposite (P2) (Piverine)
High W	ater Table (A2)			Piotio Crue					CULTELL DEUUSIIS (DZ) INVELLUE
Saturat	ion (A3)			DIOLIC CIUS	t (B12)				rift Deposits (B3) (Riverine)
Water M				Aquatic Inv	t (B12) ertebra	tes (B13)			rift Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
	Marks (B1) (Nonriver	ine)		Aquatic Inv Hydrogen S	t (B12) ertebra Sulfide (tes (B13) Odor (C1)			rift Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
	Marks (B1) (Nonriver ent Deposits (B2) (No r	ine) nriverine		Aquatic Inv Hydrogen S Oxidized R	t (B12) ertebra Sulfide (hizosph	tes (B13) Odor (C1) neres along	Living Ro	S D D D D D Ots (C3)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7)
	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive	ine) nriverine rine)		Aquatic Inv Hydrogen S Oxidized R Presence o	t (B12) ertebra Sulfide (hizosph of Reduc	tes (B13) Odor (C1) neres along ced Iron (C	Living Ro	ots (C3)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8)
Sedime Drift De	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive e Soil Cracks (B6)	ine) nriverine rine)		Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	t (B12) ertebra Sulfide (hizosph of Reduc	tes (B13) Odor (C1) neres along ced Iron (C ction in Ploy	Living Ro 4) ved Soils (C66)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Sedime Drift De Surface	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aerial I	ine) nriverine rine) magery (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) rertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3)
Sedime Drift De Surface	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9)	ine) nriverine rine) magery () X 	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils ((C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Sedime Drift De Surface Inundat Field Obse Surface Wa	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations:	ine) nriverine rine) magery (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils ((C6) S	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Water-1 Field Obse	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: tter Present? Y	ine) nriverine rine) magery (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Rod 4) ved Soils ((C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Water-3 Field Obse Surface Wa Water Table	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y	ine) nriverine rine) magery (es () es ()) X X X X X X X X X X X X X X X X X X X	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonrivel e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y Present? Y apillary fringe)	ine) nriverine rine) magery (es O es O res O) X X B7) D No O No O	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (ots (C3) C6) S S S S S S S S S S S S S	v Present? Yes No
Field Obse Surface Wa Water -3 Field Obse Surface Wa Water Table Saturation F (includes ca Describe R	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y	ine) nriverine rine) magery (es C es C es C) X B7) No No No No No No No No	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F ches): ches): ches): ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	cots (C3) C	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Water-1 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ater Present? Y Present? Y Present? Y epresent? Y epresent? Y epresent? Y epresent? Y	ine) nriverine rine) magery (es C es C res C) X B7) No (•) No (•) No (•) nonitoring v	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc well, aerial p	t (B12) rertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	cots (C3) C cots (C3) C cots (C6) S cots (C6) cots (C6) cots (C6) cots (C6) cots (C6) cots (C7) cots (C7)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water - S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y Present? Y epresent? Y ecorded Data (stream cature is a topograp	ine) nriverine rine) magery (es C res C rgauge, r) X B7) B7) B7) B7) B7 No O No O No O ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc well, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (Image: second system Image: second system oots (C3) Image: second system Image: second system Image: second system Image: second system <td>with the positis (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)</td>	with the positis (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water -1 Surface Wa Water Table Saturation F (includes ca Describe Ro Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y Present? Y epresent? Y apillary fringe) ecorded Data (stream	ine) nriverine rine) magery (es () es () res () rgauge, r phic dep	No No No No ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc Nell, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	and Hydrolog, if available:	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Sedime Drift De Surface Inundat Vater-4 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y Present? Y Present? Y Present? Y ecorded Data (stream Papillary fringe)	ine) nriverine rine) magery (es () es () gauge, r phic dep	B7)	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	Image: second system Image: second system ots (C3) Image: second system (C6) Image: second system (C6) Image: second system Image: second system Image: second system<	y Present? Yes No
Sedime Sedime Field Obse Surface Water-3 Field Obse Surface Water Table Saturation F (includes ca Describe Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ater Present? Y e Present? Y Present? Y epresent? Y ecorded Data (stream reature is a topogra	ine) nriverine rine) magery (es C es C gauge, n phic dep	No No No No ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (wet spections),	(C6) (C6) (and Hydrolog) (if available:	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Inunda Water-1 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y e Present? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? State (stream corded Data (stream	ine) nriverine rine) magery (es C res C res C gauge, n) X B7) No O No O No O ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc well, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (Image: Second system Image: Second system Image: Second	virite Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)

Project/Site: Peery Property		City/County:Placer	County	Sampling Date:10-19-12		
Applicant/Owner:				State:CA	Sampling Point:SP11	
Investigator(s):Sam Bacchini and Am	mon Rice		Section, Township,	Range:Sec17, T12N, R6	E	
Landform (hillslope, terrace, etc.): Terra	ce		Local relief (conca	ve, convex, none):Convex	Slope (%	%):1-5%
Subregion (LRR): <u>C - Mediterranean C</u>	California	Lat:38.8	3862	Long:-121.3308	Datum:N	AD 83
Soil Map Unit Name: Cometa-Fiddyme	ent complex, 2 to	9 percent	slopes	NWI classifi	cation:None	
Are climatic / hydrologic conditions on th	e site typical for thi	s time of ye	ar?Yes 💽 📃 N	lo 🔿 👘 (If no, explain in F	Remarks.)	
Are Vegetation 🔀 Soil 🗌 or Hy	/drology	significantly	disturbed? A	Are "Normal Circumstances"	present? Yes 🔿	No 💽
Are Vegetation Soil 🗌 or Hy	ydrology	naturally pro	oblematic? (If needed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - At	tach site map	showing	sampling poin	t locations, transects	, important featur	es, etc.
Hydrophytic Vegetation Present?	Yes 🍘 🛚 N	lo 💽				
Hydric Soil Present?	Yes 👩 🛛 N	10 🛞	Is the Sam	oled Area		
Wetland Hydrology Present?	Yes 🌘 🛝	lo 💽	within a We	etland? Yes 🔿	No 💽	
constructed through the s	ite and after cons	truction w	vas completed, the	e seasonal wetlands were	recontured.	
VEGETATION						
Tree Stratum (Llos scientific names)		Absolute % Cover	Dominant Indicato	Dominance Test wor	ksheet:	
1				 Number of Dominant S That Are OBL, FACW, 	Species or FAC: 0	(A)
2				Total Number of Domi	nant	
3				Species Across All Str	ata: 0	(B)
4			·		species	
Sapling/Shrub Stratum	Total Cove	er: %		That Are OBL, FACW,	or FAC: 0 %	; (A/B)
1				Prevalence Index wo	rksheet:	
2				Total % Cover of:	Multiply by:	
					STRATE 1	Sectors:

1.		That Are OBL, FA	CW, or FAC:	0	(A)
2.		Total Number of D	ominant		
3.		Species Across Al	Strata:	0	(B)
4.					
Sapling/Shrub Stratum		That Are OBL, FA	INT Species CW, or FAC:	0 %	(A/B)
1.		Prevalence Index	worksheet:		
2.		Total % Cover	r of:	Multiply by:	
3.		OBL species		x 1 =	9
4.		FACW species		x 2 =	9
5		FAC species		x3=	1
Total Cover:		FACU species	illine in	x4=	
Herb Stratum		UPL species	60 3	x5=	90
1.Avena sp. 60	Not Listed	Column Totals:	60 (A) 3	00 (B)
2		Brougloppo I	ndov = D/A .		ēA
3.			nuex - D/A -	- Da	<u>D</u> U:-
4		Hydrophytic veg	etation indic	ators:	
5.		Dominance i	est is >50%		
6.		Prevalence in	dex is ≤3.0'		
7	· · · · · · · · · · · · · · · · · · ·	Morphological	Adaptations	¹ (Provide supp a separate shee	orting et)
8		Problematic ⊢	lvdrophytic V	'egetation ¹ (Exc	(ain)
Woody Vine Stratum			, , ,	0 (1	
1		¹ Indicators of hydr	ric soil and v	vetland hydrolo	av must
2		be present.			3, ,
		Hydrophytic		<u></u>	
		Vegetation			
% Bare Ground in Herb Stratum 40 % % Cover of Biotic Cr	ust%_	Present?	Yes 🔿	No 💽	
Remarks: Oat in the field had been recently mowed.		I			

Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture ³	Remarks
0-6	7.5YR 3/3	60	7.5YR 4/6	40	D	М	Sandy Clay Loam	
6	7 5YR 2 5/3	90	7 5YR 4/6	10	D	- <u> </u>	Clay Loam	
•							<u></u>	
	_							
		_			_			
Type: C=0	Concentration, D=Dep	letion, RI	M=Reduced Matrix.	² Locatio	on: PL=Por	re Lining, F	RC=Root Channel, M=	=Matrix.
Soil Textu	res: Clay, Silty Clay, S	Sandy Cla	ay, Loam, Sandy Clay	Loam, S	Sandy Loar	n, Clay Lo	am, Silty Clay Loam,	Silt Loam, Silt, Loamy Sand, S
lydric Soil	Indicators: (Applicab	le to all L	RRs, unless otherwise	e noted.)			Indicators for Pro	oblematic Hydric Soils:
Histos	ol (A1)		Sandy Redo	x (S5)			1 cm Muck ((A9) (L RR C)
Histic I	Epipedon (A2)		Stripped M	atrix (S6))		2 cm Muck ((A10) (LRR B)
Black	HISTIC (A3)			cky ivinei	ral (⊢1) in (⊏0)		Reduced Ve	ertic (F18) Matarial (TE0)
⊓yuruų	gen Sunitie (A4) od Lovors (A5) (L PP (\sim	Loamy Gie	yeu Matr Antriv (E2	1X (FZ)		Cthor (Evol	Material (TF2)
	eu Layeis (Αθ) (LKK (Δuck (ΔΩ) (LPD D)	•)		iauix (FJ k Surface	7 9 (EG)			an in rectidiks)
	ed Below Dark Surfac	e (A11)		ark Surf:	- (F7) ace (F7)			
Thick I	Dark Surface (A12)		Redox Der	ressions	(F8)			
Sandy	Mucky Mineral (S1)		Vernal Poo	ls (F9)	(, .,		4Indicators of hvo	drophytic vegetation and
Sandy	Gleyed Matrix (S4)			()			wetland hydro	ology must be present.
Restrictive	E Layer (if present):							
Type:Cl	lav nan							
Depth (i	inches): 8						Hydric Soil Pres	ent? Yes 🕢 No 🔿
Depth (i Remarks:)	inches): <u>8</u> Dark concretions at	6 inches	5				Hydric Soil Pres	ent? Yes 💽 No 🔿
Depth (i Remarks:)	inches): 8 Dark concretions at	6 inches	5				Hydric Soil Pres	ent? Yes 💽 No 🔿
Depth (i Remarks:) YDROL	or of the second s	6 inches	S				Hydric Soil Pres	ent? Yes • No
Depth (i Remarks:) YDROL(Wetland H	inches): 8 Dark concretions at OGY ydrology Indicators:	6 inches	5 efficient)				Hydric Soil Press	ent? Yes No
Depth (i Remarks:) YDROL(Wetland H Primary Ind	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic	6 inches	s (fficient)				Hydric Soil Press Secondary Water I Water I	ent? Yes No No No No No Marks (B1) (Riverine)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic se Water (A1)	6 inches	s ifficient)	t (B11)			Hydric Soil Press Secondary Water I Sedime	ent? Yes No
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2)	6 inches	s ifficient) Salt Crus Biotic Cru	t (B11) st (B12)			Hydric Soil Press Secondary Water I Sedime Drift De	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3)	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir	t (B11) ist (B12) ivertebra	tes (B13)		Hydric Soil Press Secondary Secondary Sedime Drift De Drainage	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura Vater	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger	t (B11) st (B12) svertebra i Sulfide (tes (B13) Odor (C1)		Hydric Soil Press Secondary Secondary Water I Sedime Drift De Drainag Dry-Se	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac Ustrac High V Satura Water Sedim	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No	6 inches cator is su	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	t (B11) ist (B12) ivertebra i Sulfide (Rhizosph	tes (B13) Odor (C1) heres along	Living Ro	Hydric Soil Press Secondary Sedime Drift De Drift De Drainag Dry-Se pots (C3)	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7)
Depth (i Remarks:) YDROL(Wetland H Primary Inc Surfac Ustrac Satura Satura Satura Satura Dift D	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ist (B12) ivertebra Sulfide (Rhizospf of Redu	tes (B13) Odor (C1) neres along ced Iron (C	J Living Rc	Hydric Soil Press	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8)
Depth (i Remarks:) YDROL(Wetland H Primary Ind Surfac High V Satura Vvater Sedim Drift D Surfac	inches): 8 Dark concretions at OGY Aydrology Indicators: dicators (any one indic dicators (any one indicators) dicators (any one indicators) dic	6 inches ator is su nriverine	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) Ist (B12) Invertebra Sulfide (Rhizosph of Reduction Reduction	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo	J Living Ro (24) wed Soils	Hydric Soil Press	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac Uster Sedim Drift D Surfac Inunda	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial	6 inches cator is su rine) nriverine rine)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Ro 24) wed Soils	Hydric Soil Press	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Vater Sedim Drift D Surfac U Inunda	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9)	6 inches ator is su rine) nriverine rine)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	Living Ro 4) wed Soils	Hydric Soil Press	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Surfac Satura Sedim Drift D Surfac Inunda Surfac U Surfac	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations:	6 inches cator is su rine) erine) Imagery (s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	Living Ro 4) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se oots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac U Satura Vater Sedim Drift D Surfac U Nater Field Obso Surface W	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches cator is su rine) priverine erine) Imagery (s ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir	t (B11) st (B12) wertebra sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Ro 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se sots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Vater Sedim Drift D Surfac I Inunda Water- Field Obso Surface W Water Tab	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Y	fine) cator is su rine) mriverine erine) Imagery (fes ()	s ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir	t (B11) st (B12) wertebra sulfide (Rhizospf of Reduc on Reduc plain in F nches): nches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Rc 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se sots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Sedim Drift D Surfac U Surfac Surface W Nater Tab Saturation	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present? Y	tine) cator is su rine) mriverine rine) Imagery (ces () (es ()	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex No O Depth (ir No O Depth (ir No O Depth (ir	t (B11) ist (B12) ivertebra i Sulfide (Rhizospf of Reduc on Reduc plain in F inches): inches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks)	3 Living Ro ;4) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se pots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac U Surfac U Satura Sedim Drift D Surfac U Surfac U Surfac Surface W Water Tab Saturation (includes c	Inches): 8 Dark concretions at OGGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present? Present? apillary fringe)	tine) cator is su rine) mriverine frine) lmagery (ces () (es () (es ()	S Ifficient) Salt Crus Biotic Cru Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir No Depth (ir	t (B11) ist (B12) ivertebra Sulfide (Rhizospf of Redu on Redu plain in F nches): 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	g Living Ro 24) wed Soils	Secondary Secondary Water Sedime Drift De Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift De Dry-Se Sots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N tland Hydrology Pre-	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) leutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Sedim Drift D Surfac U Surfac U Surface Surface W Ater Tab Saturation (includes c Describe R	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present Present? Present	ine) cator is su rine) mriverine rine) Imagery ((es C) (es C) (es C) (es C)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex No O Depth (ir No O Depth (ir No O Depth (ir No O Depth (ir No O Depth (ir	t (B11) ist (B12) ivertebra Sulfide (Rhizospf of Reduc on Reduc o	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se oots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N tland Hydrology Press h, if available:	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Water Sedim Drift D Surface W Water- Field Obso Surface W Water Tab Saturation (includes c Describe R	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? P	6 inches	S	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc plain in F inches): inches): inches): inches): inches): inches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in	Living Ro Living Ro A) wed Soils wed Soils we we spections;	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Sedime Drift De Drift De Shallov FAC-N Hydrology Press , if available:	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac High V Satura Water Sedim Drift D Surface Surface W Water Field Obso Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Hydroger Oxidized Presence Recent Ir (B7) Other (Ex No No Depth (ir No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F inches): inches): inches): inches): inches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	Living Ro 24) wed Soils wed spections;	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift De Drift De Staurat Shallov FAC-N Hand Hydrology Press , if available:	ent? Yes No No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura Water Sedim Drift D Surface Ununda Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos,	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift De Drift Sedime Drift De Drift De Dry-Se Stural Shallov FAC-N tland Hydrology Press , if available:	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROL(Wetland H Primary Ind Surfac High V Satura Water Sedim Drift D Surface Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos, j	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Sedime Drift De Drainage Dry-Se Otrayfis (C6) Shallov FAC-N tland Hydrology Press I, if available:	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Surfac U Satura Sedim Drift D Surface U Nater Field Obso Surface W Water Tab Saturation (includes c Describe R Remarks:)	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present Present? Present Present Present Present Present Present	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos, j	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift De Drift De Drift De Drift De Sedime Drift De Drainage Dry-Se Otrayfis (C6) Shallov FAC-N tland Hydrology Press i f available:	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (

Project/Site: Peery Property	City/County:Placer	County		Sampling Date:	10-19-12
Applicant/Owner:		State:(CA	Sampling Point	SP12
Investigator(s): Sam Bacchini and Ammon Rice	Section, Township,	Range:Sec17, T	12N, R6E	·	
Landform (hillslope, terrace, etc.): Terrace	Local relief (conca	ve, convex, none):	Convex	S	lope (%):1-5%
Subregion (LRR): <u>C - Mediterranean California</u> Lat:38	.8836	Long:-121.3	3216	Dat	tum:NAD 83
Soil Map Unit Name: Xerofluvents, frequently flooded		N	WI classific	ation:None	
Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation Soil or Hydrology significant Are Vegetation Soil or Hydrology naturally p SUMMARY OF FINDINGS - Attach site map showing	year? Yes N Iy disturbed? A problematic? (1 g sampling poin	o (If no, e Are "Normal Circur If needed, explain t locations, tr	explain in R nstances" p any answe ransects ,	emarks.) present? Yes (rs in Remarks.) , important f e	N∘ Ceatures, etc.
Hydrophytic Vegetation Present? Yes No Remarks: Basin adjacent to Auburn ravine, separated by ber	Is the Samp within a We m.	oled Area Mand?	Yes 💽	No C	

VEGETATION

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Use scientific names.) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
2				Total Number of Dominant
3.				Species Across All Strata: 3 (B)
4.				Parcent of Dominant Spacios
Total Cover Sapling/Shrub Stratum	%		<u> </u>	That Are OBL, FACW, or FAC: 100.0 % (A/B)
1.				Prevalence Index worksheet:
2.		, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 19 99, 19990, 1999, 1999, 1999, 1999, 1999, 1999, 1		- Total % Cover of: Multiply by:
3.				OBL species 10 x 1 = 10
4.		·		FACW species 7/0 x 2 = 1/40
5.				FAC species III x 3 = 30
Total Cover:	%			FACU species 10 x 4 = 40
Herb Stratum	- Andread -			UPL species x 5 =
1.Polypogonum aviculare	40	Yes	FACW	Column Totals (A) 220 (B)
² Typha latifolia	10	Yes	OBL	
3. Cyprus sp.	30	Yes	FACW	Prevalence Index = B/A = 2.20
4. Paspalum distichum	10	No	FAC	Hydrophytic Vegetation Indicators:
5. Circsium vulgare	10	No	FACU	🛛 💥 Dominance Test is >50%
6.			h	Prevalence Index is ≤3.0 ¹
7.		·		Morphological Adaptations ¹ (Provide supporting
8.			• ••••••••	- data in Remarks or on a separate sheet)
Total Cover:	100%		h	Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	10			
1				Indicators of hydric soil and wetland hydrology must
2				
Total Cover:	%			Hydrophytic Vegetation
% Bare Ground in Herb Stratum 0 % % Cover	of Biotic C	Crust ()	%	Present? Yes No C
Remarks: Associate species: Quercus lobata, Juglan	s hindsii,	Rubus ar	meniacus	

Sampling Point: $\underline{SP12}$

Profile Des	cription: (Describe t	o the depth	needed to docur	nent the	indicator	or confirr	n the absence o	f indicators.)
Depth (inchos)	Matrix	0/	Redox	c Feature %	es Tunol	1.002	Toxturo ³	Pomarka
					 DM			Remarks
0-16	10YR 3/1	60 7.3	5YK 4/6	40	KM	<u>M</u>	Silty Clay	
·				·		·		
						. <u> </u>		
								· · · · · · · · · · · · · · · · · · ·
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	educed Matrix.	² Locatio	n: PL≃Por	e Lining, R	C=Root Channe	I, M≃Matrix.
³ Soil Textur	es: Clay, Silty Clay, S	andy Clay, L	oam, Sandy Clay	Loam, S	andy Loan	n, Clay Loa	am, Silty Clay Loa	am, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicabl	e to all LRRs	unless otherwise	noted.)			Indicators fo	r Problematic Hydric Soils:
	i (A1) Epipedon (A2)		Sandy Redo	x (SS) atrix (S6)				ick (A10) (LRR B)
Black H	listic (A3)		Loamy Muc	ky Miner	al (F1)		Reduce	d Vertic (F18)
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matri	ix (F2)		Red Par	rent Material (TF2)
	d Layers (A5) (LRR C	;)	Depleted M	atrix (F3) . (EQ)		Other (E	Explain in Remarks)
	uck (A9) (LRR D) od Below Dark Surface	A11) م		sourface ark Surfa	9 (F0) ace (E7)			
Thick E	ark Surface (A12)	,,,,,,	Redox Dep	ressions	(F8)			
Sandy	Mucky Mineral (S1)		Vernal Pool	s (F9)			⁴ Indicators o	f hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)						wetland h	ydrology must be present.
Restrictive	Layer (if present):							
l iype:								
Depth (II Remarks:	icnes):						Hydric Soll F	
i komano,								
HIDROLO	JGY						0	
Wetland Hy	drology indicators:	ntovio ovificio	- m4)					tary Indicators (2 or more required)
Primary ind	icators (any one indici	ator is sufficie		(044)	······		Vva	diment Depents (D2) (D ivertine)
	e water (ΑΤ) /ator Toble (Δ2)			(Ð11) et (B12)				alment Deposits (B2) (Riverine)
Saturat	ion (A3)			verfebra	tes (B13)			ainage Patterns (B10)
Water	Viarks (B1) (Nonriveri	ne)	Hydrogen	Sulfide (Odor (C1)			y-Season Water Table (C2)
Sedime	ent Deposits (B2) (Noi	nriverine)	X Oxidized I	Rhizosph	eres along	Living Ro	ots (C3) 🗍 Thi	in Muck Surface (C7)
Drift De	eposits (B3) (Nonrive i	rine)	X Presence	of Redu	ced Iron (C	4)	Cri	ayfish Burrows (C8)
Surface	e Soil Cracks (B6)		Recent Iro	n Reduc	tion in Plov	ved Soils ((C6) 🗌 Sa	turation Visible on Aerial Imagery (C9)
Inunda	tion Visible on Aerial 1	magery (B7)	Other (Ex	olain in F	(emarks)		Sh	allow Aquitard (D3)
X Water-	Stained Leaves (B9)							C-Neutral Test (D5)
Field Ubse	rvations:		Donth /in	obooli				
Surface vva	a Precent?	es Cinto es Cinto	Depth (in	ches):				
Saturation	Present?		Depth (in	ches).	16			
(includes ca	apillary fringe)	es 💽 🛛 Ne	C Departur	G 1637.	10		land Hydrology	Present? Yes 💽 No 🌔
Describe R	ecorded Data (stream	gauge, moni	toring well, aerial	photos, j	orevious in	spections)	, if available:	
Remarks: N	Aarshy basin adjace	ent to Aubu	m Ravine, separ	ated fro	om creek l	oy a levee	e. Marshy area	and reservoir or stock pond within
th th	ie basin.							
US Army Com	as of Engineers							
Co ramy COI	e or manencers							

••• .

Project/Site: Peery Property		City/Co	ounty:Placer Co	ounty	Sampling I	Date:10-19-12	2	
Applicant/Owner:				State:CA	- Sampling I	Point:SP13		
Investigator(s):Sam Bacchini and Ammon Rice			Section, Township, Range:Sec17, T12N, R6E					
Landform (hillslope, terrace, etc.): Terrace		Local	relief (concave,	convex, none): Concave		Slope (%):1	-5%	
Subregion (LRR):C - Mediterranean California	Lat:38.	8836		Long:-121.3216		Datum:NAD	83	
Soil Map Unit Name: Xerofluvents, frequently f	looded			NWI classifi	cation:None			
Are climatic / hydrologic conditions on the site typic	al for this time of y	ear? Ye	es 🕢 No 🕻) (If no, explain in F	Remarks.)	***		
Are Vegetation Soil Cor Hydrology	י ז significanth	v disturb	ed? Are	"Normal Circumstances"	present? Y	es 🙃 🛛 No	\cap	
Are Vegetation Soil or Hydrology	naturally pr	oblemat	tic? (If n	eeded, explain any answe	ers in Remar	ks.)	•	
SUMMARY OF FINDINGS - Attach site	e map showing	j samp	oling point l	ocations, transects	, importa	nt features	, etc.	
Hydrophytic Vegetation Present? Yes	No 🕟							
Hydric Soil Present? Yes @	No 🛞		Is the Sample	d Area				
Wetland Hydrology Present? Yes @	No 👸		within a Wetla	nd? Yes 🔿	No (0		
VEGETATION								
	Absolute	Domir	nant Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Use scientific names.)	<u>% Cover</u>	Speci	es? Status	Number of Dominant S	Species	····· 1=0		
1.Valley Oak		$\frac{Yes}{V}$	FACU	That Are OBL, FACW,	or FAC:		(A)	
3		<u>r</u> es	FAC	Total Number of Domis Species Across All Str	nant ata:	4	(B)	
4. Sapling/Shrub Stratum	otal Cover: 70 %	······································		 Percent of Dominant S That Are OBL, FACW, 	Species or FAC:	25.0 %	(A/B)	
1.				Prevalence Index wo	rksheet:			
2.		•••		Total % Cover of:	<u> </u>	Multiply by:	_	
3.			·····	OBL species	x 1	- 0		
4.				FACW species	x 2	= 0		
5. <u>.</u>	-			FAC species	30 x3	= 90		
To Herb Stratum	tal Cover: 👘 🕅)		FACU species	40 × 4	= 160		
1. Avena fatua	25	Yes	Not Listed	OPL species	55 × 5	= 275		
2. Bromus diandrus	20	$\frac{103}{\text{Yes}}$	Not Listed	_ Column Lotals:	125 (A)	223	(B)	
3. Foeniculum vulgare	10	No	Not Listed	Prevalence Inde:	x = B/A =	4.20		
4.				Hydrophytic Vegetat	ion Indicato	ors:		
5.	rr A ^{ll} fannange af annale d ^{all} a start geneller som karterbor			Dominance Test i	s >50%			
5. 6.				Dominance Test i	s >50% is ≤3.0 ¹			
5. 6. 7.		••••• ••••••••••••••••••••••••••••••••	······································	Dominance Test i Dominance Index Prevalence Index Morphological Ada data in Remark	s >50% is ≤3.0 ¹ aptations¹ (F <s a="" on="" or="" s∈<="" td=""><td>Provide support</td><td>ing</td></s>	Provide support	ing	
5. 6. 7. 8.				Dominance Test i Prevalence Index Provalence Index Morphological Ada data in Remark Problematic Hydro	s >50% is ≤3.0 ¹ aptations ¹ (F ks or on a se ophytic Vege	Provide support parate sheet) etation ¹ (Explai	ing า)	
5. 6. 7. 8. Woody Vine Stratum	tal Cover: 55 %	· · · · · · · · · · · · · · · · · · ·		Dominance Test i Prevalence Index Morphological Ada data in Remark Problematic Hydro	s >50% is ≤3.0 ¹ aptations ¹ (F ks or on a se ophytic Vege	Provide support parate sheet) station ¹ (Explain	ing n)	
5. 6. 7. 8. Woody Vine Stratum 1. 2	tal Cover: 55 %	j 		Dominance Test i Prevalence Index Morphological Ada data in Remark Problematic Hydro ¹ Indicators of hydric s be present.	s >50% is ≤3.0 ¹ aptations ¹ (F (s or on a se ophytic Vege oil and weth	Provide supporf parate sheet) etation ¹ (Explain and hydrology	iing n) must	
5. 6. 7. 8. <u>Woody Vine Stratum</u> 1. 2. To	tal Cover: 55 %	j 		Dominance Test i Prevalence Index Morphological Ada data in Remari Problematic Hydro ¹ Indicators of hydric s be present. Hydrophvtic	s >50% is ≤3.0 ¹ aptations ¹ (F ks or on a se ophytic Vege oil and wetl	Provide support eparate sheet) etation ¹ (Explain and hydrology	iing n) must	
5. 6. 7. 8. <u>Woody Vine Stratum</u> 1. 2. % Bare Ground in Herb Stratum 45 %	tal Cover: 55 %	, Crust	0 %	Dominance Test i Prevalence Index Morphological Ada data in Remari Problematic Hydro ¹ Indicators of hydric s be present. Hydrophytic Vegetation Present? Ye	s >50% is ≤3.0 ¹ aptations ¹ (F ks or on a se ophytic Vege oil and wett	Provide support eparate sheet) etation ¹ (Explain and hydrology No ()	iing n) must	

Profile Desc	ription: (Describe f	to the depth n	eeded to document the indicator or	confirm	the absence of indicators.)	
Depth	Matrix		Redox Features		- (3	
(inches)	Color (moist)	(Color (moist) Type'		Texture	Remarks
6	7.5YR 4/4				Silty Loam	
		<u> </u>				
¹ Type: C=C	oncentration, D=Depl	etion, RM=Re	duced Matrix. ² Location: PL=Pore L	ining, R(C=Root Channel, M=Matrix.	
*Soil Texture	es: Clay, Silty Clay, S	Sandy Clay, Lo	am, Sandy Clay Loam, Sandy Loam, C	lay Loai	m, Silty Clay Loam, Silt Loam, S	ilt, Loamy Sand, Sand.
Hydric Soil I	ndicators: (Applicabl	e to all LRRs,	unless otherwise noted.)		Indicators for Problematic Hy	dric Soils:
	(A1)		Sandy Redox (S5)		1 cm Muck (A9) (LRR C))
	pipedon (A2)		Stripped Matrix (S6)		2 cm Muck (A10) (LRR I	3)
	ISUC (AS) an Sulfide (A4)		Loamy Mucky Mineral (F1)		Reduced Vehic (F18)	2)
	d Lavers (A5) (I RR (3)	Depleted Matrix (F3)		Other (Explain in Remar	z) ks)
	uck (A9) (LRR D)	•)	Redox Dark Surface (F6)			(0)
Deplete	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			
Thick D	ark Surface (A12)	. ,	Redox Depressions (F8)			
Sandy N	/lucky Mineral (S1)		Vernal Pools (F9)		4Indicators of hydrophytic veg	getation and
Sandy 🤇	Gleyed Matrix (S4)				wetland hydrology must b	e present.
Restrictive	Layer (if present):					
Type:						
Depth (in	ches):				Hydric Soil Present? Yes	🔿 No 🕢
Remarks:	- 					Test
HYDROLC	GY					
Wetland Hy	drology Indicators:				Secondary Indicators (2	or more required)
Primary Indi	cators (any one indic	ator is sufficier	at)		Water Marks (B1) (Riverine)
	Vators (A1)					(D2) (B iverine)
	vvaler (AT)		Biotio Crust (B11)			(B2) (Riverine)
	ater Table (A2)		Agustia Investebrates (B12)			(Riverine)
	on (A3) forks (D4) (Nemisseri	()	Aquatic Invertebrates (B13)			
	raiks (ET) (NORHVen ht Denesite (D2) (Nei	nne) ariuarina)	Hydrogen Sunde Odor (CT)	ina Doa	Div-Season Water	
	ni Depusits (D2) (Norrive	invenne)	Dressness of Deduced Iron (C4)	nny Rou		
	Posits (BS) (Nonriver	me)	Presence of Reduced fion (C4)		ClayIsh Burrows (
	i Sull Glauks (DO)		Cther (Eveloin in Remarke)	1 20115 (1		an Aenai Iniagery (C9)
	Ion visible on Aenan Stainad Laguan (DO)	magery (B7)				73) DD
Vater-s	stained Leaves (B9)				FAC-Neutral Test (U5)
Field Obsei	vations:	•				
Surface Wa	ter Present? Y	es C No	Depth (inches):			
Water Table	Present? Y	es 🔿 🛛 No	Depth (inches):			
Saturation F	resent? Y	es 🔿 🛛 No	Depth (inches):	Math	and Hudrolomy Dresset? Ves	
(includes ca	pillary fringe)	gauge monite	pring well period photos, previous inspe		if available:	
	oorded Data (Stredfil	gauge, monit	anny wen, aenai priotos, previous frispe	.cuons),	n avaliable.	
Remarks:						
			· · · · ·			
L US Army Corn	s of Engineers					

SUD-B Northeast Quadrant Specific Plan

APPENDIX

2012-2013 REPORT OF FINDINGS REGARDING BRANCHIOPOD SURVEYS – PEERY PROPERTY



Shaping the Future



90-Day Report of Findings Regarding Branchiopod Surveys Peery Property

August 2013

Prepared For Peery-Arrillaga Project No. 34036001.00

90-Day Report of Findings Regarding Branchiopod Surveys

Peery Property

August 2013

Project No. 34036001.00

Prepared for

Richard Peery Peery-Arrillaga 2450 Watson Court Palo Alto, CA 94303

Prepared by Cardno ENTRIX 701 University Avenue, Suite 200, Sacramento, CA 95825 Tel 916 923 1097 Fax 916 923 6251 www.cardnoentrix.com

Table of Contents

Chapter 1	Introduction	1
Chapter 2	Background and Site Description	1
Chapter 3	Methods	4
Chapter 4	Results	5
Chapter 5	Conclusion	7
Chapter 6	References	8

Appendices

Appendix A	USFWS Correspondence
Appendix B	Wet Season Sampling Location Data
Appendix C	Wet Season Survey Data Summary Sheets
Appendix D	Representative Site Photographs

Figures

Figure 1 - Project Vicinity	3
Figure 2 – Sample Locations and Branchiopod Presence	6

Acronyms

CNDDB	California Natural Diversity Database
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Chapter 1 Introduction

Ammon Rice and Sam Bacchini conducted protocol-level wet season branchiopod surveys at Peery Property (Study Area) on behalf of Richard Peery of Peery-Arrillaga, in Lincoln, Placer County, California (Figure 1). Wet season surveys were authorized by Mr. David Kelly of the U.S. Fish and Wildlife Service (USFWS) on December 18, 2012, reference no. 2013-TA-0145 (USFWS, Appendix A). The purpose of these surveys was to determine the presence/absence of vernal pool branchiopod species listed as endangered or thereatened by the USFWS [i.e., vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*)] within seasonally inundated depressions at the property. These surveys were conducted under the authority of Federal Fish and Wildlife Permit TE-175385-1 and TE-795938-7 and in compliance with the *19 April 1996 Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Guidelines) (USFWS, 1996). This document is the 90-Day Report of Findings for the Peery Property (as required by Item VII of the Guidelines), which summarizes the results of 2013 wet season survey work for this site.

Ammon Rice and Sam Bacchini, Cardno ENTRIX biologists, sampled 33 seasonally inundated depressions within the Study Area (Appendix B). Mr. Rice documented the presence and abundance of both California fairy shrimp (*Linderiella occidentalis*) and federally threated vernal pool fairy shrimp (*Branchinecta lynchi*) in the Study Area.

Chapter 2 Background and Site Description

As requested by the Richard Peery of Peery-Arrillaga, Cardno ENTRIX conducted routine wetland delineation for the Peery Property in an attempt to identify the boundaries of potential wetlands and other waters of the U.S. Seasonal wetlands and swales were identified that could provide habitat for listed branchiopods.

The western parcel (approximately 70 acres) is roughly rectangular in shape and is bordered by Nelson Lane on the west, State Route 65 Bypass on the South, undeveloped land on the north, and residential neighborhood on the east. The eastern parcel (approximately 44 acres) is roughly triangular in shape and is bordered by residential development on the north, Hwy 65 Bypass on the south, and Auburn Ravine on the east (Figure 2). Additionally, the property is located in Section 17, Township 12 North, Range 6 East of the Lincoln U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle map (Latitude 038° 53' 17.31" North; Longitude -121° 20' 09.22" West; UTM 10 S., 4305679.68 m Northing, and UTM 644328.70 m Easting).

The Study Area is approximately 114 acres, and consists of the area surveyed for the boundaries of wetland features and adjacent uplands. The Study Area is generally flat, with elevation ranging from approximately 120 feet above sea level (asl) to 130 feet asl. Land uses in the general vicinity include rural residential and residential development, and agricultural.

The Study Area consists almost exclusively of disturbed non-native annual grassland. The entire western portion and most of the eastern portion of the Study Area have been disked, seeded, and mowed annually for hay production for many years. The western portion, which retains much of the natural topography, is dry farmed, while the eastern portion appears to have been graded flat, and has been flood irrigated. The primary vegetative cover in the study area consists of stubble from oat grass, but other species were observed including Fitch's tarweed (*Centromadia* [*Hemizonia*] *fitchii*), yellow flower tarplant (*Holocarpha virgata*), turkey mullein (*Croton setigerus*), and vinegarweed (*Trichostema lanceolatum*). These latter species were very sparse, and associated primarily with the seasonal wetlands or adjacent areas.

Within the non-native annual grassland habitat in the western portion of the Study Area are a number of seasonal wetlands consisting of pools and swales. Most of these features were likely to have been vernal pools or swales in the past (based on the aerial signatures and the abundance of this wetland type in the surrounding region) but due to the long history of annual disking and planting for hay production the boundaries of these features have become indistinct, and no they longer appear to support vernal pool plant species. As stated above, the eastern portion of the Study Area has been graded/leveled, and no seasonal pools or swales are present there.

The region has a Mediterranean climate characterized by hot, dry summers and cool, wet winters. The local and regional geology is within the Sacramento Valley geomorphic province, characterized primarily by agriculture, and is the wetter subregion of the Great Central Valley. The geomorphic province occurs within the greater California Floristic Province. The average summer high temperature is 95°F and the average low is 67°F. The average winter high temperature is 53°F and the average low is 37°F. Average annual precipitation is 17.1 inches (Baldwin et al., 2012).



Y:\GIS\Entrix\3340700_Scheiber\map\Peery_ProjSite_8i11i_10.mxd

Chapter 3 Methods

In order to assess the presence or absence of listed shrimp species in the Study Area, Cardno ENTRIX conducted protocol-level branchiopod surveys during the 2012-2013 wet season. All surveys were conducted in accordance with the USFWS Guidelines (USFWS, 1996). A list of federal and state special-status plant and wildlife species was developed for the project using a database search, which included a query of the California Natural Diversity Database (CNDDB) for the Lincoln and eight surrounding USGS 7¹/₂ minute quadrangles.

Monitoring methods followed the USFWS Guidelines (USFWS, 1996). Invertebrate and hydrologic monitoring were conducted simultaneously. A total of 33 seasonally inundated depressions were sampled for invertebrate species. Mr. Rice, biologist/permitted surveyor (TE175385-1), and Sam Bacchini, biologist/permitted surveyor (TE-795938-7), conducted the dip netting surveys.

The depressional wetlands were visually searched for active large branchiopods prior to entering the water. Walking within the wetlands was minimized to fullest extent possible. Water depth measurements were taken at the same location during each monitoring event and visual observations of invertebrates were made from the wetland edge.

A semi-quantitative sample was taken to determine the relative abundance of macroscopic invertebrates as follows. A net was lowered vertically into the deepest portion of the depressional wetland (usually the center) and rested on the bottom. The 153-µm mesh size net was then moved through the pool for approximately one-meter. Given the aperture of the net of 0.025 m2 and distance the net was moved, roughly 0.025 m3 or 25 liters of the water column were sampled horizontally each time. When the water column was shallower than the net aperture height, the volume of water per sweep was calculated by the horizontal distance the net was moved multiplied by the width of the net (25-cm) multiplied by the depth of the water. After the completion of each sample sweep, the contents of the net were examined for aquatic fauna. All animals captured in the net were identified to the lowest justifiable taxon in the field (consisting of 28 taxonomic groups), and recorded on standardized data sheets.

The relative numbers of individuals sampled within each taxonomic group were recorded in one of five categories: rare (≤ 2 individuals), not common (3-10 individuals), common (11-50 individuals), very common (51-100 individuals), and abundant (>100 individuals). This method allows for the relative abundances and richness of aquatic invertebrates to be compared, between and among wetlands, through time. Additionally, this method allows for density estimates of invertebrates to be calculated as number of individuals per liter of water (= number of individuals/net aperture area x length of sweep).

If large branchiopods were not detected during the sample sweep, additional strategically placed sweeps were made with the net. Additional taxonomic groups of aquatic invertebrates detected using these sweeps or visual observation were recorded with an "X" on the standardized field

data sheet to note presence. After the taxonomic identification and enumeration were completed, the contents of the net were placed back into the pool from which they were sampled.

On December 20, 2012, following several rain events, features identified during a previous wetland delineation and features not recorded but ponding at least 3-cm of water were sampled. Several of the wetland features in the Study Area had short inundation periods and not all features were inundated during each survey. The invertebrate monitoring was conducted at the Study Area between December 20, 2012 and March 14, 2013. The site was also inspected for inundation following rain events on March 21, April 5, April 9, and May 7; however, none of the features were inundated after these rain events. Depressional wetlands were monitored if they were inundated to a depth of greater than or equal to 3-cm at the time of each visit.

Chapter 4 Results

On January 3, 2013, federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*) was found to be present in one of 33 pools monitored (Table 1 and Figure 2). Additionally, non-listed California fairy shrimp (*Linderiella occidentalis*) was observed within three of 33 pools monitored (Table 1 and Figure 2).

	TABLE 1					
Coordinates of Pools Sampled and Branchiopods Found						
Pool Name	Latitude	Longitude	Species Present and Abundance			
SW21-b	038° 53′ 13.80″ N.	-121° 19′ 57.65″ W.	BRLY (10's)			
SW06	038° 53′ 11.82″ N.	-121° 20′ 06.38″ W.	LIOC (1)			
SW17	038° 53′ 11.90″ N.	-121° 19′ 57.37″ W.	LIOC (100's)			
SW31	038° 53′ 10.31″ N.	-121° 20′ 00.55″ W.	LIOC (100's)			

Note: BRLY-Branchinecta lynchi, LIOC=Linderiella occidentalis.

The location and surface area of each wetland feature sampled are included in Appendix B. Appendix C includes a tabular summary of all the sampled wetlands including the remaining required data (i.e., wetland depth of inundation, surface area, water and air temperature, branchiopod species occurrence, and other species observed) for each of the sampled wetland features. Representative site photographs are presented in Appendix D.





Chapter 5 Conclusion

A total of 33 depressional wetland features were sampled within the 144-acre Study Area. The purpose was to determine presence and absence of branchiopods in each depressional wetland feature. Seven wet season monitoring events were conducted between December 20, 2012 and March 14, 2013. Federally listed *Branchinecta lynchi* was observed within one feature on the project site, SW21b, and non-listed *Linderiella occidentalis* was observed within three of the 33 features, SW06, SW17, and SW31. As part of the State Route 65 Bypass Project, Caltrans constructed a berm along the southern perimeter of the Peery Property. At the time of surveys, water was impounded behind the berm, backing up into the project site (location SW31). After the wet season, Caltrans installed culverts in the berm to allow water to drain properly from the site, returning the previously exiting drainage paths. These modifications to the berm will likely prevent the feature from ponding water in the future.

Chapter 6 References

- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- California Department of Fish and Wildlfe (CDFW). 2013. California Natural Diversity Database, Rare Find Version 3.1.0. Last updated December 4, 2012. Available online: http://www.dfg.ca.gov/biogeodata/cnddb/. Accessed December 17, 2012.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service. 1996. Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods, April 19, 1996.

Appendix A USFWS Correspondence

Ammon Rice

From: Sent:	Kelly, David <david_kelly@fws.gov> Tuesday_December 18_2012 12:07 PM</david_kelly@fws.gov>
To:	Ammon Rice
Cc:	Terry_Adelsbach@fws.gov; Bonnie Peterson; Shannon Karvonen; Kellie Berry
Subject:	Re: Request to conduct Protocol Level Branchiopod Surveys, Lincoln CA

Ammon Rice,

By this email message you are authorized to conduct wet season surveys (2012-2013) for federally-listed vernal pool branchiopods, per the conditions of your recovery permit TE-175385 and as specified in your attached letter request with maps dated December 17, 2012. The surveys will be conducted at the Peery Property in Placer County. This site is described in the request letter and attached maps, and is located just northeast of the intersection of Nelson Lane and Hwy 65 Bypass, west of the City of Lincoln. Your request is to sample seasonally inundated wetlands, pools, ditches, and basins located within the sites. Surveys may be conducted within all seasonally inundated wetlands identified on-site that may provide suitable vernal pool crustacean habitat. Suitable habitat not previously identified on the project site may also be sampled under this authorization. Follow on dry season surveys are also authorized by this message starting next summer (2013).

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permit and the survey guidelines, including the reporting requirements. In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization. Please let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send one copy of the report(s) to David Kelly, of our Recovery Branch, and send a separate copy to Kellie Berry, chief of the Sacramento Valley Division. Please keep in mind, and please inform your client that the Service can authorize surveys that establish presence, but not surveys where the purpose is to determine absence when there is a reason to believe that the species can be present even when they are not detected. Such reasons would include species characteristics that make it hard to detect, habitat suitability and proximity to known occurrences of the species. Therefore, if additional information becomes available to us that indicates that listed crustaceans are likely to be present at specific project sites, the Service may determine that the species are present even if your surveys have failed to detect individuals or cysts. We ask that you use UTM coordinates for all spatial data and that you reference the following number in future correspondence regarding these surveys: 2013-TA-0145.

To ensure the accuracy and data integrity of your project, it is requested that you provide spatial information (boundaries, study areas, parcels, point locations, etc.) in the form of an ESRI shape file with projection, a GPS file with projection, or locations in an Excel spreadsheet with projection information . The preferred projection is UTM, Zone 10S, NAD83; the Sacramento Fish and Wildlife Office (SFWO) standard. FGDC compliant metadata must accompany each file. Please include any USFWS File Numbers associated with the data in your documentation. For additional information regarding metadata standards refer to http://www.fgdc.gov. For more information regarding spatial data please contact: Cheryl L. Hickam, GIS Branch Chief, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W-2605, Sacramento, Ca 95825-1846, office: 916-414-6708.

On Mon, Dec 17, 2012 at 4:12 PM, Ammon Rice <<u>ammon.rice@cardno.com</u>> wrote:

Hi Terry and Dave,

I am requesting authorization to perform Protocol-Level We-Season Branchiopod Surveys at the Peery Property, Lincoln, Placer County, CA. Please see the attached request letter. The project site is located northeast of the Nelson Lane intersection with Highway 65 Bypass, on the U.S. Geological Survey (USGS) Lincoln 7.5 minute topographic quadrangle in Section 17, Township 12 North, Range 6 East. If authorized, we would like to start surveying this week. We confirmed with ECORP that a reference pool in Placer County had mature vernal pool fairy shrimp for the first time this week. The pools at the Peery Property may be inundated for two-and-a-half to three weeks prior to our first survey; however, with this minor deviation from the protocol and checking reference pools, we believe we are early enough in the season to detect branchiopods, if present. We will continue to survey the site every two weeks until presence of branchiopods is confirmed, the pools are dry, or the pools have been inundated for 120 consecutive days.

I greatly appreciate your attention to this request and your understanding of the urgency.

Sincerely,

Ammon Rice ENVIRONMENTAL SPECIALIST CARDNO ENTRIX

Phone (+1) 916-923-1097 Fax (+1) 916-386-3841 Direct (+1) 916-386-3862 Mobile (+1) 559-307-4099 Address 701 University Avenue, Suite 200, Sacramento, CA 95825 USA Email <u>ammon.rice@cardno.com</u> Web <u>www.cardno.com</u> - <u>www.cardnoentrix.com</u>

This email and its attachments may contain confidential and/or privileged information for the sole use of the intended recipient(s). All electronically supplied data must be checked against an applicable hardcopy version which shall be the only document which Cardno warrants accuracy. If you are not the intended recipient, any use, distribution or copying of the information contained in this email and its attachments is strictly prohibited. If you have received this email in error, please email the sender by replying to this message and immediately delete and destroy any copies of this email and any attachments. The views or opinions expressed are the author's own and may not reflect the views or opinions of Cardno.

--

David Lee Kelly Recovery Biologist Sacramento Fish and Wildlife Office 2800 Cottage Way W-2605 Sacramento, California 95825-1888 Phone:916-414-6492
Ammon Rice

From:	Ammon Rice
Sent:	Sunday, January 13, 2013 10:32 PM
То:	David_Kelly@fws.gov
Cc:	Shannon Karvonen (shannon.karvonen@cardno.com)
Subject:	Report of Branchinecta lynchi during Protocol Level Branchiopod Surveys, Lincoln CA
Attachments:	Peery Propoerty USFWS Notification.pdf

Hi Dave,

This email is to inform you that during protocol level branchiopod surveys, vernal pool fairy shrimp (*Branchinecta lynchi*) was found in one pool on Thursday, January 3, 2013. The surveys are being conducted at the Peery Property, Lincoln, Placer County, CA. Please see the attached map. The project site is located northeast of the Nelson Lane intersection with Highway 65 Bypass, on the U.S. Geological Survey (USGS) Lincoln 7.5 minute topographic quadrangle in Section 17, Township 12 North, Range 6 East.

The pool containing *B. lynchi* was SW21(b), Lat. 38.887108°, Long. -121.332650°. *B. lynchi* was found by Ammon Rice, permit TE-175385-1, and has not been detected in any other pools on the site.

Please let me know if you have any questions or would like more information.

Thanks and Happy New Year!

Ammon Rice ENVIRONMENTAL SPECIALIST CARDNO ENTRIX

Phone (+1) 916-923-1097 Fax 916-923-6251 Direct (+1) 916-386-3862 Mobile (+1) 559-307-4099 Address 701 University Avenue, Suite 200, Sacramento, CA 95825 USA Email <u>ammon.rice@cardno.com</u> Web <u>www.cardno.com</u> - <u>www.cardnoentrix.com</u>

From: Ammon Rice
Sent: Monday, December 17, 2012 4:13 PM
To: Terry Adelsbach@fws.gov; David Kelly@fws.gov
Cc: Bonnie Peterson; Shannon Karvonen (shannon.karvonen@cardno.com)
Subject: Request to conduct Protocol Level Branchiopod Surveys, Lincoln CA

Hi Terry and Dave,

I am requesting authorization to perform Protocol-Level We-Season Branchiopod Surveys at the Peery Property, Lincoln, Placer County, CA. Please see the attached request letter. The project site is located northeast of the Nelson Lane intersection with Highway 65 Bypass, on the U.S. Geological Survey (USGS) Lincoln 7.5 minute topographic quadrangle in Section 17, Township 12 North, Range 6 East.

If authorized, we would like to start surveying this week. We confirmed with ECORP that a reference pool in Placer County had mature vernal pool fairy shrimp for the first time this week. The pools at the Peery Property may be inundated for two-and-a-half to three weeks prior to our first survey; however, with this minor deviation from the protocol and checking reference pools, we believe we are early enough in the season to detect branchiopods, if present. We will continue to survey the site every two weeks until presence of branchiopods is confirmed, the pools are dry, or the pools have been inundated for 120 consecutive days.

I greatly appreciate your attention to this request and your understanding of the urgency.

Sincerely,

Ammon Rice ENVIRONMENTAL SPECIALIST CARDNO ENTRIX



Phone (+1) 916-923-1097 Fax (+1) 916-386-3841 Direct (+1) 916-386-3862 Mobile (+1) 559-307-4099 Address 701 University Avenue, Suite 200, Sacramento, CA 95825 USA Email <u>ammon.rice@cardno.com</u> Web <u>www.cardno.com</u> - <u>www.cardnoentrix.com</u>

This email and its attachments may contain confidential and/or privileged information for the sole use of the intended recipient(s). All electronically supplied data must be checked against an applicable hardcopy version which shall be the only document which Cardno warrants accuracy. If you are not the intended recipient, any use, distribution or copying of the information contained in this email and its attachments is strictly prohibited. If you have received this email in error, please email the sender by replying to this message and immediately delete and destroy any copies of this email and any attachments. The views or opinions expressed are the author's own and may not reflect the views or opinions of Cardno.

Appendix B Wet Season Sampling Location Data

	We	t Season Sampling L	ocations at Peery Ran	ch		
Wetland Name	Area (Acres)	Latitude	Longitude	Section	Township	Range
SW01	0.023	038° 53′ 21.23″ N	-121° 20′ 23.07″ W	17	12N	6E
SW02	0.007	038° 53′ 21.23″ N	-121° 20′ 21.73″ W	17	12N	6E
SW03	0.047	038° 53′ 21.57″ N	-121° 20′ 20.25″ W	17	12N	6E
SW04	0.012	038° 53′ 19.99″ N	-121° 20′ 20.28″ W	17	12N	6E
SW05	0.811	038° 53′ 18.16″ N	-121° 20′ 17.25″ W	17	12N	6E
SW06	0.124	038° 53′ 11.82″ N	-121° 20' 06.38" W	17	12N	6E
SW07	0.086	038° 53′ 14.55″ N	-121° 20′ 05.71″ W	17	12N	6E
SW08	0.039	038° 53′ 14.23″ N	-121° 20′ 03.80″ W	17	12N	6E
SW09	0.012	038° 53′ 11.19″ N	-121° 20′ 03.85″ W	17	12N	6E
SW10	0.026	038° 53′ 11.20″ N	-121° 20' 02.69" W	17	12N	6E
SW11	0.023	038° 53' 10.51″ N	-121° 20′ 02.76″ W	17	12N	6E
SW12	0.040	038° 53′ 12.10″ N	-121° 20′ 19.29″ W	17	12N	6E
SW13	0.005	038° 53′ 12.13″ N	-121° 20′ 20.74″ W	17	12N	6E
SW14	0.017	038° 53′ 12.33″ N	-121° 20′ 21.42″ W	17	12N	6E
SW15	0.019	038° 53′ 11.23″ N	-121° 20′ 21.90″ W	17	12N	6E
SW16	0.010	038° 53′ 10.96″ N	-121° 20′ 21.39″ W	17	12N	6E
SW17	0.101	038° 53′ 11.90″ N	-121° 19′ 57.37″ W	17	12N	6E
SW18	0.030	038° 53′ 12.89″ N	-121° 19′ 59.50″ W	17	12N	6E
SW19	0.011	038° 53′ 12.48″ N	-121° 19′ 54.67″ W	17	12N	6E
SW20	0.008	038° 53′ 12.53″ N	-121° 19′ 52.69″ W	17	12N	6E
SW21a	0.067	038° 53′ 14.09″ N	-121° 19′ 56.44″ W	17	12N	6E
SW21b	0.007	038° 53′ 13.80″ N	-121° 19′ 57.65″ W	17	12N	6E
SW21c	0.016	038° 53′ 14.56″ N	-121° 19′ 57.45″ W	17	12N	6E
SW22	0.188	038° 53′ 22.37″ N	-121° 19′ 55.95″ W	17	12N	6E
SW23	0.014	038° 53′ 23.12″ N	-121° 19′ 56.75″ W	17	12N	6E
SW24	0.027	038° 53′ 22.59″ N	-121° 19′ 59.04″ W	17	12N	6E
SW25	0.133	038° 53′ 22.41″ N	-121° 19′ 01.35″ W	17	12N	6E
SW26	0.030	038° 53′ 22.90″ N	-121° 19′ 03.55″ W	17	12N	6E
SW27	0.284	038° 53′ 22.51″ N	-121° 20' 05.76" W	17	12N	6E
SW28	0.534	038° 53′ 21.85″ N	-121° 19′ 57.65″ W	17	12N	6E
SW29	0.085	038° 53′ 22.42″ N	-121° 20′ 13.28″ W	17	12N	6E
SW30	0.018	038° 53′ 12.96″ N	-121° 20′ 11.73″ W	17	12N	6E
*SW31	0.314	038° 53′ 10.31″ N	-121° 20' 00.55" W	17	12N	6E
*SW32	0.033	038° 53′ 21.94″ N	-121° 20′ 19.35″ W	17	12N	6E
*SW33	0.014	038° 53′ 22.48″ N	-121° 20′ 18.06″ W	17	12N	6E

Appendix C Wet Season Survey Data Summary Sheets

Project:	Peery	Rancl	1							Surve	eyor(s):		Sam Ba	acchini								Quad:		Lincoln	n, Sectio	n 17				Coun	ty: I	Placer				
Date:	12/20/	/2012								Weath	her Con	d:	Clear a	nd calm	ı							Towns	hip:	12N						UTM I	Northing	: 4	30566	6.81 m N		
Time:	1000-1	1430								Air Te	emperat	ure(°F	⁼):	49°F								Range	:	6E						υтм і	Easting:	6	44322	.62 m E		
<u>Abundance:</u> R = R	are (1-2	2 indivi	duals),	NC = Not Con	nmon (3-10	individuals	s), C = 0	Commo	on (11-	50 indi	viduals), VC =	= Very Co	ommon	(51-100	indivio	duals), A	= Abu	ndant	(>100 i	ndividua	als)			Habita	t Cond	lition:									
<u>Hydrology:</u> D = d	y, N/P =	= not p	onding,	M=moist, S =	saturated	to surface,	I/P = in	ntermitt	tent po	nding,	X = Pre	esent b	but not o	bserve	d in 1 m	eter sa	mple								UD = u	ndistu	urbed, D	D = dist	turbed - tt =	tire trac	:ks, t = ti	ash, p :	=plowi	ing		
LB Redroductive	Status: i	i = imn	nature, i	m = mature, g	= gravid (v	with eggs)																			UG = u	ingraze	ed, G =	= graze	ed - C = cattle	e, H = h	orse, S =	sheep	, I = lig	ght grazing, r	n = moderate	grazing, h = heavy grazing
		Pr	esent	Potential							-																	Ι.		Turbe	I	Colle				
		(in	ches)	(Inches)	Surface	Area (ft ²)		Cope	epods	1	Cru	stacea Lar	a rge Branc	hiopods	; (LB)		Co	eoptera	a	Hem	Ir ptera	nsecta	Oda	nota	Dipt	era		N	violiusca	laria	Acari	nbola (Jtner	Herps		
		,																				ľa						0		ian			rate			
	Water Temp	Max	Ave.	Max Ave.	% Current Inundation	Pot. Max	Ostracods	Calanoida	Cyclopoda	Cladocera	TIOC	BRLY	BRME	LEPA	LYBR	CYCA	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeropte	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae Planorbidae	Micro-turbella	Hydracarina		Other Inverteb	Pseudacris Other	Habitat	
Pool No.	(°F)	<u> </u>																															0		Condition	Comments
5W01 SW02	50	5	4.5	10 8	90	0.023	C																							-	$\left \right $					
SW02	50	6.5	4	10 6	90	0.047	с	с			1																									
SW04	50	5	3	5 4	90	0.012	-				1							-+																		
SW05	52	6.5	3	8 4	70	0.811		С																												
SW06	53	5	4	6 5	60	0.124	С	Х																												
SW07	D	-	-	86	-	0.086																														
SW08	52	3	2.5	4 3	50	0.039		Х					_																							
SW09	D	-	-	4 3	-	0.012																								-	+					
SW10 SW11			-	3.5 2		0.020																														
SW12	53	4	3	10 6	60	0.020	x																								1 1					
SW13	D	-	-	3.5 2	-	0.005																														
SW14	53	3.5	3	4 3	60	0.017																														
SW15	D	-	-	3 2	-	0.019																														
SW16	D	-	-	3 2	-	0.014							_																							
SW17	50	10	7	12 7	95	0.101	С						_																	_						
SW10	52 D	4.5	3	0 4 3 2	00	0.03													-												┥		-			
SW19 SW20	D	-	-	3 2		0.008																											-			
SW21a	50	4	3	6 4	80	0.067	х																													
SW21b	50	4.5	3.5	6 4	80	0.007					<u>i </u>																									
SW21c	D	-	-	2 1	· ·	0.016																														
SW22	50	5	3.5	12 5	85	0.188	C	v																	┢──┤						\vdash					
5VV23 SW24	52 52	9.5	0.5 6		90 70	0.014		^			<u> </u>						\vdash	\rightarrow							┨──┤					+	┢──┤		-+			
SW25	52	6	4	8 6	70	0.133	1	х	1		1						\vdash	-+															-+			
SW26	50	2	1	8 6	40	0.03		Х																												
SW27	D	-	-	5 4	-	0.284																														
SW28	50	8.5	6	10 7	90	0.534							_																							
SW29	50	4.5	3	7 5	90	0.085							_																	_	┨ ┨					
5W30 *SW31	D 50	- 12	- 8	5 4 20 10	- 00	0.018			NC		<u> </u>						\vdash																			
*SW32	50	5	4	7 6	85	0.033		NC									\vdash								╏──┤					+						
*SW33	50	4.5	3.5	7 6	90	0.014	1		1		1						\vdash																-+			
						-					1																			1						
	1				l –			1			1																			1						
-																																				
All Ot	ner Basi	ins On	Site Ar	e Not Ponded	l																															

										•											<u> </u>			0 <i>i</i>	17						5				
Project:	Peery F	Ranch								Surve	eyor(s):	:	Ammon Rid	e							Quad:		Lincoln,	, Section	n 17				C	ounty:	Pla	cer			
Date:	1/3/201	3								Weat	her Co	nd:	Clear and c	alm							Towns	hip:	12N						U	TM Nor	hing:	43056	66.81 m N		
Time:	1400-18	800								Air Te	empera	ature(°F):	48°ı	-						I	Range:		6E						U	TM Eas	ing:	64432	2.62 m E		
<u>Abundance:</u> R = R	are (1-2 i	individ	uals), l	NC = N	ot Con	nmon (3-10	individuals	s), C = (Common (1	1-50 indi	vidual	s), VC = \	/ery Comm	ion (51-	-100 indivi	duals),	A = Ab	undan	t (>100 i	ndividua	als)			<u>Habitat</u>	t Cond	lition:									
<u>Hydrology:</u> D = di	'y, N/P = ⊧ Natura i	not po	nding,	M=mo	ist, S =	saturated t	o surface,	I/P = in	ntermittent	oonding,	X = Pr	resent bu	t not obse	rved in	1 meter sa	ample								UD = ui	ndistu	irbed, D) = dist	urbed - t	t = tire	tracks,	t = tras	h, p =plo\	ving		
LB Redroductive :	status: I =	= Imma Pre	ature, r sent	n = ma	ture, g	= gravid (w	ith eggs)	1								1								0G = U	ngraze	ed, G =	grazed	a - C = Ca	attie, F	l = nors urbel	e, S = SI	neep, I = I	ight grazing	m = moderate	grazing, n = neavy grazing
		De	pth	De	pth						Cru	ustacea								Ir	nsecta						Ν	lollusca		aria A	ari mb	ola Other	Herps		
		(inc	hes)	(Inc	hes)	Surface	Area (ac)	-	Copepod	6		Large	Branchiop	ods (LB	3)	С	oleopte	era	Hem	iptera	æ	Odar	nota	Dipte	era					u		Ite			
D. (11)	Water Temp	Max	Ave.	Max	Ave.	% Current Inundation	Pot. Max	Ostracods	Calanoida Cyclopoda	Cladocera	710C	BRLY	BRME	I VBR	CYCA	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeroptera	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae	Planorbidae	Micro-turbellaria	пушасаша	Other Invertebra	Pseudacris Other	Habitat	
Pool No. SW01	(°F) 50	6.5	4.5	10	8	90	0.023	Δ	C	NC										x										x				Condition	Comments
SW02	50	4.5	3	5	4	90	0.007	VC	C											~										~					
SW03	50	5.5	4	10	6	90	0.047	С	С	Х																									
SW04	50	4.5	3	5	4	90	0.012	С	СХ																										
SW05	52	6.5	3	8	4	70	0.811	A	VC X	- v	v					X				X										X		_			
SW06 SW07	53 D	- D	4	8	5 6		0.124		NC	^	^					^				^										^					
SW08	52	3	2.5	4	3	50	0.039	vc	NC																										
SW09	D	-	-	4	3	-	0.012																												
SW10	D	-	-	3.5	2	-	0.026																												
SW11	D	-	-	3.5	2	-	0.023																												
SW12	53	3	2.5	10	6	60	0.04	С	С	NC																						_			
SW13	D	-	-	3.5	2	-	0.005																									_			
SW14 SW15	53 D	-	2.5	4	3 2		0.017		U U	^																									
SW16	D	-	-	3	2	-	0.014																												
SW17	50	10	6.5	12	7	95	0.101	Α	VC X	NC	х									Х													х		
SW18	52	4	2.5	6	4	60	0.03	С	NC											Х															
SW19	D	-	-	3	2	-	0.011																												
SW20	D	-	-	3	2	-	0.008	v		_																									
SW21a	50	3.5	3	6	4	80	0.067	X	NC	v		v																				_			
SW210	50 D	-	-	2	4	-	0.007		NC	^		^																				-			
SW22	50	4	3	12	5	85	0.188	Α	VC	NC																									
SW23	52	9	6.5	11	7	85	0.014	С	NC																										
SW24	52	9	6	11	7	70	0.027	VC	C	- v										X												_			
SW25 SW26	52 50	0	4	0 8	6	40	0.133	C		<u>^</u>					_					^															
SW27	D	-	-	5	4	-	0.284	Ť	- U		1																								
SW28	50	8	6	10	7	85	0.534	Α	VC	Х																									
SW29	50	4.5	3	7	5	85	0.085	Α	VC	NC																									
SW30	D	-	-	5	4	-	0.018				<u> </u>																					_			
^SW31 *SW22	50 50	9.5	6	20	10	90	0.314				×	+ +								┝──┨															
*SW32	50	4.5 4	3.5	7	0 6	85 85	0.033	VC.	C C	NC		+			_																+				
		-	۲, T	† ·			51014				1							1													+				
				İ 👘				1			1							1																1	
All Ot	ier Basin	is On S	oite Are	e Not P	onded	l																													

Project:	Peery	Ranch	1							Surve	yor(s):	А	mmon Ri	се							Quad:		Lincoln	n, Sectio	on 17				Count	t y: F	lacer				
Date:	1/17/2	013								Weath	er Con	d: C	lear and	calm							Towns	ship:	12N							Northing	430	05666	5.81 m N		
Time:	700-12	200								Air Te	mperat	ure(°F):	Sta	rt 42°F							Range	:	6E						UTM E	Easting:	644	4322.0	62 m E		
Abundance: R = R	are (1-2	indivi	duals), I	NC = Not Con	nmon (3-10	individuals	s), C = (Commo	on (11-{	50 indi	viduals)), VC = V€	ry Com	non (5	1-100 indi	viduals)	, A = Ab	undant	t (>100	individu	als)			Habitat	t Cond	lition:									
Hydrology: D = di	'y, N/P =	not p	onding,	M=moist, S =	= saturated	to surface,	I/P = in	ntermitt	tent po	nding,	X = Pre	sent but	not obse	erved i	1 meter	sample								UD = u	indistu	irbed, D) = dist	urbed - tt = t	ire trac	ks, t = tr	ash, p =p	lowi	ig		
LB Redroductive	<u>Status:</u> i	= imn	ature, i	n = mature, g) = gravid (v	with eggs)										-								UG = u	ingraze	ed, G =	= graze	d - C = cattle	e, H = he	orse, S =	sheep, I	= lig	nt grazing, m	n = moderate	grazing, h = heavy grazing
		Pr	esent epth	Potential Depth							Crus	stacaa									nsocta						Ν	Aollusca	lurbe	Acari	Colle	hor	Herps		
		(in	ches)	(Inches)	Surface	Area (ac)		Cope	epods		Ciu	Large I	Branchio	oods (L	B)		Coleopte	era	Hem	niptera	nsecia	Oda	nota	Dipt	tera			nonusca	iana	Acan		1)	Therps		
																					era				0	_	a	n	rian	m	40	rate			
					on int	×	spo	a	da	era						ae	dae	ае	dae	ae	opte	ra	era	e	idae	tera	ida	lae idae	ella	arina	4	nen	acris		
		lax	е	ve. lax	urre dati	N N	trac	noi	odo	oop	oc	SL Y	SME	E .	CA BR	scid	philic	olida	ecti	xida	ner	opte	opte	cida	mo	doq	nae	ysic	urb	race		ING	othe		
	Water	2	A	≥ ∢	o C	Pot	Ő	Cala	ycl	C O		B	B	5	G 6	Dytis	ydro	lali	oton	Cori	her	Żygo	nis	Culi	iror	Tric	-vm	Par P	ro-1	Hyd	č	Ē	Pse		
Deal Na					°` <u>−</u>			Ŭ	0								T	-	ž	Ŭ	Щ	17	4	-	ъ		_	_	Mic	-	ţ			Habitat	Community
P001 NO.	(F) 41	5	4	7 5	80	0.023	<u> </u>	NC	NC	NC				_		_	-			Y										┝──┼		-		Condition	Comments
SW01	39	3.5	3	5 4	70	0.023	c	NC	140	110						-				^									-	╞──┼			<u> </u>		
SW03	38	6.5	4.5	6 5	80	0.047	c	NC	NC	R	İ							1	1	x					х				1						
SW04	38	3.5	2	5 4	60	0.012	С	С	Х																										
SW05	38	6.5	3	8 4	35	0.811	С	NC	Х	Х															Х										
SW06	38	4	2.5	6 5	75	0.124	С	С	Х	Х						Х				Х					Х										
SW07	D	-	-	8 6	S	0.086																													
SW08	D	-	-	4 3	S	0.039																													
SW09	D	-	-	4 3	-	0.012																													
SW10	D	-	-	3.5 2	-	0.026														-															
SW11 SW12	29	-	-	3.5 2	- 70	0.023	<u> </u>	- C		<u> </u>																									
SW12 SW13	- 30 D	-	5	35 2	70	0.04	Ū			U U				_																		-			
SW14	D	-	-	4 3	-	0.000																										-			
SW15	D	-	-	3 2	-	0.019		1																											
SW16	D	-	-	3 2	-	0.014																													
SW17	38	10	6.5	12 7	95	0.101	VC	VC	NC	С	R						Х			Х					Х								Х		
SW18	38	4	2.5	6 4	60	0.03	С	NC												Х															
SW19	D	-	-	3 2	-	0.011																													
SW20	D	-	-	3 2	-	0.008																													
SW21a	38	1.5	0.5	6 4	30	0.067	X										_															_	\rightarrow		
SW21b	38	3	1.5	6 4	40	0.007	X	<u> </u>	X	X		X	(Visua	l obse	rvation)											┟──┨				┟──┟		-+	<u> </u>		
SW210	38	6	2	12 5	40	0.188	VC	С		NC						-													-	╞──┼	 	+	<u> </u>		
SW23	38	7.5	4	11 7	70	0.014	c	NC		X									1																
SW24	38	7	5.5	11 7	70	0.027	NC	NC	С	С									1	X															
SW25	38	6.5	4	8 6	70	0.133	NC	NC	R	Х							Х			Х					Х										
SW26	38	6.5	4.5	8 6	85	0.03	С	С	С	VC							Х																		
SW27	39	2	1	5 4	10	0.284	_										_																\rightarrow		
SW28	41	7	5	10 7	75	0.534	C	C		X										v												_			
SW29	38	5	3.5	7 5	85	0.085	С	C		NC						X	-			X															
SW30 *SW24	D 20	-	-	0 4 20 40	- 40	0.018	NC	NC	C	<u> </u>	Р					v				v						┝──┤				╞──┤		_	<u> </u>		
3W31 *SW22	30 27	1.3	5 25	7 6	40	0.014					ň					- ^			-	^						┝──┤				╞──┼					
3W32 *SW22	37	4.3	ა. 5	7 6	10	0.033						├				-			+							┟──┤			-	╏──┤					
38833	31		2	/ 0	40	0.014				NC						-													-	┝──┼			<u> </u>		
					+											-			+							┝──┤			-	╞──┼		-+			
	1	1	+		1		<u> </u>	1	1			\vdash	-+	-+		+		1	1							┟──┨			+	┢──┼		+			
<u> </u>	1	1	1		1			t	1		l			-+		1		1	1				<u> </u>						1						
All Ot	ner Basi	ns On	Site Ar	e Not Ponded	1				•			•						•				-		-				•					_		-

Project:	Peery	Ranch	ı							Surve	yor(s):	Am	mon Rice	9						C	Quad:	l	Lincoln	, Sectio	on 17				Count	ty: F	lacer				
Date:	1/31/2	013								Weath	ner Con	l: Cle	ar and ca	ılm						т	ownsł	nip: [,]	12N							Northing	4305	5666.81 r	m N		
Time:	900-13	330								Air Te	emperat	ıre(°F):	Start	50°F						F	Range:	(6E						UTM E	Easting:	6443	322.62 m	۱E		
<u>Abundance:</u> R = R	are (1-2	indivi	duals),	NC = Not Cor	nmon (3-10	individuals	s), C = (Commo	on (11-	50 indi	viduals	, VC = Very	/ Comm	on (51-1	00 indivi	duals), A =	Abund	lant (>	100 inc	dividua	ls)			Habitat	t Cond	lition:									
Hydrology: D = d	'y, N/P =	not po	onding,	M=moist, S =	saturated	to surface,	, I/P = ir	ntermit	tent po	nding,	X = Pre	sent but no	ot observ	ved in 1	meter sa	mple								UD = u	Indistu	ırbed, C	D = dist	urbed - tt = t	ire trac	ks, t = tr	ash, p =pl	owing			
LB Redroductive	Status: i	= imm	nature, i	n = mature, g) = gravid (v	with eggs)																		UG = u	ingraze	ed, G =	= graze	d - C = cattle	e, H = he	orse, S =	sheep, I =	light gr	razing, m	n = moderate g	grazing, h = heavy grazing
		Pr	esent	Potential							0										4 -							4	Turbe						
		(in	ches)	(Inches)	Surface	Area (ac)		Cope	epods	r	Crus	Large Br	anchiopo	ds (LB)		Cole	optera		Hemip	tera	secta	Odar	nota	Dipt	tera		N	lollusca	laria	Acari	ibola Oth	er He	erps		
																					era				0	_	a)	n.	rian	σ	rate				
					on t	×	spo	a	da	era						ae	dae	ae	dae	ae	opte	ra	era	ae	idae	tera	eida	dae idae	ella	arina	rteb	acris	r		
		lax	ve.	lax ve.	urre dati	Ň.	trac	anoi	odo	adoc	OC	SAAF	EPA	/BR	VCA	scid		blid	ecti	xida	ner	opte	opte	cida	mor	doų	inae	iysid	turb	rac	nve	spine	Othe		
	Water	2	∢	∠ ∢	nun	Pot	S	Cala	Syci	Ö	Ц	B	5 3	L'	Ó	Ovti	lydro	Нап	otor	Cor	phei	Zyg	Anis	Cull	niror	Tric	Lyn	Par P	-oro	Hyo	ler	Pse	Ŭ		
Pool No	(°F)				- °				Ŭ								_		ž		ш		1		Ċ				Σ		đ			Habitat	Comments
SW01	48	4	2	10 8	60	0.023	с	NC	NC	vc																			с				++	Condition	Comments
SW02	D	Ŀ	-	5 4	<u> </u>	0.007			_																										
SW03	48	4.5	3	10 6	60	0.047	С	С	NC	С						X									Х				NC						
SW04	D	-	-	5 4	-	0.012																													
SW05	50	6.5	3	8 4	10	0.811	NC	NC	C	NC				_		X	Х			v					X				X			_	+		
SW06	47	3.5	2	6 5 8 6	35	0.124	NC	C	C	C						X		_		x					X				X			-	┿┯╋		
SW07 SW08	47 50	4	0.5	0 0 4 3	5	0.000	X								+																		++		
SW09	D	-	-	4 3	-	0.000	Â								+															1 1			++		
SW10	D	-	-	3.5 2	-	0.026																											++		
SW11	D	-	-	3.5 2		0.023																													
SW12	D	-	-	10 6	-	0.04																													
SW13	D	-	-	3.5 2	-	0.005																													
SW14	D	-	-	4 3	· ·	0.017								_																		_	+		
SW15 SW16		-	-	3 2		0.019							_	_																		_	┿──╋		
SW10	49	9.5	6	12 7	- 30	0.014	C	С	C	VC	x				-	x	x			x					x				x			x	+		
SW18	50	2	1	6 4	30	0.03	NC		-		~					~	~			X												~	++		
SW19	D	-	-	3 2	-	0.011																													
SW20	D	-	-	3 2	-	0.008																													
SW21a	D	-	-	6 4	-	0.067																													
SW21b	D	<u> -</u>	-	6 4	<u> </u>	0.007																				┞──┨				┢──┟		_	+		
SW210	D	-	-	12 5		0.016									-																		++		
SW23	D	1 -	-	11 7	<u> </u>	0.014		1						+												┝──┤							++		
SW24	D	-	-	11 7	-	0.027																													
SW25	48	4.5	3	8 6	60	0.133	С	NC	С	VC						Х				Х					Х				Х			Х			
SW26	49	5	3.5	8 6	60	0.03	С	VC	С	vc				_	-	Х													NC			Х	+		
SW27 SW28	D 47	- 6.5	-	5 4 10 7	- 70	0.284	Δ	C	C	NC							Y			x				Y									++		
SW20	47	5	2	7 5	70	0.085	Δ	VC	C C	C						x	^			^				^					NC			-	++		
SW30	 D	-	-	5 4	-	0.018	Ê		Ť	Ť																╞──┤				┟──╂			+		
*SW31	47	7	5	20 10	40	0.314	NC	NC	Α	NC	NC					x				х									х	1 1		Х	+		
*SW32	D	-	-	76	-	0.033																													
*SW33	D	-	-	76	-	0.014																													
																																	\downarrow		
		1	_		<u> </u>		1	 		 				_				-+								┝──┤			<u> </u>				+		
	-			+ + - + - + - + - + - + - + - + - + -		+											-+	-+								┟──┨				+			+		
All Ot	ner Basi	ns On	Site Ar	e Not Ponded	1		<u> </u>	I	1	I	I																		1	1 1	I				

Project:	Peery I	Ranch							\$	Survey	or(s):	Amm	on Rice a	and Leif (Goude					Qua	d:	Lincoln	n, Section 17				Count	y:	Placer				
Date:	2/14/20	13							١	Weathe	er Cond:	Clear	and calr	n						Tow	nship:	: 12N						orthing	: 4305	666.81	m N		
Time:	915								,	Air Ten	nperature(°F	-):	Start 55	5°F						Ran	ge:	6E					UTM E	asting:	6443	22.62 m	E		
Abundance: R = F	are (1-2 i	individuals). NC = I	Not Co	mmon (3-10	individual	s). C = (Common	(11-5)	0 indiv	iduals), VC	= Verv (Commor	(51-100	individ	duals).	A = Abund	lant (>1(0 indivi	duals)			Habitat Con	dition:									
Hydrology: D = d	nv N/P -	not nondin	,	nist S	- saturated	to surface	I/P – in	ntormitto	nt non	ding)	(- Prosont	but not	obsorvo	d in 1 m	ofor sa	mnlo	/		o marri	uuuio,			UD – undist	urbod [D – disturbe	d - tt - t	iro tracl	(e t - t	ash n-nlo	wina			
<u>I B Bodroductivo</u>	Ctotuo.:		ig, wi–iii	of			, // _ //	intermitter	in poir	iuniy, 7	(= 1 1636iii	but not	0036176	u ili i ili	eter 3a	mpie												(3, t = t	asii, p -pic	liaht a		n – mederate	evering h - heavy evering
LB Realouuclive	Status. I	Dresent	;, iii = iii	tontial	g = graviu (v	nin eyys)	1																00 = ungraz	2eu, G	= grazeu - C		, н = пс	156, 3	Calle	iignt gi	azing, i	n = mouerate	jrazing, n = neavy grazing
		Depth		enth							Cruetacor									Incod	to				Mollur	202	laria	Acari	Colle mbola Otho	r LL	arne		
		(inches)	(In	iches)	Surface	Area (ac)		Copep	ods	T	La	rge Bran	chiopod	s (LB)		С	oleoptera	Н	emiptera	11360		Odanota	Diptera		WORL	500	iaria	Acan			erpa		
										ľ		Ĭ							- Í	ra							ian		ate				
	Water Temp	Max Ave.	Max	Ave.	% Current Inundation	Pot. Max	Ostracods	Calanoida	Cyclopoda	Cladocera	BRLY BRLY	BRME	LEPA	LYBR	CYCA	Dytiscidae	Hydrophilidae	Notonectidae	Corixidae	Ephemeropte	Zvdontera	zygoptera Anisoptera	Culicidae Chironomidae	Trichoptera	Lymnaeidae Physidae	Planorbidae	Micro-turbellar	Hydracarina	Other Inverteb	Pseudacris	Other	Habitat	
Pool No.	(°F)			-						-		_								_						_	v		-	-		Condition	Comments
SW01	52	4 2	10	8	5	0.023	NC	NC	NC	С		_				X			X					_		_	X					р	
SW02	D		5	4	-	0.007						_							_	_	_					_	-					р	
SW03	D		10	6	-	0.047						_							_	_						_						р	<u> </u>
SW04	D		5	4	-	0.012						_												_		_	_					р	
SW05	D		8	4	-	0.811						_												_		_	_					р	
SW06	D		6	5	-	0.124						_							_	_						_						р	<u> </u>
SW07	D		8	6	-	0.086																				_						р	
SW08	D		4	3	-	0.039														_						_						р	
SW09	D		4	3	-	0.012						_								_						_				-		р	<u> </u>
SW10	D		3.5	2	-	0.026						_	-					_	_		_					-	-					р	l
SW11			3.5	2	-	0.023						_	-					_	_		_					-	-					p	l
SW12			10	0	-	0.04						-						_	_	_	_					_				-		p	l
SW13			3.5	2	-	0.005														_						_	-					p	l
SW14			4	3	-	0.017	-					_														_						<u>р</u>	l
SW15	D		2	2	-	0.019												_	_							_	-					<u>р</u>	<u> </u>
SW10	52	7 5	12	7	20	0.014		VC	<u> </u>	VC	v	-				×	v	-	- v	-			v			-	v			v		р р	
SW17	- J2 D	· · ·	6	1		0.101	, C		0	10	^					^	^		^				^				^			^		<u> </u>	
SW10	D		2	2		0.03						_														_						р р	
SW20			3	2	-	0.008													_		_					-						<u>р</u>	
SW212			6	4	-	0.000													_		_					-						<u>р</u>	
SW21b			6	-		0.007	-		-			-						_	_	_						-						<u>р</u>	
SW21c	D		2	1		0.016	1	╉──┼												-										1		<u>4</u>	<u> </u>
SW22	D		12	5	-	0.188	1																							1		p	1
SW23	D		11	7	-	0.014	1	1 +																						1		<u>р</u>	
SW24	D		11	7	- 1	0.027	1						1																	1		р	1
SW25	D		8	6	-	0.133				1											1								1	1		p	
SW26	D		8	6	-	0.03	Ĺ													İ	l									Ĺ		р	
SW27	D		5	4	-	0.284																										р	
SW28	52	4 2.	5 10	7	60	0.534	С	С	С	NC						Х			X								Х					р	
SW29	D		7	5	-	0.085																										р	
SW30	D		5	4	-	0.018																										р	
*SW31	54	7 5	20	10	40	0.314	С	NC	Α	NC	X					Х			X								Х			Х		р	
*SW32	D		7	6	-	0.033																										р	
*SW33	D		7	6	-	0.014																										р	
							1				İ							1															
											İ							1						1									
All Ot	her Basir	s On Site /	Are Not	Ponde	d																												

*SW31, SW32, and SW33 were not included in the wetland delineation, however, these features were inundated during the 2012-2013 wet season

Project:	Peery I	Ranch							Surve	eyor(s):	Am	nmon Rice							Quad	: Lii	incoln,	Section 17				County	y:	Placer				
Date:	2/28/20)13							Weat	her Cond:	Cle	ear and slig	ht breez	е					Town	ship: 12	2N					UTM N	orthing	: 4305	666.81	m N		
Time:	900	1							Air Te	emperature	(°F):	Start 5	5°F						Rang	e: 6E	E					UTM E	asting:	6443	22.62 m	ηE		
Abundance: R = F	Rare (1-2	individuals). NC = N	Not Co	mmon (3-10	individuals	s). C = (Common (11	-50 indi	viduals). V	C = Ver	v Commo	n (51-10	0 indivi	duals).	A = Abun	dant (>1	00 indivi	duals)		ŀ	Habitat Cond	dition:									
Hvdroloav: D = d	rv. N/P =	not pondin	a. M=ma	oist. S	= saturated	to surface.	I/P = in	ntermittent p	ondina.	X = Prese	nt but n	ot observe	ed in 1 n	neter sa	ample				,		Ī	UD = undistu	urbed. [D = disturbe	d - tt = t	ire tracl	(s. t = t	ash. p =plo	wina			
B Redroductive	Status: i	= immature	m_=	ature (a = aravid (w	vith eaas)		P	j ,													UG = ungraz	red G	= grazed - C	= cattle	H = ho	rse S :	sheen I=	liaht a	razina r	n = moderate	grazing b = beavy grazing
	<u></u>	Present	Pot	tential	<u>g = g (</u>		1															•• - ug.u_			- 041110	Turbel	, .	Colle	1	· «		
		Depth	D	epth						Crustad	cea								Insecta	a				Mollus	sca	laria	Acari	nbola Othe	r H	erps		
		(inches)	(In	ches)	Surface	Area (ac)		Copepods			Large Bi	ranchiopod	ls (LB)	1	С	oleoptera	H	emiptera	l	Odano	ota	Diptera						Φ				
							(0											,	era			Φ	σ	ē	Φ	ariar	ğ	orat	S			
	Water Temp	Max Ave.	Max	Ave.	% Current Inundation	Pot. Max	Ostracod	Calanoida Cyclopoda	Cladocera	LIOC	BKLY	BRME LEPA	LYBR	СУСА	Dytiscidae	Hydrophilidae	Haliplidae	Corixidae	Ephemeropt	Zygoptera	Anisoptera	Culicidae	Trichopter	Lymnaeida Physidae	Planorbida	Micro-turbella	Hydracarin	Other Invertet	Pseudacri	Other	Habitat	
Pool No.	(°F)								_				_						_							_		0			Condition	Comments
SW01	D		10	8	-	0.023							_						_						_						р	
SW02	D		5	4	-	0.007			_																	_			-		р	
SW03	D		10	6	•	0.047			-				_						_						_						р	l
SW04	D		5	4	-	0.012			-				+						_						-				-		р	l
5005			8	4	-	0.811			-										_										-		p	l
SW07	D		0	5	-	0.124			-				-						_		-				-				-		р р	
SW07	D		4	3	-	0.000			-																						р р	
SW00	D			3	-	0.033													_										-		p n	
SW10	D		3.5	2	· ·	0.026							1																		n P	l
SW11	D		3.5	2	-	0.023																			_						Р 0	
SW12	D		10	6	-	0.04																									p	
SW13	D		3.5	2	-	0.005																									p	
SW14	D		4	3	-	0.017																									p	
SW15	D		3	2	-	0.019																									р	
SW16	D		3	2	-	0.014																									р	
SW17	55	4 3	12	7	10	0.101	NC	NC C	С						Х											Х			R		р	
SW18	D		6	4	-	0.03																									р	
SW19	D		3	2	-	0.011																									р	
SW20	D		3	2	-	0.008																									р	
SW21a	D		6	4	-	0.067													_						_						р	
SW21b	D		6	4	-	0.007							-						_										_		р	
SW210 SW22			12	5	+ -	0.016			_	+						\vdash				╉──┼─										+	p	1
SW22	П		11	7		0.014			-												-				+	+			+		<u>ч</u>	<u> </u>
SW24	D		11	7	-	0.027																									p p	<u> </u>
SW25	D		8	6	-	0.133	1		1										1						1						р	
SW26	D		8	6	-	0.03																									p	
SW27	D		5	4	-	0.284																									р	
SW28	D		10	7	-	0.534																									р	
SW29	D		7	5	-	0.085																									р	
SW30	D		5	4	-	0.018																									р	
*SW31	D		20	10	-	0.314																									р	
*SW32	D		7	6	-	0.033	I																						1		р	l
*SW33	D	- -	7	6		0.014	<u> </u>			\vdash			+			\vdash			_	+									1	\downarrow	р	l
	4			_			 			\vdash										+									_			l
			_				 																	-					1			l
				-						\vdash										+					-	<u> </u>			-			l
	hor Basin	as On Site /	Vro Not	Ponde	_ _																								1			L
All Ot	ner basir	IS ON SITE A	are NOC I	ronae	u																											

*SW31, SW32, and SW33 were not included in the wetland delineation, however, these features were inundated during the 2012-2013 wet season

Project:	Peery I	Ranch							Surve	yor(s):	Am	mon Rice							Quad	l: Lir	ncoln, S	Section 17				County	/:	Placer				
Date:	3/14/20	13							Weath	ner Cond:	Clea	ar and slig	ht breeze	Э					Town	ship: 12	2N					UTM N	orthing	: 4305	666.81	m N		
Time:	900								Air Te	mperature	°F):	Start 62	2°F						Rang	e: 6E						UTM E	asting:	6443	22.62 m	E		
Abundance: R = R	are (1-2	individuals),	NC = N	ot Con	nmon (3-10 i	individuals	s). C = C	Common (11-	-50 indi	viduals). V	C = Verv	v Commor	n (51-100) indivi	duals).	A = Abunc	dant (>1	00 indivi	duals)		На	abitat Cond	dition:									
Hydrology: D = d	rv. N/P =	not ponding	. M=mo	ist. S =	saturated to	o surface.	I/P = in	termittent po	ondina.	X = Presen	t but no	ot observe	d in 1 m	eter sa	mple				,		U	D = undistu	urbed. D) = disturbed	d - tt = t	ire track	s.t=t	ash, n =nlo	wina			
B Redroductive	Statue i	- immaturo	m – ma	turo a	– gravid (wi	ith onne)			j ,													G - ungraz	vod G-	- arazed - C	- cattle	H - ho	rso S -	shoon I-	light g	azina n	- moderate (arazina h – heavy arazina
EB Real odderive	olalas. 1	Present	Pote	ential	- gravia (iii	ini eggs/	I																	- grazed O	- cattle	Turbel	130, 0		I gint gi	azing, i	I = moderate	jiazing, n = neavy grazing
		Depth	De	pth						Crustac	еа								Insecta	a				Mollus	ca	laria	Acari	nbola Othe	rн	erns		
		(inches)	(Inc	hes)	Surface A	Area (ac)		Copepods		L	arge Bra	anchiopod	s (LB)		С	oleoptera	н	emiptera		Odanot	ta	Diptera					, louin					
																			ira					0	0	ian		rate				
DeciMe	Water Temp	Max Ave.	Max	Ave.	% Current Inundation	Pot. Max	Ostracods	Calanoida Cyclopoda	Cladocera	TIOC	BNLT	LEPA	L YBR	CYCA	Dytiscidae	Hydrophilidae	Notonectidae	Corixidae	Ephemeropte	Zygoptera	Anisoptera	Culicidae	Trichoptera	Lymnaeidae Physidae	Planorbidae	Micro-turbella	Hydracarina	Other Inverteb	Pseudacris	Other	Habitat	
POOLNO.	(F)		10	0		0.000			-								_		-										-	-	Condition	Comments
5W01			10	8	-	0.023													-						-				-		<u>р</u>	
SW02			10	4		0.007													-												<u>p</u>	
SW04	D		5	0	-	0.047			-								_		-										-	-	<u>р</u>	
SW04			0	4		0.012			-										-						-						р р	l
SW05			6	4		0.011													_										-		<u>р</u>	
SW00	D		9	6		0.124													-										-		р р	
SW08	D		4	3		0.000													-												<u>р</u> р	
SW09	D		4	3		0.000													-												<u>р</u> р	
SW10	D		3.5	2		0.026						-					-		-												p n	i
SW11	D		3.5	2	-	0.023																									<u>р</u> р	
SW12	D		10	6		0.04																										
SW13	D		3.5	2	<u> </u>	0.005													1												<u>а</u>	
SW14	D		4	3	-	0.017																									p r	
SW15	D		3	2	-	0.019																									<u>р</u>	
SW16	D		3	2	-	0.014			1																						р	
SW17	D		12	7	-	0.101																									р	
SW18	D		6	4	-	0.03																									р	
SW19	D		3	2	-	0.011																									р	
SW20	D		3	2	-	0.008																									р	
SW21a	D		6	4	-	0.067																									р	
SW21b	D		6	4	-	0.007																									р	
SW21c	D		2	1	<u> </u>	0.016			_										_						1				1	+	р	l
SW22	D		12	5	<u> </u>	0.188			_										_				\vdash			┝──┤					р	
SW23	U		11	7	<u> </u>	0.014																	──			┝──╿				┼─┨	p	
5W24	D		11	1	<u> </u>	0.027													_						-				-	<u>├</u>	<u>р</u>	
SW20			•	0		0.133						_	<u>├</u>										┝──┤			┝──┤				┼──┨	р р	
SW20	D		5	4		0.03													-												<u>р</u> р	
SW28	D		10	7	-	0.534			1										-				1								p	
SW29	D		7	5		0.085																									p p	
SW30	D		5	4	-	0.018																									<u>р</u> р	
*SW31	D		20	10	1.	0.314				╏──┼──															+				1	<u> </u>	р р	l
*SW32	D		7	6	<u> </u>	0.033				╏──┼─																┝──┤				┼──┨	р	l
*SW33	D		7	6	<u> </u>	0.014																			-	1 1			1		<u>г</u> р	l
				Ē	1																				1						r*	
			1	<u> </u>	1				+										-											┼─┨		l
			1		ł	†													+						1					┼ ┨		l
			1		1																								1			l
All Ot	her Basir	ns On Site A	re Not P	onded	<u>n</u>			<u>n I</u>		<u>n I</u>												1		ı I				1				

*SW31, SW32, and SW33 were not included in the wetland delineation, however, these features were inundated during the 2012-2013 wet season

Appendix D Representative Site Photographs



Photo 1. Seasonal wetland SW21b. This pool contained vernal pool fairy shrimp (*Branchinecta lynchi*). Photo facing west.



Photo 2. Seasonal wetland SW17. This pool contained California fairy shrimp (*Linderiella occidentalis*). Photo facing south.



Photo 3. Feature SW31. This pool contained California fairy shrimp (*Linderiella occidentalis*). Photo facing west.



Photo 4. Seasonal wetland SW28. No vernal pool branchiopods were found in this pool. Photo facing north.



Photo 5. Seasonal wetland SW26. No vernal pool branchiopods were found in this pool. Photo facing northeast.



Photo 6. Seasonal wetland SW24. No vernal pool branchiopods were found in this pool. Photo facing north.



Photo 7. California fairy shrimp (*Linderiella occidentalis*), ostracods, and copepods observed in Feature SW31.





SUD-B Northeast Quadrant Specific Plan

APPENDIX



2013-2014 REPORT OF FINDINGS REGARDING BRANCHIOPOD SURVEYS – PEERY PROPERTY

90-Day Report of Findings Regarding Branchiopod Surveys

Peery Property

June 16, 2014





Document Information

Prepared for	Peery-Arrillaga
Project Name	Peery Property
Project Manager	Shannon Karvonen
Date	June 16, 2014

Prepared for: Peery-Arrillaga 2450 Watson Court, Palo Alto, CA 94303

Prepared by:



Cardno ENTRIX 701 University Avenue, Suite 200, Sacramento, CA 95825

Table of Contents

1	Introduction	1-1
2	Background and Site Description	2-1
3	Methods	3-4
4	Results	4-5
5	Conclusion	5-7
6	References	6-8

Appendices

USFWS Correspondence
Wet Season Wetland Location Data
Wet Season Survey Data Summary Sheets
Representative Site Photographs
Precipitation Data for Lincoln, CA

Figures

Figure 1- Site and Vicinity Map	
Figure 2- Sample Locations	

Acronyms

CNDDB	California Natural Diversity Database
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 Introduction

Sam Bacchini conducted protocol-level wet-season branchiopod surveys at Peery Property (Study Area) on behalf of Richard Peery of Peery-Arrillaga, in Lincoln, Placer County, California (Figure 1). Wetseason surveys were authorized by Mr. David Kelly of the U.S. Fish and Wildlife Service (USFWS) on December 9, 2013 (USFWS, Appendix A). The purpose of these surveys was to determine the presence/absence of vernal pool branchiopod species listed as endangered or threatened by the USFWS [i.e., vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*)] within seasonally inundated depressions at the property. These surveys were conducted under the authority of Federal Fish and Wildlife Permit TE-795938-7 and in compliance with the *19 April 1996 Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Guidelines) (USFWS, 1996). This document is the 90-Day Report of Findings for the Peery Property (as required by Item VII of the Guidelines), which summarizes the results of 2014 wet-season survey work for this site.

Sam Bacchini, Cardno ENTRIX biologist, sampled 29 seasonally inundated depressions within the Study Area (Appendix B). California fairy shrimp (*Linderiella occidentalis*) were observed in one depression, but no federally listed as threated vernal pool fairy shrimp (*Branchinecta lynchi*) were observed in the Study Area.

2 Background and Site Description

As requested by the Richard Peery of Peery-Arrillaga, Cardno ENTRIX conducted a protocol-level wetseason branchiopod survey for the Peery Property in an attempt to determine the presence or absence of listed branchiopods.

The western parcel (approximately 70 acres) is roughly rectangular in shape and is bordered by Nelson Lane on the west, State Route 65 Bypass on the South, undeveloped land on the north, and residential neighborhood on the east. The eastern parcel (approximately 44 acres) is roughly triangular in shape and is bordered by residential development on the north, Hwy 65 Bypass on the south, and Auburn Ravine on the east (Figure 2). Additionally, the property is located in Section 17, Township 12 North, Range 6 East of the Lincoln U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle map (Latitude 038° 53' 17.31" North; Longitude -121° 20' 09.22" West; UTM 10 S., 4305679.68 m Northing, and UTM 644328.70 m Easting).

The Study Area is approximately 114 acres, and consists of the area surveyed for the boundaries of wetland features and adjacent uplands. The Study Area is generally flat, with elevation ranging from approximately 120 feet above sea level (asl) to 130 feet asl. Land uses in the general vicinity include rural residential and residential development, and agricultural.

The entire western portion and most of the eastern portion of the Study Area have been disked, seeded, and mowed annually for hay production for many years. The western portion, which retains much of the natural topography, is dry farmed, while the eastern portion appears to have been laser leveled, and has been flood irrigated during the dry season for a number of years. The primary vegetative cover in the study area consists of stubble from oat grass, but other species were observed including Fitch's tarweed (*Centromadia [Hemizonia] fitchii*), yellow flower tarplant (*Holocarpha virgata*), turkey mullein (*Croton setigerus*), and vinegarweed (*Trichostema lanceolatum*). These latter species were very sparse, and associated primarily with the seasonal wetlands or adjacent areas.

Within the non-native annual grassland habitat in the western portion of the Study Area are a number of seasonal wetlands consisting of pools and swales. Most of these features were likely to have been vernal pools or swales in the past (based on the aerial signatures and the abundance of this wetland type in the surrounding region) but due to the long history of annual disking and planting for hay production the boundaries of these features have become indistinct, and no they longer appear to support vernal pool plant species. As stated above, the eastern portion of the Study Area has been graded/leveled, no seasonal pools or swales are present there, and no ponding was observed during the survey period.

The region has a Mediterranean climate characterized by hot, dry summers and cool, wet winters. The local and regional geology is within the Sacramento Valley geomorphic province, characterized primarily by agriculture, and is the wetter subregion of the Great Central Valley. The geomorphic province occurs within the greater California Floristic Province. The average summer high temperature is 95°F and the average low is 67°F. The average winter high temperature is 53°F and the average low is 37°F. Average annual precipitation is 17.1 inches (Baldwin et al., 2012).



Y:\GIS\Entrix\3340700_Scheiber\map\Peery_ProjSite_8i11i_10.mxd

3 Methods

In order to assess the presence or absence of listed shrimp species in the Study Area, Cardno ENTRIX conducted protocol-level branchiopod surveys during the 2013-2014 wet season. All surveys were conducted in accordance with the USFWS Guidelines (USFWS, 1996). A list of federal and state special-status plant and wildlife species was developed for the project using a database search, which included a query of the California Natural Diversity Database (CNDDB) for the Lincoln and eight surrounding USGS 7¹/₂ minute quadrangles.

Monitoring methods followed the USFWS Guidelines (USFWS, 1996). Invertebrate and hydrologic monitoring were conducted simultaneously. A total of 29 seasonally inundated depressions that potentially support vernal pool branchiopods were present in the study area. Sampling using a D style dip net was conducted by Cardno ENTRIX biologist Sam Bacchini (TE-795938-7).

The standard procedure Cardno ENTRIX follows for conducting these surveys includes:

When pools are inundated to a depth of 3 cm or greater, the depressional wetlands are visually searched for active large branchiopods prior to entering the water. Walking within the wetlands is minimized to fullest extent possible. Water depth measurements are taken at the same location during each monitoring event and visual observations of invertebrates were made from the wetland edge.

Following the visual search, a semi-quantitative sample is taken to determine the relative abundance of macroscopic invertebrates as follows. A net was lowered vertically into the deepest portion of the depressional wetland (usually the center) and rested on the bottom. The 153-µm mesh size net is then moved through the pool for approximately one-meter. Given the aperture of the net of 0.025 m2 and distance the net is moved, roughly 0.025 m3 or 25 liters of the water column were sampled horizontally each time. When the water column was shallower than the net aperture height, the volume of water per sweep was calculated by the horizontal distance the net was moved multiplied by the width of the net (25-cm) multiplied by the depth of the water. After the completion of each sample sweep, the contents of the net are examined for aquatic fauna. All animals captured in the net were identified to the lowest justifiable taxon in the field (consisting of 28 taxonomic groups), and recorded on standardized data sheets.

The relative numbers of individuals sampled within each taxonomic group are recorded in one of five categories: rare (≤ 2 individuals), not common (3-10 individuals), common (11-50 individuals), very common (51-100 individuals), and abundant (>100 individuals). This method allows for the relative abundances and richness of aquatic invertebrates to be compared, between and among wetlands, through time. Additionally, this method allows for density estimates of invertebrates to be calculated as number of individuals per liter of water (= number of individuals/net aperture area x length of sweep).

If large branchiopods are not detected during the sample sweep, additional strategically placed sweeps are made with the net. Additional taxonomic groups of aquatic invertebrates detected using these sweeps or visual observation are recorded with an "X" on the standardized field data sheet to note presence. After the taxonomic identification and enumeration are completed, the contents of the net were placed back into the pool from which they were sampled.

Beginning on February 19, 2014, following significant rain events, features identified during a previous wetland delineation ponding at least 3-cm of water were sampled. Several of the wetland features in the Study Area had short inundation periods and not all features were inundated during each survey. The invertebrate monitoring was conducted at the Study Area biweekly between December 16, 2014 and May 9, 2014. Depressional wetlands were monitored if they were inundated to a depth of greater than or equal to 3-cm at the time of each visit.

4 Results

California fairy shrimp were observed in one pool during the survey, but no federally listed species were observed in any surveyed wetland features. The location and surface area of each wetland feature sampled are included in Appendix B. Appendix C includes a tabular summary of all the sampled wetlands including the remaining required data (i.e., wetland depth of inundation, surface area, water and air temperature, branchiopod species occurrence, and other species observed) for each of the sampled wetland features. Representative site photographs are presented in Appendix D.

California is currently within a drought year but several significant rain events were recorded during the survey period. Inundation was observed within some depressional wetlands during the February 19, March 14, and April 10 surveys and dip net surveys were conducted on February 19 and March 14. Precipitation data for Lincoln is located in Appendix E.







Z:\GIS\Entrix\3340700_Scheiber\map\Peery_Wetland_Delineation_USACE_34i22i_11.mxd

potential Waters of the U.S. acreage reported.



5 Conclusion

A total of 29 depressional wetland features were sampled within the 144-acre Study Area. The purpose was to determine presence and absence of branchiopods in each depressional wetland feature. Seven wet-season monitoring events were conducted between December 16, 2013 and May 9, 2014. California fairy shrimp were observed in one pool during the survey, but no federally listed species were observed in any surveyed wetland features.

6 References

- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- California Department of Fish and Wildlfe (CDFW). 2013. California Natural Diversity Database, Rare Find Version 3.1.0. Last updated December 4, 2012. Available online: http://www.dfg.ca.gov/biogeodata/cnddb/. Accessed December 17, 2012.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service. 1996. Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods, April 19, 1996.

Peery Property

APPENDIX

USFWS CORRESPONDENCE

From: Kelly, David [mailto:david kelly@fws.gov]
Sent: Monday, December 09, 2013 7:03 AM
To: Sam Bacchini
Cc: Terry Adelsbach; Kellie Berry; Jason Hanni
Subject: Authorization to conduct surveys for the listed large branchiopods at the Walkup Ranch, the Peery Property, and the LaBellaRosa property in Placer County.

Sam Bacchini,

By this email message you are authorized to conduct wet season surveys (2013-2014) for federally-listed large branchiopods, per the conditions of the recovery permit TE-795938 (PBSJ, Sam Bacchini) and Kelly Bayne (TE-185595) as specified in your letter request with maps dated November 21, 2013. The surveys will be conducted at the the following locations:

1) The Walkup Ranch Project in Placer County. Located north of Hwy 193, south of Auburn Ravine just to the east of the City of Lincoln.

2) The Peery property in Placer County. Located just to the east of Nelson Road and directly west of the City of Lincoln.

3) The LaBellaRosa property in Placer County. Located north of Hwy 193 east of the City of Lincoln.

These sites are described in the request letters and attached maps and as described above. Your request is to sample seasonally inundated wetlands, pools, ditches, and basins located within the sites. Surveys may be conducted within all seasonally inundated wetlands identified on-site that may provide suitable vernal pool crustacean habitat. Suitable habitat not previously identified on the project site may also be sampled under this authorization. This authorization extends to the conduct of dry season sampling at the same site in 2014.

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permit and the survey guidelines, including the reporting requirements. In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization. Please let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send one hard copy of the report(s) to David Kelly, of our Recovery Branch, and send a separate copy to Kellie Berry, Chief of the Sacramento Valley Division (can be electronic). We ask that you use UTM coordinates for all spatial data and that

you reference the following numbers in future correspondence regarding these surveys:

- 1) The Walkup Ranch Project in Placer County: 2008-TA-0187
- 2) The Peery property in Placer County: 2013-TA-0145
- 3) The LaBellaRosa property in Placer County: 2008-TA-1815

To ensure the accuracy and data integrity of your project, it is requested that you provide spatial information (boundaries, study areas, parcels, point locations, etc.) in the form of an ESRI shape file with projection, a GPS file with projection, or locations in an Excel spreadsheet with projection information . The preferred projection is UTM, Zone 10S, NAD83; the Sacramento Fish and Wildlife Office (SFWO) standard. FGDC compliant metadata must accompany each file. Please include any USFWS File Numbers associated with the data in your documentation. For additional information regarding metadata standards refer to http://www.fgdc.gov. For more information regarding spatial data please contact: Cheryl L. Hickam, GIS Branch Chief, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W-2605, Sacramento, Ca 95825-1846, office: 916-414-6708.

--

David Lee Kelly Recovery Biologist Sacramento Fish and Wildlife Office 2800 Cottage Way W-2605 Sacramento, California 95825-1888 Phone:916-414-6492 Peery Property

WETLAND LOCATION DATA

Wet Season Wetland Locations at Peery Ranch								
Wetland Name	Area (Acres)	Latitude	Longitude	Section	Township	Range		
SW03	0.047	038° 53′ 21.57″ N	-121° 20′ 20.25″ W	17	12N	6E		
SW05	0.811	038° 53′ 18.16″ N	-121° 20′ 17.25″ W	17	12N	6E		
SW06	0.124	038° 53′ 11.82″ N	-121° 20' 06.38" W	17	12N	6E		
SW07	0.086	038° 53′ 14.55″ N	-121° 20′ 05.71″ W	17	12N	6E		
SW08	0.039	038° 53′ 14.23″ N	-121° 20' 03.80" W	17	12N	6E		
SW09	0.012	038° 53′ 11.19″ N	-121° 20' 03.85" W	17	12N	6E		
SW10	0.026	038° 53′ 11.20″ N	-121° 20' 02.69" W	17	12N	6E		
SW11	0.023	038° 53' 10.51″ N	-121° 20′ 02.76″ W	17	12N	6E		
SW12	0.040	038° 53′ 12.10″ N	-121° 20′ 19.29″ W	17	12N	6E		
SW13	0.005	038° 53′ 12.13″ N	-121° 20′ 20.74″ W	17	12N	6E		
SW14	0.017	038° 53′ 12.33″ N	-121° 20′ 21.42″ W	17	12N	6E		
SW15	0.019	038° 53′ 11.23″ N	-121° 20′ 21.90″ W	17	12N	6E		
SW17	0.101	038° 53′ 11.90″ N	-121° 19′ 57.37″ W	17	12N	6E		
SW18	0.030	038° 53′ 12.89″ N	-121° 19′ 59.50″ W	17	12N	6E		
SW19	0.011	038° 53′ 12.48″ N	-121° 19′ 54.67″ W	17	12N	6E		
SW20	0.008	038° 53′ 12.53″ N	-121° 19′ 52.69″ W	17	12N	6E		
SW21a	0.067	038° 53′ 14.09″ N	-121° 19′ 56.44″ W	17	12N	6E		
SW21b	0.007	038° 53′ 13.80″ N	-121° 19′ 57.65″ W	17	12N	6E		
SW21c	0.016	038° 53′ 14.56″ N	-121° 19′ 57.45″ W	17	12N	6E		
SW22	0.188	038° 53′ 22.37″ N	-121° 19′ 55.95″ W	17	12N	6E		
SW23	0.014	038° 53′ 23.12″ N	-121° 19′ 56.75″ W	17	12N	6E		
SW24	0.027	038° 53′ 22.59″ N	-121° 19′ 59.04″ W	17	12N	6E		
SW25	0.133	038° 53′ 22.41″ N	-121° 19′ 01.35″ W	17	12N	6E		
SW26	0.030	038° 53′ 22.90″ N	-121° 19′ 03.55″ W	17	12N	6E		
SW27	0.284	038° 53′ 22.51″ N	-121° 20' 05.76" W	17	12N	6E		
SW28	0.534	038° 53′ 21.85″ N	-121° 19′ 57.65″ W	17	12N	6E		
SW29	0.085	038° 53′ 22.42″ N	-121° 20′ 13.28″ W	17	12N	6E		
SW30	0.018	038° 53′ 12.96″ N	-121° 20′ 11.73″ W	17	12N	6E		
*SW31	0.314	038° 53′ 10.31″ N	-121° 20' 00.55" W	17	12N	6E		
*SW32	0.033	038° 53′ 21.94″ N	-121° 20′ 19.35″ W	17	12N	6E		
*SW33	0.014	038° 53′ 22.48″ N	-121° 20′ 18.06″ W	17	12N	6E		

Peery Property

APPENDIX



WET SEASON SURVEY DATA SUMMARY SHEETS
Surveyeryterwite Wumber: Sam Bauchini Under 10:10:1 Term (f) Depth (inclus) Surveyeryter is the starting of the star	Project N	lame:	Peery Pr	operty			County	Placer	Quad:	Lincol	n		Tow	nship,	Rang	ge, Se	ection	n:	T12N	, R6E		
Date: 12.16.13 Time: Weather conditions: Course Pond # Temp (F) Depth (inclus) Surface Aca (fix ft) Frequence	Surveyo	r/Permit N	lumber:	Sam Bacc	hini																	
Temp (F) Depth (incles) Surface /res (fix th) Crustaceans Linexts Jack Ja	Date:	12.16.13		Time:			Weather Co	nditions:	Cloudy	/												
Pond # ± Š ž Š <td></td> <td>Tem</td> <td>p (F)</td> <td>Depth</td> <td>(inches)</td> <td>Surface</td> <td>Area (ftx ft)</td> <td></td> <td></td> <td>Crus</td> <td>stacea</td> <td>ns</td> <td></td> <td></td> <td>lr</td> <td>nsects</td> <td>S</td> <td></td> <td></td> <td></td> <td></td> <td></td>		Tem	p (F)	Depth	(inches)	Surface	Area (ftx ft)			Crus	stacea	ns			lr	nsects	S					
SW-03 40 n/a 10 n/a 2032 n/a . D D Dy at time of survey SW-06 40 n/a n/a 1 1 1 D <t< td=""><td>Pond #</td><td>Air</td><td>Water</td><td>Average</td><td>Est. Max.</td><td>Present</td><td>Est. Max.</td><td>Turbidity (secci disc depth)</td><td>Anostracans</td><td>Notostracans</td><td>Copepods</td><td>Ostracods</td><td>Cladocera</td><td>Coleoptera</td><td>Hemiptera</td><td>Ephemeroptera</td><td>Odonata</td><td>Diptera</td><td>Fish</td><td>Herps</td><td>Habitat Condition</td><td>Notes / Voucher information</td></t<>	Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-05 40 n/a n/a 8 n/a 30994.3 n/a - D D D D	SW-03	40	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06 40 n/a n/a 6 n/a 5 1 <t< td=""><td>SW-05</td><td>40</td><td>n/a</td><td>n/a</td><td>8</td><td>n/a</td><td>30994.3</td><td>n/a</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>D-p</td><td>Dry at time of survey</td></t<>	SW-05	40	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07 40 n/a 1/a 3756.9 n/a -	SW-06	40	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08 40 n/a n/a n/a 1 100.8 n/a -	SW-07	40	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09 40 n/a n/a 1/a 524.8 n/a - 0 D	SW-08	40	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10 40 n/a n/a 1.39.9 n/a -	SW-09	40	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11 40 n/a n/a 1015.2 n/a -	SW-10	40	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12 40 n/a n/a 10 n/a 172.07 n/a -	SW-11	40	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13 40 n/a n/a 3.5 n/a 218.2 n/a -	SW-12	40	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14 40 n/a n/a n/a 738 n/a -	SW-13	40	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15 40 n/a n/a 13 n/a 837.8 n/a -	SW-14	40	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17 40 n/a n/a 12 n/a 4403.3 n/a -	SW-15	40	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18 40 n/a n/a 6 n/a 1304.1 n/a -	SW-17	40	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19 40 n/a n/a 3 n/a 457.8 n/a -	SW-18	40	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20 40 n/a n/a 3 n/a 341.8 n/a -	SW-19	40	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21 40 n/a n/a 6 n/a 7899.5 n/a -	SW-20	40	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22 40 n/a n/a 12 n/a 5126.1 n/a -	SW-21	40	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-2340n/an/a11n/a628.5n/an/ann	SW-22	40	n/a	n/a	12	n/a	5126.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24 40 n/a n/a 11 n/a 1183.2 n/a -	SW-23	40	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-25 40 n/a n/a 8 n/a 5799.7 n/a - - - - - - - - - - - - - - - - - - - D-p Dry at time of survey SW-26 40 n/a n/a 8 n/a 1306.9 n/a - - - - - - D-p Dry at time of survey SW-27 40 n/a n/a 5 n/a 12392.2 n/a - - - - - - - D-p Dry at time of survey SW-28 40 n/a n/a 10 n/a 23275.5 n/a - - - - - - - D-p Dry at time of survey SW-29 40 n/a n/a 7 n/a 3723.5 n/a - - - - - - - D-p Dry at time of survey SW-30 40 n/a n/a 76.2 <td>SW-24</td> <td>40</td> <td>n/a</td> <td>n/a</td> <td>11</td> <td>n/a</td> <td>1183.2</td> <td>n/a</td> <td>-</td> <td>D-p</td> <td>Dry at time of survey</td>	SW-24	40	n/a	n/a	11	n/a	1183.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-26 40 n/a n/a 8 n/a 1306.9 n/a -	SW-25	40	n/a	n/a	8	n/a	5799.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-2740n/an/a5n/a12392.2n/aD-pDry at time of surveySW-2840n/an/a10n/a23275.5n/aD-pDry at time of surveySW-2940n/an/a7n/a3723.5n/aD-pDry at time of surveySW-3040n/an/a5n/a776.2n/aD-pDry at time of surveySW-3140n/an/a20n/a139.4n/aD-pDry at time of surveySW-3240n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a7270.9n/aD-pDr	SW-26	40	n/a	n/a	8	n/a	1306.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-2840n/an/a10n/a23275.5n/aD-pDry at time of surveySW-2940n/an/a7n/a3723.5n/aD-pDry at time of surveySW-3040n/an/a5n/a776.2n/aD-pDry at time of surveySW-3140n/an/a20n/a139.4n/aD-pDry at time of surveySW-3240n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a7270.9n/aD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-3340n/an/a7n/a7270.9n/aD-pD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-33	SW-27	40	n/a	n/a	5	n/a	12392.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-2940n/an/a7n/a3723.5n/aD-pDry at time of surveySW-3040n/an/a5n/a776.2n/aD-pDry at time of surveySW-3140n/an/a20n/a139.4n/aD-pDry at time of surveySW-3240n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a7270.9n/aD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-3340n/a7n/a7270.9n/aD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-3340n/a	SW-28	40	n/a	n/a	10	n/a	23275.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-3040n/an/a5n/a776.2n/aD-pDry at time of surveySW-3140n/an/a20n/a139.4n/aD-pDry at time of surveySW-3240n/an/a7n/a64.8n/aD-pDry at time of surveySW-3340n/an/a7n/a7270.9n/aD-pDry at time of surveySW-34D-pDry at time of surveySW-3440n/an/a7n/a7270.9n/aD-pDry at time of surveySW-34D-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-3340n/aD-pDry at time of surveySW-34 <t< td=""><td>SW-29</td><td>40</td><td>n/a</td><td>n/a</td><td>7</td><td>n/a</td><td>3723.5</td><td>n/a</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>D-p</td><td>Dry at time of survey</td></t<>	SW-29	40	n/a	n/a	7	n/a	3723.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31 40 n/a n/a 20 n/a 139.4 n/a - - - - - - - D-p Dry at time of survey SW-32 40 n/a n/a 7 n/a 64.8 n/a - - - - - - D-p Dry at time of survey SW-33 40 n/a n/a 7 n/a 7270.9 n/a - - - - - - - D-p Dry at time of survey SW-33 40 n/a n/a 7 n/a 7270.9 n/a - - - - - - - D-p Dry at time of survey SW-33 40 n/a n/a 7 n/a 7270.9 n/a - - - - - - - D-p Dry at time of survey	SW-30	40	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32 40 n/a n/a 7 n/a 64.8 n/a - - - - - - - - - - - D-p Dry at time of survey SW-33 40 n/a n/a 7 n/a 7270.9 n/a - - - - - - - D-p Dry at time of survey SW-33 40 n/a n/a 7 n/a 7270.9 n/a - - - - - - - D-p Dry at time of survey	SW-31	40	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33 40 n/a n/a 7 n/a 7270.9 n/a -	SW-32	40	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
	SW-33	40	n/a	n/a	7	n/a	7270.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
			1	I	1	I					1											

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

Surveyor	/Permit N	umber:	Sam Bacc	hini and Ke	elly Bayne																
Date:	2.19.14		Time:			Weather Cor	nditions:	Clear a	and sur	nny											
	Tem	p (F)	Depth	(inches)	Surface	e Area (ft2)			Cru	stacea	ns			lr	nsects	5					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	62	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-05	62	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06	62	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07	62	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08	62	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09	62	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	62	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	62	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	62	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	62	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	62	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	62	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	62	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18	62	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19	62	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	62	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	62	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	62	70.7	6	12	45x10	5126.1	tea	-	-	-	Х	-	-	-	-	-	-	-	-	D-p	Some crustaceans found
SW-23	62	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24	62	70.7	6	11	33x10	1183.2	tea	-	-	-	-	-	-	-	-	-	-	-	-	D-p	No species seen during survey
SW-25	62	70.7	14	8	80x40	5799.7	cloudy tea	-	-	-	Х	-	-	-	-	-	-	-	-	D-p	Some crustaceans found
SW-26	62	71.6	13	8	20x30	1306.9	tea	-	-	-	-	-	-	-	-	-	-	-	-	D-p	No species seen during survey

62

62

62

62

62

62

62

SW-27

SW-28

SW-29

SW-30

SW-31

SW-32

SW-33

Project Name:

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

12392.2

23275.5

3723.5

776.2

139.4

64.8

7270.9

n/a

n/a

n/a

n/a

n/a

n/a

n/a

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

- - - -

-

-

- - -

-

-

- - - -

-

- -

-

_

-

_

_

5

10

7

5

20

7

7

n/a

n/a

n/a

n/a

n/a

n/a

n/a

County

Placer

Quad: Lincoln

Township, Range, Section:

T12N, R6E

Page:

D-p

D-p

D-p

D-p

D-p

D-p

D-p

-

_

-

-

-

-

-

-

-

-

Dry at time of survey

Dry at time of survey

Dry at time of survey

Dry at time of survey

Dry at time of survey

Dry at time of survey

Dry at time of survey

UG, ungrazed, c = cattle, h = horses, s = sheep

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

n/a

Surveyor	/Permit N	umber:	Sam Bacc	hini																	
Date:	3.14.14		Time:			Weather Cor	nditions:	Clear a	and sur	nny											
	Tem	p (F)	Depth	(inches)	Surface	e Area (ft2)			Crus	stacea	ns			Ir	sects	5					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	71.6	62.6	2	10	8x12	2032	tea	-	-	-	-	-	Х	Х	-	-	Х	-	-	D-p	Insect species seen
SW-05	71.6	62.6	4	8	11x10	30994.3	tea	-	-	-	-	-	Х	-	-	-	-	-	-	D-p	Insect species seen
SW-06	71.6	64.4	2	6	10x10	5413.5	cloudy tea	-	-	-	-	-	Х	-	-	-	-	-	-	D-p	Insect species seen
SW-07	71.6	64.4	4	8	9x12	3756.9	cloudy tea	-	-	-	Х	Х	Х	Х	-	-	-	-	-	D-p	Crustaceans and insects seen
SW-08	71.6	64.4	3	4	8x9	1700.8	cloudy tea	-	-	-			Х	Х	-	-	-	-	-	D-p	Insect species seen
SW-09	71.6	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	71.6	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	71.6	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	71.6	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	71.6	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	71.6	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	71.6	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	71.6	64.4	6	12	10x11	4403.3	cloudy tea	Х	-	-	Х	Х	Х	Х	-	-	Х	-	Х	D-p	Multiple species seen
SW-18	71.6	64.4	3	6	5x9	1304.1	cloudy tea	-	-	-		-	Х	Х	-	-	-	-	-	D-p	Insect species seen
SW-19	71.6	n/a	n/a	3	n/a	457.8	n/a	-	-	-		-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	71.6	n/a	n/a	3	n/a	341.8	n/a	-	-	-		-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	71.6	n/a	n/a	6	n/a	7899.5	n/a	-	-	-		-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	71.6	59	4	12	11x12	5126.1	tea	-	-	Х	Х	-	Х	Х	-	-	Х	-	-	D-p	Crustaceans and insects seen
SW-23	71.6	57.2	4	11	3x4	628.5	cloudy tea	-	-	-		-	Х	Х	-	-	Х	-	-	D-p	Insect species seen
SW-24	71.6	57.2	8	11	7x8	1183.2	cloudy	-	-	-	Х	-	Х	Х	-	-	Х	-	-	D-p	Crustaceans and insects seen
SW-25	71.6	57.2	6	8	8x9	5799.7	cloudy	-	-	-	Х	-	Х	Х	-	-	Х	-	-	D-p	Crustaceans and insects seen
SW-26	71.6	n/a	3	8	9x11	1306.9	cloudy	-	-	-	Х	-	Х	Х	-	-	Х	-	-	D-p	Crustaceans and insects seen
SW-27	71.6	58.1	6	5	10x13	12392.2	tea	-	-	-	-	-	Х	Х	-	-	Х	-	-	D-p	Insect species seen
SW-28	71.6	58.1	5	10	12x13	23275.5	tea	-	-	-	-	-	Х	Х	1	1	Х	-	-	D-p	Insect species seen
SW-29	71.6	62.6	3	7	8x9	3723.5	tea	-	-	-	-	-	Х	Х	-	-	Х	-	-	D-p	Insect species seen
SW-30	71.6	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31	71.6	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32	71.6	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33	71.6	62.6	6	7	8x12	7270.9	cloudy tea	-	-	-	-	-	Х	Х	-	-	Х	-	-	D-p	Insect species seen
			-		-		-	-													

Project Name:

-

.. ..

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

County

Placer

Quad: Lincoln

Township, Range, Section:

T12N, R6E

Page:

UG, ungrazed, c = cattle, h = horses, s = sheep

Surveyor	/Permit N	umber:	Sam Bacc	hini																	
Date:	4.10.14		Time:			Weather Cor	nditions:	Sunny													
	Tem	o (F)	Depth (inches)	Surface	e Area (ft2)			Crus	stacea	ns			li	nsect	s					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	78	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-05	78	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06	78	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07	78	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08	78	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09	78	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	78	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	78	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	78	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	78	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	78	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	78	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	78	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18	78	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19	78	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	78	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	78	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	78	n/a	n/a	12	n/a	5126.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-23	78	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24	78	n/a	n/a	11	n/a	1183.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-25	78	n/a	<2	8	16	5799.7	tea	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Not deep enough to survey
SW-26	78	n/a	<2	8	6	1306.9	mud	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Not deep enough to survey
SW-27	78	n/a	n/a	5	n/a	12392.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-28	78	n/a	n/a	10	n/a	23275.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-29	78	n/a	n/a	7	n/a	3723.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-30	78	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31	78	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32	78	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33	78	n/a	n/a	7	n/a	7270.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey

Project Name:

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

County

Placer

Quad: Lincoln

Township, Range, Section:

Surveyo	r/Permit N	umber:	Sam Bacc	hini																	
Date:	3.28.14		Time:			Weather Cor	nditions:	Cloudy	/												
	Tem	p (F)	Depth	(inches)	Surface	Area (ftx ft)			Crus	stacea	ns			Ir	nsect	S					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	69	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-05	69	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06	69	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07	69	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08	69	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09	69	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	69	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	69	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	69	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	69	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	69	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	69	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	69	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18	69	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19	69	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	69	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	69	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	69	n/a	n/a	12	n/a	5126.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-23	69	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24	69	n/a	n/a	11	n/a	1183.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-25	69	n/a	n/a	8	n/a	5799.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-26	69	n/a	n/a	8	n/a	1306.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-27	69	n/a	n/a	5	n/a	12392.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-28	69	n/a	n/a	10	n/a	23275.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-29	69	n/a	n/a	7	n/a	3723.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-30	69	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31	69	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32	69	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33	69	n/a	n/a	7	n/a	7270.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey

Project Name:

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

County

Placer

Quad: Lincoln

Township, Range, Section:

Surveyo	/Permit N	umber:	Sam Bacc	hini																	
Date:	4.24.14		Time:			Weather Cor	nditions:	Sunny													
	Tem	p (F)	Depth	(inches)	Surface	Area (ftx ft)			Crus	stacea	ns			lr	nsects	s					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	65	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-05	65	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06	65	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07	65	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08	65	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09	65	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	65	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	65	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	65	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	65	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	65	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	65	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	65	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18	65	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19	65	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	65	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	65	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	65	n/a	n/a	12	n/a	5126.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-23	65	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24	65	n/a	n/a	11	n/a	1183.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-25	65	n/a	n/a	8	n/a	5799.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-26	65	n/a	n/a	8	n/a	1306.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-27	65	n/a	n/a	5	n/a	12392.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-28	65	n/a	n/a	10	n/a	23275.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-29	65	n/a	n/a	7	n/a	3723.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-30	65	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31	65	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32	65	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33	65	n/a	n/a	7	n/a	7270.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey

Project Name:

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

County

Placer

Quad: Lincoln

Township, Range, Section:

Surveyo	/Permit N	umber:	Sam Bacc	hini																	
Date:	5.09.14		Time:			Weather Cor	ditions:	Sunny													
	Tem	p (F)	Depth ((inches)	Surface	Area (ftx ft)			Crus	stacea	ns			lr	nsect	s					
Pond #	Air	Water	Average	Est. Max.	Present	Est. Max.	Turbidity (secci disc depth)	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Ephemeroptera	Odonata	Diptera	Fish	Herps	Habitat Condition	Notes / Voucher information
SW-03	87	n/a	n/a	10	n/a	2032	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-05	87	n/a	n/a	8	n/a	30994.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-06	87	n/a	n/a	6	n/a	5413.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-07	87	n/a	n/a	8	n/a	3756.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-08	87	n/a	n/a	4	n/a	1700.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-09	87	n/a	n/a	4	n/a	524.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-10	87	n/a	n/a	3.5	n/a	1139.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-11	87	n/a	n/a	3.5	n/a	1015.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-12	87	n/a	n/a	10	n/a	1720.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-13	87	n/a	n/a	3.5	n/a	218.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-14	87	n/a	n/a	4	n/a	738	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-15	87	n/a	n/a	3	n/a	837.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-17	87	n/a	n/a	12	n/a	4403.3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-18	87	n/a	n/a	6	n/a	1304.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-19	87	n/a	n/a	3	n/a	457.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-20	87	n/a	n/a	3	n/a	341.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-21	87	n/a	n/a	6	n/a	7899.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-22	87	n/a	n/a	12	n/a	5126.1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-23	87	n/a	n/a	11	n/a	628.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-24	87	n/a	n/a	11	n/a	1183.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-25	87	n/a	n/a	8	n/a	5799.7	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-26	87	n/a	n/a	8	n/a	1306.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-27	87	n/a	n/a	5	n/a	12392.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-28	87	n/a	n/a	10	n/a	23275.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-29	87	n/a	n/a	7	n/a	3723.5	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-30	87	n/a	n/a	5	n/a	776.2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-31	87	n/a	n/a	20	n/a	139.4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-32	87	n/a	n/a	7	n/a	64.8	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey
SW-33	87	n/a	n/a	7	n/a	7270.9	n/a	-	-	-	-	-	-	-	-	-	-	-	-	D-p	Dry at time of survey

Project Name:

Peery Property

Habitat Conditions: UD = undisturbed, D = disturbed, tt = tire tracks, t = trash, p = plowed, g = grazed, sheep, L = light grazing, M = moderate grazing, H = heavy grazing

County

Placer

Quad: Lincoln

Township, Range, Section:

Peery Property

APPENDIX



REPRESENTATIVE SITE PHOTOGRAPHS



Photo 1: Represented site photo of Peery Property. Property dry planted for oats and hay



Photo 2: Seasonal Wetland Pool 26 on April 12, 2014. Not deep enough to survey on this visit, but surveyed on February 19 and March 14, no special status branchiopods observed



Photo 3: Seasonal Wetland Swale 25 on April 12, 2014. Not deep enough to survey on this visit, but surveyed on February 19 and March 14, no special status branchiopods observed



Photo 4: Seasonal Wetland Swale 05 on April 12, 2014. Dry during this survey, but surveyed on March 14, no special status branchiopods found

Peery Property

APPENDIX



PRECIPITATION DATA FOR LINCOLN, CA

Precipitation Data for Lincoln, CA

Date	PPT (inches)	Rain to Date (inches) from 6/30/13
10/1/2013	0	0.42
10/2/2013	0	0.42
10/3/2013	0	0.42
10/4/2013	0	0.42
10/5/2013	0	0.42
10/6/2013	0	0.42
10/7/2013	0	0.42
10/8/2013	0	0.42
10/9/2013	0	0.42
10/10/2013	0	0.42
10/11/2013	0	0.42
10/12/2013	0	0.42
10/13/2013	0	0.42
10/14/2013	0	0.42
10/15/2013	0	0.42
10/16/2013	0	0.42
10/17/2013	0	0.42
10/18/2013	0	0.42
10/19/2013	0	0.42
10/20/2013	0	0.42
10/21/2013	0	0.42
10/22/2013	0	0.42
10/23/2013	0	0.42
10/24/2013	0	0.42
10/25/2013	0	0.42
10/26/2013	0	0.42
10/27/2013	0.08	0.5
10/28/2013	0.01	0.51
10/29/2013	0	0.51
10/30/2013	0	0.51
10/31/2013	0	0.51
11/1/2013	0	0.51
11/2/2013	0	0.51
11/3/2013	0	0.51
11/4/2013	0	0.51
11/5/2013	0	0.51
11/6/2013	0	0.51
11/7/2013	0	0.51

Date	PPT (inches)	Rain to Date (inches) from 6/30/13
11/8/2013	0	0.51
11/9/2013	0	0.51
11/10/2013	0	0.51
11/11/2013	0	0.51
11/12/2013	0	0.51
11/13/2013	0	0.51
11/14/2013	0	0.51
11/15/2013	0	0.51
11/16/2013	0	0.51
11/17/2013	0	0.51
11/18/2013	0	0.51
11/19/2013	0.67	1.18
11/20/2013	0.88	2.06
11/21/2013	0.38	2.44
11/22/2013	0	2.44
11/23/2013	0	2.44
11/24/2013	0	2.44
11/25/2013	0	2.44
11/26/2013	0	2.44
11/27/2013	0	2.44
11/28/2013	0	2.44
11/29/2013	0	2.44
11/30/2013	0	2.44
12/1/2013	0	2.44
12/2/2013	0	2.44
12/3/2013	0	2.44
12/4/2013	0	2.44
12/5/2013	0	2.44
12/6/2013	0.43	2.87
12/7/2013	0.01	2.88
12/8/2013	0.01	2.89
12/9/2013	0	2.89
12/10/2013	0	2.89
12/11/2013	0	2.89
12/12/2013	0	2.89
12/13/2013	0	2.89
12/14/2013	0	2.89
12/15/2013	0	2.89
12/16/2013	0	2.89
12/17/2013	0	2.89

Date	PPT (inches)	Rain to Date (inches) from 6/30/13
12/18/2013	0	2.89
12/19/2013	0	2.89
12/20/2013	0	2.89
12/21/2013	0	2.89
12/22/2013	0	2.89
12/23/2013	0	2.89
12/24/2013	0	2.89
12/25/2013	0	2.89
12/26/2013	0	2.89
12/27/2013	0	2.89
12/28/2013	0	2.89
12/29/2013	0	2.89
12/30/2013	0	2.89
12/31/2013	0	2.89
1/1/2014	0	2.89
1/2/2014	0	2.89
1/3/2014	0	2.89
1/4/2014	0	2.89
1/5/2014	0	2.89
1/6/2014	0	2.89
1/7/2014	0	2.89
1/8/2014	0	2.89
1/9/2014	0	2.89
1/10/2014	0	2.89
1/11/2014	0.04	2.93
1/12/2014	0	2.93
1/13/2014	0	2.93
1/14/2014	0	2.93
1/15/2014	0	2.93
1/16/2014	0	2.93
1/17/2014	0	2.93
1/18/2014	0	2.93
1/19/2014	0	2.93
1/20/2014	0	2.93
1/21/2014	0	2.93
1/22/2014	0	2.93
1/23/2014	0	2.93
1/24/2014	0	2.93
1/25/2014	0	2.93
1/26/2014	0	2.93

Date	PPT (inches)	Rain to Date (inches) from 6/30/13
1/27/2014	0	2.93
1/28/2014	0	2.93
1/29/2014	0.17	3.1
1/30/2014	0.1	3.2
1/31/2014	0.02	3.22
2/1/2014	0	3.22
2/2/2014	0	3.22
2/3/2014	0	3.22
2/4/2014	0	3.22
2/5/2014	0	3.22
2/6/2014	0.35	3.57
2/7/2014	0.42	3.99
2/8/2014	2.28	6.27
2/9/2014	1.23	7.5
2/10/2014	0.08	7.58
2/11/2014	0	7.58
2/12/2014	0	7.58
2/13/2014	0	7.58
2/14/2014	0	7.58
2/15/2014	0.09	7.67
2/16/2014	0.02	7.69
2/17/2014	0	7.69
2/18/2014	0	7.69
2/19/2014	0	7.69
2/20/2014	0	7.69
2/21/2014	0	7.69
2/22/2014	0	7.69
2/23/2014	0	7.69
2/24/2014	0	7.69
2/25/2014	0	7.69
2/26/2014	0.41	8.1
2/27/2014	0.1	8.2
2/28/2014	1.68	9.88
3/1/2014	0	9.88
3/2/2014	0.19	10.07
3/3/2014	0.22	10.29
3/4/2014	0.1	10.39
3/5/2014	0.37	10.76
3/6/2014	0.01	10.77
3/7/2014	0	10.77

Date	PPT (inches)	Rain to Date (inches) from 6/30/13
3/8/2014	0	10.77
3/9/2014	0	10.77
3/10/2014	0.3	11.07
3/11/2014	0	11.07
3/12/2014	0	11.07
3/13/2014	0	11.07
3/14/2014	0	11.07
3/15/2014	0	11.07
3/16/2014	0	11.07
3/17/2014	0	11.07
3/18/2014	0	11.07
3/19/2014	0	11.07
3/20/2014	0	11.07
3/21/2014	0	11.07
3/22/2014	0	11.07
3/23/2014	0	11.07
3/24/2014	0	11.07
3/25/2014	0.14	11.21
3/26/2014	0.53	11.74
3/27/2014	0.03	11.77
3/28/2014	0	11.77
3/29/2014	0.99	12.76
3/30/2014	0	12.76
3/31/2014	0.25	13.01
4/1/2014	1	14.01
4/2/2014	0.11	14.12
4/3/2014	0	14.12
4/4/2014	0.15	14.27
4/5/2014	0	14.27
4/6/2014	0	14.27
4/7/2014	0	14.27
4/8/2014	0	14.27
4/9/2014	0	14.27
4/10/2014	0	14.27
4/11/2014	0	14.27
4/12/2014	0	14.27
4/13/2014	0	14.27
4/14/2014	0	14.27
4/15/2014	0	14.27
4/16/2014	0	14.27

SUD-B Northeast Quadrant Specific Plan

APPENDIX



CNDDB AND USFW QUERY RESULTS _____

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

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

Document Number: 141006040607

Current as of: October 6, 2014

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio Conservancy fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus valley elderberry longhorn beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X) vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus delta smelt (T)

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

Oncorhynchus tshawytscha

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

Amphibians

Rana draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas giant garter snake (T)

Candidate Species

Birds

Coccyzus americanus occidentalis Western yellow-billed cuckoo (C)

Quads Containing Listed, Proposed or Candidate Species:

GOLD HILL (527B)

ROCKLIN (527C)

http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists.cfm

LINCOLN (528A) SHERIDAN (528B) PLEASANT GROVE (528C) ROSEVILLE (528D) WOLF (542C) WHEATLAND (543C) CAMP FAR WEST (543D)

County Lists

No county species lists requested.

Key:

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

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

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

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

- (C) Candidate Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey $7\frac{1}{2}$ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

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

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

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

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should

determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our <u>Protocol</u> and <u>Recovery Permits</u> pages.

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

Your Responsibilities Under the Endangered Species Act

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

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

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

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

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

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

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

Critical Habitat

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

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

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

Candidate Species

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

Species of Concern

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

Wetlands

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

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be January 04, 2015.





Query Criteria:

Quad is (Lincoln (3812183) or Wolf (3912112) or Camp Far West (3912113) or Wheatland (3912114) or Sheridan (3812184) or Pleasant Grove (3812174) or Roseville (3812173) or Rocklin (3812172) or Gold Hill (3812182))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor	ABPBXB0020	None	None	G2G3	S1S2	SSC
tricolored blackbird						
Alkali Meadow	CTT45310CA	None	None	G3	S2.1	
Alkali Meadow						
Alkali Seep	CTT45320CA	None	None	G3	S2.1	
Alkali Seep						
Ammodramus savannarum	ABPBXA0020	None	None	G5	S2	SSC
grasshopper sparrow						
Andrena subapasta	IIHYM35210	None	None	G1G2	S1S2	
an andrenid bee						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Balsamorhiza macrolepis	PDAST11061	None	None	G2	S2	1B.2
big-scale balsamroot						
Branchinecta conservatio	ICBRA03010	Endangered	None	G1	S1	
Conservancy fairy shrimp						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S2S3	
vernal pool fairy shrimp						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S3	
Swainson's hawk						
Chloropyron molle ssp. hispidum	PDSCR0J0D1	None	None	G2T2	S2	1B.1
hispid salty bird's-beak						
Circus cyaneus	ABNKC11010	None	None	G5	S3	SSC
				0.0057.0	<u></u>	4.0
Clarkia biloba ssp. brandegeeae	PDONA05053	None	None	G4G514	S4	4.2
Convortinue townsondii		Nono	Condidata	C2C4	6060	880
Townsend's big-eared bat	AWACC06010	None	Threatened	6364	3233	330
Desmocerus californicus dimorphus		Threatened	None	G3T2	S 2	
vallev elderberry longhorn beetle		mediciled	None	0012	02	
Downingia pusilla	PDCAM060C0	None	None	GU	S2	2B.2
dwarf downingia					0-	
Elanus leucurus	ABNKC06010	None	None	G5	S3	FP
white-tailed kite						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
- western pond turtle						



Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Gratiola heterosepala	PDSCR0R060	None	Endangered	G2	S2	1B.2
Boggs Lake hedge-hyssop						
Hydrochara rickseckeri	IICOL5V010	None	None	G2?	S2?	
Ricksecker's water scavenger beetle						
<i>Juncus leiospermus var. ahartii</i> Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
Juncus leiospermus var. leiospermus	PMJUN011L2	None	None	G2T2	S2	1B.1
Red Bluff dwarf rush						
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G4T1	S1	FP
California black rail						
Legenere limosa	PDCAM0C010	None	None	G2	S2	1B.1
legenere						
Lepidurus packardi	ICBRA10010	Endangered	None	G3	S2S3	
vernal pool tadpole shrimp						
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Melospiza melodia	ABPBXA3010	None	None	G5	S3?	SSC
song sparrow ("Modesto" population)						
Navarretia myersii ssp. myersii	PDPLM0C0X1	None	None	G1T1	S1	1B.1
pincushion navarretia						
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2	S2	
Pandion haliaetus	ABNKC01010	None	None	G5	S3	WL
osprey						
Progne subis	ABPAU01010	None	None	G5	S3	SSC
purple martin						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2S3	
bank swallow						
Setophaga petechia	ABPBX03010	None	None	G5	S3S4	SSC
yellow warbler						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Wolffia brasiliensis	PMLEM03020	None	None	G5	S1	2B.3
Brazilian watermeal						

Record Count: 38

Wetland Delineation and Preliminary Jurisdictional Determination

Peery Property

March 6, 2015





Document Information

Prepared for	Peery-Arrillaga
Project Name	Peery Property
Project Manager	Shannon Karvonen
Date	March 6, 2015

Prepared for:

Peery-Arrillaga 2450 Watson Court, Palo Alto, CA 94303

Prepared by:



Cardno 701 University Ave Suite 200, Sacramento, CA 95825

Table of Contents

1	Introdu	ction	1-1
2	Regulat	tory Framework	2-3
	2.1	Federal Jurisdiction of Wetlands and Other Waters of the United States	2-3
		2.1.1 Section 404 of the Clean Water Act	2-3
	2.2	State Jurisdiction of Wetlands and Other Waters	2-3
		2.2.1 Regional Water Quality Control Board	2-3
3	Method	ology	3-5
	3.1	Waters of the United States	3-5
		3.1.1 Potential Section 404 Jurisdictional Wetlands	3-5
		3.1.2 Potential Section 404 Other Waters	3-7
	3.2	Waters of the State	3-8
4	Study A	Area	4-9
	4.1	Vegetation	4-9
		4.1.1 Non-native Annual Grassland	4-9
		4.1.2 Oak Woodland	4-9
		4.1.3 Riparian	4-9
	4.2	Soils	4-10
	4.3	Hydrology	4-13
5	Results	and Discussion	5-14
	5.1	Seasonal Wetlands (3.288 acres)	5-14
	5.2	Seasonal Wetland Swales (1.797 acres)	5-14
	5.3	Wet Meadow (1.687 acres)	5-14
	5.4	Irrigation Pond (0.358 acre)	5-14
	5.5	Ditch (0.057 acre/ 815 linear feet)	5-15
	5.6	Ephemeral Drainage (0.030 acre/ 60 linear feet)	5-15
	5.7	Auburn Ravine (0.315 acre/ 430 linear feet)	5-15
6	Finding	S	6-17
7	Supple	mental Information	7-18
	7.1	Directions to the Study Area	7-18
	7.2	Contact Information	7-18
8	Referer	nces	8-19

Appendices

- Appendix A Wetlands and Other Waters Map
- Appendix B Representative Site Photographs
- Appendix C Data Sheets

Tables

Table 1 Wetlands and Other Waters in the Study Area	5·	-1	5
---	----	----	---

Figures

Figure 1	Project Location	. 1-2
Figure 2	Soils Map	4-12

Acronyms

FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
NRCS	Natural Resource Conservation Service
OBL	Obligate
OHW	Ordinary High Water
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 Introduction

As requested by the Richard Peery of Peery-Arrillaga, Cardno conducted routine wetland delineation for the Peery Ranch (Figure 1). This report presents the results of the field evaluation and provides a preliminary determination of jurisdictional wetlands and waters of the United States as defined by the Clean Water Act. The project site is located on the U.S. Geological Survey (USGS) Lincoln 7.5 minute topographic quadrangle in Section 17, Township 12 North, Range 6 East. The site is approximately 114 acres total, consisting of two adjacent parcels. The western parcel (approximately 70 acres) is roughly rectangular in shape and is bordered by Nelson Lane on the west, the Hwy 65 Bypass on the South, undeveloped land on the north, and residential development on the east. The eastern parcel (approximately 44 acres) is roughly triangular in shape and is bordered by residential development on the north, the Hwy 65 Bypass on the south, and Auburn Ravine on the east.

This report presents the results of the field evaluation and provides a preliminary discussion regarding current wetlands and other Waters of the United States as defined by the Clean Water Act (CWA) within the Study Area.

This delineation of Waters of the United States contains the following:

- A narrative describing the methodology used to delineate the wetlands and Waters of the United States in the Study Area.
- A narrative description of existing field conditions, hydrology, soils descriptions, and plant communities present in the Study Area.
- Maps, including a USGS map with the Project location, a soils map, and aerial imagery showing the delineated wetlands and Waters of the United States in the Study Area.

The narrative and supporting graphics listed above accompany the wetland delineation map. This map was prepared locations of wetland indicators, mapping conventions and symbols, reference block, scale, property lines (when available), Study Area boundaries, and topography.



Y:\GIS\Entrix\3340700_Scheiber\map\Peery_ProjSite_8i11i_10.mxd

2 Regulatory Framework

2.1 Federal Jurisdiction of Wetlands and Other Waters of the United States

2.1.1 Section 404 of the Clean Water Act

Under Section 404 of the CWA, the U.S. Environmental Protection Agency (EPA) and the USACE have regulatory and permitting authority regarding discharge of dredged or fill material into "navigable Waters of the United States". The scope of the USACE jurisdiction was further refined in Rapanos v. U.S. and Carabell v. U.S. Guidance (EPA, 2008). The USACE asserts jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE determines jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that does not directly abut a relatively permanent non-navigable tributary.

A significant nexus exists when it is demonstrated that the tributary and/or wetland along with any other, similarly situated wetlands, has "more than a speculative or insubstantial effect on the chemical, physical and biological integrity of a traditional navigable water."

The USACE generally will not assert jurisdiction over the following features:

- Swales or erosional features (e .g., gullies, small washes characterized by low volume, infrequent, or short duration flow); or
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

2.2 State Jurisdiction of Wetlands and Other Waters

2.2.1 Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) regulate activities in Waters of the State, under the Dickey Water Pollution Act of 1949 and the Porter-Cologne Act of 1969. Waters of the State include Waters of the United States., and are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." Additionally, the RWQCB regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne Act through the State Water Quality Certification Program. The State Water Quality Certification Program regulates proposed federally permitted activity which may result in a discharge to water bodies including discharges of dredged or fill material permitted by the USACE under section 404 of the CWA (e.g., navigational dredging; flood control channelization; levee construction; channel clearing; and fill of wetlands or other water bodies for land development), and

ensures consistency with the Federal CWA, California Environmental Quality Act (CEQA), California Endangered Species Act (ESA), and the Porter-Cologne Act.

The Central Valley RWQCB has jurisdiction over the Study Area. Because Waters of the State are defined more broadly than Waters of the United States., projects that do not require a federal permit may still result in dredge or fill in Waters of the State. Such projects may be regulated by the RWQCB under Waste Discharge Requirements or Certifications of Waste Discharge Requirements.

3 Methodology

On September 19, 2011, and October 19, 2012 Cardno biologists collected field data in an attempt to identify the boundaries of potential wetlands and other waters of the U.S. Data on vegetation, soils, and hydrologic characteristics of potentially-jurisdictional features were recorded in the field on data forms for the Arid West Region. The area surveyed included all features within the two adjacent parcels (Study Area). Additional information for the western and southern boundary of the site was obtained from a verified delineation titled *Delineation of Jurisdictional Wetlands and Waters, Route 65 Lincoln Bypass, Placer County, California (Corp file No. SPK-1995-00363)* that was acquired through a FOIA request made on September 12, 2011. Information was also obtained for the eastern portion of the western parcel from a verified wetland delineation titled *Wetland Restoration Report for the State Route 65 Lincoln Bypass Haul Road (USACE File No. SPK-1995-00363) 3-PLA-Route 65-KP R19.6 (PM R12.2) – KP R38.3 (PM 23.8), EA 333800.* This delineation also overlaps along its western boundary with the *Wetland Delineation and Preliminary Jurisdictional Determination Nelson Lane Bridge Replacement Project (Bridge No. 19C0082)* that was verified by the USACE.

The wetland delineation was revised based on input from the USACE verification visit, and was resubmitted to the USACE on October 6, 2014. At the direction of the USACE, Cardno revised this wetland map and resubmitted it to the USACE on February 23, 2015. Based on the delineation, it is estimated that there is a total of 7.532 acres of wetlands within the Peery Property. Final verification from the USACE is still in progress at the time of this writing.

For each sampling site, the site location was recorded and the geographic coordinates (longitude and latitude) were collected. A handheld Trimble Geo 7X (2014 Series) Global Positioning System (GPS) unit capable of sub-meter accuracy was used to digitally record the boundaries of each potential jurisdictional wetland area identified in the Study Area. Vegetation communities were classified pursuant to the California Wildlife Habitat Relationship (CWHR) scheme (Mayer and Laudenslayer 1988). Plant species were identified using the *Jepson Manual of Higher Plants of California* (Baldwin Ed., 2012). Representative photographs of the Study Area are in Appendix B.

GPS data were subsequently downloaded from the GPS unit, differentially corrected using Trimble Pathfinder Office software and converted to GIS shapefiles. These shapefiles were then overlaid on aerial base maps of the Study Area, showing the location of wetlands in relation to topographical features. GPS data were corrected as necessary based on the distance and bearing from known topographic features and facilities, and the acreage of each wetland or other water in the Study Area was calculated.

The recorded OHWM limits were imported into ArcGIS and cross-referenced with mapped topography to delineate wetland and other waters which are subject to the jurisdiction of the USACE.

3.1 Waters of the United States

3.1.1 Potential Section 404 Jurisdictional Wetlands

The delineation of Waters of the United States was conducted in accordance with the *1987 U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE, 1987) (Wetland Delineation Manual), *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE, 2007), and *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region 2.0* (USACE, 2008) (Regional Supplement). A Level 2, routine wetland delineation, was conducted (as defined in the Wetland Delineation Manual) which consisted of an onsite inspection and evaluation of three parameters that identify and delineate the boundaries of wetlands, including (1) the dominance of wetland vegetation; (2) the presence of hydric soils; and (3) hydrologic conditions that result in periods of inundation or saturation on the surface as a result of flooding or ponding.

The National List of Plant Species That Occur in Wetlands: California (Region 0) (Reed, 1988), was consulted as a guideline, however, per USACE regulatory notice dated May 10, 2012 the draft North American Digital Flora: National Wetland Plant List (Lichvar, 2013) was used to determine the wetland indicator status of plants identified in the Study Area. The U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) Web Soil Survey for Placer County, Western Area California (Soil Survey Staff, 2013) and the National List of Hydric Soils (NRCS, 2013) were used to preliminarily identify soil types in the Study Area.

Data on vegetation, soils, and hydrologic characteristics were recorded in the field on data forms for the Arid West Region (Appendix C).

3.1.1.1 Vegetation

A visual assessment was made of all plant species located in and around the Study Area. Habitat was classified based on A Guide to Habitat Classification of California (Mayer, 1988) and vegetation series were defined based on *A Manual of California Vegetation, Second Edition* (Sawyer, et al., 2009). Plant species were identified using *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin Ed., 2012) and analyzed to determine the presence or absence of hydrophytic vegetation. The procedure for determining the presence of hydrophytic vegetation followed that identified in the Regional Supplement. Specifically, it involves the following assessment for each sample plot:

- 1. Apply Indicator 1 (Dominance Test). If the plant community passes the dominance test, then the vegetation is hydrophytic and no further vegetation analysis is required.
 - a. If the plant community fails the dominance test and indicators of hydric soil and/or wetland hydrology are absent, then hydrophytic vegetation is absent unless the site meets the requirements for a problematic wetland vegetation.
 - b. If the plant community fails the dominance test, but indicators of hydric soil and wetland hydrology are both present, proceed to Step 2.
- 2. Apply Indicator 2 (Prevalence Index). This and the following step assume that at least one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present.
 - a. If the plant community satisfies the prevalence index, then the vegetation is hydrophytic. No further vegetation analysis is required.
 - b. If the plant community fails the prevalence index, proceed to Step 3.
- 3. Apply Indicator 3 (Morphological Adaptations).
 - a. If the indicator is satisfied, then the vegetation is hydrophytic.
 - b. If none of the indicators are satisfied, then hydrophytic vegetation is absent unless indicators of hydric soil and wetland hydrology are present and the site meets the requirements for a problematic wetland situation.
 - Wetland indicator species include those listed as Obligate (OBL), Facultative Wetland (FACW), or Facultative (FAC) in the National List of Plant Species that Occur in Wetlands: California (Region 0). Vegetation was described in terms of both species and percent coverage per strata. Sample plots that had vegetation that met the above criteria were identified as hydrophytic.

3.1.1.2 Soils

The Soil Survey of Placer County was used to identify potential soils (map units) present in the vicinity of the Study Area (Figure 2). Soils were examined by digging a test pit to a depth of 20 inches, where feasible, to determine if soils exhibited hydric characteristics. In some cases loose soil, groundwater, or a

restrictive layer prohibited the digging of 20 inch test pits, and pits were dug to a depth sufficient to identify hydric indicators. The determination of hydric soils was based on soil texture, matrix color, and/or the presence of other hydric soil indicators such as mottles.

The NRCS maintains a list of hydric soil indicators that are known to occur in the United States. Soil samples were collected and described according to the methodology provided in the Regional Supplement. Soil chroma and values were determined by using a standard Munsell soil color chart (Munsell, 2009). Hydric soils were determined to be present if any of the soil samples met one or more of the hydric soil indicators described by the NRCS.

3.1.1.3 Hydrology

The USACE jurisdictional wetland hydrology criterion is satisfied if an area is inundated or saturated for a period of time sufficient to create anoxic soil conditions during the growing season (a minimum of 14 consecutive days in the Arid West Region). Evidence of wetland hydrology can include primary indicators, such as visible inundation or saturation, drift deposits, oxidized root channels, and salt crusts, or secondary indicators such as the FAC-neutral test, or the presence of a shallow aquitard. The Regional Supplement contains 18 primary hydrology indicators and nine secondary hydrology indicators.

The presence of these primary or secondary indicators was used to determine whether each sample point met the wetland hydrology criteria. A minimum of one primary indicator or two secondary indicators are required to meet the wetland hydrology criterion.

3.1.2 Potential Section 404 Other Waters

The Study Area was evaluated for the presence of "other waters," including lakes, rivers, and perennial or intermittent streams. Potential "other waters" may be identified by the presence of a defined river or streambed, a bank, or evidence of flow, or the absence of emergent vegetation in ponds and lakes. The extent of other waters was mapped to the ordinary high water mark (OHWM) as defined by the USACE Regulatory Guidance Letter No. 05-05 Ordinary High Water Mark Identification (USACE, 2005).

CWA regulations define the OHWM at 33 CFR 328.3(e) as the following:

• The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

The following geomorphic OHWM indicators, as described in the U.S. Army Corps of Engineers (USACE) publication A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (Lichvar & McColley 2008), were used to delineate the OHWM of other Waters of the United States:

- 1. **Benches**: Formed by the removal of previously aggraded sediment, and located near the below/at ordinary high water (OHW) boundary and potentially near the at/above boundary.
- 2. **Drift**: Organic debris larger than twigs. Tends to be oriented in the direction of flow, and often collects behind/in obstructions or is simply deposited by receding flow.
- 3. **Exposed Root Hairs Below Intact Soil Layer**: Exposed by erosion of sediment. Tend to be located along the above/at OHW boundary or where benches have formed.
- 4. **Change in Particle Size Distribution**: Transition from coarser to finder sediment common, and likely to occur near the at/below OHW boundary.
- 5. **Upper Limit of Sand-Sized Particles**: Deposited due to reduced flow competence, and tends to be concentrated near the at/below OHW boundary but may extend to the above OHW boundary.

6. **Valley Flat**: Formed by the deposition of fine-grained sediment during over-bank flow, and located adjacent to low-flow feature(s) and extends to the break in slope (when present) near the at/above OHW boundary.

3.2 Waters of the State

Although the SWRCB and RWQCB are in the process of establishing a formal wetland delineation protocol and wetland definition for Waters of the State, these agencies have typically accepted the USACE delineation protocol. However, these agencies do regulate "isolated waters" and non-navigable waters under the Porter-Cologne Act. Therefore, the methods described in Section 3.1 (Waters of the United States) were used to determine potential Waters of the State, but it was assumed that all wetlands and waters delineated using the USACE methods fall in the state's jurisdiction under the Porter-Cologne Act.
4 Study Area

The Study Area is approximately 114 acres, and consists of the area surveyed for the boundaries of wetland features and adjacent uplands (Appendix A). The Study Area is generally flat, with elevation ranging from approximately 120 feet above sea level (asl) to 130 feet asl Land uses in the general vicinity include rural residential and residential development, and agricultural. Representative photographs of the Study Area are located in Appendix B.

4.1 Vegetation

4.1.1 Non-native Annual Grassland

The Study Area consists almost exclusively of disturbed non-native annual grassland. The entire western portion and most of the eastern portion of the Study Area have been disked, seeded, and mowed annually for hay production for many years. The western portion, which retains much of the natural topography, is dry farmed, while the eastern portion appears to have been graded flat, and has been flood irrigated. The primary vegetative cover in the study area consists of stubble from oat grass, but other species were observed including Fitch's tarweed (*Centromadia* [*Hemizonia*] *fitchii*), yellow flower tarplant (*Holocarpha virgata*), turkey mullein (*Croton setigerus*), and vinegarweed (*Trichostema lanceolatum*). These latter species were very sparse, and associated primarily with the seasonal wetlands or adjacent areas.

Within the non-native annual grassland habitat in the western portion of the Study Area are a number of seasonal wetlands consisting of pools and swales. Most of these features were likely to have been vernal pools or swales in the past (based on the aerial signatures and the abundance of this wetland type in the surrounding region) but due to the long history of annual disking and planting for hay production the boundaries of these features have become indistinct, and no they longer appear to support vernal pool plant species. As stated above, the eastern portion of the Study Area has been graded/leveled, and no seasonal pools or swales are present.

4.1.2 Oak Woodland

A small portion of the southeast corner of the Study Area contains oak woodland. This is a narrow band along the upland portion of the Auburn Ravine corridor and along the adjacent portion of the Hwy 65 Bypass, and consists of approximately 100 trees consisting primarily of valley oak (*Quercus lobata*) along with a few blue oak (*Quercus douglasi*), interior live oak (*Quercus wislizenii*) and northern California black walnut (*Juglans hindsii*). The understory consists primarily of non-native grassland species including wild oats, ripgut brome (*Bromus diandrus*), Medusahead grass, prickly lettuce (*Lactuca serriola*), wild radish (*Raphanus sativus*), wild mustard (*Brassica* sp.), broad leaf filaree (*Erodium botrys*), English plantain, vetch (*Vicia* sp.), Spanish lotus (*Acmispon americanus* var. *americanus*), field bindweed, and cutleaf geranium.

4.1.3 <u>Riparian</u>

Auburn Ravine passes through the southeast corner of the Study Area. The channel is separated from the oak woodland area by a levee. The main channel is separated from the oak woodland area by a levee. The channel side of the levee and the opposite bank are vegetated by riparian woodland including Northern California black walnut (*Juglans hindsii*), willow, and valley oak, with an understory of Himalayan blackberry, pokeberry (*Phytolacca americana*) and a variety of annual grasses and forbs similar to that found in the oak woodland.

4.2 Soils

The soil map units and miscellaneous land types in the Study Area and vicinity are described in soil report for the *Placer County, California, Western Part* (USDA Soil Conservation Service, 2014). Soil map units that occur in the Study Area are shown in Figure 2 and include Alamo-Fiddyment complex 0 to 5 percent slopes, Cometa-Fiddyment complex, 1 to 5 percent slopes, Cometa-Ramona sandy loam, 1 to 5 percent slopes, Kilaga loam, Ramona sandy loam, 2 to 9 percent slopes, San Joaquin-Cometa sandy loams, 1 to 5 percent slopes, and Xerofluvents, frequently flooded. Descriptions of each of these soil types are provided below.

Alamo-Fiddyment complex 0 to 5 percent slopes

The Alamo-Fiddyment complex series consists of moderately deep to hardpan, poorly drained soils that formed in alluvium from mixed sources. Alamo soils are found in basins and drainageways on floodplains and fan remnants. The Alamo-Fiddyment complex soils are poorly drained with very slow runoff, and very slow permeability. Within Placer County, Alamo-Fiddyment complex soils are listed as a hydric soil within depressions (USDA 2010).

Cometa-Fiddyment complex, 1 to 5 percent slopes

The Cometa-Fiddyment complex series consists of moderately deep, moderately well to well drained soils found on nearly level to rolling low terraces and hills, or on slightly dissected older stream terraces. Cometa-Fiddyment complex soils are moderately well or well drained with slow to medium runoff and very slow permeability. Within Placer County, Cometa-Fiddyment complex soils are listed as a hydric soil within depressions (USDA 2010).

Cometa-Ramona sandy loam, 1 to 5 percent slopes

Cometa-Ramona sandy loam soils are found on nearly level to rolling low hills, terraces and fans. They are on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. Cometa-Ramona sandy loam is well-drained with slow to medium runoff, and moderately slow permeability. Within Placer County, Cometa-Ramona sandy loam is listed as a hydric soil within depressions (USDA 2010).

Kilaga loam

Kilaga loam consists of deep to very deep, well drained soils formed in alluvium from mixed rock sources, forming on nearly level to gently rolling terraces. Kilaga loam is well drained with slow to medium runoff and slow permeability. Within Placer County, Kilaga loam is listed as a hydric soil within drainage ways (USDA 2010).

Ramona sandy loam, 2 to 9 percent slopes

The Ramona soils are nearly level to moderately steep. They are on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. Ramona sandy loam is well-drained with slow to rapid runoff, and moderately slow permeability. Within Placer County, Ramona sandy loam is listed as a hydric soil within drainage ways (USDA 2010).

San Joaquin-Cometa sandy loams, 1 to 5 percent slopes

San Joaquin-Cometa sandy loams consist of soils that formed in alluvium derived from mixed but dominantly granitic rock sources, occurring on hummocky, nearly level to undulating low terraces. San Joaquin-Cometa sandy loams are well and moderately well drained with medium to very high runoff and very slow permeability. Some areas are subject to rare or occasional flooding. Within Placer County, San Joaquin-Cometa sandy loam is listed as a hydric soil within depressions (USDA 2010).

Xerofluvents, frequently flooded

Xerofluvents are found on flood plains along rivers or streams or on alluvial fans, mostly in areas with Mediterranean climates. Flooding is most common in winter, but some of the soils are flooded in spring due to melting snow in the nearby mountains. Vegetation communities on Xerofluvents typically consist of mixed forest or grass and shrubs. Xerofluvents, frequently flooded soil type is found adjacent to stream channels and consist of narrow bands of somewhat poorly drained recent alluvium. Areas containing this soil type are typically subject to frequent flooding and channelization. Within Placer County, Xerofluvents, frequently flooded soils are listed as a hydric soil within drainage ways (USDA 2010).



Z:\GIS\Entrix\3340700_Scheiber\map\Peery_Soils_8i11i_10.mxd

4.3 Hydrology

The Study Area lies within the Upper Coon – Upper Auburn Watershed, and appears to be a part of a larger historic vernal pool/swale complex that encompassed much of the surrounding region prior to development for urban or agricultural uses. While generally flat, the topography in the western portion of the Study Area appears to generally slope from east to west and from the north to south. The topography in the eastern portion of the Study Area appears to slope from west to east towards Auburn Ravine. The source of the water for the seasonal wetlands in the area seems to be primarily from precipitation, and runoff from adjacent uplands. Auburn Ravine receives water from upstream sources, as well as overland flow from the adjacent watershed. Water was flowing in Auburn Ravine at the time of the survey. The U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) mapped only Auburn Ravine and a freshwater pond adjacent to Auburn Ravine. No other features are mapped for the remainder of the Study Area (USFWS 2010).

5 Results and Discussion

Wetlands and Other Waters present in the Study Area (see Appendix A) included seasonal wetlands, seasonal wetland swales, a wetland meadow, an irrigation pond, a ditch, an ephemeral drainage, and Auburn Ravine. The hydrophytic vegetation, hydric soils, and wetland hydrology of these features are described below. Representative photographs of the Study Area are located in Appendix B, and copies of data sheets are located in Appendix C.

Upland areas are fairly consistent throughout the Study Area. No hydrologic indications were observed. Soils were generally sandy clay to sandy clay loam with some larger sand and gravel, and no stratified layers with soil chroma in the range of 7.5 YR 4/4. Typical plant species observed throughout the upland portion of the Study Area consisted almost exclusively of oat grass.

5.1 Seasonal Wetlands (3.288 acres)

There are 35 features in the Study Area mapped as seasonal wetland pools totaling 3.288 acres. The majority of these features occur in the western portion of the Study Area, while only five small seasonal wetland features are present in the eastern portion. These features were likely to have been vernal pools in the past, but decades of disking and planting for dry farmed hay and other crops has degraded these features to the point where they no longer appear to support vernal pool plant species. While oat grass was the dominant species observed in these features, there was generally a higher amount of barren ground in the basins of these features, and turkey mullein and vinegarweed were also present within the boundaries of these features.

5.2 Seasonal Wetland Swales (1.797 acres)

The four seasonal wetland swales totaling 1.797 acres mapped in the Study Area were also, like the seasonal wetlands, likely to have been vernal swales in the past, but no longer support vernal pool plant species due to the decade's long history of agricultural disturbances. Three of these features occur in the western portion of the property, while one runs along the eastern side of the eastern parcel. Species observed within these features were the same as those observed within the seasonal wetlands.

5.3 Wet Meadow (1.687 acres)

A large wet meadow area totaling 1.687 acres was mapped in the southeast corner of the Study Area adjacent to Auburn Ravine, but separated from it by a levee. This feature is a shallow basin that surrounds the irrigation pond described below, and is densely vegetated with a variety of facultative and obligate wetland plant species including water pepper (*Persicaria hydropiperoides*), umbrella sedge, Baltic rush (*Juncus balticus*), dallis grass (*Paspalum dilatatum*), and bull thistle (*Cirsium vulgare*). This feature appears to have received water from one of two wells located in the southeast corner of the Study Area, and likely receives water during flood irrigation of the adjacent graded field.

5.4 Irrigation Pond (0.358 acre)

An irrigation pond occurs within the above described wet meadow. This feature covers approximately 0.358 acre, and consists of a low spot within the larger wet meadow area. As with the wet meadow, it appears to receive its water primarily from nearby wells that were used to flood irrigate the adjacent hay field. Vegetation in this feature consists primarily of cattail along with some water pepper and umbrella sedge.

5.5 Ditch (0.057 acre/ 815 linear feet)

An irrigation ditch occurs along the eastern boundary edge of the Study Area. The ditch originated from a culvert on the north edge and flows south then west to the ephemeral drainage. This feature is vegetated with non-native annual grassland species.

5.6 Ephemeral Drainage (0.030 acre/ 60 linear feet)

The ephemeral drainage occurs at the southeastern edge of the eastern hay field. It appears to originate near a well that is also at the edge of the hay field, and flows into the wet meadow adjacent to Auburn Ravine. This feature is scoured from water flow, unvegetated, and appears to convey flows from the adjacent field to the wet meadow and irrigation pond during flood irrigation.

5.7 Auburn Ravine (0.315 acre/ 430 linear feet)

Auburn Ravine is a perennial stream that flows from northeast to southwest passing under the Hwy 65 Bypass as it leaves the Study Area. Approximately 500 linear feet of this feature define the eastern boundary of the Study Area with an approximate average width of 20 feet. The vegetation community along Auburn Ravine is riparian with a sparse to dense understory, and is described in more detail under Riparian Woodland above.

Wetlands and Other Waters Type	ID	Acreages
Seasonal Wetland 02	SW-02	0.041
Seasonal Wetland 03	SW-03	0.005
Seasonal Wetland 04	SW-04	0.150
Seasonal Wetland 05	SW-05	0.014
Seasonal Wetland 06	SW-06	1.372
Seasonal Wetland 07	SW-07	0.011
Seasonal Wetland 08	SW-08	0.033
Seasonal Wetland 10	SW-10	0.423
Seasonal Wetland 11	SW-11	0.234
Seasonal Wetland 12	SW-12	0.014
Seasonal Wetland 13	SW-13	0.075
Seasonal Wetland 14	SW-14	0.013
Seasonal Wetland 15	SW-15	0.088
Seasonal Wetland 16	SW-16	0.212
Seasonal Wetland 17	SW-17	0.130
Seasonal Wetland 18	SW-18	0.008
Seasonal Wetland 19	SW-19	0.067
Seasonal Wetland 21	SW-21	0.016
Seasonal Wetland 22	SW-22	0.010
Seasonal Wetland 23	SW-23	0.019
Seasonal Wetland 24	SW-24	0.098
Seasonal Wetland 25	SW-25	0.086
Seasonal Wetland 26	SW-26	0.030
Seasonal Wetland 27	SW-27	0.025
Seasonal Wetland 28	SW-28	0.012
Seasonal Wetland 29	SW-29	0.007
Seasonal Wetland 30	SW-30	0.006
Seasonal Wetland 31	SW-31	0.003
Seasonal Wetland 32	SW-32	0.028

Table 1 Wetlands and Other Waters in the Study Area

Seasonal Wetland 33	SW-33	0.035
Seasonal Wetland 34	SW-34	0.001
Seasonal Wetland 35	SW-35	0.008
Seasonal Wetland 36	SW-36	0.005
Seasonal Wetland 37	SW-37	0.007
Seasonal Wetland 38	SW-38	0.002
Wetland Swale 01	SW-01	0.980
Wetland Swale 09	SW-09	0.455
Wetland Swale 20	SW-20	0.244
Wetland Swale 39	SW-39	0.118
Wet Meadow 01	WM-01	1.687
Irrigation Pond	IP-01	0.358
Total Wetlands		7.130
Other Waters		Acreages/ Linear Feet
Ditch	D-01	0.057 acres/ 815 linear feet
Ephemeral Drainage	ED-01	0.030 acres/ 60 linear feet
Auburn Ravine	PS-01	0.315 acres/ 430 linear feet
Total Other Waters		0.402 acres/ 1,305 linear feet
Total Wetlands and Other Waters		7.532 acres/ 1,305 linear feet

6 Findings

Based on the findings of this delineation, the Study Area contains approximately 7.130-acre wetland and 0.402 acre (1,305 linear feet) of other waters of the U.S. (Appendix A) that are potentially subject to the USACE's jurisdiction pursuant to the Clean Water Act for the following reasons:

- The vernal pools, seasonal wetlands irrigation pond and wet meadow in the Study Area meet the USACE's three-parameter wetland criteria (hydrophytic vegetation, hydric soils, and wetland hydrology); and
- The pools in the Study Area are hydrologically linked to the drainage ditches that convey water through a series of drainages and canals to the Sacramento River. Thus, the wetland has a significant nexus to a non-relatively permanent water that flows directly to a Traditional Navigable Water.

As this report is a preliminary jurisdictional determination, we assume that the USACE has jurisdiction over all features included in the delineation map. Additionally, while the state may have independent jurisdiction criteria, we assume the state has jurisdiction over these mapped features as well.

No additional wetlands or waters were identified in the Study Area. All wetlands and waters with the Study Area meet the broader criteria for Water of the State and should be considered RWQCB jurisdiction.

7 Supplemental Information

7.1 Directions to the Study Area

From Sacramento, California, take Interstate-80 (I-80) East toward Roseville. Take exit for Highway 65 and head north until you reach the intersection of the Hwy 65 Bypass and Nelson Lane. This intersection is the southwest corner of the Study Area.

7.2 Contact Information

Applicant Richard Peery Peery-Arrillaga 2450 Watson Court Palo Alto, CA 94303 (650) 380-3665 Delineator Sam Bacchini Cardno 701 University Ave, Suite 200

Sacramento, California 95825

(916) 386-3850

sam.bacchini@cardno.com

8 References

- Environmental Laboratory, Department of the Army. 1987. U.S. Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1). U.S. Army Corps of Engineers. Waterways Experimental Station. Vicksburg, Mississippi.
- Baldwin, Bruce G. Ed., 2012. The Jepson Manual: Vascular Plants of California; Second Edition. University of California Press. Berkeley, California.
- Lichvar, Robert W., and McColley, Shawn M. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. U.S. Army Corps of Engineers Engineer Research and Development Center. Publication ERDC/CRREL TR-08-12.
- Lichvar, R.W. 2013. The National Wetland Plant List: 2013 wetland ratings. Phytoneuron 2013-49: 1-241.
- Munsell. 2009. Soil Color Charts. Kollmorgen Instruments Corporation. New Windsor, New York.
- Soil Survey Staff, 2013. Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/ accessed November March 4, 2013.
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 2014. National Hydric Soils List by State - California. March 2013. Website (http://soils.usda.gov/use/hydric/lists/state.html) accessed September 24, 2014.
- U.S. Army Corps of Engineers. 2007 Jurisdictional Determination Form Instructional Guidebook. May 2007.
- U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September 2008.

Peery Property

APPENDIX

WETLANDS AND OTHER WATERS MAP



WETLANDS

Seasonal Wetland Swale Wet Meadow Irrigation Pond Ditch Ephemeral Drainage Perennial Stream



OTHER FEATURES

Δ	Soil Pit
	Project Si

Project Site



2007 Verified Delineation Boundary

Z:\GIS\Entrix\3340700_Scheiber_Peery\map\Peery_Wetland_Delineation_USACE_34i22i_12.mxd

NOTES

Gross Site Acreage: +/- 114 ac. Aerial Photo Source: © April, 2012 Microsoft Corporation and its data suppliers Topographic Data Source: Fraji Design Group. Vertical Datum: NGVD 29

*This exhibit depicts information and data produced in strict accord with the U.S. Army Corps of Engineers wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and conforms to specifications per the Corps Sacramento District. However, wetland boundaries have not been legally surveyed and may be subject to minor adjustments if exact locations are required. **The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.



	WETLAND)S**	
	Wetland Type	ID	Acres
	Seasonal Wetland Pool	SW-02	0.041
	Seasonal Wetland Pool	SW-03	0.005
	Seasonal Wetland Pool	577-04 SW-05	0.150
	Seasonal Wetland Pool	SW-06	1.372
	Seasonal Wetland Pool	SW-07	0.011
	Seasonal Wetland Pool	SW-08	0.033
	Seasonal Wetland Pool	SW-10	0.224
	Seasonal Wetland Pool	SW-11 SW-12	0.234
ARRING CONTRACTOR AND AND AND AND AND AND AND AND AND AND	Seasonal Wetland Pool	SW-13	0.075
	Seasonal Wetland Pool	SW-14	0.013
	Seasonal Wetland Pool	SW-15	0.088
	Seasonal Wetland Pool	SW-10 SW-17	0.212
	Seasonal Wetland Pool	SW-18	0.008
	Seasonal Wetland Pool	SW-19	0.067
	Seasonal Wetland Pool	SW-21	0.016
	Seasonal Wetland Pool	SW-22 SW-23	0.010
	Seasonal Wetland Pool	SW-24	0.098
	Seasonal Wetland Pool	SW-25	0.086
	Seasonal Wetland Pool	SW-26	0.030
	Seasonal Wetland Pool	SW-27 SW-28	0.025
	Seasonal Wetland Pool	SW-29	0.007
	Seasonal Wetland Pool	SW-30	0.006
HART . C	Seasonal Wetland Pool	SW-31	0.003
	Seasonal Wetland Pool	577-32 SW-33	0.028
	Seasonal Wetland Pool	SW-34	0.001
	Seasonal Wetland Pool	SW-35	0.008
SW-38	Seasonal Wetland Pool	SW-36	0.005
SW-37 (Seasonal Wetland Pool	577-31 SW-38	0.007
	SUBTOTAL		3.288
SW-36	Seasonal Wetland Swale	SW-01	0.980
C SW-39	Seasonal Wetland Swale	SW-09	0.455
SW235	Seasonal Wetland Swale	577-20 SW-20	0.244
		SW-39	1.797
	Wet Meadow	WM-01	1.687
	Irrigation Pond	IP-01	0.358
		TOTAL	7.130
	OTHER WAT	ERS**	
ED-01	Wetland Type	ID	Acres
A A A A A A A A A A A A A A A A A A A	Ditch	D-01	0.057
	Ephemeral Drainage Perennial Stream	ED-01 PS-1	0.030
		TOTAL	0.402
WM-01/WM-01/			
SP12	TOTAL WATERS OF THE	U.S.*	7.532
IF-01			
PS1			
A CONTRACT OF CONTRACT.			
Salar All and a state			
405 m Delineators: Ammon Rice. Cardno			(R)
Sam Bacchini, Cardno GIS Specialist:		ardr	10 °
Melissa Nugent, Cardno	Shapi	ng the Future	
Preparation Date: 25 October 2012	Peery Property Wetlar	nd Delineatio	n
Fotalom Revision Date:			
23 July 2014	Appendi	хA	
Folsom	Wotland Dalin	ation*	
E-Do fado-F wy	wetiand Deline	c au011	
White Rock			<u> </u>
		200 300	400 Feet
15	SCALE:	1 inch = 200 feet	
Jacks and sen	Projection: Ca Datu	ii. Stateplane, Zo im: NAD 83	ne 2
-on-Rd - 10 X			

Peery Property

APPENDIX



REPERSENTATIVE SITE PHOTOGRAPHS



Typical seasonal wetland in the western portion of the site



Typical upland on the site



View of wet meadow looking south



View of irrigation pond looking south



View of Auburn Ravine from levee looking southeast



View of Auburn Ravine levee looking south

Peery Property



DATA SHEETS

State CA Sampling Point S[P] Vestgato(s) Sam Bacchini & Lon Neal Section, Township, Range SI7, T12N, RGE MDBACM andform (hillings, terrace, the); "Terrace Load relief (concex, corver, non); Conceve Datum:NAD83 State gion (LRR) C - Mediterranean California Lat Long: MVI dissification Hydric vestgation [2] Ornerta-Fiddyment complex, T to 5 percent slopes MVI dissification Hydric No (vestgation [2] Sol [2] or Hydratogy isgnificantly distaford? No ((fina.explain in Remarks.) SUMMARY OF FINDINGS - Attach slot map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Fresent? Yes (No (Hydrophytic Vegetation Present? Yes (No (within a Westand? Yes (No (Hydrophytic Vegetation Present? Yes (No (within a Westand? Yes (No (Remarks:Parcel was moved in comection with normal farming practices, making identification of vegetation diffect. No (No (No (Remarks:Parcel was moved in comection with normal farming practices, making identification of vegetation diffect. No (N	pplicant/Owner: westigator(s):Sam Bacchini & Dan Neal andform (hillslope, terrace, etc.): Terrace ubregion (LRR):C - Mediterranean California Lat: oil Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 p re climatic / hydrologic conditions on the site typical for this time of re Vegetation Soil or Hydrology significant re Vegetation Soil or Hydrology naturally p SUMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes No (Hydric Soil Present? Yes No (Wetland Hydrology Present? Yes (No (No (Wetland Hydrology Present? Yes (No	Section, Local reli ercent slo /ear? Yes (ly disturbed roblematic? g sampli	Township, Ra ief (concave, ppes (): No (I? Are ? (If no ing point le	State: <u>CA</u> inge: <u>S17</u> , T12N, R6E I convex, none): <u>Concave</u> Long:NWI classifiNWI classifiNormal Circumstances" eeded, explain any answe ocations, transects	Sampling Point: <u>SP1</u> MDB&M Slope (%) Datum: <u>NA</u> cation: <u>Hydric</u> Remarks.) present? Yes () i, important feature	:0-1% D83 40 C s, etc.
weakigator(s): Sam Bacchini & Dan Neal Section, Township, Range S17, T12N, R6E MDB&M andform (fillstope, terrace, etc); Terrace Local relief (concave, convex, nons); Concave Single (%) (0, 1%) andform (fillstope, terrace, etc); Terrace Local relief (concave, convex, nons); Concave Single (%) (0, 1%) and Mom (hillstope, terrace, etc); Terrace Local relief (concave, convex, nons); Concave Single (%) (0, 1%) are allowed: //// (no. explain in Remarks.) No C (fine. explain in Remarks.) see Vegotation[Soi [] or Hydrology Intrakly probability No C (fine.explain in Remarks.) see Vegotation[Soi [] or Hydrology Intrakly probability No C (fine.explain in Remarks.) Studently Hydrologic conditions on the site bydrology in antrakly probability Intrakly probability No C Within a Wetland? Yes C No C Hydrophytic Vegotation Present? Yes C No C within a Wetland? Yes C No C Within a Wetland? No C Mithing Wetland? Remarks Parcel was mowed in connection with normal forming probability Within a Wetland? Yes C No C Within a Wetland? Yes C No C (A) Total Cover: % Cov	Investigator(s):Sam Bacchini & Dan Neal andform (hillslope, terrace, etc.): Terrace ubregion (LRR):C - Mediterranean California Lat: oil Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 present re climatic / hydrologic conditions on the site typical for this time of present Soil or Hydrology significant re Vegetation Soil or Hydrology Soil or Hydrology naturally present iUMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes No Wetland Hydrology Present?	Section, Local rel.	Township, Ra ief (concave, opes (): No (ing point lo ng point lo	inge:S17, T12N, R6E I convex, none):Concave Long: NWI classifi (If no, explain in F "Normal Circumstances" eeded, explain any answe ocations, transects	MDB&M Slope (%) Datum:NA cation:Hydric Remarks.) present? Yes (•) s; important feature	0-1% D83
Indian (hillslope, lemane, efc.): Terrace Local relief (concave, convex, none): Concave Slope (%) 0.1% bregion (RR)C - Meditermanean California Lat Long: Datum (NADB3) bregion (RR)C - Meditermanean California Lat Long: Datum (NADB3) bregion (RR)C - Meditermanean California Lat Long: Datum (NADB3) bregion (RR)C - Meditermanean California Lat Long: Datum (NADB3) bregion (RR)C - Meditermanean California Lat Long: Mol (assification Ilydric) e Veglation [Soil] or Hydrology (Instantial problematic?) No (Instantial problematic?) No (Instantial problematic?) Veglation Present? Yes (Encore) No (Encore) No (Encore) No (Encore) Veriand Hydrology Present? Yes (Encore) No (Encore) Instance Stratum? No (Encore) Ves (Encore) No (Encore) No (Encore) Instance Stratum? No (Encore) No (Encore) Ves (Encore) No (Encore) No (Encore) Instance Stratum? No (Encore) No (Encore) Ves (Encore) No (Encore) No (Encore) No (Encore) No (Encore) No (Encore) No (Encore) <	Indform (hillslope, terrace, etc.): Terrace ubregion (LRR):C - Mediterranean California Lat: bil Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 p e climatic / hydrologic conditions on the site typical for this time of p e Vegetation Soil or Hydrology significant e Vegetation Soil or Hydrology naturally p UMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes No Hydrology Present?	Local rel percent slo year? Yes (ly disturbed roblematic? g sampli	ief (concave, opes (): No (l? Are ? (If no ing point lo	convex, none):Concave Long:NWI classifi NWI classifi NVVI classifi NVVI classifi 	Slope (%) Datum: <u>NA</u> cation: <u>Hydric</u> Remarks.) present? Yes	10-1% D83
abregion (LRR) C - Mediterranean California Lat Long Datum:NAD83 at Map Unit Name: L11, Cometa-Fiddyment complex, It o 5 percent slopes NM (dissification ffydric e Vegotation Soll or Hydrology Inter Statypic distification No (fr.o, explain in Remarks.) e Vegotation Soll or Hydrology naturally problematic? No (fr.o, explain any answers in Remarks.) UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et hydrophytic Vegetation Present? Yes (St. No (C) within a Wetland? Yes (C) No (C) within a Wetland? No (C) within a Wetland? Yes (C) No (C) within a Wetland? No (C) Within a Wetland? No (C) Within a Wetland? No (C) Within a Wetland? No (C) Within a Wetland? No (C) Withi	ubregion (LRR):C - Mediterranean California Lat: uil Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 i e climatic / hydrologic conditions on the site typical for this time of a complex of the site significant. Soil or Hydrology isignificant e Vegetation Soil or Hydrology in aturally provide the site significant. e Vegetation Soil or Hydrology in aturally provide the site significant. e Vegetation Soil or Hydrology in aturally provide the site site significant. Hydrophytic Vegetation Present? Yes No in the site site site site site site site sit	ercent slo /ear? Yes (ly disturbed roblematic? g sampli	opes No (1? Are ? (If no ing point le	Long:NWI classifi (If no, explain in F "Normal Circumstances" eeded, explain any answe ocations, transects	Datum: <u>NA</u> cation: <u>Hydric</u> Remarks.) present? Yes () N ərs in Remarks.) ə , important feature	.D83 10 C s, etc.
III Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 percent slopes NWI classification Hydric e dentation () Mydrologic conditions on the site splical for this line of year? Yes () No () (If no, explain in Remarks.) e Vegetation () Sol () or Hydrology () naturally problematic? (If needed, explain any answers in Remarks.) UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et hydrophytic Vegetation Present? Yes () No () Vydro Soli Present? Yes () No () Is the Sampled Area within a Wetland? Yes () No () Vediand Hydrology Present? Yes () No () Is the Sampled Area within a Wetland? Yes () No () Vediand Hydrology Present? Yes () No () Is the Sampled Area within a Wetland? EGETATION EGETATION EGETATION Dominance Test worksheet: Number of Dominant Species N/A Ital Cover: %% Total Number of Dominant Species Total Number of Dominant Species (A) N/A Ital Cover: %% FACW species Area Size Size Size Size Size Size Size Size	iii Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5 e climatic / hydrologic conditions on the site typical for this time of y e Vegetation Soil or Hydrology naturally p e Vegetation Soil or Hydrology naturally p UMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes No () Hydric Soil Present? Yes () No () Wetland Hydrology Present? Yes () No ()	percent slo year? Yes (ly disturbed roblematic? g sampli	opes No (1? Are ? (If no ing point lo	NWI classifi (If no, explain in F "Normal Circumstances" eeded, explain any answe ocations, transects	cation:Hydric Remarks.) present? Yes	^₄ o C s, etc.
e climetie / hydrologie conditions on the site typical for this time of year? Yes > Vegetation Scill or Hydrology alturally disturbed? Are "Normal Circumstances" present? Yes > Vegetation Scill or Hydrology naturally proteimatic? (if needed, explain any answers in Remarks.) > Vegetation Present? Yes > No > No > Vegetation Present? Yes > No > No > No > Vegetation Present? Yes > No > No > No > Vegetation Present? Yes > No > No	e climatic / hydrologic conditions on the site typical for this time of e Vegetation Soil or Hydrology significant e Vegetation Soil Or Hydrology naturally p JMMARY OF FINDINGS - Attach site map showin hydrophytic Vegetation Present? Yes No (hydric Soil Present? Yes No (Vetland Hydrology Present? Yes (No (No (year? Yes ly disturbed roblematic? g sampli	No (No (Are (If no (If no (If no)	(If no, explain in F "Normal Circumstances" eeded, explain any answe ocations, transects	Remarks.) present? Yes	^₄ o C s, etc.
e Vegetation ∑ Soil ☐ or itydology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes) No () 2 Vegetation ∑ Soil ∑ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.) 2 Vegetation ∑ Soil ∑ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.) 2 Vegetation ∑ Soil ∑ or Hydrology ? No () (If needed, explain any answers in Remarks.) 2 Vegetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Vedetation Present? Yes () No () (If needed, explain any answers in Remarks.) Vedetation Vedetation Vedetation Vedetation Vedetation Vedetation Vedetation Vedetation Vedetation Vede	e Vegetation Soil Or Hydrology significant e Vegetation Soil Or Hydrology naturally p JMMARY OF FINDINGS - Attach site map showin lydrophytic Vegetation Present? Yes No lydric Soil Present? Yes No Image: Soil Present? Vetland Hydrology Present? Yes No Image: Soil Present?	ly disturbed roblematic? g sampli	? Are ? (If no ng point le	"Normal Circumstances" eeded, explain any answe ocations, transects	present? Yes	⁴० ᢕ s, etc.
e Vegetatlon Soil e Hydrolegy in naturally protematic? (If needed, explain any answers in Remarks.) UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et ydrophytic Vegetation Present? Yes No yes No yes No yes No yes No yes No yes No yes No yes No yes No yes No	e Vegetation Soil or Hydrology naturally p JMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes No (Hydric Soil Present? Yes (No (Vetland Hydrology Present? Yes (No (g sampli	? (If ne	eeded, explain any answe ocations, transects	ers in Remarks.)	s, etc.
UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et hydric bydric Vegetation Present? Yes No	UMMARY OF FINDINGS - Attach site map showin Hydrophytic Vegetation Present? Yes (No (Hydric Soil Present? Yes (No (Vetland Hydrology Present? Yes (No (g sampli	ng point l	ocations, transects	, important feature	s, etc.
ydrophytic Vegetation Present? Yes No Prevalence Index Science Stratum (Use scientific names.)	lydrophytic Vegetation Present? Yes (No (lydric Soil Present? Yes (No (Vetland Hydrology Present? Yes (No (Is		-	· · ·	•
Wordpring Vegean(7) Yes No Is the Sampled Area within a Wetland Pydrology Present? Yes No No Is the Sampled Area within a Wetland Pydrology Present? Yes No Is the Sampled Area within a Wetland Pydrology Present? Yes No Is the Sampled Area within a Wetland Pydrology Was present at this sampling point, the requisite hydrophytic vegetation and hydric soils were absent. Comparison of the pydrophytic vegetation and hydric soils were absent. EGETATION Test No (Internet) Moolute Dominant Indicator Mumber of Dominant Species That Are OBL, FACW, or FAC: (A)	lydric Soil Present? Yes (No (ls				
Vestion a Worthand? Yes No within a Worthand? Yes No No remarks: Parcel was mowed in connection with normal farming practices, making identification of vegetation difficult. Soil is made up of red parent material. While wetland hydrology was present at this sampling point, the requisite hydrophytic vegetation and hydric soils were absent. No Image: Sampling point, the requisite hydrophytic vegetation and hydrology was present at this sampling point, the requisite hydrophytic vegetation and hydric soils were absent. EGETATION Absolute Dominant Indicator Dominant Species: That Are OBL, FACW, or FAC: (A)	Vetland Hydrology Present? Yes 💿 No 🖗	1.10	the Sampler	d Area		
temarks: Parcel was mowed in connection with normal farming practices, making identification of vegetation difficult. Soil is made up of red parent material. While wetland hydrology was present at this sampling point, the requisite hydrophytic vegetatic and hydric soils were absent. CEETATION Total Cover: <td< td=""><td>· · · · · · · · · · · · · · · · · · ·</td><td>w w</td><td>ithin a Wetla</td><td>nd? Yes 🗋</td><td>No 🛈</td><td></td></td<>	· · · · · · · · · · · · · · · · · · ·	w w	ithin a Wetla	nd? Yes 🗋	No 🛈	
EGETATION Absolute Dominant Indicator % Cover Species? Status N/A Dominance Test worksheet: N/A Species? Status N/A Total Cover: Species? Status Total Number of Dominant Species Total Number of Dominant Species Species Across All Stratum Total Cover: % N/A Total Cover: % Species Across All Stratum Total Cover: % N/A Total Cover: % Species Across All Stratum Total Cover: % N/A Total Cover: % Species Across All Stratum Total Cover: % N/A Total Cover: % Species Across All Stratum Total Cover: % N/A Total Cover: % Species Across All Stratum Total Cover: % Corton setigerus Species Across All Stratus Loflum multiflorum 4 No Phalaris sp. 1 No Species Across All Stratum Total Cover: 100% More Lated Dominant Species Across All Stratus More Lated Dominant Species Across All Stratus Phalaris sp. 1 No <td< td=""><td>emarks:Parcel was mowed in connection with normal farm up of red parent material. While wetland hydrolog and hydric soils were absent.</td><td>ing practio</td><td>ces, making ent at this s</td><td>identification of vege ampling point, the req</td><td>tation difficult. Soil is uisite hydrophytic veg</td><td>made etation</td></td<>	emarks:Parcel was mowed in connection with normal farm up of red parent material. While wetland hydrolog and hydric soils were absent.	ing practio	ces, making ent at this s	identification of vege ampling point, the req	tation difficult. Soil is uisite hydrophytic veg	made etation
Absolute Dominant Indicator Dominance Test worksheet: N/A Species? Status Number of Dominant Species N/A Total Number of Dominant Species Across All Strata: (a) apling/Shrub Stratum Total Cover: % Prevalence Index worksheet: (b) N/A Total Cover: % Prevalence Index worksheet: (b) % N/A Total Cover: % Prevalence Index worksheet: (c) % N/A Total Cover: % FACU species x 2 = 0 (c) % N/A Total Cover: % FACU species x 2 = 0 (c) (c) % (c) (c) % (c)	EGETATION			·		
International constraints International species N/A International species N/A International species International species International species I	Absolute	Dominar	nt Indicator	Dominance Test wor	ksheet:	
Instruct of Dominant Instruct of Dominant Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: N/A Prevalence Index worksheet: N/A Image: Species Across All Strata: N/A Prevalence Index worksheet: Image: Species Across All Strata: Image: Species Across All Strata: N/A Prevalence Index worksheet: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Species Across All Strata: Image: Across All Strata: Image: Species Across All Strata: Image: Across All Strata: Image: Species Across All Strata: Image: Across All Strata: Image: Species Across All Strata: Image: Across All Strata: Image: Species Acrophytic Across All Strata:	$\frac{N}{A}$	opecies		Number of Dominant S	Species	(Δ)
Total Number of Dominant Species Across All Strata: 1 (B) Appling/Shrub Stratum Total Cover: % N/A Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (Are prevalence Index worksheet: N/A Total Cover: % Total % Cover of: Multiply by: CBL species x 1 = 0 FACW species x 2 = 0 FAC species x 4 = 0 UPL species g6 x 5 = 480 Coroton setigerus 5 No Not Elisted Lolium multiflorum 4 No FAC Phalaris sp. 1 No Not Elisted Phalaris sp. 1 No Not Elisted Worphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) Voody Vine Stratum 0 % % Cover of Biotic Crust 0 % Keare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 % Keare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 %						0.0
Total Cover: % AV/A Total Cover: % Total Cover: % Total Cover: % Total Cover: % Total % Cover of: Multiply by: OBL species x1 = 0 FACW species x2 = 0 FAC species x3 = 12 FAC species x4 = 0 UPL species x4 = 0 Croton setigerus 5 No Not Listed Cotour setigerus 5 No Not Listed Phalaris sp. 1 No Not Listed Morphological Adaptations '(Provide supporting data in Remarks or on a separate sheet) Provalence Index is s3.0' Woody Vine Stratum 0 % % Cover of Blotic Crust 0 % Keare Ground in Herb Stratum 0 % % Cover of Blotic Crust 0 % KeareK: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his		· <u> </u>	······	Total Number of Domin Species Across All Str	nant ata:	(B)
Total Cover: % Prevalence Index worksheet: 0.0 % (Are .N/A Prevalence Index worksheet: Total % Cover of: Multiply by: 0.0 % (Are	- <u></u>					()
Applingsnrub stratum Prevalence Index worksheet: N/A Total % Cover of: Multiply by: OBL species x 1 = 0 FACW species x 2 = 0 FAC species 4 x 3 = 12 FACU species x 4 = 0 UPL species 96 x 5 = 480 Coton setigerus 5 No Not Listed Phalaris sp. 1 No FAC Planaris sp. 1 No FAC Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Prevalence Index is \$3.0 ⁴ N/A Total Cover: 100 % Prevalence index is \$3.0 ⁴ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation '(Explain) N/A Total Cover: 100 % Present? Yes (No @ Kemarks: 0 % % Cover of Biotic Crust 0 % Yes (No @	Total Cover:	6		That Are OBL, FACW,	, or FAC: 0.0 %	(A/B)
A Total % Cover of: Multiply by: OBL species x 1 = 0 FACW species x 2 = 0 FACW species x 3 = 12 FACW species x 3 = 12 FACW species x 4 = 0 UPL species 96 x 5 = 480 Coton setigerus 5 No Not Listed Prevalence Index = B/A = 492 Phalaris sp. 1 No Not Listed Prevalence Index is \$3.01 Prevalence Index is \$3.01 Mort Didu 4 No FAC Prevalence Index is \$3.01 Mort Didu is \$4.01 Voody Vine Stratum Total Cover: 100% Mort Didu is \$4.01 Prevalence Index is \$3.01 Mort Didu is the prevalence Index is \$2.01 Mort Didu is \$5.05 Prevalence Index is \$3.01 Problematic Hydrophytic Vegetation Indicators: Mort Didu is the prevalence Index is \$2.01 Problematic Hydrophytic Vegetation I (Explain) Problematic Hydrophytic Vegetation (Explain) N/A Total Cover: % Problematic Hydrophytic Vegetation (Explain) Present? N/A Total Cover: % Yegetation Present?<	apling/Shrub Stratum			Provalance Index we		
India is construction India is construction India is construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Avena fatua 90 Yes Net Listed Column multiflorum 4 No FAC Image: Construction 1 No Net Listed Image: Construction 1 No Net Listed Image: Construction 1 No Not Elisted Image: Construction 1 No Not Elisted <td< td=""><td></td><td></td><td></td><td>Total % Cover of</td><td>Multiply by:</td><td></td></td<>				Total % Cover of	Multiply by:	
FACW species x 2 = 0 FAC species 4 x 3 = 12 FAC species 4 x 3 = 12 FAC species 4 x 3 = 12 FAC species x 4 = 0 UPL species y 4 = 0 Coton setigerus 5 No Not Listed Lolium multiflorum 4 No FAC Phalaris sp. 1 No Not Listed Prevalence Index = B/A = 4.92 Ominance Test is >50% Prevalence Index is ≤3.0' Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) Voody Vine Stratum 100 % ''Indicators of hydric soil and wetland hydrology mus be present. MA ''Indicators of hydric soil and wetland hydrology mus be present? Yes C No © temarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his No (o)	·		·	OBL species	$\frac{1}{x_1} = 0$	
Total Cover: % Avena fatua 90 Yes Not Listed Croton setigerus 5 No Not Listed Lolium multiflorum 4 No FAC Phalaris sp. 1 No Not Listed Phalaris sp. 1 No Not Listed Voody Vine Stratum 7 100 % Prevalence Index = B/A = 4.92 Word Stratum 1 No Not Listed Voody Vine Stratum Total Cover: 100 % Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) N/A Total Cover: 100 % 1 Seare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 % Vegetation Present? Yes (No () remarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his				FACW species	x 2 = 0	
Total Cover: % FACU species x 4 = 0 Avena fatua 90 Yes Not Listed Column Totals: 100 (A) 492 (Croton setigerus 5 No Not Listed Column Totals: 100 (A) 492 (Phalaris sp. 1 No FAC Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is <3.01				- FAC species	4 ×3=	ž
Image: Stratum 90 Yes Not Listed Avena fatua 90 Yes Not Listed Croton setigerus 5 No Not Listed Lolium multiflorum 4 No FAC Phalaris sp. 1 No Not Listed Phalaris sp. 1 No Not Listed Word phalaris sp. 1 No Not Listed Word phalaris sp. 1 No Not Listed Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) Voody Vine Stratum 100 % 100 % 1 N/A Total Cover: 9% Yes Not Listed Not Cover to Biotic Crust Bare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 % Yes Not Stratum Wide phytic Vegetation in Herb Stratum 0 % % Cover of Biotic Crust 0 % Yes Not Stratum Imarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his Not Stratus	Total Cover;	6		FACU species	x 4 = 0	
Avena fatua 90 Yes Nor Listed Croton setigerus 5 No Not Listed Lolium multiflorum 4 No FAC Phalaris sp. 1 No Not Listed Phalaris sp. 1 No Not Listed Phalaris sp. 1 No Not Listed Worthological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Dominance Test is >50% Prevalence Index is ≤3.01 Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) N/A N/A N/A Total Cover: 100% Total Cover: 100% Voody Vine Stratum 0 % N/A Total Cover: 0 % Kemarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his	lerb Stratum			UPL species	96 × 5 = 48	0
Croton setigerus 5 No Not Listed Prevalence Index = B/A = 4.92 Industrial phalaris sp. 1 No Not Listed Prevalence Index = B/A = 4.92 Phalaris sp. 1 No Not Listed Prevalence Index = B/A = 4.92 Phalaris sp. 1 No Not Listed Prevalence Index is <5.0%	Avena fatua 90	<u>Yes</u>	Not Listed	Column Totals:	100 (A) 49	2 (B)
Lotium multiflorum 4 No FAC Hydrophytic Vegetation Indicators: Phalaris sp. 1 No Not Listed Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.01 Dominance Test is >50% Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) N/A 100% 1 N/A 1 Indicators of hydric soil and wetland hydrology mus be present. Hydrophytic Vegetation Yes C No (•) Kemarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his No (•)	Croton setigerus 5	_ <u>No</u>	Not Listed	Prevalence Inde	x = B/A = 4.6	2
Imatures sp. Imatures sp. Imatures sp. Imaturesp.	Delaris sp 1		FAC Not Listed	Hydrophytic Vegetat	ion Indicators:	257.11
Prevalence Index is ≤3.01 Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) N/A Total Cover: N/A Total Cover: Y Bare Ground in Herb Stratum 0 % Se Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0 % Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his	<u>1</u>			Dominance Test i	s >50%	
Image: Second second	· · · · · · · · · · · · · · · · · · ·			Prevalence Index	is ≤3.0 ¹	
Image: Constraint of the stratum Total Cover: Image: Constraint of the stratum Image: N/A Image: Constraint of the stratum Image: Constraint of the stratum Image: Constraint of the stratum Image: N/A Image: Constraint of the stratum Image: Constraint of the				Morphological Ad	aptations ¹ (Provide suppo	orting
Total Cover: 100 % N/A 1 Indicators of hydric soil and wetland hydrology mus be present. Koody Vine Stratum 1 Indicators of hydric soil and wetland hydrology mus be present. Koody Vine Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum 0 % Koody Stratum <				data in Remark	<pre><s (the="" a="" apply="" management="" on="" or="" separate="" sheet="" state="" state<="" td="" the=""><td>) ain)</td></s></pre>) ain)
woody vine stratum 1 .N/A 1 .N/A 1 .N/A be present. .N/A 1 .N/A 1 .N/A 1 .N/A be present. .N/A 1 .N/A 1 .N/A 1 .N/A 1 .N/A be present. .N/A 1 .N/A 1	Total Cover: 100	10			opnytic vegetation. (Expla	ain)
Indicators of hydro son and wenand hydrology must be present. Total Cover: % Kemarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his	vooay vine Stratum			¹ Indicators of bydric s	oil and wetland hydrolog	w must
Total Cover: % Hydrophytic % Vegetation Vegetation % % Cover of Biotic Crust 0 % % Remarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his %		<u> </u>	<u> </u>	 be present. 	on and wenand hydrolog	y muai
% Bare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 % Vegetation Remarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his No (•)	Total Cover	<u> </u>				
% Bare Ground in Herb Stratum 0 % % Cover of Biotic Crust 0 % Present? Yes () No () Remarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his No ()		.v	A	Vegetation		
Remarks: Property owner indicated that parcel normally contains dry-farmed wild oat, and was recently mowed pursuant to his	% Bare Ground in Herb Stratum <u>0%</u> % Cover of Biotic		0 %	Present? Ye	es () No 💽	
	Remarks: Property owner indicated that parcel normally co	ntains dry-	-farmed wil	d oat, and was recently	y mowed pursuant to h	is
normal farming practices.	normal farming practices.					

Sampling Point: SP1

Profile Des	cription: (Describe	to the de	pth needed to docu	ument the	indicator	or confirm	n the absence of	indicators.)
Depth	Matrix		Red	ox Feature) S	1 5 - 2	T-14	D
(incnes)	Color (moist)	%	Color (moist)	%		LOC ²	<u>l exture</u>	Remarks
0-16"	<u>5 YR 3/4</u>	80	<u>5 YR 5/6</u>	5	<u>C</u>	<u>M</u>	Loam	Uniform soil stratum.
			5 YR 3/2	15	С	Μ		
16" =								
Bottom			,					

¹ Type: C=C	oncentration, D=De	pletion, RN	/I=Reduced Matrix.	² Locatio	n: PL=Por	e Lining, R	C=Root Channel,	M=Matrix.
³ Soil Texture	es: Clay, Silty Clay,	Sandy Cla	iy, Loam, Sandy Cla	y Loam, S	andy Loan	n, Clay Loa	am, Silty Clay Loa	m, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil I	ndicators: (Applical	ole to all Li	RRs, unless otherwis	se noted.)			Indicators for	Problematic Hydric Soils:
Histoso	I (A1)		Sandy Red	lox (S5)			1 cm Mu	ck (A9) (LRR C)
	pipedon (A2)		Stripped N	/latrix (S6)			2 cm Mue	ck (A10) (LRR B)
Black H	IISTIC (A3) on Sulfide (A4)			icky Miner	al (F1)		Reduced	Vertic (F18)
Stratifie	d Lavers (A5) / BR	C)		eyeu Matri Matrix (F3	IX (FZ))			(IFZ)
	uck (A9) (LRR D)	0)		rk Surface	/ e (E6)			
Deplete	d Below Dark Surfa	ce (A11)	Depleted	Dark Surfa	ace (F7)			
Thick D	ark Surface (A12)		Redox De	pressions	(F8)			
Sandy I	Mucky Mineral (S1)		Vernal Po	ols (F9)			⁴ Indicators of	hydrophytic vegetation and
Sandy (Gleyed Matrix (S4)		boosternal				wetland hy	/drology must be present.
Restrictive	Layer (if present):							
Type:								
Depth (ir	iches):						Hydric Soil P	resent? Yes 🔿 🛛 No 💽
Remarks: R	ed parent materia	l indicato	r (TF2) not satisf	ied since	red layer	extends	below 12" bene	ath soil surface.
HYDROLC	JGY							
Wetland Hy	drology Indicators	:					Seconda	ary Indicators (2 or more required)
Primary Indi	icators (any one indi	cator is su	fficient)				Wat	er Marks (B1) (Riverine)
Surface	e Water (A1)		Salt Crus	st (B11)			Sed	iment Deposits (B2) (Riverine)
🔄 High W	ater Table (A2)		Biotic Cr	ust (B12)			Drift	Deposits (B3) (Riverine)
C Saturat	ion (A3)		Aquatic I	nvertebra	tes (B13)		Dra	inage Patterns (B10)
Water N	Marks (B1) (Nonrive	rine)	Hydroge	n Sulfide (Odor (C1)		Dry-	Season Water Table (C2)
Contraction Sedime	ent Deposits (B2) (No	onriverine) X Oxidized	Rhizosph	ieres along	Living Ro	ots (C3) 🔲 Thir	n Muck Surface (C7)
Drift De	posits (B3) (Nonriv	erine)	Presence	e of Redu	ced Iron (C	4)	Cra	yfish Burrows (C8)
Surface	e Soil Cracks (B6)		Recent I	ron Reduc	tion in Plo	wed Soils ((C6) 🔄 Satu	uration Visible on Aerial Imagery (C9)
🔄 Inundat	ion Visible on Aerial	Imagery (I	B7) Other (E	xplain in F	Remarks)		Sha	llow Aquitard (D3)
Water-	Stained Leaves (B9)						FAC	C-Neutral Test (D5)
Field Obse	rvations:	_						
Surface Wa	ter Present?	Yes 🔿	No 💽 Depth (i	inches):				
Water Table	e Present?	Yes 🔿	No 💽 Depth (i	inches):				
Saturation F	Present?	Yes 🔿	No 💽 🛛 Depth (i	inches):		\N/ot	land Hydrology I	Procent? Yos @ No O
Describe Re	ipillary tringe)	n daude n	nonitoring well, aeria	I photos u	arevious in	spections)	if available:	resent? res 🂽 No 🥥
Google Ea	rth satellite image	rv dated	6/13/2011.	ii pilotoo, j		opeonoria	, il avallable.	
Bomarke:0	1		· · · · · · · · · · · · · · · · · · ·					
Remarks.Sa	ample point taken	in a depr	ession visible in s	atenite in	nagery.			
US Anny Corp	os of Engineers							· · · ·
								Arid Mont Marcian 11 1 2006

Project/Site: Scheiber Biological Resources Assessment	City/County:Lincoln / Pla	cer	Sampling Date:9/19/2011		
Applicant/Owner:		State:CA	Sampling Point:SP2		
Investigator(s):Sam Bacchini & Dan Neal	Section, Township, Range	S17, T12N, R6I	E MDB&M		
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, con	/ex, none):Conca	ve Slope (%):0-1%		
Subregion (LRR):C - Mediterranean California Lat:	Lo	ong:	Datum:NAD83		
Soil Map Unit Name: 141, Cometa-Fiddyment complex, 1 to 5	percent slopes	NWI class	ification:Hydric		
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes 💽 🛛 No 🌔	(If no, explain i	n Remarks.)		
Are Vegetation 🔀 Soil 🗌 or Hydrology 🗍 significar	ntly disturbed? Are "Nor	mal Circumstance	s" present? Yes 💽 🛛 No 🔿		
Are Vegetation Soil 🗙 or Hydrology 🗌 naturally	problematic? (If neede	d, explain any ans	wers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing	ng sampling point loca	tions, transec	ts, important features, etc.		
Hydrophytic Vegetation Present? Yes 💽 No 💽					
Hydric Soil Present? Yes 🛞 No 🛞	Is the Sampled Are	ea			
Wetland Hydrology Present? Yes 📦 No 🌘	within a Wetland?	Yes (
Remarks:Parcel was mowed in connection with normal far vegetation and wetland hydrology are present at t red parent indicator hydric soil indicator (TF2) is	ming practices, making ide his location. The red paren present. This feature is dep	ntification of ver t material of the picted on map as	getation difficult. Hydrophytic soil is naturally problematic, but SW1.		
VEGETATION					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant Species
1. <i>N/A</i>				That Are OBL, FACW, or FAC: (A)
2.				Tatal Number of Dominant
3.		·	·	Species Across All Strata:
4				
			·	- Percent of Dominant Species
Sapling/Shrub Stratum	. %			Inat Are OBL, FACW, or FAC: 100.0% (A/B)
1.N/A				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				- FAC species 😵 🛪 3 = 255
Total Cover:	%			– FACU species x 4 = 0
Herb Stratum	11111111			UPL species x 5 =
1.Lolium multiflorum	85	Yes	FAC	Column Totals: 100 (A) 330 (B)
2. Avena fatua	13	No	Not Listed	
³ .Taeniatherum caput-medusae	1	No	Not Listed	Prevalence Index = B/A = 3.30
4. Phalaris sp.	1	No	Not Listed	Hydrophytic Vegetation Indicators:
5.	·			Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7.	,			Morphological Adaptations ¹ (Provide supporting
8.	••••••••••			- data in Remarks or on a separate sheet)
Total Cover	100.07		- br	- Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	190 70			
1. <i>N/A</i>				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total Cover	%			- Hydrophytic
% Para Cround in Harb Stratum 0. % %	of Diotio (Saunt (Vegetation
) %	Present? Yes 🍥 No 💭
Remarks: Property owner indicated that parcel norm	ally cont	tains dry-	farmed wil	d oat, and was recently mowed pursuant to his
normal farming practices. This sample po	int was d	ominated	by Lolium	n multiflorum.

Sampling Point: $\underline{SP2}$

	Matrix		Rado	x Feature	25	01 0011111		· · · · · · · · · · · · · · · · · · ·
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type1	Loc ²	Texture ³	Remarks
0-12"	7.5 YR 4/4	90 :	5 YR 5/8	5	С	M	Sandy loam	Uniform soil stratum.
			5 YR 3/2	5	C	M		
12" =				-				
Bottom					,			
Dottom		. 			· ····			
				.,		k		
					·	·	·	
	- <u></u>							
1=				2				
³ Soil Textur	Concentration, D=Depl res: Clay Silty Clay S	letion, RM= Sandy Clay	Reduced Matrix. Loam Sandy Clay	Loam S	on: PL≂Pon andv Loam	ELINING, F ⊢Clav Lo:	C=Root Channel am Silty Clay Los	l, M≃Matrix. am Silt Leam Silt Leamv Sand Sand
Hydric Soil	Indicators: (Applicabl	le to all LRI	Rs. unless otherwise	e noted.)	anay courr	i, oluy 200	Indicators fo	r Problematic Hydric Soils:
Histoso	ol (A1)		Sandy Redo	x (S5)			1 cm Mu	uck (A9) (LRR C)
Histic E	Epipedon (A2)		Stripped Ma	atrix (S6)	l .		2 cm Mi	ick (A10) (LRR B)
Black H	Histic (A3)		Loamy Muc	ky Mine	al (F1)		Reduce	d Vertic (F18)
Stratific	gen Sumae (A4) ed Lavers (A5) /I RR (2)	Loamy Gie	yeu Matr latrix (E3	IX (FZ)		X Red Par	ent Material (TF2) Explain in Remarks)
	luck (A9) (LRR D)	-)	Redox Darl	< Surface	, e (F6)			
Deplete	ed Below Dark Surface	e (A11)	Depleted D	ark Surfa	ace (F7)			
Thick D	Dark Surface (A12)		Redox Dep	ressions	(F8)		A	
Sandy	Mucky Mineral (S1)		Vernal Poo	ls (F9)			"Indicators o	f hydrophytic vegetation and
Restrictive	Laver (if present):						Wetlatiu i	iyotology must be present.
Type:Ha	ardpan laver							
Depth (i	nches):12"						Hydric Soil F	Present? Yes 💿 No 🦳
Remarks: F	Red Parent Material	(TF2) inc	dicator present, as	red lay	er entirely	within t	op 12" of test p	oit. Hardpan layer at 12" prevented
ć	leeper excavation a	nd evalua	tion.	-	•			1 7 1
1								
			· · · · · · · · · · · · · · · · · · ·					
	DGY		· · · · · · · · · · · · · · · · · · ·				Soone	Ion Indicators (2 or more required)
HYDROL(Wetland Hy	DGY ydrology Indicators:	ator is suffi						lary Indicators (2 or more required)
HYDROL(Wetland Hy Primary Ind	DGY ydrology Indicators: dicators (any one indic	ator is suffi	icient)	· (B11)			Second	lary Indicators (2 or more required) ater Marks (B1) (Riverine)
HYDROL(Wetland H Primary Ind	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2)	ator is suffi	icient)	: (B11) st (B12)			Second Wa Se Dri	lary Indicators (2 or more required) iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
HYDROL(Wetland H Primary Ind Surface High W Satura	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3)	ator is suffi	icient) Salt Crust	: (B11) st (B12)	tes (B13)		Seconc Wa Se Dri Dri	lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10)
HYDROL(Wetland H Primary Ind Surface High W Saturat Water	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver	ator is suffi ine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen	: (B11) st (B12) svertebra Sulfide	tes (B13) Odor (C1)		Second Wa Se Dri Dri Dri	lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2)
HYDROL(Wetland H Primary Ind Surface High W Saturai Water Sedime	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No	ator is suffi ine) nriverine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized	: (B11) st (B12) vertebra Sulfide Rhizosph	tes (B13) Odor (C1) heres along	Living Ro	Second Wa Se Dri Dri Dry tots (C3)	lary Indicators (2 or more required) Iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>y</i> -Season Water Table (C2) in Muck Surface (C7)
HYDROL(Wetland H Primary Ind Surface High W Saturat Water Sedime Drift De	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non	ator is suffi ine) nriverine) rine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence	(B11) st (B12) wertebra Sulfide Rhizosph of Redu	tes (B13) Odor (C1) heres along ced Iron (C	Living Ro 4)	Second Second Se Dri Dri Dri Dri Cri cri Cri Cri	lary Indicators (2 or more required) tter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>y</i> -Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8)
HYDROL(Wetland H Primary Ind Surface High W Saturae Water Sedime Drift De Surface	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6)	ator is suffi ine) nriverine) rine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence Recent Iro	: (B11) st (B12) vertebra Sulfide Rhizosph of Redu on Redu	tes (B13) Odor (C1) heres along ced Iron (C ction in Plov	Living Ro 4) ved Soils	Seconc Wa Se Dri Dri Dro sots (C3) Thi Cra (C6) Sa	lary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>r</i> -Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
HYDROL(Wetland H; Primary Ind Surface High W Saturat Vater Sedime Drift De Surface Inunda	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I	ator is suffi ine) nriverine) rine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence Recent Irc 7) Other (Ex	(B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils	Second Wa Se Dri Dri Dri Sots (C3) Thi Cra (C6) Sa Sh	lary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3)
HYDROL(Wetland H Primary Ind Surface High W Saturat Water Sedime Drift De Surface Inunda Water-	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9)	ator is suffi ine) nriverine) rine)	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Irc 7) Other (Ex	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils	Second Wa Se Dri Dri Dri Dri Ori Ori Se Ori	lary Indicators (2 or more required) tter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Saturar Water Sedime Drift De Surface Inunda Water- Field Obse	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations:	ator is suffi ine) nriverine) rine) Imagery (B	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence Recent Irc 7) Other (Ex	(B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduo plain in F	tes (B13) Odor (C1) neres along ced Iron (C stion in Plov Remarks)	Living Rc 4) ved Soils	Second See Dri Dri Dri Dri Dri Ori Ori <	lary Indicators (2 or more required) tter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>y</i> -Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland Hi Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obsee Surface Wa	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y	ator is suffi ine) nriverine) rine) Imagery (B	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence Recent Irc 7) Other (Ex No Depth (ir	: (B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): aches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Rc 4) ved Soils	Second Wa Se Dri Dri Dri Dri Oris Oris Thi Cra Sa Sh FA	lary Indicators (2 or more required) atter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>r</i> -Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Satura' Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wa Water Table Saturation	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y le Present? Y	ine) nriverine) rine) Imagery (B	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Irc 7) Other (Ex No Depth (ir No Depth (ir	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduo plain in F aches): aches):	tes (B13) Odor (C1) neres along ced Iron (C stion in Plov Remarks)	Living Ro 4) ved Soils	Second Wa Se Dri Dri Dri Oris (C3) Thi Cra (C6) Sh FA	lary Indicators (2 or more required) tter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Ununda Water- Field Obse Surface Wa Water Table Saturation (includes ca	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y le Present? Y Present? Y apillary fringe)	ine) nriverine) rine) Imagery (B res () res () res ()	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Iro 7) Other (Ex No Depth (ir No Depth (ir	(B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduo plain in F aches): 	tes (B13) Odor (C1) neres along ced Iron (C ttion in Plov Remarks)	Living Ro 4) ved Soils	Second Wa Se Dri Dra Dro Dro Dro Cra Cra C6) Sa FA	lary Indicators (2 or more required) tter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) <i>y</i> -Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Unift De Surface Water- Field Obsee Surface Wa Water Table Saturation (includes cc Describe R	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y Present? Y Present? Y apillary fringe) tecorded Data (stream	ator is suffi ine) nriverine) rine) (magery (B) (es () (es () (es () (es ())	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized Presence Recent Irc 7) Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir	: (B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): aches): aches): maches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils	Second Wa Se Dri Dri Dri Oris Sa Oris Sh Oris Oris Oris Oris Oris Oris Oris Oris Oris	Iary Indicators (2 or more required) atter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5) Present? Yes No
HYDROL(Wetland H, Primary Ind Surface High Vi Satura' Useful Sedime Drift De Surface Inunda Useful Surface Wa Vater Table Saturation (includes ca Describe R Google Ea	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y le Present? Y present? Y present? Y ecorded Data (stream arth satellite imager	ine) nriverine) rine) Imagery (B res () res	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Irc 7) Other (Ex No Depth (ir No Depth (ir No Depth (ir Sonitoring well, aerial /13/2011.	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduo plain in F aches): 	tes (B13) Odor (C1) neres along ced Iron (C stion in Plov Remarks)	Living Rc 4) ved Soils	Second Wa Se Dri Dri Dri Oris Off C6) Sa FA	Iary Indicators (2 or more required) Iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5) Present? Yes No
HYDROL(Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wa Water Table Saturation I (includes ca Describe R Google Ea Remarks:S	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y Present? Y Present? Y epresent? epresent ? e	ator is suffi ine) nriverine) rine) Imagery (B res () res	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Iro 7) Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir ssion visible in sa	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): aches): aches): photos,	tes (B13) Odor (C1) heres along ced Iron (C ttion in Plov Remarks) crevious ins magery. O	Living Rc 4) ved Soils wet Soils spections)	Second Wa Se Dri Dri Dra Dra Cra (C6) Sa Sh FA	Iary Indicators (2 or more required) Iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Vater- Field Obsee Surface Water Table Saturation (includes cc Describe R Google Ea Remarks:S	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y Present? Y Present? Y Present? Y Present? Y eposits (Stream arth satellite imager ample point taken i	ator is suffi ine) nriverine) rine) (magery (B (es () (es ()))))))))))))))))))))))))))))))))))	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Irc 7) Other (Ex No O Depth (ir No O Depth (ir No O Depth (ir No O Depth (ir ssion visible in sat	(B11) st (B12) vertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): aches): aches): photos, tellite in	tes (B13) Odor (C1) neres along ced Iron (C tion in Plov Remarks) crevious ins nagery. O	Living Ro 4) ved Soils wet spections) xidized r	Seconc Wa Se Dri Dro Dry ots (C3) Thi Cra (C6) Sa Sh FA Hand Hydrology , If available: hizospheres alc	Iary Indicators (2 or more required) Iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) inage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
HYDROL(Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obset Surface Wa Water Table Saturation (includes ca Describe R Google Ea Remarks:S	DGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y Present? Y Present? Y Present? Y ecorded Data (stream arth satellite imager cample point taken i	ator is suffi ine) nriverine) rine) Imagery (B res () res	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Irc 7) Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir ssion visible in sa	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): 	tes (B13) Odor (C1) neres along ced Iron (C stion in Plov Remarks)	Living Ro 4) ved Soils spections) xidized r	Second Wa Se Dri Dri Dro Cra (C6) Sa Sh FA Sh Had Hydrology , if available:	Iary Indicators (2 or more required) itter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5) Present? Yes No ong living roots visible.
HYDROL(Wetland H Primary Inc Surface High W Satura' Water Sedime Drift De Surface Ununda Water- Field Obset Surface Wa Water Table Saturation I (includes cd Describe R Google Ea Remarks:S	DGY ydrology Indicators: licators (any one indic e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) ation Visible on Aerial I Stained Leaves (B9) ervations: ater Present? Y le Present? Y Present? Y Present? Y apillary fringe) recorded Data (stream arth satellite imager	ator is suffi ine) nriverine) rine) Imagery (B res () res	icient) Salt Crust Biotic Cru Aquatic Ir Hydrogen X Oxidized I Presence Recent Iro 7) Depth (ir No Depth (ir No Depth (ir No Depth (ir onitoring well, aerial /13/2011. Ssion visible in sa	(B11) st (B12) wertebra Sulfide Rhizosph of Redu on Reduc plain in F aches): aches): mches): photos,	tes (B13) Odor (C1) heres along ced Iron (C stion in Ploy Remarks)	Living Rc 4) ved Soils wet spections)	Second Wa Se Dri Dri Dro Cra (C6) Sa Sh FA	Iary Indicators (2 or more required) Iter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ainage Patterns (B10) /-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)

Project/Site: Scheiber Biological Resources Asse	ssment	_ City/County:Lincoln / Placer	Sampling Date: 9/19/2011	
Applicant/Owner:			State: <u>CA</u>	Sampling Point:SP3
Investigator(s): Sam Bacchini & Dan Neal		Section, Township, Range:S1	7, T12N, R6E	MDB&M
Landform (hillslope, terrace, etc.): Terrace		Local relief (concave, convex,	none):Convex	Slope (%):0-1%
Subregion (LRR): <u>C - Mediterranean California</u>	Lat:	Long:		Datum:NAD83
Soil Map Unit Name: 141, Cometa-Fiddyment con	nplex, 1 to 5 j	percent slopes	NWI classif	cation:Hydric
Are Vegetation Soil or Hydrology Are Vegetation Soil or Hydrology Are Vegetation Soil Soil or Hydrology SUMMARY OF FINDINGS - Attach site n	significani naturally p nap showin	tly disturbed? Are "Normal problematic? (If needed, e g sampling point locatio	Circumstances" explain any answ ns, transects	present? Yes () No () ers in Remarks.) s, important features, etc.
Hydrophytic Vegetation Present? Yes (Hydric Soil Present? Yes (Wetland Hydrology Present? Yes (Remarks: Parcel was mowed in connection with material of the soil is naturally proble which was taken at a high point, lack	No (No (No (n normal farm ematic, but re s the requisite	Is the Sampled Area within a Wetland? hing practices, making identif d parent indicator hydric soil hydrophytic vegetation or w	Yes O ication of vege indicator (TF2 retland hydrolo	No () tation difficult. The red parent) is present. This data point, gy.
VEGETATION				

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant Species
1 <i>.N/A</i>				That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.	,			
Total Cove	r. %			- Percent of Dominant Species
Sapling/Shrub Stratum				
1. <i>N/A</i>				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 =
4.				FACW species x 2 = 0
5.	•			FAC species x 3 =
Total Cover	. %			FACU species x 4 =
Herb Stratum				UPL species 100 x 5 = 500
1.Avena fatua	96	Yes	Not Listed	Column Totals: 100 (A) 500 (B)
² .Hemizonia congesta	2	No	Not Listed	
3. Croton setigerus	1	No	Not Listed	Prevalence Index = B/A = 5.00
4. Phalaris sp.	1	No	Not Listed	Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.	·	-		Prevalence Index is ≤3.0 ¹
7.				Morphological Adaptations ¹ (Provide supporting
8.				- data in Remarks or on a separate sheet)
Total Cover	100%			- Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	100.70			
1 <i>.N/A</i>				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total Cover	: %			Hydrophytic
% Bare Ground in Herb Stratum 0%% % Cover	of Biotic (Crust ()	%	Vegetation Present? Yes No (•)
Remarks' Property owner indicated that nareal norm	nally con	toine dry f	armed wil	d out and was recently mayed pursuant to his
normal farming practices. This sample po	int was d	lominated	hy Avena	fatua
normal farming practices. This sample pe	int was u	ionninateu	by Avena.	latua.

Sampling Point: <u>SP3</u>

Profile Des	cription: (Describe t	o the de	pth needed to docur	nent the	indicator	or confir	m the abs	ence of	f indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	k Feature	es Type ¹		Textu	re ³	Remarks
0.12"	5 VP 3/4	00	5 VP 3/1	5	<u></u>	<u></u>	Sandy lor		Liniform soil stratum
0-12	<u>5 TK 5/4</u>	- 90	$\frac{J I K J I}{10 N D 5/2}$	- <u> </u>					
			<u>10 YR 5/2</u>		<u> </u>	M			
12" =									
Bottom							<u> </u>		
				• •••••••••	• •••••••••••••••••••••••••••••••••••••				
				• •	• •••••••••				
¹ Type: C=C	oncentration, D=Depl	etion, RI	M=Reduced Matrix.	² Locatio	n: PL=Poi	e Lining, F	RC=Root (Channel	, M=Matrix.
³ Soil Texture	es: Clay, Silty Clay, S	andy Cla	ay, Loam, Sandy Clay	Loam, S	andy Loar	n, Clay Lo	am, Silty (Clay Loa	am, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil I	ndicators: (Applicabl	e to all L	RRs, unless otherwise	noted.)			Indica	ators for	r Problematic Hydric Soils:
Histoso	I (A1)		Sandy Redo	x (S5)				cm Mu	ick (A9) (LRR C)
Histic E	pipedon (A2)		Stripped Ma	atrix (S6) kv Minor) (51/E1)			cm Mu	ick (A10) (LRR B) 1 Vortio (E18)
Hvdroa	en Sulfide (A4)			ved Matr	ix (F2)			Red Par	ent Material (TF2)
Stratifie	d Layers (A5) (LRR C	;)	Depleted M	atrix (F3)		Ĥ	Other (E	xplain in Remarks)
1 cm M	uck (A9) (LRR D)		Redox Darl	surface	e (F6)				
Deplete	ed Below Dark Surface	e (A11)	Depleted D	ark Surfa	ace (F7)				
	ark Sufface (A12) Mucky Mineral (S1)			ressions (e (Fa)	(F8)		⁴ Indic	atore of	f bydronbytic vegetation and
Sandy	Gleved Matrix (S4)			ia (i a)			We	etland h	vdrology must be present.
Restrictive	Layer (if present):								, <u>, , , , , , , , , , , , , , , , , , </u>
Туре:На	rdpan layer								
Depth (ir	nches):12"						Hydri	c Soil P	Present? Yes 💿 🛛 No 🔿
Remarks: R	ed Parent Material	(TF2) i	ndicator present, as	red lay	er entirel	y within	top 12" o	f test p	it. Hardpan layer at 12" prevented
d	eeper excavation a	ıd evalı	ation. Some deplet	ion visi	ble in this	s sample.			
)GY								
Wetland Hy	drology Indicators:							Second	any Indicators (2 or more required)
Primary Ind	icators (any one indic	ator is su	(fficient)						iter Marks (B1) (Riverine)
	Water (A1)		Salt Crust	(B11)					diment Denosits (B2) (Riverine)
High W	ater Table (A2)		Biotic Cru	(= · · ·) st (B12)					ft Deposits (B3) (Riverine)
Saturat	ion (A3)		Aquatic In	vertebra	tes (B13)			Dra	ainage Patterns (B10)
Water I	Marks (B1) (Nonriveri	ne)	Hydrogen	Sulfide	Odor (C1)			Dry	-Season Water Table (C2)
Sedime	ent Deposits (B2) (No r	riverine) 🗍 Oxidized I	Rhizospł	neres along	g Living Ro	oots (C3)	Thi	in Muck Surface (C7)
Drift De	eposits (B3) (Nonrive	ine)	Presence	of Redu	ced Iron (C	24)		Cra	ayfish Burrows (C8)
Surface	e Soil Cracks (B6)		Recent Iro	n Redu	ction in Plo	wed Soils	(C6)	Sal	turation Visible on Aerial Imagery (C9)
	tion Visible on Aerial I	magery (B7) Other (Ex	plain in F	(emarks)				allow Aquitard (D3)
Field Obee	stallieu Leaves (B9)								C-Neutral Test (D5)
Surface Ma	tor Procent? V	\sim	No 🙃 Depth (in	choe).					
Water Table	Present? V	େ () ଜ ()	No (Depth (in	ches):					
Saturation F	Present? V		No 🕢 Depth (in	ches).					
(includes ca	apillary fringe)	es (We	tland Hyd	rology	Present? Yes 🔿 No 💽
Describe Re	ecorded Data (stream	gauge, i	nonitoring well, aerial	photos,	previous ir	spections)), if availat	le:	
Google Ea	rth satellite imager	y dated	6/13/2011.						
Remarks:Sa	ample point taken a	t a high	point. No wetland	hydrol	ogy indic	ators wer	e present	at this	location.
98 Army Corp	os or Engineers								

Project/Site: Scheiber Biological Re	City/County:Lincol	n / Placer	Sampling Date:9/19/2011					
Applicant/Owner:			-	St	ate:CA	Sampling F	oint:SP4	
Investigator(s): Sam Bacchini & Dan	Neal		Section, Township,	Range:S17,	T12N, R6E	MDB&M		
Landform (hillslope, terrace, etc.): Terr	ace		Local relief (conca	/e, convex, n	one):Concav	e	Slope	(%):1-2%
Subregion (LRR):C - Mediterranean	_	Long:			Datum:	NAD83		
Soil Map Unit Name: 182, San Joaqui	n-Cometa san	dy loams, 1 t	to 5 percent slopes		NWI classi	ication:Hydri	ic	
Are climatic / hydrologic conditions on t	he site typical fo	or this time of y	rear?Yes 💽 🛛 N	٥ <mark>ᢕ</mark> (If	no, explain in	Remarks.)		
Are Vegetation 🗙 Soil 🗌 or H	lydrology	significantl	y disturbed? A	re "Normal C	ircumstances'	present? Ye	es 💽	No 🔿
Are Vegetation Soil 🗙 or H	fydrology	naturally p	roblematic? (f needed, ex	plain any answ	ers in Remar	ks.)	
SUMMARY OF FINDINGS - A	ttach site m	ap showing	g sampling poin	t location	s, transect	s, importa	nt feat	ures, etc.
Hydrophytic Vegetation Present?	Yes 🔘	No 💽						
Hydric Soil Present?	Yes 🛞	No 🛞	Is the Sam	led Area				
Wetland Hydrology Present?	Yes 🛞	No 🔘	within a We	tland?	Yes C) No 🧿	9	
Remarks:Parcel was mowed in co material of the soil is nat appeared to be in a wetla	nnection with turally problem and, but conta	normal farm natic, but rec ins borderline	ing practices, mak l parent indicator h e upland vegetation	ing identific ydric soil iı 1.	cation of veg idicator (TF2	etation diffic ?) is present.	cult. The . This sa	e red paren imple point
VEGETATION								
	\	Absolute	Dominant Indicate	r Domin	ance Test wo	rksheet:		
LICE SUBLUM (USE SCIENUIC NAMES	.)	70 Cover	opecies rotatus	Mumbe	r of Dominant	Spaciae		

1. <i>N/A</i>				That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 2 (B)
4.				- Percent of Dominant Species
Total Cover: Sapling/Shrub Stratum	%			That Are OBL, FACW, or FAC: 50.0 % (A/B)
1. <i>N/A</i>				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				FAC species 60 x 3 = 180
Total Cover:	%			FACU species x 4 = 0
Herb Stratum				UPL species 40 x 5 = 200
¹ Lolium multiflorum	60	Yes	FAC	Column Totals: 100 (A) 380 (B)
² ·Avena fatua	37	Yes	Not Listed	
³ . Croton setigerus	2	No	Not Listed	Prevalence Index = B/A = 3.80
⁴ . <i>Hemizonia congesta</i>	1	No	Not Listed	Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0'
7				 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	100%			
<u> </u>				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total Cover: % Bare Ground in Herb Stratum 0 % % Cover (of Biotic C	Crust	0 %	─ Hydrophytic Vegetation Present? Yes No ●
Pomarke: The successful in this complementation		h	<u></u>	the dominance test. The property symperiodicated
that parcel normally contains dry-farmed v	vild oat,	and was	es not, satisf	owed pursuant to his normal farming practices.

Sampling Point: SP4

Profile Des	cription: (Describe t	to the de	pth needed to doc	ument the	e indica	tor or confi	rm the absence of	indicators.)	
Depth (inches)	Matrix Color (moist)	%	Rec Color (moist)	lox Featur	es Typ	be1 Loc2	Texture ³	Remarks	
0-4"	5 YR 3/4	74	5 YR 5/8	2.5	 C	M	Loam		
		<u> </u>	10 YR 2/2	 1	- <u>-</u>	<u></u>			
4-6"	10 YR 4/3	65	10 YR 2/2		- <u>~</u>	<u></u>			
	10 1 K 4/3		10 TK 2/2		- <u>C</u>				
	5 ND 4/2		<u>10 YK 5/3</u>		- <u>D</u>	<u>M</u>			
0-8"	<u>5 YK 4/3</u>	/4	<u>10 YR 2/1</u>	25	- <u>C</u>	<u></u> <u>M</u>		· · · · · · · · · · · · · · · · · · ·	
			7.5 YR 5/8	1	<u> </u>	<u>M</u>	····		
8" =			đ H				·····		
Bottom			• http://www.autore.com/autore/a		_				
'Type: C=C ³ Soil Textur	Concentration, D=Depl	letion, RN Sandy Cla	/l≂Reduced Matrix. w Loam Sandy Cla	Locati ^a	on: PL= Sandy I	Pore Lining,	RC=Root Channel	, M=Matrix. m_Silt Loam_Silt Loamy Sand_Sand	
Hydric Soil	Indicators: (Applicabl	e to all 1	RRs unless otherwi	ise noted)	sanuy L	.oani, Osay L	Indicators for	Problematic Hydric Soils	
Histoso	I (A1)		Sandy Re	dox (S5)			1 cm Mu	ck (A9) (LRR C)	
Histic E	pipedon (A2)		Stripped	Matrix (S6)		2 cm Mu	ck (A10) (LRR B)	
Black H	listic (A3)		Loamy M	ucky Mine	ral (F1)		Reduced	l Vertic (F18)	
Hydrog	en Sulfide (A4)		Loamy G	leyed Mati	rix (F2)		× Red Pare	ent Material (TF2)	
	ed Layers (A5) (LRR C	(ت		Matrix (F3	5) 0 (EB)		U Other (E	xplain in Remarks)	
	uuk (A9) (LKK D) ed Below Dark Surface	e (A11)		ark Suffac Dark Surf	е (го) ace (F7	'n			
	ark Surface (A12)	e (evil)		epressions	605 (F8) 6 (F8)	/			
Sandy	Mucky Mineral (S1)		Vernal Po	ools (F9)	~~/		⁴ Indicators of	hydrophytic vegetation and	
Sandy	Gleyed Matrix (S4)		<u>1</u>				wetland h	ydrology must be present.	
Restrictive	Layer (if present):								
Type:Ha	rdpan layer								
Depth (ir	1ches):8"						Hydric Soil P	resent? Yes 💽 🛛 No 🔿	
Remarks: R	Red Parent Material	(TF2) i	ndicator present,	as first re	ed layer	r entirely w	vithin top 12" of t	est pit. Hardpan layer at 8"	
p	revented deeper ex	cavation	n and evaluation.	Distinct s	stratific	eation with	some depletion v	isible at this sample pit.	
HYDROLO	DGY								
Wetland Hy	drology Indicators:	,,				******	Second	ary Indicators (2 or more required)	
Primary Ind	icators (any one indic	ator is su	fficient)				Wa	ter Marks (B1) (Riverine)	
Surface	e Water (A1)		Sait Cru	ıst (B11)				liment Deposits (B2) (Riverine)	
High W	/ater Table (A2)		Biotic C	rust (B12)			Drif	t Deposits (B3) (Riverine)	
🗍 Saturat	tion (A3)		Aquatic	Invertebra	ates (B1	3)	Drainage Patterns (B10)		
Water I	Marks (B1) (Nonriver i	ine)	Hydroge	en Sulfide	Odor (C	C1)	Dry	-Season Water Table (C2)	
Sedime	ent Deposits (B2) (No r	nriverine) 🗙 Oxidized	d Rhizospl	heres al	long Living F	Roots (C3) 🔲 Thi	n Muck Surface (C7)	
Drift De	eposits (B3) (Nonrive i	rine)	Present	e of Redu	iced Iroi	n (C4)	Cra	yfish Burrows (C8)	
Surface	e Soil Cracks (B6)		Recent	Iron Redu	ction in	Plowed Soils	s (C6) 🗌 Sat	uration Visible on Aerial Imagery (C9)	
Inunda	tion Visible on Aerial I	magery (B7) 🗌 Other (E	Explain in I	Remark	s)	Sha	allow Aquitard (D3)	
Water-	Stained Leaves (B9)						FAC	C-Neutral Test (D5)	
Field Obse	rvations:								
Surface Wa	ater Present? Y	es C	No 💽 Depth	(inches):					
Water Table	e Present? Y	es C	No 💽 Depth	(inches):					
Saturation I	Present? Y	es C	No 💽 Depth	(inches):		w	etland Hydrology	Present? Yes 💽 No 🔿	
Describe R	ecorded Data (stream	gauge, r	monitoring well, aeri	al photos,	previou	is inspection	s), if available:		
Google Ea	arth satellite imager	y dated	6/13/2011.	-					
Remarks:S	ample point taken a	it a depr	ession visible in (Google E	arth sa	tellite imag	ery.		
				-			-		
1									
US Army Corj	ps of Engineers							A & West and a second second second second second second second second second second second second second second	

Project/Site: Scheiber Biological Resources Assessment	City/County:Lincoln / Placer	Sampling Date:9/19/2011	
Applicant/Owner:	State:CA	Sampling Point:SP5	
Investigator(s):Sam Bacchini & Dan Neal	Section, Township, Range:S17, T12N, R6E	MDB&M	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none):None	Slope (%):0%	
Subregion (LRR): C - Mediterranean California Lat:	Long:	Datum:NAD83	
Soil Map Unit Name: 182, San Joaquin-Cometa sandy loams, 1 to	5 percent slopes NWI classi	fication:Hydric	
Are climatic / hydrologic conditions on the site typical for this time of year Are Vegetation Soil or Hydrology significantly Are Vegetation Soil or Hydrology naturally provide the site map showing SUMMARY OF FINDINGS - Attach site map showing	ear? Yes i No (If no, explain in disturbed? Are "Normal Circumstances" oblematic? (If needed, explain any answ sampling point locations, transect	Remarks.) ' present? Yes	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:Parcel was mowed in connection with normal farmin wetland indicators, including the red parent material	Is the Sampled Area within a Wetland? Yes C ng practices, making identification of veg soil indicator, were present at this sample	No () etation difficult. None of the e point.	

	VE	EG	E	T/	٩T	10	ΟN
--	----	----	---	----	----	----	----

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant Species
1. <i>N/A</i>				That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.				
Total Cove	r' %			- Percent of Dominant Species
Sapling/Shrub Stratum	·			
1. <i>N/A</i>				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				FAC species 25 x 3 = 75
Total Cover	: %			FACU species x 4 =
Herb Stratum	1101000100			UPL species 75 x 5 = 375
1-Avena fatua	75	Yes	Not Listed	Column Totals: 100 (A) 450 (B)
2.Lolium multiflorum	25	Yes	FAC	
3.				Prevalence Index = B/A = 4.50
4.	·			Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7.				Morphological Adaptations ¹ (Provide supporting
8.	-			data in Remarks or on a separate sneet)
Total Cover	100%			Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	100 /0			
1. <i>N/A</i>				¹ Indicators of hydric soil and wetland hydrology must
2				be present.
Total Cover	: %			Hydrophytic
% Bare Ground in Herb Stratum0 % Cover	of Biotic C	Crust 0	%	Present? Yes No 💿
Remarks: The property owner indicated that parcel	normally	contains o	lry-farmed	wild oat, and was recently mowed pursuant to his
normal farming practices.				

Sampling Point: SP5

Depth	Matrix			Redox	Feature	es					
(inches)	Color (moist)	%	Color ((moist)	%	Type1	_Loc ²	Textu	re ³	Remarks	
0-14"	7.5 YR 3/4	98	7.5 YR 2	2/1	2	С	М	Loam		Uniform stratum.	
148 -					·	•		·			
14" =					*****			·			
Bottom	<u>k-d</u>				·····			<u> </u>			
			·				-	·			
			·				<u> </u>	· ·			
		lation DN	I⊯Bodupod	Motrix	² Leoptic				bornel		
oil Texture	es: Clay Silty Clay S	Sandy Cla	v Loam S	andy Clav I	Locaiit Loam S	andv Loan	e ∟ininy, ⊧ n_Clav Lo:	am Silty C	lav Loar	m≕maunx. n Silt Loam Silt Loamv San	t San
vdric Soil la	dicators: (Applicabl	le to all 1	Rs unless	s of herwise	noted)	andy Loan	n, olay Los	Indica	tors for	Problematic Hydric Soils	4, Oan
Histosol	(A1)			Sandv Redox	(S5)				cm Muc	k (A9) (LRR C)	
_] Histic E∣	pipedon (A2)			Stripped Ma	trix (S6))		2	cm Muc	k (A10) (LRR B)	
🕇 Black H	istic (A3)			_oamy Muc	ky Minei	ral (F1)		R	Reduced	Vertic (F18)	
☐ Hydroge	en Sulfide (A4)			_oamy Gley	ed Matr	ix (F2)		R	Red Pare	nt Material (TF2)	
] Stratifie	d Layers (A5) (LRR (C)		Depleted Ma	atrix (F3)			Other (Ex	plain in Remarks)	
] 1 cm Mı	JCK (A9) (LRR D)		F	Redox Dark	Surface	e (F6)					
Deplete	d Below Dark Surfac	e (A11)		Depleted Da	ark Surfa	ace (F7)					
Sandy N	ark Sunace (A12) Auchy Mineral (S1)			Redox Depr	essions	(F8)		⁴ India	atora of l	hydrophytic vocatation and	
Sandy (Reved Matrix (S4)			venar room	5(19)			muic	ators or i stland hv	drology must be present	
estrictive	Laver (if present):										
Tyne [.]											
Type: Depth (in	ches):							Hydric	- Soil Pr	esent? Yes 🔿 No 🤇	
Type: Depth (in Remarks: T	ches): he Red Parent Mat	terial (TI	-2) soil in	dicator is	not pre	sent, as tl	ie red lay	Hydric ver extend	z Soil Pr Is deepe	esent? Yes () No (or than the first 12" of the t	• test pi
Type: Depth (in emarks: T /DROLO	ches): he Red Parent Mat GY drology Indicators:	terial (TI	²) soil in	dicator is	not pre	sent, as th	ne red lay	Hydric ver extend	s Soil Pro	esent? Yes (No (er than the first 12" of the t	test pi
Type: Depth (in emarks: T /DROLO /etland Hy	ches): he Red Parent Mat GY drology Indicators: cators (any one indic	terial (TI	2) soil in	dicator is	not pre	sent, as th	ne red lay	Hydric ver extend	Soil Professional Seconda	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine)	• test pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1)	terial (TI	fficient)	dicator is	not pre	sent, as th	ie red lay	Hydric ver extend	Seconda	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine	etest pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) afer Table (A2)	ator is su	fficient)	dicator is Salt Crust	(B11)	sent, as th	ne red lay	Hydric ver extend	s Soil Pri ls deepe Seconda Wate Sedi	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi] Surface] High Wi Saturati	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3)	ator is su	fficient)	dicator is Salt Crust Biotic Crus	(B11) (B12) (etebra	sent, as th	ne red lay	Hydric ver extend	Seconda	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) page Patterns (B10)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface High Water M	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriver	ator is su	fficient)	dicator is Salt Crust Biotic Crust Aquatic Inv Hydrogen	(B11) (B12) vertebra Sulfide (tes (B13)	ne red lay	Hydric ver extend	Seconda Seconda Wate Sedi Drift Drai Drv-	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2)	est pi
Type: Depth (in emarks: T /DROLC /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No	ator is su ine)	fficient)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F	(B11) (B11) (B12) vertebra Sulfide (tes (B13)	ne red [ay	Hydric /er extend	Seconda Seconda Wate Seci	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requirer marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7)	est pi
Type: Depth (in iemarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime Drift De	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive	terial (TI ator is su ine) nriverine rine)	(12) soil in	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of	(B11) (B11) (B12) vertebra Sulfide (Rhizosph	tes (B13) Odor (C1) neres along ced Iron (C	te red lay	Hydric ver extend	Seconda Seconda Seconda Sedi Drift Drain Dry- Thin Crav	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8)	est p
Type: Depth (in iemarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water M Sedime Drift De Surface	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	ator is su ine) nriverine rine)	fficient)	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduk n Reduk	tes (B13) Odor (C1) neres along ced Iron (C	te red lay	Hydric /er extend	Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) ration Visible on Aerial Image	erv (CS
Type: Depth (in emarks: T /DROLC /etland Hy rimary-Indi Surface High Wa Saturati Water M Sedime Drift De Surface	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial	ator is su ine) nriverine rine)	fficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exc	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro Living Ro :4)	Hydric ver extend	Seconda Seconda Seconda Seconda Orifi Draii Dry- Thin Cray Satu Shal	esent? Yes () No (or than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) aration Visible on Aerial Image low Aquitard (D3)	est pi
Type: Depth (in emarks: T /DROLO /etland Hy rimary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9)	ine) ine) iniverine ine)	12) soil in	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Rc (4) wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Sedi Drain Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est provident
Type: Depth (in temarks: T YDROLO Yetland Hy Yrimary Indi Surface High Wa Saturati Vater M Saturati Drift De Surface Inundat Water-S ield Obsei	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations:	ine) ine) ine) ine) inagery (Ficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc n Reduc olain in F	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks)	tiving Rc Living Rc (4) wed Soils	Hydric /er extend	Seconda Seconda Seconda Seconda Seconda Drain Drain Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Yrimary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Sield Obser	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present?	ine) nriverine rine)	Ficient)	dicator is Salt Crust Biotic Crust Aquatic Im Hydrogen Oxidized R Presence o Recent Iro Other (Exp Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc olain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro (4) wed Soils	Hydric /er extend	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Surface Wal Surface Wal	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y	ine) nriverine rine) Imagery (Soil in Fricient) Fricie	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ind Depth (ind	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduk n Reduk olain in F ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Rc Uving Rc (4) wed Soils	Hydric /er extend	Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Water Surface Water Surface Mater S	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Y	ine) nriverine rine) Imagery (res () res ()		dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	tiving Ro (24) Wed Soils	Hydric ver extend (C6) Hydric (C6) (C6) (C6)	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC	esent? Yes () No (er than the first 12" of the t ry Indicators (2 or more requi er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundat Water-S Surface Wal Surface Wal Vater Table Saturation F includes ca	ches): he Red Parent Mat GGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Present? Y Present? Y	ine) nriverine rine) Imagery ('es () 'es ()	2) soil in fficient) Image: state	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	I Living Ro (4) wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Sedi Drift Drain Dry- Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in temarks: T YDROLO Yetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Wal Vater Table Saturation F includes ca Describe Re	ches): he Red Parent Mat GY drology Indicators: <u>cators (any one indic</u> Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y pillary fringe) corded Data (stream	ine) nriverine rine) Imagery ('es () 'es () i gauge, r	2) soil in (1) (1) (2) (2) (3) (3) (4) (4) (5) (5) (5) (5) (5) (5	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino Depth (ino Depth (ino Depth (ino Depth (ino	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C tion in Plo Remarks) previous in	tiving Ro Living Ro (4) wed Soils	Hydric ver extend (C6) [(C6) [(tland Hyd	Seconda Seconda Seconda Seconda Seconda Sedi Draii Draii Dry- Thin Satu Shal FAC rology P le:	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) rfish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Sedime Surface Inundat Water A Sedime Surface Surface Water Table Saturation F includes ca Describe Re Boogle Ear	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? resent Present Present Present P	ine) nriverine rine) Imagery ('es () 'es () 'es () 'es () 'es ()	2) soil in fficient) fficient) B7) No (No (No (No (No (No (13/2011	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth	(B11) (B11) (B12) vertebra Sulfide (hizosph of Redu n Redu n Redu olain in F ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in	tiving Rc (24) wed Soils wed Soils	Hydric ver extend	Seconda Second	esent? Yes No (er than the first 12" of the f ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) aration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Unundat Water Sedime Surface Surface Wal Water Table Saturation F includes ca Describe Re Boogle Ear Remarks: T	ches): the Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y Present? Y pillary fringe) corded Data (stream rth satellite imager	ine) nriverine rine) Imagery (res () res ()	2) soil in fficient) fficient) B7) No No No No No No No No No N	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ino Depth (ino Depth (ino Mell, aerial p L. point adja	(B11) (B11) (B12) vertebra Sulfide (Chizosph of Reduc n Reduc of	tes (B13) Odor (C1) Deres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro Living Ro (4) wed Soils wed Soils wed Soils	Hydric ver extend	Seconda Seconda Seconda Seconda Seconda Drift Draii Dry- Thin Cray Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more require er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Nater Table Saturation F includes ca Describe Re Google Eat Remarks: Th	ches): the Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y Present? Y pillary fringe) icorded Data (stream rth satellite imager is sample point with	ine) nriverine rine) Imagery (res () res () res () ry dated as taken	2) soil in fficient) fficient) 1	dicator is Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized F Presence o Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro (24) wed Soils spections) sample p	Hydric ver extend	Seconda Seconda Seconda Seconda Sedi Drift Draii Dry- Thin Cray Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Vater Table Saturation F Includes ca Describe Re Boogle Ear Remarks:Th	ches): he Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y Present? Y pillary fringe) coorded Data (stream rth satellite imager is sample point with	ine) nriverine rine) /magery (/es () /es () /es () / gauge, r y dated as taken	2) soil in fficient) fficient) B7) No () No () No () No () No () nonitoring v 6/13/2011 at a high p	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind well, aerial p L. point adja	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Ro (4) wed Soils spections) sample p	Hydric ver extend	Seconda Seconda Wate Sedi Drift Dry- Thin Cray Satu Shal FAC	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	ery (C9
Type: Depth (in Remarks: T YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser Surface Water Vater Table Saturation F includes ca Secribe Re Soogle Eas Remarks: T	ches): he Red Parent Mat A Red Parent Mat GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Present? Present? Y Present? Y Present? Y pillary fringe) icorded Data (stream rth satellite imager is sample point wa	ine) nriverine rine) /magery (/es () /es () /es () /es () /es () /as taken	2) soil in fficient)	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind well, aerial p I. point adja	(B11) (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	Living Ro Living Ro 4) wed Soils wed Soils wet spections) sample j	Hydric ver extend	Seconda Seconda Seconda Vate Sedi Drift Drain Dry- Thin Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	est pi
Type: Depth (in iemarks: T /DROLC /etland Hy rimary Indi Surface High Wa Saturati Water N Sedime Drift De Surface Inundat Water-S ield Obser urface Water Vater Table aturation F ncludes ca iescribe Re ioogle Eai emarks: Th	ches): he Red Parent Mat GY drology Indicators: <u>cators (any one indic</u> Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) vations: ter Present? Y Present? Y Present? Y pillary fringe) corded Data (stream rth satellite imager his sample point w	ine) nriverine rine) Imagery ('es () 'es () 'es () 'es () a gauge, r y dated as taken	2) soil in fficient) Image: state	dicator is Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Other (Exp Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind Depth (ind	(B11) (B11) (B12) vertebra Sulfide (Rhizosph of Reduc n Reduc olain in F ches): ches): ches): ches): ches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in the T1P4	tiving Rc (24) wed Soils wed Soils spections) sample p	Hydric ver extend	Seconda Seconda Seconda Seconda Seconda Orifi Drain Ory- Thin Cray Satu Shal FAC rology P le: wetland	esent? Yes No (er than the first 12" of the t ry Indicators (2 or more requir er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) mage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) rration Visible on Aerial Image low Aquitard (D3) -Neutral Test (D5)	eed) red) ory (C9

Project/Site: Peery Property	City/	County:Placer C	ounty	Sampling Date:10-19-12
Applicant/Owner:			State:CA	Sampling Point:SP6
Investigator(s):Sam Bacchini and Ammon Rice	Sed	tion, Township, Ra	ange:Sec17, T12N, R6E	7
Landform (hillslope, terrace, etc.): Terrace	Loc	al relief (concave,	convex, none):Concave	Slope (%):1-5%
Subregion (LRR):C - Mediterranean California	Lat:38.8862		Long:-121.3308	Datum:NAD 83
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to	9 percent slop	oes	NWI classific	ation:None
Are climatic / hydrologic conditions on the site typical for this	s time of year?	Yes 🕢 No ((If no, explain in R	emarks.)
Are Vegetation Soil or Hydrology	ignificantly distu	Irbed? Are	"Normal Circumstances" p	present? Yes 🔿 No 🙃
Are Vegetation Soil or Hydrology r	aturally problem	natic? (If n	leeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sar	nplina point l	ocations, transects.	important features, etc.
	~		,,,	
Hydrophytic Vegetation Present? Yes 🍘 N	o 💽			
Wetland Hydrology Present?	0 (®)	Is the Sample	d Area	N= C
Remarks: The parcel has been used as a used as an a	oricultural fiel	d for growing o	and for the res ()	NO ()
constructed through the site and after cons	truction was c	ompleted, the se	easonal wetlands were r	econtured.
VEGETATION				
Tree Strature (line econtific servers)	Absolute Dor	minant Indicator	Dominance Test work	sheet:
Tree Stratum (Use scientific names.)	% Cover Spe	cies? Status	Number of Dominant S	pecies
2				JIFAC. (A)
3			 Total Number of Domin Species Across All Stress 	ant to:
4				иа. (D)
" Total Cove			 Percent of Dominant Sp That Are OBL_EACIAL 	Decies
Sapling/Shrub Stratum			marvie obe, i viovi, i	(A/B)
1			Prevalence Index wor	ksheet:
2			Total % Cover of:	Multiply by:
3			OBL species	x1= 0
4			FACVV species	x 2 = 0
D				x3= 0
Herb Stratum	70		UPI species	x5 = aca
1.Croton setiger	30	Not Listed	Column Totale:	το (Δ) 250 (B)
2. Avena sp.		Not Listed		M (A) 200 (B)
3.			Prevalence Index	= B/A = 5.00
4			Hydrophytic Vegetatio	on Indicators:
5			Dominance Test is	>50%
6				S≤3.U'
7.			data in Remark	plations (Provide supporting s or on a separate sheet)
8	1.75 (000 K 7 1		Problematic Hydro	phytic Vegetation ¹ (Explain)
Voody Vine Stratum	r. <u>50</u> %			- • • •
1.			¹ Indicators of hydric so	il and wetland hydrology must
2.			be present.	
Total Cove	r: %		Hydrophytic	
8 Bare Ground in Herb Stratum 50 % % Cove	r of Biotic Crust	40 %	Present? Ye	s 🔿 No 🙆

Sampling Point: SP6

Depth	Matrix	07		Redox Featu	'es 1	1?	Taudu	
(incries)		%		noist) <u>%</u>	iype'			Remarks
0-6	<u>10YR 3/2</u>		5YR 4/6	50	- <u>D</u>	- <u>M</u>	Clay Loam	
6	<u>10YR 3/1</u>	50	7.5YR 4/6	5 50	D	M	Clay -	
			-					
			_					
			_					
Type: C=	Concentration, D=Dep	bletion, RI	 M≃Reduced I	Matrix. ² Locat	on: PL=Por	e Lining, F	RC=Root Channel, M	I=Matrix.
Soil Textu	ires: Clay, Silty Clay,	Sandy Cla	ay, Loam, Sa	andy Clay Loam,	Sandy Loan	n, Clay Lo	am, Silty Clay Loam,	Silt Loam, Silt, Loamy Sand, Sa
Hydric Soil	I Indicators: (Applicat	ole to all L	RRs, unless	otherwise noted.)		Indicators for P	roblematic Hydric Soils ⁴ :
Histos	iol (A1) Eninodon (A3)			andy Redox (S5)	4		1 cm Muck	(A9) (LRR C)
Black	Histic (A3)			amy Mucky Mine	eral (F1)		Reduced V	(ATU) (LRK B) ertic (F18)
Hydro	gen Sulfide (A4)			amy Gleyed Mai	rix (F2)		Red Parent	t Material (TF2)
Stratifi	ied Layers (A5) (LRR	C)	X Di	epleted Matrix (F	3)		Other (Expl	lain in Remarks)
<u>1 cm M</u>	Muck (A9) (LRR D)	<i></i>		edox Dark Surfac	e (F6)			
Deplet	ted Below Dark Surface	ce (A11)		epleted Dark Sur	ace (F7)			
Sandy	Mucky Mineral (S1)			ernal Pools (F9)	s (1 0)		⁴ Indicators of hy	/drophytic vegetation and
- Sandy	Gleyed Matrix (S4)		L				wetland hydr	rology must be present.
Restrictiv	e Layer (if present):							
Type:C	lay pan							
Depth ((inchas): 6						Distanting Orall Days	
	(inches). 0						Hydric Soli Pres	sent? Yes 💽 No 🖯
Remarks:							Hydric Soil Pres	
Remarks:							Hydric Soil Pres	sent? Yes 🂽 NO 🌔
Remarks:	OGY							
Remarks: YDROL Wetland F	OGY	:	ficient				Secondary	/ Indicators (2 or more required)
YDROL Wetland F	OGY Hydrology Indicators dicators (any one indic	: cator is su	ifficient)				Secondary	<u>/ Indicators (2 or more required)</u> Marks (B1) (Riverine)
Primary In Surfac	OGY Hydrology Indicators dicators (any one indic ce Water (A1)	: cator is su	ifficient)	Salt Crust (B11)			Secondary Water Sedim	/ Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3)	: cator is su	(fficient)	Salt Crust (B11) Biotic Crust (B12)	ates (B13)		Secondary Secondary Water Sedim Draina	<u>Andicators (2 or more required)</u> Marks (B1) (Riverine) tent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10)
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3)	: cator is su	ifficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide	ates (B13) Odor (C1)		Secondary Secondary Water Sedim Drift D Draina Dry-Se	A lndicators (2 or more required) Marks (B1) (Riverine) Nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2)
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura Water Sedim	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No	: cator is su rine) porriverine	(fficient) □ 5 □ 4 □ 4	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp	ates (B13) Odor (C1) heres along	Living Rc	Secondary Secondary Sedim Sedim Drift D Draina Dry-Se sots (C3) Thin M	A Indicators (2 or more required) Marks (B1) (Riverine) Marks (B2) (Riverine) Marks (B3) (Riverine) Marks (B3) (Riverine) Mage Patterns (B10) Muck Surface (C7)
Remarks: YDROL Wetland F Primary Ind Surfac High V Satura Vater Sedim Drift D	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No	: cator is su rine) prriverine priverine)	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red	ates (B13) Odor (C1) heres along iced Iron (C	Living Rc	Secondary Secondary Sedirr Sedirr Sedirr Drift D Draina Dry-Si oots (C3) Thin M	<u>Andrease (C7)</u> An Harrows (C8) <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u> <u>An Harrows (C8)</u>
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surfac	OGY Hydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver the Soil Cracks (B6)	: cator is su rine) porriverine erine)	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se toots (C3) Thin M Crayfi (C6) Satura	Arks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C
YDROL Wetland F Primary In Surfac High V Satura Water Drift D Drift C X Surfac Inunda	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat	: cator is su rine) parriverine prine) Imagery ((fficient) X X	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	Living Ro 4) wed Soils	Secondary Sedim Sedim Sedim Drift D Draina Dry-Se (C6) Satura Shallo	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C w Aquitard (D3)
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Vater Sedim Drift D X Surfac Unuda Water Water	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonrive nent Deposits (B2) (No Deposits (B3) (Nonrive ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9)	: cator is su rine) pariverine erine) Imagery ((B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se (C6) Satura Shallo FAC-N	<u>Andicators (2 or more required)</u> Marks (B1) (Riverine) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Ment Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C ww Aquitard (D3) Neutral Test (D5)
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surfac Inunda Water Field Obs	OGY Hydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver the Deposits (B2) (No Deposits (B3) (Nonriver the Solid Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) the revations:	: cator is su rine) prriverine prine) Imagery ((fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Secondary Water Sedim Sedim Drift D Draina Dry-Se oots (C3) Thin M Crayfit (C6) Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peposits (B3) (Riverine) peroperturbation (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C pw Aquitard (D3) Neutral Test (D5)
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Drift D Surface W Surface W	OGY Jydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) servations: /ater Present?	: cator is su rine) porriverine erine) Imagery (Yes O	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Secondary Sedim Sedim Sedim Drift D Draina Dry-Se Crayfi (C6) Satura FAC-N	Ar Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surface Water Tab	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) rervations: /ater Present?	rine) parriverine parriverine parrine) Imagery (Yes C	(B7) (0 No () No ()	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks)	I Living Ro 4) wed Soils	Secondary Second	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D X Surface Water Field Obs Surface W Water Tab Saturation	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) rervations: /ater Present? Deposent? Present?	rine) prine) prriverine prine) Imagery (Yes C Yes C	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Other (Explain in Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plor Remarks)	Living Ro 4) wed Soils	Secondary Secondary Sedirr Sedirr Sedirr Sedirr Drift D Draina Dry-Se oots (C3) Thin N Crayfi (C6) Satura Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (River
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface Water Tab Saturation (includes of Describe F	OGY iydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat -Stained Leaves (B9) rervations: /ater Present? De Present? Present? Present? A Present? Capillary fringe) Recorded Data (stream	rine) priverine priverine priverine prine) Imagery (Yes C Yes C Yes C	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Ro 4) wed Soils	Secondary Sedim Sedim Sedim Sedim Sedim Drift D Draina Dry-Se ots (C3) Thin M Crayfi (C6) Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Reason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C Divertical Test (D5) Desent? Yes No
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Surface W Water Tab Saturation (includes of Describe F	OGY dydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver Ce Soil Cracks (B6) ation Visible on Aerial r-Stained Leaves (B9) servations: //ater Present? Depresent? Present? Present? Action Strained Cata (stream	rine) priverine prine) Imagery (Yes () Yes () Yes () Yes ()	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Red Other (Explain in Depth (inches): Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	I Living Ro 4) wed Soils	Secondary Secondary Secondary Water Solar Prese Secondary Water Secondary Se	Arian Antice (Constraints) (Co
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface W Water Tab Saturation (includes of Describe F Remarks:	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat r-Stained Leaves (B9) nervations: /ater Present? Depresent? Present? Capillary fringe) Recorded Data (stream	rine) pariverine priverine prine) Imagery (Yes C Yes C Yes C n gauge, r	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches):	ates (B13) Odor (C1) heres along iced Iron (C ction in Plor Remarks) previous in	Living Ro 4) wed Soils	Secondary Second	Andicators (2 or more required) Marks (B1) (Riverine) Nent Deposits (B2) (Riverine) Deposits (B3
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift D Surface Water Tab Saturation (includes of Describe F Remarks:	OGY Hydrology Indicators dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) rervations: /ater Present? Depresent? Present? Present? Capillary fringe) Recorded Data (stream	rine) prriverine prriverine prine) Imagery (Yes C Yes C n gauge, r	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Rc 4) wed Soils	Secondary Sedim Sedim Sedim Sedim Drift D Draina Dry-Si Dry-Si Dry-Si Crayfi (C6) Shallo FAC-N	Arks (B1) (Riverine) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C Divertical Test (D5) Desent? Yes No
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Sedim Drift C Surface Water Tab Saturation (includes of Describe F Remarks:	OGY Jydrology Indicators dicators (any one indic the Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver thent Deposits (B2) (No Deposits (B3) (Nonriver Coeposits (B3) (Nonriver Coep	rine) porriverine porriverine prine) Imagery (Yes O Yes O Yes O Yes O	(fficient)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Red Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): eli, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	Living Ro 4) wed Soils	Secondary Secondary Water Solar Press Secondary Water Secondary Se	Arks (B1) (Riverine) Marks (B1) (Riverine) Marks (B1) (Riverine) Marks (B1) (Riverine) Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B3) (Riverine) Deposits (B10) eason Water Table (C2) Auck Surface (C7) sh Burrows (C8) ation Visible on Aerial Imagery (C Diversible on Aer
Remarks: YDROL Wetland F Primary In Surfac High V Satura Water Drift C X Surface W Water Tab Saturation (includes of Describe F Remarks:	OGY Jydrology Indicators idicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver nent Deposits (B2) (No Deposits (B3) (Nonriver ce Soil Cracks (B6) ation Visible on Aeriat r-Stained Leaves (B9) iervations: /ater Present? Present? Present? Present? Present? Ater Aresent? Present? Present? Present? Ater Aresent? Present? Ater Aresent? Ater Aresent Ater Aresent Ater Aresent Ater Aresent Ater Aresent Ater Ater Ater Ater Ater Ater Ater Ate	rine) priverine prine) Imagery (Yes C Yes C Yes C	(B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebr Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Other (Explain in Depth (inches): Depth (inches): Depth (inches): ell, aerial photos	ates (B13) Odor (C1) heres along iced Iron (C ction in Plo Remarks) previous in	I Living Ro 4) wed Soils	Secondary Sedim Water Solt Pres Sedim Sedim Drift D Draina Dry-Se Sots (C3) Thin M Crayfi (C6) Satura FAC-N Manad Hydrology Pre Ti available:	Arian Antiparties (e) No (Arian Antiparties (e) No (Arian Antiparties (2 or more required) Marks (B1) (Riverine) and the positis (B2) (Riverine) and the positis (Riverine) and the positis (Riverine) and the positis (Riverine) and the positis (Riverine) and the positis (Riverine) and

Project/Site: Peery Property	City/County:	Placer County	5	Sampling Date: 10-19-12	
Applicant/Owner:		State:	CA S	Sampling Point:SP7	
Investigator(s):Sam Bacchini and Ammon Rice	Section, Tov	nship, Range:Sec17, 7	T12N, R6E		
Landform (hillslope, terrace, etc.): Terrace	Local relief	concave, convex, none):Concave	Slope (%):1-5%	
Subregion (LRR):C - Mediterranean California	Lat:38.8862	Long:-121.	.3308	Datum:NAD 83	
Soil Map Unit Name: Cometa-Fiddyment complex,	2 to 9 percent slopes		VWI classifica	lion:None	
Are climatic / hydrologic conditions on the site typical for Are Vegetation Soil or Hydrology	or this time of year? Yes 💽 significantly disturbed?	No C (If no, Are "Normal Circu	explain in Rei imstances" pro	marks.) esent? Yes 🏹 🛛 No 💽	
Are Vegetation Soil or Hydrology Soil SUMMARY OF FINDINGS - Attach site m	naturally problematic? ap showing sampling	(If needed, explain point locations, t	n any answers r ansects, i	in Remarks.) mportant features, etc.	
Hydrophytic Vegetation Present? Yes (%) Hydric Soil Present? Yes (%) Wetland Hydrology Present? Yes (%)	No 🕢 No 🕥 Isthe No 🕥 withi	Sampled Area	Yes O	No 💽	
Remarks: The parcel has been used as a used as constructed through the site and after o	an agricultural field for g construction was complet	owing oats and has l ed, the seasonal weth	oeen disked. ands were re	A haul road was contured.	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				- Total Number of Dominant
3.				Species Across All Strata: 0 (B)
Total C Sapling/Shrub Stratum	Cover: 🦉 %			Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 = 0
4.				FACW species x 2 = 0
5.			**	FAC species x 3 =
Total C	Cover:			FACU species x 4 =
Herb Stratum	-3-28199921.3-1			UPL species x 5 = 300
1.Avena sp.	60		Not Listed	Column Totals: 60 (A) 300 (B)
2.				
3.				Prevalence Index = B/A = 5.00
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7				- Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
OTotal C				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	50 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.				be present.
Total C	Cover: %			Hydrophytic Vegetation
% Bare Ground in Herb Stratum 40 % %	Cover of Biotic C	rust	%	Present? Yes C No 💽
Remarks: Oat in the field had been recently mo	wed.			. 1

Sampling Point: $\underline{SP7}$

Profile Des	cription: (Describe	to the depth	needed to docur	nent the	indicator	or confirm	m the absence of indicators.)
Depth	Matrix		Redox	<pre>K Feature</pre>	s	<u>~</u>	
(inches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture [®] Remarks
0-6	7.5YR 4/3	95 7.:	5YR 4/6	5	D	<u>M</u>	Sandy Clay Loam
6	7.5YR 3/4	100					Clay Loam
	-						
				,			
		,					
		·		·			·
$\frac{1}{1}$		lation DM-D	aduced Metrix	21		- Lining D	
³ Soil Textur	es: Clav Silty Clav S	Sandy Clay 1	oam Sandy Clav	Locano Loam S	andv Loan	e cining, ro n Clav Loa	am Silfy Clay Loam Silt Loam Silt Loamy Sand Sand
Hydric Soil	Indicators: (Applicab	le to all I RRs	unless otherwise	noted)	unay coun	1, 014y 200	Indicators for Problematic Hydric Soils
Histosc	d (A1)		Sandy Redo	x (S5)			1 cm-Muck (A9) (LRR C)
	Epipedon (A2)		Stripped Ma	atrix (S6)			2 cm Muck (A10) (LRR B)
Black I	Histic (A3)		Loamy Muc	ky Miner	al (F1)		Reduced Vertic (F18)
Hydrog	jen Sulfide (A4)		Loamy Gley	ed Matri	x (F2)		Red Parent Material (TF2)
Stratifie	ed Layers (A5) (LRR (C)	Depleted M	atrix (F3))		Other (Explain in Remarks)
🗂 1 cm M	luck (A9) (LRR D)		Redox Dark	surface	• (F6)		Kuulaya
Deplete	ed Below Dark Surfac	e (A11)	Depieted D	ark Surfa	ice (F7)		
Thick E	Dark Surface (A12)		Redox Dep	ressions	(F8)		
Sandy	Mucky Mineral (S1)		Vernal Poo	ls (F9)			*Indicators of hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)						wetland hydrology must be present.
Restrictive	Layer (if present):						
Type:Cl	ay pan						
Depth (ii	nches): 6						Hydric Soil Present? Yes 🔿 No 💿
Remarks:							
							· · · · · · · · · · · · · · · · · · ·
Wetland Hy	ydrology Indicators:						Secondary Indicators (2 or more required)
Primary Ind	licators (any one indic	ator is suffici	ent)				Water Marks (B1) (Riverine)
Surfac	e Water (A1)		Salt Crust	(B11) ·			Sediment Deposits (B2) (Riverine)
High W	/ater Table (A2)		Biotic Cru	st (B12)			Drift Deposits (B3) (Riverine)
Satura	tion (A3)		Aquatic In	vertebrat	tes (B13)		Drainage Patterns (B10)
Water	Marks (B1) (Nonriver	ine)	Hydrogen	Sulfide (Odor (C1)		Dry-Season Water Table (C2)
Sedime	ent Deposits (B2) (No	nriverine)	Oxidized I	Rhizosph	eres along	I Living Ro	oots (C3) 🔲 Thin Muck Surface (C7)
Drift De	eposits (B3) (Nonrive	rine)	Presence	of Reduc	ed fron (C	4)	Crayfish Burrows (C8)
Surface	e Soil Cracks (B6)		Recent Iro	n Reduc	tion in Plo	wed Soils ((C6) Saturation Visible on Aerial Imagery (C9)
🔄 Inunda	tion Visible on Aerial	lmagery (B7)	Other (Ex	olain in R	temarks)		Shallow Aquitard (D3)
Water-	Stained Leaves (B9)						FAC-Neutral Test (D5)
Field Obse	ervations:						
Surface Wa	ater Present? Y	′es 🔿 — Ni	o 💽 🔹 Depth (in	ches):			
Water Tabl	e Present? γ	′es 🎧 🛛 No	Depth (in	ches):			
Saturation	Present? Y	(es 🔿 Ni	Depth (in	ches):			
(includes c	apillary fringe)			· —		Wet	tland Hydrology Present? Yes 🔿 No 💿
Describe R	ecorded Data (stream	i gauge, mon	itoring well, aerial	photos, p	previous in	spections).	, if available:
Remarks:							

Project/Site: Peery Property	City/County:Placer Coun	ty	Sampling Date:10-19-12	
Applicant/Owner:		State:CA	Sampling Point:SP8	
Investigator(s):Sam Bacchini and Ammon Rice	Section, Township, Range	Sec17, T12N, R		
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, cor	ivex, none):Convey	x Slope (%):1-5%	
Subregion (LRR):C - Mediterranean California Lat:38	. <u>8862</u> L	ong:-121.3308	Datum:NAD 83	
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to 9 percer	nt slopes	NWI class	ification:None	
Are Vegetation Soil or Hydrology significantl Are Vegetation Soil or Hydrology significantl Are Vegetation Soil or Hydrology naturally p SUMMARY OF FINDINGS - Attach site map showing	ly disturbed? Are "No problematic? (If need g sampling point loca	rmal Circumstances ed, explain any ans ations, transect	s" present? Yes A No () wers in Remarks.) ts, important features, etc.	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled A within a Wetland?	rea Yes (No 💽	
constructed through the site and after construction	al field for growing oats was completed, the sease	and has been disk onal wetlands wer	ted. A haul road was e recontured.	

	\bsolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	_Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4.		********		- Demonst of Deminant Chassics
Sapling/Shrub Stratum	%			That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.			1 h 	Total % Cover of: Multiply by:
3.		,		OBL species x 1 = 0
4.				FACW species x 2 = 0
5.				FAC species x 3 = 0
Total Cover:	%			FACU species 20 x 4 = 80
Herb Stratum	.5.000001			UPL species x 5 =
¹ .Centromadia fitchii	20		FACU	Column Totals: 20 (A) 80 (B)
2. Avena sp.			Not Listed	
3.				Prevalence Index = $B/A = 4.00$
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.			· <u> </u>	Prevalence index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	20 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.		b		be present.
Total Cover:	%	·		 Hydrophytic
% Bare Ground in Herb Stratum65 % % Cover	of Biotic C	crust2	0 %	Vegetation Present? Yes No •
Remarks: Oat in the field had been recently mowed.				

Sampling Point: SP8

Depth	cription: (Describe Matrix	to the de	ptn needed to docum Redox	Featur	e indicator es	or confiri	n the absence of i	ndicators.)	
(inches) Color (moist) %		%	Color (moist)	<u>%</u> Type ¹	Loc ²	Texture ³	Remarks		
0-6	7.5YR 4/1	20	7.5YR 4/4	80	<u>D</u>	<u>M</u>	Sandy Clay Loam	Red parent material	
6	7.5YR 3/2	20	7.5YR 4/6	80	<u>D</u>	<u>M</u>	Clay Loam		
¹ Type: C=C ³ Soil Texture Hydric Soil I Histoso Histic E Black H Hydrogr Stratifie 1 cm M Deplete Thick D Sandy I	oncentration, D=Dep es: Clay, Silty Clay, S ndicators: (Applicab l (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) (LRR 0) d Layers (A5) (LRR D) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1)	Letion, RM Sandy Cla le to all L1 C) e (A11)	A=Reduced Matrix. y, Loam, Sandy Clay I Rs, unless otherwise Sandy Redox Stripped Ma Loamy Muck Loamy Gley X Depleted Ma Redox Dark Depleted Da Redox Depr Vernal Pools	² Locatio _oam, S noted.) (S5) trix (S6) trix (S6) trix (S6) trix (S7) atrix (F3) Surface ark Surf- essions s (F9)) ral (F1) ix (F2) s) e (F6) ace (F7) 5 (F8)	e Lining, F	C=Root Channel, am, Silty Clay Loan Indicators for I 2 cm Muc Reduced Y Red Parei Other (Ex	M=Matrix. n, Silt Loam, Silt, Loamy Sand, Sand. Problematic Hydric Soils ⁴ : k (A9) (LRR C) k (A10) (LRR B) Vertic (F18) nt Material (TF2) plain in Remarks) hydrophytic vegetation and	
Sandy (Gleyed Matrix (S4)			/			wetland hy	drology must be present.	
Type:Cls	w pan								
Depth (ir	iches): 6						Hydric Soil Pre	esent? Yes 💽 👘 No 🔿	
. contained									
HYDROLC)GY						Coopda	nu Indicatora (2) or more required)	
Primary Indi	cators (any one indic	ator is su	fficient)				Seconda Wate	er Marks (B1) (Riverine)	
Surface High W Saturati Vater M Sedime Drift De Surface Inundat Water-S	Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No iposits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations:	ine) nriverine rine) Imagery (Salt Crust Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iron B7) Other (Exp	(B11) t (B12) vertebra Sulfide thizospl of Redu n Redu lain in F	ites (B13) Odor (C1) neres along iced Iron (C ction in Ploo Remarks)	Living Ro 4) ved Soils	(C6)	ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) low Aquitard (D3) -Neutral Test (D5)	
Surface Wa Water Table Saturation F (includes ca Describe Re Remarks:	ter Present? Y Present? Y Present? Y pillary fringe) ecorded Data (strean	res () res () res () n gauge, r	No Depth (ind No Depth (ind No Depth (ind nonitoring well, aerial p	ches): ches): ches): ches): ohotos,	previous in	Wet spections)	land Hydrology P , if available:	resent? Yes 💽 No 💭	
JS Army Corp	os of Engineers								

Applicant/Owner: State CA Sampling Points_SP) mvestgleart(S):Sam_Bacchin and Ammon Rice Section, Township, Range:Sec17, T12N, RGF. andform (hillslope, lerrace, etc): Local relife (concave, convex, nonc); Convex. Slope (%):1-5%, Slope (%):1	Project/Site: Peery Property		City/County	Placer Co	ounty	Sampling Date:1()-19-12
nvestigator(s):Sam Bacchini and Ammon Rice Section, Township, Range; Sec 17, T12N, R6F; andform (hillslope, terrace, etc.); Terrace Local reliaf (concave, convex, none); Convex Slope (%)1-5% Subregion (LRR):C - Mediterranean California Lat;38,8862 Long-121,308 Datum; NAD 83 Subregion (LRR):C - Mediterranean California Lat;38,8862 Long-121,308 Datum; NAD 83 Subregion (LRR):C - Mediterranean California Lat;38,8862 Long-121,308 Datum; NAD 83 Subregion (LRR):C - Mediterranean California Lat;38,8862 Long-121,308 Datum; NAD 83 Subregion (LRR):C - Mediterranean California Lat;38,8862 Long-121,308 Datum; NAD 83 Are Vegetation (S Sill or hydrology in any answers in Remarks.) SubMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Prosent? Yes (C No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) Hydrophytic Vegetation Prosent? Yes (C No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) Vettand Hydrology Present? Yes (C No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) No (C Hediteranean) No (C Hediteranean)	Applicant/Owner:				State:CA	Sampling Point:S]	P9
andform (hillslope, tarace, etc.): Terrace Local relief (concave, convex, none): Convex Stope (%):1_5% Subregion (LRR)CMediterranean California Lat:38.8862 Long121.338 Datum:(NAD 83 Solil Map Unit Name: Conneta-Fiddyment complex, 2 to 9 percent slopes NM classification/None Mare Conneta-Fiddyment complex, 2 to 9 percent slopes NM classification/None Are Vegetation Solil	Investigator(s): Sam Bacchini and Ammon Rice		Section, To	wnship, Ra	inge:Sec17, T12N, R6I	3	
Subregion (LRR):C - Mediterranean California Lat:38.8862 Long-121.3308 Detum:NAD 83 Soli Map Unit Name: Cometa-Fiddyment complex, 2 to 9 percent slopes NV C (if no.explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes (interpretation) No (interpretation) No (interpretation) Are Vegetation Soil interpretation Soil interpretation No (interpretation) No (interpretation) Are Vegetation Soil interpretation Soil interpretation Interpretation No (interpretation) State Vegetation Provide state map showing sampling point locations, transects, important features, etc. Hydrophysic Vegetation Prosont? Yes (interpretation) No (interpretation) Kemarks: No (interpretation) Is the Sampled Area within a Wetland? Yes (interpretation) Wetland Hydrology Present? Yes (interpretation) No (interpretation) No (interpretation) Remarks: No (interpretation) Is the Sampled Area within a Wetland? Yes (interpretation) No (interpretation) VEGETATION Interpretation No (interpretation) Dominant Indicator No (interpretation) No (interpretation) 1 Interpretatins Species? State	Landform (hillslope, terrace, etc.): Terrace		Local relief	(concave,	convex, none):Convex	Slop	e (%):1-5%
Soil Map Unit Name: Cometa-Fiddyment complex, 2 to 9 percent slopes NWI classificationNone Are climate / hydrologic conditions on the site typical for this time of year? Yes No (if no, explain in Romarke.) Are Vegetation[Soil] or Hydrology asignificantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Prosent? Yes No (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Prosent? Yes No Hydrophytic Vegetation Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Wetland Hydrology Prosent? Yes No Is the Sampled Area Intere Stratum	Subregion (LRR):C - Mediterranean California	Lat:38.8	862		Long:-121.3308	Datur	n:NAD 83
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (if no, explain in Remarks.) Are Vegetation Soil or Hydrology as printicantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes No Yes No Is the Sampled Area within a Wetland Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Tree Stratum (Use scientific names.) % Cover 1	Soil Map Unit Name: Cometa-Fiddyment complex, 2 to	9 percent	slopes		NWI classifi	cation:None	
Are Vegetation X Soil or Hydrology naturally problematic? Are "Normal Circumstances" present? Yes No end through the site and showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes No end through the site and showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes No end through the site and after construction was completed, the seasonal wetland? Yes No end through the site and after construction was completed, the seasonal wetlands were recontured. Tree Stratum (Use scientific names.) Absolute Dominant No end through the site and after construction was completed, the seasonal wetlands were recontured. VEGETATION Absolute Dominant Indicator Number of Dominant Species 1. Total Cover: % Oe Yes No end three of Dominant Species 3. Total Cover: % Yes No end three of Dominant Species Total % Cover of: Multiply by: 1. Total Cover: % Total Cover: % Yes No end three of Dominant Species 1. Total Cover: % Yes No end three of Dominant Species Total % Cover of: Multiply by: 2. Total Cover: % Yes Limed Total % Cover of: Multiply by: 3. <t< td=""><td>Are climatic / hydrologic conditions on the site typical for this</td><td>time of ye</td><td>ar?Yes 💽</td><td>No (</td><td>(If no, explain in F</td><td>Remarks.)</td><td></td></t<>	Are climatic / hydrologic conditions on the site typical for this	time of ye	ar?Yes 💽	No ((If no, explain in F	Remarks.)	
Are Vegetation Sol or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Hydrophytic Vegetation Present? Yes No Is the Sampled Area Wetland Hydrology Present? Yes No No Remarks: The parcel has been used as a used as an agricultural field for growing oats and has been disked. A haul road was constructed through the site and after construction was completed, the seasonal wetlands were recontured. VEGETATION Absolute Dominance Test worksheet: Number of Dominant Species 1.	Are Vegetation X Soil or Hydrology si	gnificantly	disturbed?	Are	"Normal Circumstances"	present? Yes C	No 🌘
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No No Remarks: The parcel has been used as a used as an agricultural field for growing oats and has been disked. A haul road was constructed through the site and after construction was completed, the seasonal wetlands were recontured. VEGETATION Tree Stratum (Use scientific names.) Absolute Dominant Indicator Species? Status Dominance Test worksheet: 1	Are Vegetation Soil or Hydrology	aturally pro	blematic?	(if ne	eeded, explain any answe	ers in Remarks.)	
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No Is the Sampled Area Wetland Hydroplogy Present? Yes No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Yes No No Is the Sampled Area Wetland Hydroplogy Present? Number of Dominant Species Number of Dominant Species In the Yes (R) No (R) 1.		howing	complin	a point l	postiono transcoto	important for	turos sta
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Wetland Hydrology Present? Yes No within a Wetland? Yes No No Remarks: The parcel has been used as an agricultural field for growing oats and has been disked. A haul road was completed, the seasonal wetlands were recontured. VEGETATION Tree Stratum (Use scientific names.) Åbsolute Dominant Indicator No Anter Prevalue of Dominant Species 1	Sommart of Findings - Attach site map s	nowing	samping	y point i	ocations, transects	, important lea	itures, etc.
Hydric Soll Present? Yes No Is the Sampled Area within a Wetland? Yes No No Is the Sampled Area within a Wetland? Yes No <	Hydrophytic Vegetation Present? Yes 🌘 No) 🛞					
Wetland Hydrology Present? Yes No within a Wetland? Yes No No Remarks: The parcel has been used as a used as an agricultural field for growing oats and has been disked. A haul road was constructed through the site and after construction was completed, the seasonal wetlands were recontured. No N	Hydric Soil Present? Yes 🕥 No) 🛞	ls th	ie Sampled	l Area		
Remarks: The parcel has been used as a used as an agricultural field for growing oats and has been disked. A haul road was constructed through the site and after construction was completed, the seasonal wetlands were recontured. VEGETATION Absolute Dominant Indicator % Cover Species? Status Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) 1.	Wetland Hydrology Present? Yes 💿 No	» 🔘	with	iin a Wetla	nd? Yes 🔿	No 💽	
constructed through the site and after construction was completed, the seasonal wetlands were recontured. VEGETATION Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) 2	Remarks: The parcel has been used as a used as an ag	ricultural	l field for g	growing o	ats and has been diske	d. A haul road w	as
Description Absolute % Cover Dominant Indicator Species? Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) 2.	constructed through the site and after const	ruction w	as comple	ted, the se	asonal wetlands were	recontured.	
VEGETATION Tree Stratum (Use scientific names.) Absolute Dominant Indicator 1.	_		•	·			
VEGETATION Tree Stratum (Use scientific names.) Absolute Dominant Indicator 1. Species? Status 1. Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) 2. Total Number of Dominant Species Across All Strata: 0 (B) 4. Total Cover: % Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A) 1. Total Cover: % That Are OBL, FACW, or FAC: 0 % (A) 3. Total Cover: % That Are OBL, FACW, or FAC: 0 % (A) 1. Total Cover: % Total % Cover of: Multiply by: 0 % (A) 3. Total Cover: % FACW species x 2 = 0 % FACW species x 2 = 0 % Multiply by: % 1 0 % % % % 1 = 0 % % % % 1 = 0 % % % % % % 1 = 0 % % </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Tree StratumAbsolute % CoverDominant Indicator Species?Dominance Test worksheet:1Species?Status2Total Number of Dominant Species Across All Strats:04Percent of Dominant Species That Are OBL, FACW, or FAC:04Percent of Dominant Species Across All Strats:05612323456712345679911<	VEGETATION						
Tree Stratum Willing Scientific names.) % Cover Species? Status 1.		Absolute	Dominant	Indicator	Dominance Test work	ksheet:	
1. Inat Are OBL, FACW, or FAC: 0 (A) 2. Inat Are OBL, FACW, or FAC: 0 (A) 3. Inat Are OBL, FACW, or FAC: 0 (A) 3. Inat Are OBL, FACW, or FAC: 0 (A) 4. Inat Are OBL, FACW, or FAC: 0 (B) 9 Fortal Cover: % Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % 1. Inat Are OBL, FACW, or FAC: 0 % (A) (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. Inat Are OBL, FACW, or FAC: 0 % (A) 1. <t< td=""><td>Tree Stratum (Use scientific names.)</td><td>% Cover</td><td>Species?</td><td>Status</td><td>Number of Dominant S</td><td>Species</td><td>antes e e e</td></t<>	Tree Stratum (Use scientific names.)	% Cover	Species?	Status	Number of Dominant S	Species	antes e e e
2. Total Number of Dominant 3. Total Number of Dominant 4. Percent of Dominant Species 5. Total Cover: 6. Y 7. Total Cover:	1				That Are OBL, FACW, -	or FAC:	(A)
3. Total Cover: % 4. Total Cover: % 1. Prevalence Index worksheet: 2. Total % Cover of: Multiply by: 3. OBL species x 1 = 0 4. FAC was pecies x 2 = 0 5. Total Cover: % FAC species x 3 = 0 FAC species x 3 = 0 FACU species x 4 = 0 UPL species 80 Nor Listed Column Totals: 80 x5 = 400 1. A. OBL species x 4 = 0 0 0 0 1. Total Cover: % FACU species x 4 = 0	2				Total Number of Domi	nant	(D)
Sapling/Shrub Stratum Total Cover: % 1. Prevalence Index worksheet: 2. Total % Cover of: Multiply by: 3. OBL species x 1 = 0 4. FACW species x 2 = 0 5. FAC species x 3 = 0 Herb Stratum FACU species x 4 = 0 1. Avena sp. 80 Nor Listed Column Totals: 80 (A) 400 (I) 2.	۵					ala.	(Б)
Sapling/Shrub Stratum Inter Ref Obe, FACW, of FAC. U % (AB 1. Prevalence Index worksheet: Inter Ref Obe, FACW, of FAC. U % (AB 3. OBL species x 1 = 0 4. FACW species x 2 = 0 5. FAC species x 3 = 0 FACU species x 4 = 0 UPL species x 4 = 0 UPL species 80 Nor Listed Column Totals: 80 (A) 400 4. OBL species 80 (A) 5. OBL species 80 (A) 6. OBL species 90 7. Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)	Total Cover	~ 0/2	· ·		 Percent of Dominant S That Are OBL_EACIAL 		5 (A/D)
I. Prevalence Index worksheet: 2. Total % Cover of: Multiply by: 3. OBL species x 1 = 0 4. FACW species x 2 = 0 5. Total Cover: % FAC species x 3 = 0 FACU species x 4 = 0 0 0 0 0 1. Avena sp. 80 Not Listed Column Totals: 80 (A) 400 0 2. . 9 Prevalence Index = B/A = 5.00 5 0 0 4. 3. 4. .	Sapling/Shrub Stratum	•					% ₀ (Α/Β)
2.Total % Cover of:Multiply by:3.OBL species $x \ 1 = 0$ 4.FACW species $x \ 2 = 0$ 5.FAC species $x \ 3 = 0$ Total Cover:%FAC species $x \ 4 = 0$ UPL species $x \ 4 = 0$ UPL species 80 Not Listed3.ObsectionColumn Totals:4.ObsectionPrevalence Index = B/A = 5.004.ObsectionDominance Test is >50%5.ObsectionObsection6.Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	1				Prevalence Index wo	rksheet:	
3. OBL species $x 1 =$ 0 4. FACW species $x 2 =$ 0 5. FAC species $x 3 =$ 0 FACU species $x 4 =$ 0 UPL species 80 Not Listed 1. Avena sp. 80 Not Listed 2. O Prevalence index = B/A = 5.00 4. O Hydrophytic Vegetation Indicators: Dominance Test is >50% 5. O Prevalence Index is <3.01	2				Total % Cover of:	Multiply	<u>v by:</u>
4. FACW species $x 2 = 0$ 5. FAC species $x 3 = 0$ Total Cover: % FACU species $x 4 = 0$ UPL species $x 4 = 0$ UPL species $x 4 = 0$ 1. Avena sp. 80 Not Listed Column Totals: 80 (A) 3. Prevalence Index = B/A = 5.00 4. Dominance Test is >50% Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	3				OBL species	x 1 =	0
5. FAC species $x 3 =$ 0 Total Cover: % FAC species $x 4 =$ 0 FAC species $x 4 =$ 0 UPL species $x 4 =$ 0 UPL species $x 4 =$ 0 UPL species $x 4 =$ 0 Column Totals: 80 (A) 400 (B) Prevalence Index = B/A = 5:00 Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is <3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a senarate sheet)	4.					x 2 =	0
Total Cover:%FACU species $x 4 = 0$ Herb StratumUPL species $x 0 x 5 = 400$ 1. Avena sp.80Not ListedColumn Totals: $x 0$ 2.3Prevalence Index = B/A = 5.00 4Hydrophytic Vegetation Indicators:5Dominance Test is >50%6	5				FAC species	x 3 =	0.
1. Avena sp.80Not ListedOPE species80 $x = 400$ 2.3.Column Totals:80(A)400(B)4. $= 500$ Hydrophytic Vegetation Indicators:5. $= 500$ 5. $= 500$ $= 50\%$ $= 50\%$ 6. $= 200$ Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	Herb Stratum	. %			FACU species	X4=	0
Interfactory Interfactory <t< td=""><td>1. Avena sp</td><td>80</td><td></td><td>Not Listed</td><td>OFL species</td><td>80 × 5 -</td><td>400 400 (D)</td></t<>	1. Avena sp	80		Not Listed	OFL species	80 × 5 -	400 400 (D)
3. Prevalence Index = B/A = 500 4. Hydrophytic Vegetation Indicators: 5. Dominance Test is >50% 6. Prevalence Index is ≤3.01 7. Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet)	2.					80 (A)	400 (D)
4. Hydrophytic Vegetation Indicators: 5. Dominance Test is >50% 6. Prevalence Index is ≤3.0 ¹ 7. Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	3.				Prevalence index	x = B/A =	5.00
5.	4				Hydrophytic Vegetati	ion Indicators:	
6 Prevalence Index is ≤3.0 ¹ 7 Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	5.				- 📓 Dominance Test is	s >50%	
7. Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	6.				Prevalence Index	is ≤3.0 ¹	
	7				Morphological Ada	aptations ¹ (Provide :	supporting sheet)

Remarks: Oat in the field had been recently mowed.

Total Cover:

Total Cover:

20 %

80 %

%

% Cover of Biotic Crust

% Bare Ground in Herb Stratum

Woody Vine Stratum

8.

1.

2.

No 💽

Problematic Hydrophytic Vegetation¹ (Explain)

Yes 🔿

be present.

Hydrophytic Vegetation Present?

%

¹Indicators of hydric soil and wetland hydrology must

Sampling Point: SP9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix Redox Features				1.002				
	mes Color (moist) % Color (moist) % Type1 0.10 7.5VD 2/4 20 7.5VD		 M	Candy Clay Law				
10	7.51K 3/4	 	$\frac{7.5 \text{YR} 4/6}{7.5 \text{YR} 4/6}$ 20		<u> </u>	<u>IVI</u>	Sandy Clay Loam	
10	7.5 Y K 3/4	0	<u>/.5YR 4/6</u>	_40	<u>D</u>	<u>M</u>	Clay Loam	
						·	AL_00_0, 0, 1, -, -, -, -, -, -, -, -, -, -, -, -, -,	
							Advanting for provide an end of the second se	
			. <u></u>	·				
			· ······					
'Type: C=C ³ Soil Textur	Concentration, D=Dep	letion, RN Sandy Cla	I≂Reduced Matrix. v. Loam, Sandy Clay I	Locatio	on: PL=Pon Sandy Loan	e Lining, R D. Clay Los	RC=Root Channel, M≃Matrix. am, Silty Clay Loam, Silt Loam, Silt	Loomy Sand, Sand
Hydric Soil I	Indicators: (Applicabl	e to all Li	RRs. unless otherwise	noted.)	anuy Loan		Indicators for Problematic Hvd	
Histoso	l (A1)		Sandy Redox	(S5)			1 cm Muck (A9) (LRR C)	
Histic E	pipedon (A2)		Stripped Ma	trix (S6))		2 cm Muck (A10) (LRR B))
Black H	listic (A3) en Sulfide (A4)		Loamy Much	ky Minei ed Matr	ral (F1) ix (F2)		Reduced Vertic (F18)	
Stratifie	en ounde (A4) ed Lavers (A5) (LRR (;)	Depleted Ma	atrix (F3))		Other (Explain in Remarks	s)
🔚 1 cm M	uck (A9) (LRR D)		Redox Dark	Surface	e (F6)			<i>*</i>
Deplete	ed Below Dark Surface	e (A11)	Depleted Da	irk Surfa	ace (F7)			
Sandy I	Ark Surface (A12) Mucky Mineral (S1)			essions s (E9)	(F8)		⁴ Indicators of hydrophytic year	etation and
Sandy	Gleyed Matrix (S4)			, (, 0)			wetland hydrology must be	present.
Restrictive	Layer (if present):							
Type:Cla	ay pan							
Depth (ir	nches): 10						Hydric Soil Present? Yes (No ()
Remarks:								
ļ								
HYDROLO	DGY							
Wetland Hy	drology Indicators:						Secondary Indicators (2 o	or more required)
Primary Ind	icators (any one indic	ator is su	fficient)				Water Marks (B1) (R	liverine)
Surface	e Water (A1)		Salt Crust	(B11)			Sediment Deposits (B2) (Riverine)
Hign W	ater Table (A2)			t (B12) ortobra	ton (P12)		Drift Deposits (B3) (F	Riverine)
	Marks (B1) (Nonriver	(ne)		Sulfide (Odor (C1)		Drainage Patients (D	able (C2)
C Sedime	ent Deposits (B2) (No	nriverine) Oxidized R	hizosph	ieres along	Living Ro	ots (C3) Thin Muck Surface (C7)
Drift De	eposits (B3) (Nonrive	rine)	Presence of	of Redu	ced Iron (C	4)	Crayfish Burrows (C	8)
Surface	e Soil Cracks (B6)		Recent Iron	n Reduc	ction in Ploy	wed Soils ((C6) Saturation Visible on	Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)							Shallow Aquitard (D3	3)
Vater-	Stained Leaves (B9)						FAC-Neutral Test (D	5)
Surface Wa	i vauoris: iter Present?		No 🍙 👘 Denth (inc	hes).				
Water Table	e Present? Y		No 💽 Depth (inc	thes):				
Saturation F	Present?		No C Depth (inc	hes):				
(includes ca	apillary fringe)			<u> </u>		Wet	land Hydrology Present? Yes	
Describe Re	ecorded Data (stream	gauge, n	nonitoring well, aerial p	notos,	previous in:	spections)	, it available:	
Pemarks: E	actives is a taxase	hia dan						
	calure is a lopogra	pine dep	12881011					
US Army Corr	os of Engineers		······································					<u> </u>
WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Peery Property		City/County:P1	acer County		Sampling Date: 10-19-12
Applicant/Owner:			State:CA	Sampling Point:SP10	
Investigator(s): Sam Bacchini and Ammon Rice		Section, Town	ship, Range:Se	c17, T12N, R	6E
Landform (hillslope, terrace, etc.): Terrace		Local relief (co	oncave, convex	, none):Convex	x Slope (%):1-5%
Subregion (LRR):C - Mediterranean California	Lat:38.8	3862	Long	:-121.3308	Datum:NAD 83
Soil Map Unit Name: Cometa-Fiddyment complex, 2	2 to 9 percent	slopes		NWI class	ification:None
Are climatic / hydrologic conditions on the site typical for	r this time of ye	ar? Yes 💽	NOC	(If no, explain ir	n Remarks.)
Are Vegetation Soil or Hydrology	significantly	disturbed?	Are "Norma	Il Circumstances	s" present? Yes 🎧 🛛 No 💽
Are Vegetation Soil or Hydrology	naturally pro	oblematic?	(If needed,	explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing	sampling p	oint locatio	ons, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes	No 🙆				
Hydric Soil Present? Yes 🙆	No 🌘	Is the S	Sampled Area		
Wetland Hydrology Present? Yes 💽	No 🛞	within	a Wetland?	Yes (🗋 No 💽
Remarks: The parcel has been used as a used as a constructed through the site and after construc	n agricultural onstruction w	l field for gro as completed	wing oats and l, the seasonal	l has been disk I wetlands wer	xed. A haul road was re recontured.

VEGETATION

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				. Total Number of Dominant
3.				Species Across All Strata: 0 (B)
4.				Porcent of Dominant Spacing
Total Cove Sapling/Shrub Stratum	r: %			That Are OBL, FACW, or FAC: 0 % (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of:Multiply by:
3.				OBL species x 1 = 0
4.			·	FACW species x 2 = 0
5.				FAC species x 3 =
Total Cover	%			FACU species to x 4 = 40
Herb Stratum				UPL species X6 x 5 = 200
1.Avena sp.	30		Not Listed	Column Totals: 50 (A) 240 (B)
² .Centromadia fitchii	10		FACU	
³ . Croton setiger	10		Not Listed	Prevalence Index = B/A = 4.80
4.				Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.	· ·			Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				Problematic Hydronbytic Vegetation ¹ (Explain)
Total Cover Woody Vine Stratum	^{::} 50 %			
1.				¹ Indicators of hydric soil and wetland hydrology must
2.	·			be present.
Total Cover	r: %	a . <u></u>		Hydrophytic Vegetation
% Bare Ground in Herb Stratum 50 % % Cover	r of Biotic C	Crust	%	Present? Yes O No 💿
Remarks: Trichostema lanceolatum present outside mowed.	of the sar	nple poin	t, elsewher	e in the feature. Oat in the field had been recently

SOIL

Sampling Point: SP10

Profile Des	cription: (Describe	to the de	pth neede	u to uocum	ent the	mulcator		n the absence	of indicators.)
Depth	Matrix			Redox	Feature	es			
(inches)	Color (moist)		Color (moist)		Type1			Remarks
0-8	<u>10YR 3/2</u>		7.5YR 4	/6		<u>D</u>	<u>M</u>	Sandy Clay Loa	m
8	10YR 3/3	60	7.5YR 4	/6	40	D	RC	Clay Loam	
						······			
									· · · · · · · · · · · · · · · · · · ·
									· · · · · · · · · · · · · · · · · · ·
		·				·			
¹ Type: C=C	oncentration, D=Dep	letion, RM	I=Reduced	Matrix.	² Locatio	n: PL=Pore	e Lining, R	C=Root Chann	el, M=Matrix.
³ Soil Texture	es: Clay, Silty Clay, S	Sandy Cla	y, Loam, S	andy Clay L	₋oam, S	andy Loam	i, Clay Loa	am, Silty Clay Lo	oam, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicabl	le to all Li	Rs, unless	s otherwise	noted.)			Indicators f	or Problematic Hydric Soils:
Histoso	l (A1)			andy Redox	(S5)				luck (A9) (LRR C)
	ipipedon (A2) listic (A3)			oamy Muck	(NX (S6) V Miner	ral (E1)			IUCK (A10) (LRR B) ed Vertic (E18)
Hydrog	en Sulfide (A4)			oamy Gleye	ed Matri	ix (F2)		Red Pa	arent Material (TF2)
Stratifie	d Layers (A5) (LRR 0	C)		Depleted Ma	ıtrix (F3)		Other (Explain in Remarks)
🗍 1 cm M	uck (A9) (LRR D)		F F	Redox Dark	Surface	e (F6)			
	ed Below Dark Surface	e (A11)		Depleted Da	rk Surfa	ace (F7)			
	Mucky Mineral (S1)			redox Depre	essions	(F8)		⁴ Indicators	of hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)			official conc	, (, 0)			wetland	hydrology must be present.
Restrictive	Layer (if present):								
Type:Cla	ay pan								
Depth (ir	nches): 8							Hydric Soil	Present? Yes 💽 No 🔿
Remarks:								— — — — —	
HYDROLO	DGY								
Wetland Hy	/drology Indicators:							Secor	dary Indicators (2 or more required)
Primary Ind	icators (any one indic	ator is su	fficient)					<u> </u>	/ater Marks (B1) (Riverine)
	e Water (A1)			Salt Crust ((B11)				adiment Deposite (P2) (Piverine)
High W	ater Table (A2)			Piotio Crue					CULTELL DEUUSIIS (DZ) INVELLUE
Saturat	ion (A3)			DIOLIC CIUS	t (B12)				rift Deposits (B3) (Riverine)
Water M				Aquatic Inv	t (B12) ertebra	tes (B13)			rift Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
	Marks (B1) (Nonriver	ine)		Aquatic Inv Hydrogen S	t (B12) ertebra Sulfide (tes (B13) Odor (C1)			rift Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
	Marks (B1) (Nonriver ent Deposits (B2) (No r	ine) nriverine		Aquatic Inv Hydrogen S Oxidized R	t (B12) ertebra Sulfide (hizosph	tes (B13) Odor (C1) neres along	Living Ro	S D D D D D Ots (C3)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7)
	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive	ine) nriverine rine)		Aquatic Inv Hydrogen S Oxidized R Presence c	t (B12) ertebra Sulfide (hizosph of Reduc	tes (B13) Odor (C1) neres along ced Iron (C	Living Ro	ots (C3)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8)
Sedime Drift De	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive e Soil Cracks (B6)	ine) nriverine rine)		Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	t (B12) ertebra Sulfide (hizosph of Reduc	tes (B13) Odor (C1) neres along ced Iron (C ction in Ploy	Living Ro 4) ved Soils (C66)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Sedime Drift De Surface	Marks (B1) (Nonriver ent Deposits (B2) (No r eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aerial I	ine) nriverine rine) magery () X 	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) rertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3)
Sedime Drift De Surface	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9)	ine) nriverine rine) magery () X 	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils ((C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Sedime Drift De Surface Inundat Field Obse Surface Wa	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations:	ine) nriverine rine) magery (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils ((C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Water-1 Field Obse	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: tter Present? Y	ine) nriverine rine) magery (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Rod 4) ved Soils ((C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Water-3 Field Obse Surface Wa Water Table	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y	ine) nriverine rine) magery (es () es ()) X X X X X X X X X X X X X X X X X X X	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (C6)	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water Table Saturation F (includes ca	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonrivel e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y Present? Y apillary fringe)	ine) nriverine rine) magery (es () es () fes ()) X X B7) D No O No O	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C stion in Plov Remarks)	Living Ro 4) ved Soils (ots (C3) C6) S S S S S S S S S S S S S	v Present? Yes No
Field Obse Surface Wa Water -1 Surface Wa Water Table Saturation F (includes ca Describe R	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y	ine) nriverine rine) magery (es C es C es C) X B7) No No No No No No No No	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F ches): ches): ches): ches): ches): ches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),		rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) y Present? Yes No
Sedime Drift De Surface Water-1 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ater Present? Y Present? Y Present? Y epresent? Y epresent? Y epresent? Y epresent? Y	ine) nriverine rine) magery (es C es C res C) X B7) B7) B7) D No (•) No (•)	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc well, aerial p	t (B12) rertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	Image: second system Image: second system ots (C3) Image: second system (C6) Image: second system (C6) Image: second system Image: second system Image: second system<	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water - S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ther Present? Y e Present? Y Present? Y epresent? Y ecorded Data (stream conded Data (stream	ine) nriverine rine) magery (es C res C rgauge, r) X B7) B7) B7) B7) B7 No O No O No O ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc well, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (Image: second system Image: second system Image: second	with the positis (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Field Obse Surface Wa Water -1 Surface Wa Water Table Saturation F (includes ca Describe Ro Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Non eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y Present? Y epresent? Y apillary fringe) ecorded Data (stream	ine) nriverine rine) magery (es () es () res () rgauge, r phic dep	No No No No ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc Nell, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	and Hydrolog, if available:	rift Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Sedime Drift De Surface Inundat Vater-4 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y Present? Y Present? Y Present? Y Present? Y ecorded Data (stream Papillary fringe)	ine) nriverine rine) magery (es () es () gauge, r phic dep	B7)	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks) previous ins	Living Ro 4) ved Soils (wet spections),	(C6) (C6) (and Hydrolog (if available:	y Present? Yes No
Sedime Sedime Field Obse Surface Water-3 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re Remarks: F	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ater Present? Y e Present? Y Present? Y epresent? Y ecorded Data (stream reature is a topogra	ine) nriverine rine) magery (es C es C gauge, n phic dep	No No No ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc Depth (inc	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (wet spections),	(C6) (C6) (and Hydrolog) (if available:	rift Deposits (B2) (Riverine) rainage Patterns (B10) ny-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedime Drift De Surface Inunda Water-1 Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	Marks (B1) (Nonriver ent Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) tion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Y e Present? Y e Present? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? Y epresent? State (stream corded Data (stream	ine) nriverine rine) magery (es C res C res C gauge, n) X B7) No O No O No O ression	Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp Depth (inc Depth (inc well, aerial p	t (B12) ertebra Sulfide (hizosph of Reduc n Reduc lain in F 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plov Remarks)	Living Ro 4) ved Soils (Image: second symmetry Image: second symmetry ots (C3) Image: second symmetry (C6) Image: second symmetry (C6) Image: second symmetry (C6) Image: second symmetry (C6) Image: second symmetry Image: second symmetry Image: second symmetry Image: seco	virite Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Peery Property			City/County:Placer	County	Sampling Date:10-19-12	
Applicant/Owner:				State:CA	Sampling Point:SP11	
Investigator(s):Sam Bacchini and Am	mon Rice		Section, Township,	Range:Sec17, T12N, R6	E	
Landform (hillslope, terrace, etc.): Terra	ce		Local relief (conca	ve, convex, none):Convex	Slope (%	%):1-5%
Subregion (LRR): <u>C - Mediterranean C</u>	California	Lat:38.8	3862	Long:-121.3308	Datum:N	AD 83
Soil Map Unit Name: Cometa-Fiddyme	ent complex, 2 to	9 percent	slopes	NWI classifi	cation:None	
Are climatic / hydrologic conditions on th	e site typical for thi	s time of ye	ar?Yes 💽 📃 N	lo 🔿 👘 (If no, explain in F	Remarks.)	
Are Vegetation 🔀 Soil 🗌 or Hy	/drology	significantly	disturbed? A	Are "Normal Circumstances"	present? Yes 🔿	No 💽
Are Vegetation Soil 🗌 or Hy	ydrology	naturally pro	oblematic? (If needed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - At	tach site map	showing	sampling poin	t locations, transects	, important featur	es, etc.
Hydrophytic Vegetation Present?	Yes 🍘 🛚 N	lo 🜘				
Hydric Soil Present?	Yes 👩 🛛 N	10 🛞	Is the Sam	oled Area		
Wetland Hydrology Present?	Yes 🌘 🛝	lo 💽	within a We	etland? Yes 🔿	No 💽	
constructed through the s	ite and after cons	truction w	vas completed, the	e seasonal wetlands were	recontured.	
VEGETATION						
Tree Stratum (Llos scientific names)		Absolute % Cover	Dominant Indicato	Dominance Test wor	ksheet:	
1				 Number of Dominant S That Are OBL, FACW, 	Species or FAC: 0	(A)
2				Total Number of Domi	nant	
3				Species Across All Str	ata: 0	(B)
4			·		species	
Sapling/Shrub Stratum	Total Cove	er: %		That Are OBL, FACW,	or FAC: 0 %	; (A/B)
1				Prevalence Index wo	rksheet:	
2				Total % Cover of:	Multiply by:	
					STRATE 1	Sectors:

1.		That Are OBL, FA	CW, or FAC:	0	(A)
2.		Total Number of D	ominant		
3.		Species Across Al	Strata:	0	(B)
4.					
Sapling/Shrub Stratum		That Are OBL, FA	INT Species CW, or FAC:	0 %	(A/B)
1.		Prevalence Index	worksheet:		
2.		Total % Cover	r of:	Multiply by:	
3.		OBL species		x 1 =	9
4.		FACW species		x 2 =	9
5		FAC species		x3=	1
Total Cover:		FACU species	illine in	x4=	
Herb Stratum		UPL species	60 3	x5=	90
1.Avena sp. 60	Not Listed	Column Totals:	60 (A) 3	00 (B)
2		Brougloppo I	ndov = D/A .		ēo.
3.			nuex - D/A -	- Da	<u>D</u> U:-
4		Hydrophytic veg	etation indic	ators:	
5.		Dominance i	est is >50%		
6.		Prevalence in	dex is ≤3.0'		
7	· · · · · · · · · · · · · · · · · · ·	Morphological	Adaptations	¹ (Provide supp a separate shee	orting et)
8		Problematic ⊢	lvdrophytic V	'egetation ¹ (Exc	(ain)
Woody Vine Stratum			, , ,	0 (1	
1		¹ Indicators of hydr	ric soil and v	vetland hydrolo	av must
2		be present.			3, ,
		Hydrophytic		<u></u>	
		Vegetation			
% Bare Ground in Herb Stratum 40 % % Cover of Biotic Cr	ust%_	Present?	Yes 🔿	No 💽	
Remarks: Oat in the field had been recently mowed.		I			

SOIL

Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture ³	Remarks
0-6	7.5YR 3/3	60	7.5YR 4/6	40	D	М	Sandy Clay Loam	
6	7 5YR 2 5/3	90	7 5YR 4/6	10	D	- <u> </u>	Clay Loam	
•							<u></u>	
	_					<u> </u>		
		_			_			
Type: C=0	Concentration, D=Dep	letion, RI	M=Reduced Matrix.	² Locatio	on: PL=Por	re Lining, F	RC=Root Channel, M=	=Matrix.
Soil Textu	res: Clay, Silty Clay, S	Sandy Cla	ay, Loam, Sandy Clay	Loam, S	Sandy Loar	n, Clay Lo	am, Silty Clay Loam,	Silt Loam, Silt, Loamy Sand, S
lydric Soil	Indicators: (Applicab	le to all L	RRs, unless otherwise	e noted.)			Indicators for Pro	oblematic Hydric Soils:
Histos	ol (A1)		Sandy Redo	x (S5)			1 cm Muck ((A9) (L RR C)
Histic I	Epipedon (A2)		Stripped M	atrix (S6))		2 cm Muck ((A10) (LRR B)
Black	HISTIC (A3)			cky ivinei	ral (⊢1) in (⊏0)		Reduced Ve	ertic (F18) Matarial (TE0)
	gen Sunitie (A4) od Lovors (A5) (L PP (\sim	Loamy Gie	yeu Matr Antriv (E2	1X (FZ)		Cthor (Evol	Material (TF2)
	eu Layeis (Αθ) (LKK (Δuck (ΔΩ) (LPD D)	•)		iauix (FJ k Surface	7 9 (EG)			an in rectidiks)
	ed Below Dark Surfac	e (A11)		ark Surf:	- (F7) ace (F7)			
Thick I	Dark Surface (A12)		Redox Der	ressions	(F8)			
Sandy	Mucky Mineral (S1)		Vernal Poo	ls (F9)	(, .,		4Indicators of hvo	drophytic vegetation and
Sandy	Gleyed Matrix (S4)			()			wetland hydro	ology must be present.
Restrictive	E Layer (if present):							
Type:Cl	lav nan							
Depth (i	inches): 8						Hydric Soil Pres	ent? Yes 🕢 No 🔿
Depth (i Remarks:)	inches): <u>8</u> Dark concretions at	6 inches	5				Hydric Soil Pres	ent? Yes 💽 No 🔿
Depth (i Remarks:)	inches): 8 Dark concretions at	6 inches	5				Hydric Soil Pres	ent? Yes 💽 No 🔿
Depth (i Remarks:) YDROL	or of the second s	6 inches	S				Hydric Soil Pres	ent? Yes • No
Depth (i Remarks:) YDROL(Wetland H	inches): 8 Dark concretions at OGY ydrology Indicators:	6 inches	5 efficient)				Hydric Soil Press	ent? Yes No
Depth (i Remarks:) YDROL(Wetland H Primary Ind	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic	6 inches	s (fficient)				Hydric Soil Press Secondary Water I Water I	ent? Yes No No No No No Marks (B1) (Riverine)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic se Water (A1)	6 inches	s ifficient)	t (B11)			Hydric Soil Press Secondary Water I Sedime	ent? Yes No No No No No No No No No No No No No
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2)	6 inches	s ifficient) Salt Crus Biotic Cru	t (B11) st (B12)			Hydric Soil Press Secondary Water I Sedime Drift De	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3)	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir	t (B11) ist (B12) ivertebra	tes (B13)		Hydric Soil Press Secondary Secondary Sedime Drift De Drainage	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura Vater	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger	t (B11) st (B12) svertebra i Sulfide (tes (B13) Odor (C1)		Hydric Soil Press Secondary Secondary Water I Sedime Drift De Drainag Dry-Se	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac Ustrac High V Satura Water Sedim	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No	6 inches cator is su	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	t (B11) ist (B12) ivertebra i Sulfide (Rhizosph	tes (B13) Odor (C1) heres along	Living Ro	Hydric Soil Press Secondary Secondary Water I Sedime Drift De Drainag Dry-Se pots (C3) Thin M	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7)
Depth (i Remarks:) YDROL(Wetland H Primary Inc Surfac Ustrac Satura Satura Satura Satura Dift D	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive	6 inches	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ist (B12) ivertebra Sulfide (Rhizospf of Redu	tes (B13) Odor (C1) neres along ced Iron (C	J Living Rc	Hydric Soil Press	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8)
Depth (i Remarks:) YDROL(Wetland H Primary Ind Surfac High V Satura Vvater Sedim Drift D Surfac	inches): 8 Dark concretions at OGY Aydrology Indicators: dicators (any one indic dicators (any one indicators) dicators (any one indicators) dic	6 inches ator is su nriverine	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) Ist (B12) Invertebra Sulfide (Rhizosph of Reduction Reduction	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo	J Living Ro (24) wed Soils	Hydric Soil Press	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac Uster Sedim Drift D Surfac Inunda	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial	6 inches cator is su rine) nriverine rine)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Ro 24) wed Soils	Hydric Soil Press	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Vater Sedim Drift D Surfac U Inunda	inches): 8 Dark concretions at OGY ydrology Indicators: dicators (any one indic e Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9)	6 inches ator is su rine) nriverine rine)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	Living Ro 4) wed Soils	Hydric Soil Press	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac Ustrac Sedim Drift D Surfac Inunda Surfac Ustrac Field Obso	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations:	6 inches cator is su rine) erine) Imagery (s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex	t (B11) st (B12) vertebra Sulfide (Rhizosph of Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	Living Ro 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se oots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac U Satura Vater Sedim Drift D Surfac U Nater Field Obso Surface W	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches cator is su rine) priverine erine) Imagery (s ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir	t (B11) st (B12) wertebra sulfide (Rhizosph of Reduc on Reduc plain in F	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Ro 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se oots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Vater Sedim Drift D Surfac I Inunda Water- Field Obso Surface W Water Tab	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Y	fine) cator is su rine) mriverine erine) Imagery (fes ()	s ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir	t (B11) st (B12) wertebra sulfide (Rhizospf of Reduc on Reduc plain in F nches): nches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	3 Living Rc 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se sots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Sedim Drift D Surfac U Surfac Surface W Nater Tab Saturation	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present? Y	tine) cator is su rine) mriverine rine) Imagery (ces () (es ()	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex No O Depth (ir No O Depth (ir No O Depth (ir	t (B11) ist (B12) ivertebra i Sulfide (Rhizospf of Reduc on Reduc plain in F inches): inches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks)	3 Living Ro ;4) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se pots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac U Surfac U Satura Sedim Drift D Surfac U Surfac U Surfac Surface W Water Tab Saturation (includes c	Inches): 8 Dark concretions at OGGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present? Present? apillary fringe)	tine) cator is su rine) mriverine frine) lmagery (ces () (es () (es ()	S Ifficient) Salt Crus Biotic Cru Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir No Depth (ir	t (B11) ist (B12) ivertebra Sulfide (Rhizospf of Redu on Redu plain in F nches): 	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks)	g Living Ro 24) wed Soils	Secondary Secondary Water Sedime Drift De Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift De Dry-Se Sots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N tland Hydrology Pre-	ent? Yes No No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) leutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Sedim Drift D Surfac U Satura Sedim Surface W Water Field Obso Surface W Water Tab Saturation (includes c Describe R	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present Present? Present	ine) cator is su rine) mriverine rine) Imagery ((es C) (es C) (es C) (es C)	s ifficient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Irr (B7) Other (Ex No O Depth (ir No O Depth (ir No O Depth (ir No O Depth (ir No O Depth (ir	t (B11) ist (B12) ivertebra sulfide (Rhizospf of Reduc on Reduc o	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drainag Dry-Se oots (C3) Thin M Crayfis (C6) Saturat Shallov FAC-N tland Hydrology Press h, if available:	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) th Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5)
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Satura Water Sedim Drift D Surface U Surface Surface W Water Tab Saturation (includes c Describe R	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic te Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? P	6 inches	S	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc plain in F inches): inches): inches): inches): inches): inches):	tes (B13) Odor (C1) heres along ced Iron (C ction in Plo Remarks) previous in	Living Ro Living Ro We wed Soils We wspections;	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Sedime Drift De Drift De Shallov FAC-N Hydrology Press , if available:	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac High V Satura Water Sedim Drift D Surface Surface W Water Field Obso Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive the Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Hydroger Oxidized Presence Recent Ir (B7) Other (Ex No No Depth (ir No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) ist (B12) ivertebra Sulfide (Rhizosph of Reduc on Reduc plain in F inches): inches): inches): inches): inches):	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	Living Ro 24) wed Soils wed spections;	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift Sedime Drift De Drift De Drift Sedime Drift De Drift De Dry-Se Scots (C3) Thin M Crayfis (C6) Shallov FAC-N tland Hydrology Press h, if available:	ent? Yes No No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) feutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Inc Surfac High V Satura Water Sedim Drift D Surface Ununda Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at Dark concretions at OGGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver the Soil Cracks (B6) ation Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos,	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift De Drift Sedime Drift De Drift De Dry-Se Stural Shallov FAC-N tland Hydrology Press , if available:	ent? Yes No No No Narks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROL(Wetland H Primary Ind Surfac High V Satura Water Sedim Drift D Surface Surface W Water Tab Saturation (includes c Describe R Remarks:)	Inches): 8 Dark concretions at Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos, j	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Sedime Drift De Drainage Dry-Se Otrayfis (C6) Shallov FAC-N tland Hydrology Press I, if available:	ent? Yes No No C Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) wh Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (
Depth (i Remarks:) YDROLO Wetland H Primary Ind Surfac U Surfac U Satura Sedim Drift D Surface U Nater Field Obso Surface W Water Tab Saturation (includes c Describe R Remarks:)	inches): 8 Dark concretions at OGY (ydrology Indicators: dicators (any one indic the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver es Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? Present Present? Present Present Present Present Present Present	6 inches	s ifficient) ifficient) Salt Crus Biotic Cru Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir (B7) Other (Ex No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial pression	t (B11) st (B12) wertebra Sulfide (Rhizosph of Reduc plain in F nches): nches): photos, j	tes (B13) Odor (C1) neres along ced Iron (C ction in Plo Remarks) previous in	3 Living Ro 24) wed Soils wed Soils	Hydric Soil Press Secondary Water I Sedime Drift De Drift De Drift De Drift De Drift De Drift De Sedime Drift De Drainage Dry-Se Otrayfis (C6) Shallov FAC-N tland Hydrology Press i f available:	ent? Yes No No No No Indicators (2 or more required Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) uck Surface (C7) ih Burrows (C8) tion Visible on Aerial Imagery w Aquitard (D3) eutral Test (D5) sent? Yes No (

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Peery Property	City/County:Placer Count	у	Sampling Date: 10-19-12	
Applicant/Owner:		State:CA	Sampling Point:SP12	
Investigator(s): Sam Bacchini and Ammon Rice	Section, Township, Range:	Sec17, T12N, R6	E	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, conv	/ex, none):Convex	Slope (%):1-5%	
Subregion (LRR):C - Mediterranean California Lat:38.8	3836 Lo	ng:-121.3216	Datum:NAD 83	
Soil Map Unit Name: Xerofluvents, frequently flooded		NWI classif	ication:None	
Are climatic / hydrologic conditions on the site typical for this time of ye Are Vegetation Soil or Hydrology significantly Are Vegetation Soil or Hydrology naturally pro SUMMARY OF FINDINGS - Attach site map showing	ear? Yes No No Contract No Con	(If no, explain in I mal Circumstances" d, explain any answ tions, transects	Remarks.) present? Yes No No ers in Remarks.) s, important features, etc.	
Hydrophytic Vegetation Present? Yes No No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Basin adjacent to Auburn ravine, separated by berm	Is the Sampled Are within a Wetland?	ea Yes 🌘	No	

VEGETATION

· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
2				Total Number of Dominant
3.				Species Across All Strata: 3 (B)
4.				
Total Cover	%			That Are OBL, FACW, or FAC: 100.0% (A/B)
Sapling/Shrub Stratum	11/12/2011			, , , , , , , , , , , , , , , , , , ,
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3.				OBL species 10 x 1 = 10
4.				FACW species 70 x 2 = 140
5				FAC species $10 \times 3 = 30$
Total Cover:	%			FACU species $10 \times 4 = 40$
Herb Stratum				UPL species x 5 = 0
¹ .Polypogonum aviculare	40	Yes	FACW	Column Totals: 100 (A) 220 (B)
² Typha latifolia	10	Yes	OBL	
³ . <i>Cyprus sp.</i>	30	Yes	FACW	Prevalence Index = B/A = 2,20
⁴ .Paspalum distichum	10	No	FAC	Hydrophytic Vegetation Indicators:
5. Circsium vulgare	10	No	FACU	🖌 💥 Dominance Test is >50%
6.		· ·····		Prevalence Index is ≤3.0 ¹
7.		·		Morphological Adaptations ¹ (Provide supporting
8.				- data in Remarks or on a separate sheet)
Total Cover:	100.04			Problematic Hydrophytic Vegetation' (Explain)
Woody Vine Stratum	31.7840 \. \.			
1				¹ Indicators of hydric soil and wetland hydrology must
2				
Total Cover:	%			Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover	of Biotic (Crust 0	%	Present? Yes 💽 No 🔿
Remarks: Associate species: Quercus lobata, Juglan	s hindsii,	Rubus ar	meniacus	

SOIL

Sampling Point: $\underline{SP12}$

Profile Des	cription: (Describe t	o the depth	needed to docur	nent the	indicator	or confirr	n the absence of	indicators.)
Depth (inchos)	Matrix	0/	Redox	c Feature %	es Tunol	1.002	Toxturo ³	Pomorko
					 DM			Remarks
0-10	10YK 3/1	60 7.3	0 Y K 4/0	40	KM		Siity Clay	
·				·		·		
						. <u> </u>		
								·
¹ Type: C=C	Concentration, D=Depl	etion, RM=R	educed Matrix.	² Locatio	n: PL≃Por	e Lining, R	C≃Root Channel,	M=Matrix.
³ Soil Textur	es: Clay, Silty Clay, S	andy Clay, L	oam, Sandy Clay	Loam, S	andy Loan	n, Clay Loa	am, Silty Clay Loan	n, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicabl	e to all LRRs	unless otherwise	noted.)			Indicators for	Problematic Hydric Soils:
	Epipedon (A2)		Sandy Redo	x (SS) atrix (S6)				k (A10) (LRR B)
Black H	fistic (A3)		Loamy Muc	ky Miner	al (F1)		Reduced	Vertic (F18)
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matri	ix (F2)		Red Pare	nt Material (TF2)
	ed Layers (A5) (LRR C	;)	Depleted M	atrix (F3) \ (E@)		Other (Ex	plain in Remarks)
	ed Below Dark Surface	e (A11)		ark Surfa	; (F0) ace (F7)			
Thick E	ark Surface (A12)	· /	Redox Dep	ressions	(F8)			
Sandy	Mucky Mineral (S1)		Vernal Pool	s (F9)			⁴ Indicators of I	hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)						wetland hy	drology must be present.
Type	Layer (il present):							
Denth (ii	nches):	·					Hydric Soil Pr	esent? Ves 🕢 No 🔿
Remarks:							- Injuno don i i	
Wetland H	vdrology Indicators:						Seconda	ry Indicators (2 or more required)
Primary Ind	icators (any one indic	ator is sufficie	ent)					er Marks (B1) (Riverine)
Surface	e Water (A1)		Salt Crust	(B11)			[_] Sedi	ment Deposits (B2) (Riverine)
High W	/ater Table (A2)		Biotic Cru	st (B12)			Drift	Deposits (B3) (Riverine)
Saturat	tion (A3)		Aquatic In	vertebra	tes (B13)		Draii	nage Patterns (B10)
Water I	Marks (B1) (Nonriveri	ne)	Hydrogen	Sulfide (Odor (C1)		Dry-	Season Water Table (C2)
Sedime	ent Deposits (B2) (Nor	nriverine)	Oxidized I	Rhizosph	eres along	Living Ro	ots (C3)	Muck Surface (C7)
	eposits (B3) (Nonrivei e Soil Crecke (B6)	ine)	X Presence	of Reduc	tion in Ploy	4) Wed Soile /	(C6) Cray	ration Visible on Aerial Imageny (CQ)
	tion Visible on Aerial 1	magery (B7)	Other (Ex	olain in F	Remarks)		CO, ⊡ Salu □ Shal	low Aquitard (D3)
Water-	Stained Leaves (B9)	inagoij (Di)			(ennume)			-Neutral Test (D5)
Field Obse	rvations:							
Surface Wa	ater Present? Y	es C No	Depth (in	ches):				
Water Table	e Present? Y	es 💽 🛛 No	Depth (in	ches):				
Saturation I	Present? Y	es 💽 🛛 No	Depth (in	ches):	16	Wot	land Hydrology P	resent? Ves 🙃 No 🔿
Describe R	ecorded Data (stream	gauge, moni	toring well, aerial	photos, j	orevious in	spections)	, if available:	
	```	0 0 .	Ŭ,	•		. ,		
Remarks: N	Marshy basin adjace	ent to Aubu	rn Ravine, separ	ated fro	m creek l	oy a levee	e. Marshy area a	und reservoir or stock pond within
th	ie basin.		× 1			-	-	1
US Army Corj	ps of Engineers							

••• .

### WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Peery Property		City/County:	Placer Co	unty	Sampling I	Date:10-19-12	
Applicant/Owner:				Sampling Point:SP13			
nvestigator(s):Sam Bacchini and Ammon Rice		Section, Tor	wnship, Rar	nge:Sec17, T12N, R6E	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Landform (hillslope, terrace, etc.): Terrace		Local relief	(concave, c	convex, none): Concave		Slope (%):1-5	5%
Subregion (LRR):C - Mediterranean California	Lat:38.8	836		Long:-121.3216		Datum:NAD 8	33
Soil Map Unit Name: Xerofluvents, frequently fl	ooded	1	******************	NWI classific	ation:None		
Are climatic / hydrologic conditions on the site typica	al for this time of ye	ar? Yes 🐻	No C	(If no, explain in R	emarks.)	***	
Are Vegetation Soil or Hydrology	l significantly	disturbed?	Are "	Normal Circumstances"	oresent? Y	es 💿 🛛 No 🕻	~
Are Vegetation Soil or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answe	rs in Remar	rks.)	****
SUMMARY OF FINDINGS - Attach site	map showing	sampling	g point lo	cations, transects	, importa	int features, (	etc.
Hydrophytic Vegetation Present? Yes 🍙	No 🕞					********	
Hydric Soil Present? Yes	No 👸	Is th	e Sampled	Area			
Wetland Hydrology Present? Yes	No 💽	with	in a Wetlan	d? Yes C	No 🤆	Ð	
VEGETATION							
	Absolute	Dominant	Indicator	Dominance Test work	sheet:		
Tree Stratum (Use scientific names.)	<u>% Cover</u>	Species?	Status	Number of Dominant S	pecies		A \
2. Juglans hindsii	40	$\frac{res}{Vac}$	ACU	That Are OBL, FACW,	of FAC:	<b>1</b> (*	-1)
3.		<u> </u>	-AC	Total Number of Domin Species Across All Stra	nant ata:	<b>4</b> (F	3)
4. Sapling/Shrub Stratum	al Cover: 70 %			Percent of Dominant S That Are OBL, FACW,	pecies or FAC:	25.0 % (A	4/B)
1.				Prevalence Index wo	ksheet:		
2.				Total % Cover of:	<u> </u>	Multiply by:	
3.		and a state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the		OBL species	x 1	- 0	
4.				FACW species	x 2	= 0	
5	-			FAC species	30 x3	= 90	
Herb Stratum	al Cover: 👘 %			FACU species	40 X4	= 160	
1. Avena fatua				I OF L Species	55 XO	- 2/5	(D)
11,0,4,0, ,0,4,0,	25	Yes N	Not Listed	Column Totala	TREACH RAINE (AN)	CAC	(6)
² .Bromus diandrus	25	Yes P	Not Listed Not Listed	Column Totals:	25 (A)	525	
² ·Bromus diandrus ³ ·Foeniculum vulgare	<u>25</u> 20 10	$\frac{\text{Yes}}{\text{Yes}} = \frac{1}{N}$	Not Listed Not Listed Not Listed	Column Totals: Prevalence Inde>	25 (A) : = B/A =	525 4.20	
2.Bromus diandrus 3.Foeniculum vulgare 4.	25 20 10	Yes n Yes n No n	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index <b>Hydrophytic Vegetati</b>	25 (A) = B/A = on Indicato	525 4.20 irs:	
2.Bromus diandrus 3.Foeniculum vulgare 4. 5.	25 20 10	Yes n Yes n No n	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is	25 (A) ( = B/A = on Indicato ( > 50%	525 420 Irs:	
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6.	25 20 10	Yes n Yes n No n	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index	25 (A) x = B/A = on Indicato x > 50% $x \le 3.0^{1}$	525 420 vrs:	
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6. 7.	25 20 10	Yes n Yes n No n	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark	25 (A) x = B/A = on Indicate x > 50% $y = 3.0^{1}$ uptations ¹ (F s or on a set	525 4.20 vrs: 'rovide supporting parate sheet)	9
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6. 7. 8.	25 20 10	Yes P Yes P No P	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark Problematic Hydro	25 (A) x = B/A = on Indicato x > 50% $x = 3.0^{1}$ uptations ¹ (F s or on a set uptytic Veget	525 4 20 rrs: 'rovide supporting parate sheet) rtation ¹ (Explain)	9
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6. 7. 8. Woody Vine Stratum	25 20 10 al Cover: 55 %	Yes n Yes n No n	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark Problematic Hydro	25 (A) x = B/A = on Indicator x > 50% $x > 3.0^{1}$ uptations ¹ (F s or on a set uphytic Vege	525 4.20 Ins: Provide supporting parate sheet) Itation ¹ (Explain)	9
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6. 7. 8. Woody Vine Stratum 1.	25 20 10 al Cover: 55 %	Yes h Yes h No h	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark Problematic Hydro ¹ Indicators of hydric so be present.	25 (A) x = B/A = on Indicato x > 50% $x \le 3.0^{1}$ uptations ¹ (F s or on a set uptations ¹ vegation of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$ of the set $x \ge 0$	525 420 Provide supporting parate sheet) station ¹ (Explain) and hydrology m	g
2.Bromus diandrus 3.Foeniculum vulgare 4. 5. 6. 7. 8. Woody Vine Stratum 1. 2.	25 20 10 al Cover: 55 %	Yes 1 Yes 1 No 1	Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark Problematic Hydro ¹ Indicators of hydric so be present.	25 (A) a = B/A = on Indicato a > 50% is $\le 3.0^{1}$ aptations ¹ (F s or on a set phytic Veget bil and weth	525 4.20 Provide supporting parate sheet) station ¹ (Explain) and hydrology m	g iust
2. Bromus diandrus 3. Foeniculum vulgare 4. 5. 6. 7. 8. Woody Vine Stratum 1. 2. Tot % Bare Ground in Herb Strature 45 m	25 20 10 10 al Cover: 55 %		Not Listed Not Listed Not Listed	Column Totals: Prevalence Index Hydrophytic Vegetati Dominance Test is Prevalence Index Morphological Ada data in Remark Problematic Hydro ¹ Indicators of hydric so be present. Hydrophytic Vegetation Proceeding	25 (A) c = B/A = on Indicato s > 50% is $\le 3.0^1$ uptations ¹ (F s or on a second uphytic Veget bil and weth c = 0	525 420 Provide supporting parate sheet) station ¹ (Explain) and hydrology m	g uust

### SOIL

### Sampling Point: SP13

Profile Desc	cription: (Describe	to the depth	needed to document the indicator or (	confirm	the absence of indicator	s.)
Depth	Matrix		Redox Features		<b>T</b> 1 3	
(inches)	Color (moist)	<u> </u>	Color (moist) <u>%</u> Type ¹	_0C ²		Remarks
6	7.5YR 4/4	100			Silty Loam	
		·				
		·		······		
		· ·				
				·		
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix. ² Location: PL=Pore Li	ning, RO	C=Root Channel, M=Matrix	
*Soil Texture	es: Clay, Silty Clay, S	Sandy Clay, L	oam, Sandy Clay Loam, Sandy Loam, C	lay Loar	m, Silty Clay Loam, Silt Loa	am, Silt, Loamy Sand, Sand.
Hydric Soil I	ndicators: (Applicabl	le to all LRRs,	unless otherwise noted.)		Indicators for Problema	tic Hydric Soils:
	(A1)		Sandy Redox (S5)		1 cm Muck (A9) (LI	RR C)
	pipedon (A2)		Stripped Matrix (S6)		2 cm Muck (A10) (L	
	ISUC (A3) an Sulfide (A4)		Loamy Cleved Matrix (E2)		Reduced Venic (Fi	(TE2)
	d Lavers (A5) ( <b>I RR (</b>	2)	Depleted Matrix (F3)		Other (Explain in R	emarks)
	uck (A9) (LRR D)	-,	Redox Dark Surface (F6)			omanoy
Deplete	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			
Thick D	ark Surface (A12)	· · /	Redox Depressions (F8)			
Sandy N	Aucky Mineral (S1)		Vernal Pools (F9)		4Indicators of hydrophyt	tic vegetation and
Sandy 🤇	Gleyed Matrix (S4)				wetland hydrology m	nust be present.
Restrictive	Layer (if present):					
Type:						
Depth (in	ches):				Hydric Soil Present?	Yes 🔿 No 💿
Remarks:						Teat' Teat'
	•					
HYDROLC	GY					
Wetland Hv	drology Indicators:				Secondary Indicat	ors (2 or more required)
Primary Indi	cators (any one indic	ator is sufficie	ent)		Water Marks (	(B1) (Riverine)
	Mater (A1)		Salt Crust (B11)		Viator mainer	osite (P2) ( <b>Bivarina</b> )
	ator Table (A2)		Biotic Crust (B12)			(P2) ( <b>D</b> ivorino)
	(A3)		Aquatic Invertebrates (B13)		Drainage Patt	aros (B10)
	for (~0) forks (B1) ( <b>Nonrivor</b>	ino)	Hydrogen Sulfide Odor (C1)		Dialitage Fall	Vater Table (C2)
	naiks (D1) (Noniven	nrivorino)	Ovidized Phizospheres along Liv	ing Doo	te (C3) Thin Muck Su	rface $(C7)$
	nosite (B3) (Nonrive	rine)	Presence of Reduced Iron (C4)	ing (too		(C8)
	Soil Cracks (B6)	inie)		Soile (C	Crayiish Durit	ible on Aerial Imageny (CQ)
	ion Visible on Aerial I	mageov (B7)	Other (Explain in Remarks)		Shallow Aquit	ard (D3)
	tained Leaves (BQ)	inagery (D7)				Get (D5)
				1	TAC-Neuliai	rest (DD)
Field Obser						
Surface vva	ter Present? Y		Deptn (incres):			
Water Table	Present? Y	ies () No	Depth (inches):	4		
Saturation F	Present? Y	'es 🔿 👘 No	<ul> <li>Depth (inches):</li> </ul>	Wotls	and Hydrology Present?	
Describe Re	piliary ininge) corded Data (stream	naune mont	toring well aerial photos, previous inspe	ctions)	if available:	
Bomorlini						
Remarks:						
1						

# Wetland Delineation and Preliminary Jurisdictional Determination

**Gill Property** 

March 6, 2015





# **Document Information**

Prepared for	Gill Property Development, LLC
Project Name	Gill Property
Project Manager	Shannon Karvonen
Date	March 6, 2015

Prepared for: Gill Property Development, LLC 424 D Street, Marysville, CA 95901

Prepared by:



Cardno 701 University Ave Suite 200, Sacramento, CA 95825

# Table of Contents

1	Introdu	iction	1-1				
2	Regulat	tory Framework	2-3				
	2.1	Federal Jurisdiction of Wetlands and Other Waters of the United States	2-3				
		2.1.1 Section 404 of the Clean Water Act	2-3				
	2.2	State Jurisdiction of Wetlands and Other Waters	2-3				
		2.2.1 Regional Water Quality Control Board	2-3				
3	Method	lology	3-5				
	3.1	Waters of the United States	3-5				
		3.1.1 Potential Section 404 Jurisdictional Wetlands	3-5				
3 <b>4 S</b> 4 4		3.1.2 Potential Section 404 Other Waters	3-7				
		3.1.3 Areas Excluded from Section 404 Jurisdiction	3-7				
	3.2	Waters of the State	3-8				
4	Study A	Area	4-9				
4	4.1	Vegetation	4-9				
		4.1.1 Non-native Annual Grassland	4-9				
		4.1.2 Riparian	4-9				
	4.2	Soils	4-9				
	4.3	Hydrology	4-12				
5	Results	s and Discussion	5-13				
	5.1	Vernal Pool (4.156 acres)	5-13				
	5.2	Seasonal Wetland (0.633 acre)	5-13				
	5.3	5.3 Ephemeral Swale (0.013 acre/ 187 linear feet)5.					
	5.4	Seasonal Drainage (0.207 acre/ 927 linear feet)5-1					
	5.5	Markham Ravine (0.617 acre/ 1,173 linear feet)5-14					
6	Finding	ງs	6-16				
7	Supple	mental Information	7-17				
	7.1	Directions to the Study Area	7-17				
	7.2	Contact Information	7-17				
8	Referen	nces	8-18				

# Appendices

Appendix A	Wetlands and Other Waters Map
Appendix B	Representative Site Photographs
Appendix C	Data Sheets
Appendix D	Plant Species Observed within Study Area

# Tables

Table 1       Wetland and Other Waters in the Study Area         5-4	Table 1	Wetland and Other Waters in the Study Area5	-14
----------------------------------------------------------------------	---------	---------------------------------------------	-----

# Figures

Figure 1	Project Location	1-2
Figure 2	Soils Map4	-11

# Acronyms

FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
NRCS	Natural Resource Conservation Service
OBL	Obligate
OHW	Ordinary High Water
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

# 1 Introduction

Cardno conducted a wetland delineation for the Gill Property (Project). The Project is comprised of one parcel (APN 021292001000) within the City of Lincoln, Placer County, California. The Project is located at the approximate latitude 38.8959° north and longitude -121.3381° west (Figure 1), and on the USGS 7.5 minute topographic quadrangle map for Lincoln, California, in Sections 17, Township 12 North, Range 6 East, Mount Diablo Baseline & Meridian.

A previous Wetland Delineation and Preliminary Jurisdictional Determination for the Nelson Lane Bridge Replacement Project (Bridge No. 19C0082) was conducted by Cardno in June of 2012 and overlapped the western portion of this Project. This previously delineated area was excluded from this wetland delineation and not part of the Study Area (Study Area), Figure 1 shows the Project and Study Area boundary.

This report presents the results of the field evaluation and provides a preliminary discussion regarding wetlands and other Waters of the United States as defined by the Clean Water Act (CWA) within the Study Area.

This delineation of Waters of the United States contains the following:

- A narrative describing the methodology used to delineate the wetlands and Waters of the United States in the Study Area.
- A narrative description of existing field conditions, hydrology, soils descriptions, and plant communities present in the Study Area.
- Maps, including a USGS map with the Project location, a soils map, and aerial imagery showing the delineated wetlands and Waters of the United States in the Study Area.

The narrative and supporting graphics listed above accompany the wetland delineation map. This map was prepared using horizontal survey control, locations of wetland indicators, mapping conventions and symbols, reference block, scale, property lines (when available), Study Area boundaries, and topography.



# 2 Regulatory Framework

### 2.1 Federal Jurisdiction of Wetlands and Other Waters of the United States

### 2.1.1 Section 404 of the Clean Water Act

Under Section 404 of the CWA, the U.S. Environmental Protection Agency (EPA) and the USACE have regulatory and permitting authority regarding discharge of dredged or fill material into "navigable Waters of the United States". The scope of the USACE jurisdiction was further refined in Rapanos v. U.S. and Carabell v. U.S. Guidance (EPA, 2008). The USACE asserts jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE determines jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that does not directly abut a relatively permanent non-navigable tributary.

A significant nexus exists when it is demonstrated that the tributary and/or wetland along with any other, similarly situated wetlands, has "more than a speculative or insubstantial effect on the chemical, physical and biological integrity of a traditional navigable water."

The USACE generally will not assert jurisdiction over the following features:

- Swales or erosional features (e .g., gullies, small washes characterized by low volume, infrequent, or short duration flow); or
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

### 2.2 State Jurisdiction of Wetlands and Other Waters

### 2.2.1 Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) regulate activities in Waters of the State, under the Dickey Water Pollution Act of 1949 and the Porter-Cologne Act of 1969. Waters of the State include Waters of the United States., and are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." Additionally, the RWQCB regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne Act through the State Water Quality Certification Program. The State Water Quality Certification Program regulates proposed federally permitted activity which may result in a discharge to water bodies including discharges of dredged or fill material permitted by the USACE under section 404 of the CWA (e.g., navigational dredging; flood control channelization; levee construction; channel clearing; and fill of wetlands or other water bodies for land development), and

ensures consistency with the Federal CWA, California Environmental Quality Act (CEQA), California Endangered Species Act (ESA), and the Porter-Cologne Act.

The Central Valley RWQCB has jurisdiction over the Study Area. Because Waters of the State are defined more broadly than Waters of the United States., projects that do not require a federal permit may still result in dredge or fill in Waters of the State. Such projects may be regulated by the RWQCB under Waste Discharge Requirements or Certifications of Waste Discharge Requirements.

# 3 Methodology

The Study Area for this delineation encompasses all anticipated construction areas in the vicinity of the Project Area (Appendix A). On April 3, 2014, A Cardno biologist collected field data and delineated potential USACE and RWQCB jurisdictional boundaries in the Study Area. For each sampling site, the site location was recorded and the geographic coordinates (longitude and latitude) were collected. A handheld Trimble Geo 6000 XT (2012 Series) Global Positioning System (GPS) unit capable of sub-meter accuracy was used to digitally record the boundaries of each potential jurisdictional wetland area identified in the Study Area. Vegetative communities were classified pursuant to the California Wildlife Habitat Relationship (CWHR) scheme (Mayer and Laudenslayer 1988). Plant species were identified using the *Jepson Manual of Higher Plants of California* (Baldwin Ed., 2012). Representative photographs of the Study Area are in Appendix B.

GPS data were subsequently downloaded from the GPS unit, differentially corrected using Trimble Pathfinder Office software and converted to GIS shapefiles. These shapefiles were then overlaid on base maps of the Study Area, showing the location of wetlands in relation to topographical features. GPS data were corrected as necessary based on the distance and bearing from known topographic features and facilities, and the acreage of each wetland or other water in the Study Area was calculated.

The recorded OHWM limits were imported into ArcGIS and cross-referenced with mapped topography to delineate wetland and other waters which are subject to the jurisdiction of the USACE.

### 3.1 Waters of the United States

### 3.1.1 Potential Section 404 Jurisdictional Wetlands

The delineation of Waters of the United States was conducted in accordance with the *1987 U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE, 1987) (Wetland Delineation Manual), *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE, 2007), and *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region 2.0* (USACE, 2008) (Regional Supplement). A Level 2, routine wetland delineation, was conducted (as defined in the Wetland Delineation Manual) which consisted of an onsite inspection and evaluation of three parameters that identify and delineate the boundaries of wetlands, including (1) the dominance of wetland vegetation; (2) the presence of hydric soils; and (3) hydrologic conditions that result in periods of inundation or saturation on the surface as a result of flooding or ponding.

The National List of Plant Species That Occur in Wetlands: California (Region 0) (Reed, 1988), was consulted as a guideline, however, per USACE regulatory notice dated May 10, 2012 the draft North American Digital Flora: National Wetland Plant List (Lichvar, 2013) was used to determine the wetland indicator status of plants identified in the Study Area. The U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) Web Soil Survey for Placer County, Western Area California (Soil Survey Staff, 2013) and the National List of Hydric Soils (NRCS, 2013) were used to preliminarily identify soil types in the Study Area.

Data on vegetation, soils, and hydrologic characteristics were recorded in the field on data forms for the Arid West Region (Appendix C).

### 3.1.1.1 Vegetation

A visual assessment was made of all plant species located in and around the Study Area. Habitat was classified based on A Guide to Habitat Classification of California (Mayer, 1988) and vegetation series were defined based on *A Manual of California Vegetation, Second Edition* (Sawyer, et al., 2009). Plant species were identified using *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin

Ed., 2012) and analyzed to determine the presence or absence of hydrophytic vegetation. The procedure for determining the presence of hydrophytic vegetation followed that identified in the Regional Supplement. Specifically, it involves the following assessment for each sample plot:

- 1. Apply Indicator 1 (Dominance Test). If the plant community passes the dominance test, then the vegetation is hydrophytic and no further vegetation analysis is required.
  - a. If the plant community fails the dominance test and indicators of hydric soil and/or wetland hydrology are absent, then hydrophytic vegetation is absent unless the site meets the requirements for a problematic wetland vegetation.
  - b. If the plant community fails the dominance test, but indicators of hydric soil and wetland hydrology are both present, proceed to Step 2.
- 2. Apply Indicator 2 (Prevalence Index). This and the following step assume that at least one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present.
  - a. If the plant community satisfies the prevalence index, then the vegetation is hydrophytic. No further vegetation analysis is required.
  - b. If the plant community fails the prevalence index, proceed to Step 3.
- 3. Apply Indicator 3 (Morphological Adaptations).
  - a. If the indicator is satisfied, then the vegetation is hydrophytic.
  - b. If none of the indicators are satisfied, then hydrophytic vegetation is absent unless indicators of hydric soil and wetland hydrology are present and the site meets the requirements for a problematic wetland situation.

Wetland indicator species include those listed as Obligate (OBL), Facultative Wetland (FACW), or Facultative (FAC) in the National List of Plant Species that Occur in Wetlands: California (Region 0). Vegetation was described in terms of both species and percent coverage per strata. Sample plots that had vegetation that met the above criteria were identified as hydrophytic. A list of plant species observed within the Study Area and the wetland indicator status is available in Appendix D.

### 3.1.1.2 Soils

The Soil Survey of Placer County was used to identify potential soils (map units) present in the vicinity of the Study Area (Figure 2). Soils were examined by digging a test pit to a depth of 20 inches, where feasible, to determine if soils exhibited hydric characteristics. In some cases loose soil, groundwater, or a restrictive layer prohibited the digging of 20 inch test pits, and pits were dug to a depth sufficient to identify hydric indicators. The determination of hydric soils was based on soil texture, matrix color, and/or the presence of other hydric soil indicators such as mottles.

The NRCS maintains a list of hydric soil indicators that are known to occur in the United States. Soil samples were collected and described according to the methodology provided in the Regional Supplement. Soil chroma and values were determined by using a standard Munsell soil color chart (Munsell, 2009). Hydric soils were determined to be present if any of the soil samples met one or more of the hydric soil indicators described by the NRCS.

### 3.1.1.3 Hydrology

The USACE jurisdictional wetland hydrology criterion is satisfied if an area is inundated or saturated for a period of time sufficient to create anoxic soil conditions during the growing season (a minimum of 14 consecutive days in the Arid West Region). Evidence of wetland hydrology can include primary indicators, such as visible inundation or saturation, drift deposits, oxidized root channels, and salt crusts, or

secondary indicators such as the FAC-neutral test, or the presence of a shallow aquitard. The Regional Supplement contains 18 primary hydrology indicators and nine secondary hydrology indicators.

The presence of these primary or secondary indicators was used to determine whether each sample point met the wetland hydrology criteria. A minimum of one primary indicator or two secondary indicators are required to meet the wetland hydrology criterion.

### 3.1.2 Potential Section 404 Other Waters

The Study Area was evaluated for the presence of "other waters," including lakes, rivers, and perennial or intermittent streams. Potential "other waters" may be identified by the presence of a defined river or streambed, a bank, or evidence of flow, or the absence of emergent vegetation in ponds and lakes. The extent of other waters was mapped to the ordinary high water mark (OHWM) as defined by the USACE Regulatory Guidance Letter No. 05-05 Ordinary High Water Mark Identification (USACE, 2005).

CWA regulations define the OHWM at 33 CFR 328.3(e) as the following:

• The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

The following geomorphic OHWM indicators, as described in the U.S. Army Corps of Engineers (USACE) publication A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States (Lichvar & McColley 2008), were used to delineate the OHWM of other Waters of the United States:

- 1. **Benches**: Formed by the removal of previously aggraded sediment, and located near the below/at ordinary high water (OHW) boundary and potentially near the at/above boundary.
- 2. **Drift**: Organic debris larger than twigs. Tends to be oriented in the direction of flow, and often collects behind/in obstructions or is simply deposited by receding flow.
- 3. **Exposed Root Hairs Below Intact Soil Layer**: Exposed by erosion of sediment. Tend to be located along the above/at OHW boundary or where benches have formed.
- 4. **Change in Particle Size Distribution**: Transition from coarser to finder sediment common, and likely to occur near the at/below OHW boundary.
- 5. **Upper Limit of Sand-Sized Particles**: Deposited due to reduced flow competence, and tends to be concentrated near the at/below OHW boundary but may extend to the above OHW boundary.
- 6. Valley Flat: Formed by the deposition of fine-grained sediment during over-bank flow, and located adjacent to low-flow feature(s) and extends to the break in slope (when present) near the at/above OHW boundary.

### 3.1.3 Areas Excluded from Section 404 Jurisdiction

Some areas that meet the technical criteria for wetlands or other waters may not be jurisdictional under the CWA. Included in this category are (1) some man-induced wetlands, which are areas that have developed at least some characteristics of naturally occurring wetlands due to either intentional or incidental human activities, and (2) "isolated" wetlands, or non-navigable waters which are not connected or adjacent to a navigable Waters of the United States through either a hydrologic or economic connection. Per SWANCC v. United States, examples of man-induced wetlands include, but are not limited to, irrigated wetlands, impoundments (such as stock ponds for livestock), drainage ditches constructed in uplands, wetlands resulting from filling of formerly deep water habitats, dredged material disposal areas, and wetlands resulting from stream channel realignment. Isolated wetlands include wetland areas which do not have a surface or groundwater connection to, and are not adjacent to navigable Waters of the United States.

### 3.2 Waters of the State

Although the SWRCB and RWQCB are in the process of establishing a formal wetland delineation protocol and wetland definition for Waters of the State, these agencies have typically accepted the USACE delineation protocol. However, these agencies do regulate "isolated waters" and non-navigable waters under the Porter-Cologne Act. Therefore, the methods described in Section 3.1 (Waters of the United States) were used to determine potential Waters of the State, but it was assumed that all wetlands and waters delineated using the USACE methods fall in the state's jurisdiction under the Porter-Cologne Act

# 4 Study Area

The Study Area is approximately 53 acres, and consists of the area surveyed for wetland features and the boundaries of adjacent uplands (Figure 3). The Study Area is generally flat, with elevation ranging from approximately 105 feet above sea level (asl) at Markham Ravine up to 130 feet asl in the upland portions to the north and south. Land uses in the general vicinity consist of undisturbed and undeveloped grassland. Representative photographs of the Study Area are located in Appendix B. Vegetation communities consist primarily of non-native annual grasslands with a few scattered oaks, with riparian vegetation occurring along Markham Ravine.

### 4.1 Vegetation

### 4.1.1 Non-native Annual Grassland

Typical species observed in this community, include medusa head grass (*Elymus caput-medusae*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum ssp. leporinum*), purple needle grass (*Stipa pulchra*), chicory (*Cichorium intybus*), climbing bedstraw (*Galium porrigens*), and annual fireweed (*Epilobium brachycarpum*). Other species observed during the survey included red stemmed filaree (*Erodium cicutarium*), cutleaf geranium (*Geranium dissectum*), Bithynian vetch (*Vicia bithynica*), purple vetch (*Vicia benghalensis*), miniature lupine (*Lupinus bicolor*), fiddleneck (*Amsinckia menziesii*), black mustard (*Brassica nigra*), English plantain (*Plantago lanceolata*), shepherd's purse (*Capsella bursa-pastoris*), field bindweed (*Convolvulus arvensis*), shamrock clover (*Trifolium dubium*), rose clover (*Trifolium hirtum*), and yellow star thistle (*Centaurea solstitialis*).

### 4.1.2 <u>Riparian</u>

Riparian vegetation in the project area occurs in a narrow band along Markham Ravine. The canopy layer consists primarily of valley oak, with a few interior live oaks, northern California black walnut, and willow (*Salix* sp.) present as well. The understory is fairly sparse, but a few patches of Himalayan blackberry (*Rubus armeniacus*) are present. A narrow herbaceous understory included species such as fiddle dock (*Rumex pulcher*), common rush (*Juncus effusus*), sedges (*Carex* sp.), rough cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*) occurs along the banks in clumps, but otherwise the herbaceous layer consists of grasses and forbs similar to the adjacent grassland. Common cattails (*Typha latifolia*) and floating primrose (*Ludwigia peploides*) are present along the banks of Markham Ravine

### 4.2 Soils

The soil map units and miscellaneous land types in the Study Area and vicinity are described in soil report for the *Placer County, California, Western Part* (USDA Soil Conservation Service, 2013). Soil map units that occur in the Study Area are shown in Figure 2 and include Cometa-Fiddyment complex; Cometa-Ramona sandy loams, 1 to 5 percent slope; Ramona sandy loam, 2 to 9 percent slope; and Xerofluvents, frequently flooded. Descriptions of each of these soil types are provided below.

### Cometa-Fiddyment complex, 1 to 5 percent slopes

The Cometa-Fiddyment complex series consists of moderately deep, moderately well to well drained soils found on nearly level to rolling low terraces and hills, or on slightly dissected older stream terraces. Cometa-Fiddyment complex soils are moderately well or well drained with slow to medium runoff and very slow permeability. Within Placer County, Cometa-Fiddyment complex soils are listed as a hydric soil within depressions (USDA 2010).

### Cometa-Ramona sandy loams, 1 to 5 percent slopes

Cometa- Ramona sandy loam series are found on terraces between one to five percent and between 20 and 3,500 feet above mean sea level. They are formed from alluvium derived granite and have a restricted layer over 80 inches down. Cometa- Ramona are considered well- drained and within Placer County is listed as a hydric soil within drainage ways (USDA 2010).

### Ramona sandy loam, 2 to 9 percent slopes

The Ramona soils are nearly level to moderately steep. They are on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. Ramona sandy loam is well-drained with slow to rapid runoff, and moderately slow permeability. Within Placer County, Ramona sandy loam is listed as a hydric soil within drainage ways (USDA 2010).

### Xerofluvents, frequently flooded

Xerofluvents are found on flood plains along rivers or streams or on alluvial fans, mostly in areas with Mediterranean climates. Flooding is most common in winter, but some of the soils are flooded in spring due to melting snow in the nearby mountains. Vegetation communities on Xerofluvents typically consist of mixed forest or grass and shrubs. Xerofluvents, frequently flooded soil type is found adjacent to stream channels and consist of narrow bands of somewhat poorly drained recent alluvium. Areas containing this soil type are typically subject to frequent flooding and channelization. Within Placer County, Xerofluvents, frequently flooded soils are listed as a hydric soil within drainage ways (USDA 2010).



Scale in Feet

N

**Shaping the Future** 

Figure 2 Soils

### 4.3 Hydrology

The Study Area lies within the Lower Bear Watershed, and appears to be a part of a larger historic vernal pool/swale complex that encompassed much of the surrounding region prior to development for urban or agricultural uses. While generally flat, the topography in the Study Area appears to slope from east to west, and towards Markham Ravine. The source of the water for the vernal pools and seasonal wetlands in the area appears to be from precipitation, and runoff from paved surfaces in the roadside ditches. Markham Ravine receives water from upstream sources, as well as overland flow from the adjacent watershed. Water was flowing in Markham Ravine at the time of the survey.

# 5 Results and Discussion

Cardno biologists Sam Bacchini, and Alexandra Topor delineated wetlands and other waters in the Study Area on April 3, 2014. A Wetland Delineation Map and Report was created from the data gathered and submitted to the USACE on May 29, 2014 for verification. An onsite meeting between Cardno and the USACE was conducted on February 9, 2015. Several additional wetland features were added and other features' boundaries were revised. An updated wetland delineation map was then produced and submitted to the Corps on March 3, 2015.

Wetlands and Other Waters present in the Study Area (see Appendix A, and Figure 3) included, Markham Ravine, an ephemeral swale tributary to Markham Ravine, a seasonal drainage tributary to Markham Ravine, two wetlands in the Markham Ravine flood plain, and seventy seven vernal pools. The banks of the stream were inspected for OHWM indicators using the methods described in Section 2 above, and GPS points were recorded along the banks. Representative photographs of the Study Area are located in Appendix B.

### 5.1 Vernal Pool (4.156 acres)

There are 77 wetland features in the Study Area that were mapped as vernal pools, totaling 4.156 acres. These features are distinct depressions of varying depths and size. A fire occurring in the early summer of 2013 cleared many of the vernal pools of invasive upland grasses. The pools affected by the fire had a high diversity of vernal pool plants such as Great Valley button celery (*Eryngium castrense*), smooth goldfields (*Lasthenia glaberrima*), vernal pool goldfields (*Lasthenia fremontii*), popcornflower (*Plagiobothrys stipitatus*), white meadowfoam (*Limnanthes alba*), hyssop loosestrife (*Lythrum hyssopifolium*), Pillwort (*Pilularia americana*), Owl's clover (*Castilleja campestris*), creeping spike rush (*Eleocharis macrostachya*), vernal pool buttercup (*Ranunculus bonariensis*), and spinyfruit buttercup (*Ranunculus muricatus*). The vernal pools that were unaffected by the 2013 fire were mostly overgrown with invasive upland plant species such as Medusa head, red stemmed filaree, common wild oats, soft chess, and foxtail barley. All vernal pools had distinct boundaries and had generally similar appearance and soil types, most pools were inundated with water.

### 5.2 Seasonal Wetland (0.633 acre)

Three seasonal wetland features totaling 1.48 acres are mapped within the floodplain of Markham Ravine. These features consist of W-01 (0.561 acre), WC-02 (0.072 acre), and FPW-01 (0.847 acre). These features occur in the floodplain of Markham Ravine and result from inundation during high water events, becoming isolated when high water recedes. FPW-01 and W-01 are located on the north side of Markham Ravine while w-02 is located on the south side of Markham Ravine. W-01 is on the northeastern edge of the Study Area, near Nicolaus Road, and extends outside of the study area to the east. The boundaries of these features were determined based on vegetation and flow patterns. The plant species observed in these features included meadow fescue (*Festuca pratensis*), curly dock, common rush, and little rattlesnake grass (*Briza minor*).

### 5.3 Ephemeral Swale (0.013 acre/ 187 linear feet)

A single ephemeral drainage is located in the Study Area near the western portion of Markham Ravine draining from the upland portion of the site, south of Markham Ravine, flowing north/northwest to the Markham Ravine creek channel. The ephemeral swale is approximately 87.1 linear feet and 0.013 acre. This feature does not have a distinct bed or bank, and is vegetated with similar upland grasses and forbs found in the adjacent uplands.

### 5.4 Seasonal Drainage (0.207 acre/ 927 linear feet)

This drainage feature originates from a culvert on the eastern edge of the property and flows generally northwest to Markham Ravine. This is a natural, meandering feature that originally extended into the adjacent property to the east, prior to the construction of a large detention basin on that property. The culvert was placed to drain overflow water from the detention basin on the neighboring property to Markham Ravine. The drainage feature is approximately 0.207 acre and 927.1 linear feet long with an average width of three feet. The feature has a distinct bed and bank, and contains hydrophytic vegetation such as common rush, sedges, nut sedge (*Cyperus eragrostis*), curly dock, and rough cocklebur.

### 5.5 Markham Ravine (0.617 acre/ 1,173 linear feet)

Markham Ravine is a perennial stream that flows from east to west, bisecting the site. Approximately 1,173.4 linear feet of this feature pass through the Study Area with an approximate average width of 26 feet and covering 0.616 acre. The vegetation community along Markham Ravine is riparian with a sparse understory, and is described in more detail above in Section 4.1.2.

Wetlands	Acres
VP-01	1.237
VP-02	0.022
VP-03	0.010
VP-04	0.030
VP-05	0.023
VP-06	0.013
VP-07	0.040
VP-08	0.017
VP-09	0.017
VP-10	0.015
VP-11	0.012
VP-12	0.017
VP-13	0.014
VP-14	0.010
VP-15	0.016
VP-16	0.214
VP-17	0.024
VP-18	0.010
VP-19	0.023
VP-20	0.029
VP-21	0.011
VP-22	0.013
VP-23	0.042
VP-24	0.032
VP-25	0.032
VP-26	0.016
VP-27	0.005
VP-28	0.129
VP-29	0.268
VP30	0.030
VP-31	0.048
VP-32	0.025
VP-33	0.064
VP-34	0.025

### Table 1 Wetland and Other Waters in the Study Area

Wetlands	Acres
VP-35	0.021
VP-36	0.024
VP-37	0.014
VP-38	0.009
VP-39	0.018
VP-40	0.033
VP-41	0.014
VP-42	0.008
VP-43	0.005
VP-44	0.019
VP-45	0.020
VP-46	0.005
VP-47	0.014
VP-48	0.028
VP-49	0.023
VP-50	0.151
VP-51	0.075
VP-52	0.036
VP-53	0.027
VP-54	0.022
VP-55	0.030
VP-56	0.017
VP-57	0.021
VP-58	0.157
VP-59	0.153
VP-60	0.106
VP-61	0.066
VP-62	0.037
VP-63	0.068
VP-64	0.055
VP-65	0.045
VP-66	0.008
VP-67	0.030
VP-68	0.055
VP-69	0.005
VP-70	0.017
VP-71	0.096
VP-72	0.034
VP-73	0.008
VP-74	0.016
VP-75	0.008
VP-76	0.017
VP-77	0.008
Wetland 1	0.561
Wetland 2	0.072
Total Wetlands	5.636 Acres
Other Waters	Acres/Linear Feet
Markham Ravine	0.617acres/ 1173.4feet
Drainage	0.207 acres/ 927.1 feet
Ephemeral Drainage	0.013 acres/ 187.1 feet
Total Other Waters	0.837 Acres/2287.6 Linear Feet

# 6 Findings

Based on the findings of this delineation, the Study Area contains approximately 5.636-acre wetland and 0.837 acres (2287.6 linear feet) of other waters of the U.S. (Appendix A) that appear to be subject to the Corps' jurisdiction pursuant to the Clean Water Act for the following reasons:

- The vernal pools and seasonal wetlands in the Study Area meet the Corps' three-parameter wetland criteria (hydrophytic vegetation, hydric soils, and wetland hydrology); and
- Markham Ravine is hydrologically linked to a series of canals that convey water to the Sacramento River. Thus, the wetland has a significant nexus to a relatively permanent water that flows directly to a Traditional Navigable Water.

Acreages of wetlands and other Waters of the United States in the Study Area are summarized in Table 1 and depicted graphically in Appendix A:

No additional wetlands or waters were identified in the Study Area. All wetlands and waters with the Study Area meet the broader criteria for Water of the State and should be considered RWQCB jurisdiction.

# 7 Supplemental Information

### 7.1 Directions to the Study Area

From Sacramento, California, take Interstate-80 (I-80) East toward Roseville. Take exit for Highway 65 and head north until you reach Nelson Lane. Turn right on Nelson Lane and the project area is on the left of Nelson Lane. To reach the Study Area walk 250 feet east from Nelson Lane.

### 7.2 Contact Information

Applicant Chris Gill Gill Property Development, LLC 424 D Street Marysville, CA 95901 (530) 301-0485 chrisgill67@yahoo.com

Delineator Sam Bacchini Cardno 701 University Ave, Suite 200 Sacramento, California 95825 (916) 386-3850 sam.bacchini@cardno.com

# 8 References

- Environmental Laboratory, Department of the Army. 1987. U.S. Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1). U.S. Army Corps of Engineers. Waterways Experimental Station. Vicksburg, Mississippi.
- Baldwin, Bruce G. Ed., 2012. The Jepson Manual: Vascular Plants of California; Second Edition. University of California Press. Berkeley, California.
- Lichvar, Robert W., and McColley, Shawn M. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. U.S. Army Corps of Engineers Engineer Research and Development Center. Publication ERDC/CRREL TR-08-12.
- Lichvar, R.W. 2013. The National Wetland Plant List: 2013 wetland ratings. Phytoneuron 2013-49: 1-241.
- Munsell. 2009. Soil Color Charts. Kollmorgen Instruments Corporation. New Windsor, New York.
- Soil Survey Staff, 2013. Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/ accessed November March 4, 2013.
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 2013. National Hydric Soils List by State - California. March 2013. Website (http://soils.usda.gov/use/hydric/lists/state.html) accessed May 11, 2012.
- U.S. Army Corps of Engineers. 2007 Jurisdictional Determination Form Instructional Guidebook. May 2007.
- U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September 2008.

Gill Property

# APPENDIX

# WETLANDS AND OTHER WATERS MAP



	VP=04	VP-10	VP-14	V	P916				
N-VS-23	VR-01					Wetland Delineation - Acreage Summary			
11-10-23		VP-11		X			Gill	Nelson	All features
N-VP-25		03	VP=13			Wetlands			
			VD47	VP-73		Floodplain Wetland	0.847	0.000	0.847
		A CALL AND AND	0000	~~??™	/P-75	Vernal Pool	4.156	0.601	4.757
		Son .				Vernal Swale	0.000	0.074	0.074
N-VP-24	VP-01	$\nabla \Delta $	VI VI	P-74		Wetland	0.633	0.000	0.633
		N SA			國國國 机电子运	Subtotal:	5.636	0.675	6.311
	AR	И Ч	VP18			Other Waters			
124 2200	N N	VP-02		Street Barry	/P-19	Drainage	0.207	0.000	0.207
-121.5399,		A MB		143		Ephemeral Drainage	0.013	0.000	0.013
38.8902					and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	Markham Ravine	0.617	0.238	0.855
the second second second second					10000	Subtotal:	0.837	0.238	1.075
					-	TOTAL	6.473	0.913	7.386
NOTES									
Gross Site Acreage: +/- 79 ac. (Study Area is +/- 53 ac.)		- 1 - 1		1.1	Delineato	rs:		Card	00
Aerial Photo Source: © February, 2012 Microsoft Corporation and its data supp	iers		Lincoln	1	Sam Bacchini,	am Bacchini, Cardno			
*This exhibit depicts information and data produced in strict accord with the LLS	Army Corps of Engineers wetland delineation	in methods		1			Gill	Anneya	tion
described in the 1987 Corps of Engineers Wetland Delineation Manual and conforms to specifications per the Corps Sacramento District.		ento District.	t Site	8	Delineation Date:				
However, wetland boundaries have not been legally surveyed and may be subject	t to minor adjustments if exact locations are r	required.	Roseville	20	4/3/2014	4	Ар	penaix	A
** The acreage value for each feature has been rounded to the nearest 1/1000 de potential Waters of the U.S. acreage reported.	cimal. Summation of these values may not eq	qual the total	da	212			Netlan	d Delin	eation*
		1 Contraction	. /	100	Preparation	Date:			
		12	-	angeval	4/20/2014 M.M	Nugent		50 100	200 Feet
		West	Carmichae	el	Revision D	ate:	Х-е Х	1 inch = 2	00 feet
		cramento	Sacramento		n/a	S	Proje	ction: Cal. Sta Datum: N	teplane, Zone 2 AD 83

 $\label{eq:c:l_TRANSFER} \end{tabular} C: \label{eq:c:l_TRANSFER} ToZ \end{tabular} Sill \end{tabular} Annexation \end{tabular} Sill \end{tabular} Wetland \end{tabular} Delineation \end{tabular} 11i17i_02.mxd \end{tabular} 3/2/2015 \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tabular} Sill \end{tab$ 

Gill Property

# APPENDIX



## REPERSENTATIVE SITE PHOTOGRAPHS



Photo 1: Typical nonnative grassland and vernal pool habitat found in Study Area



Photo 2: Typical view of riparian habitat by Markham Ravine



Photo 3: Typical view of Markham Ravine flood plain



Photo 4: Drainage from Markham Ravine into Wetland 1



Photo 5: Typical view of Wetland 1



Photo 6: Wetland 2


Photo 7: Typical view of vernal pool that was unaffected by the 2013 grass fire



Photo 8: Typical view of vernal pool that was affected by the 2013 grass fire



Photo 9: Drainage, near Markham Ravine outlet



Photo 10: Ephemeral Drainage, near Markham Ravine inlet

Gill Property



# DATA SHEETS

Project Site: Gill Annexation		City/Count	y: Lincoln/Placer	Sampling Date:	04/03/14	1
Applicant/Owner: Genesis Engineering			State: <u>CA</u>	Sampling Point:	<u>SP01</u>	
Investigator(s): Sam Bacchini		Section, To	ownship, Range: <u>Section 17, Townsh</u>	nip 12N, Range 6E	<u>.</u>	
Landform (hillslope, terrace, etc.): terrace	Loc	al relief (con	cave, convex, none): <u>concave</u>	Slop	be (%): <u>2</u>	<u>.</u>
Subregion (LRR): <u>Mediterranean</u>	Lat: <u>38.896364°</u>		Long: <u>-121.389688°</u>	Datum: <u>N</u>	AD83	
Soil Map Unit Name: California <u>Cometa-Fiddyment complex; C</u> sandy loam, 2 to 9 percent slop	ometa-Romona sandy loam	s, 1 to 5 percently flooded	cent slope; Ramona NWI classif	ication: <u>N/A</u>		
Are climatic / hydrologic conditions on the site type	cal for this time of year?	Yes 🗌	No 🛛 (If no, explain in Ren	narks.)		
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	significantly disturbed	? Are "I	Normal Circumstances" present?	Yes	No No	□ c
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	naturally problematic?	(If nee	eded, explain any answers in Remark	.s.)		
SUMMARY OF FINDINGS – Attach site map sh	nowing sampling point	locations,	transects, important features,	etc.		
Hydrophytic Vegetation Present?	Yes 🗌 No 🖾					
Hydric Soil Present?	Yes 🗌 No 🖾	Is the Sam	pled Area within a Wetland?	Yes		o ⊠
Wetland Hydrology Present?	Yes 🗌 No 🖾					
Remarks: Currently in a drought year, however, ye	getation and hydrology we	ere not prob	lematic.			
VEGETATION – Use scientific names of plants	S.					
Tree Stratum (Plot size:)	Absolute Dominant % Cover Species?	Indicator Status	Dominance Test Worksheet:			
1			Number of Dominant Species			<i></i>
2			That Are OBL, FACW, or FAC:	<u>0</u>		(A)
3			Total Number of Dominant			(5)
4			Species Across All Strata:	<u>1</u>		(B)
50% =, 20% =	= Total Cover		Percent of Dominant Species	0		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, or FAC:	<u>0</u>		(A/B)
1			Prevalence Index worksheet:			
2			Total % Cover of :	Multiply	<u>v by:</u>	
3			OBL species	x1 =		
4			FACW species	x2 =		
5			FAC species 7	x3 =	<u>21</u>	
50% =, 20% =	= Total Cover		FACU species <u>7</u>	x4 =	<u>28</u>	
Herb Stratum (Plot size:1M2)			UPL species 79	x5 =	395	
1. Elvmus caput-medusae	58 ves	UPL	Column Totals: 93 (A)		435 (B)	
2 Bromus hordeaceus	7 no	FACU	Prevalence Inde	ax = B/A = 4.68	<u></u> (-)	
3 Rumey crispus	7 no	FAC	Hydrophytic Vegetation Indicators	<u>s:</u>		
4 Galium porrigens	<u>7</u> <u>no</u> 7 no			6		
5 Erodium cicutarium	7 no			1		
6 Coronium dissoctum	<u>7 10</u> 7 po		Prevalence Index is <3.0	) 1 (=		
7 Astropolus sp	<u>7 110</u> 7 no	OFL	Morphological Adaptatio     data in Remarks or on a	ns' (Provide supp separate sheet)	orting	
n. <u>Astragatus sp.</u>	<u>r 110</u>	-		······		
o			Problematic Hydrophytic	Vegetation' (Exp	lain)	
50% =, 20% =	<u>100</u> = 10tal Cover		¹ Indicators of hydric soil and wetland	d hydrology must		
<u>woody vine Stratum</u> (Plot size:)			be present, unless disturbed or prob	lematic.		
··	<u> </u>	—				
2		—	Hydrophytic Vegetation	Yes 🗆	No	
50% =, 20% =	= I otal Cover		Present?	⊔		
Provide and a constraint         Provide and a constraint           Remarks:         Vegetation dominated by upland provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and provide and pro	% Cover of Biotic Crust					
US Army Corps of Engineers				Arid West –	Version 2	.0

Project Site: <u>Gill Annexation</u>

SOIL										Samp	ling Point	: <u>SP01</u>
Profile D	escription: (Describe to t	he depth	needed to d	ocument the in	ndicator or con	firm the abse	ence of indic	ators.)				
Depth	n Matrix			Redo	x Features	2						
(inches	s) <u>Color (moist)</u>	<u>%</u>	Color (Mo	<u>ist) %</u>	<u>Type</u>	Loc ²	Tex	<u>ture</u>	<u>Remarks</u>			
<u>0-16</u>	<u>7.5yr 3/3</u>	<u>100</u>					sandy	loam				
'Type: C	= Concentration, D=Deplet	on, RM=F	Reduced Matr	ix, CS=Covered	d or Coated San	d Grains. ² L	ocation: PL=	Pore Linin	g, M=Matrix.		a 3	
Hydric S	oil Indicators: (Applicable	e to all Li	RRs, unless (	otherwise note	ed.)		In	dicators fo	or Problematic	Hydric	Soils':	
His	stosol (A1)			Sandy Redox	(S5)		L	] 1 cm	Muck (A9) (LR	RC)		
L His	stic Epipedon (A2)			Stripped Matr	ix (S6)		L	2 cm	Muck (A10) (LI	RR B)		
L Bla	Black Histic (A3) Loamy Mucky Mineral (F1)						L	Redu	ced Vertic (F18	)		
Hy	drogen Sulfide (A4)			Loamy Gleye	d Matrix (F2)			J Red F	Parent Material	(TF2)		
□ Str	atified Layers (A5) (LRR C	)		Depleted Mat	rix (F3)		Ľ	Other	r (Explain in Re	marks)		
□ 1 c	m Muck (A9) (LRR D)			Redox Dark S	Surface (F6)							
🗆 De	pleted Below Dark Surface	(A11)		Depleted Dar	k Surface (F7)							
🔲 Thi	ick Dark Surface (A12)			Redox Depre	ssions (F8)			³ Indic	ators of hydrop	hytic veg	getation a	and
□ Sa	ndy Mucky Mineral (S1)			Vernal Pools	(F9)			we	tland hydrology	must be	e present	,
🔲 Sa	ndy Gleyed Matrix (S4)							u	nless disturbed	or prob	lematic.	
Restricti	ve Layer (if present):											
Type:	<u>n/a</u>											
Depth (In	nches):					Hydric Soi	ils Present?		Yes		No	$\boxtimes$
Remarks	: Hydric soils not obser	ved										
HYDRO	LOGY											
Wetland	Hydrology Indicators:											
Primary I	ndicators (minimum of one	required;	check all that	t apply)			Sec	condary Inc	licators (2 or m	ore requ	ired)	
Su Su	urface Water (A1)			Salt Crust (B1	1)			Water M	arks (B1) <b>(Rive</b>	rine)		
🗆 Hig	gh Water Table (A2)			Biotic Crust (I	B12)			Sedimer	nt Deposits (B2)	(Riveri	ne)	
🗆 Sa	aturation (A3)			Aquatic Inver	tebrates (B13)			Drift Dep	oosits (B3) <b>(Riv</b>	erine)		
	Water Marks (B1) (Nonriverine)     Hydrogen Sulfide Odd							Drainage Patterns (B10)				

Oxidized Rhizospheres along Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Depth (inches):

Depth (inches):

Depth (inches):

Other (Explain in Remarks)

Wetland Hydrology Present?

Dry-Season Water Table (C2)

Saturation Visible on Aerial Imagery (C9)

Crayfish Burrows (C8)

Shallow Aquitard (D3)

FAC-Neutral Test (D5)

Remarks: No surface water, water table, saturation or primary hydrology indicators observed

No

No

No

Yes

Yes

Yes

 $\boxtimes$ 

 $\boxtimes$ 

 $\boxtimes$ 

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

US Army Corps of Engineers

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Sediment Deposits (B2) (Nonriverine)

Inundation Visible on Aerial Imagery (B7)

Drift Deposits (B3) (Nonriverine)

Surface Soil Cracks (B6)

Water-Stained Leaves (B9)

Arid West - Version 2.0

Yes

 $\boxtimes$ 

No

Project Site: Gill Annexation		City/County: Lincoln/Placer S	Sampling Date: 04/03/14
Applicant/Owner: Genesis Engineering		State: <u>CA</u> S	ampling Point: SP02
Investigator(s): Sam Bacchini		Section, Township, Range: Section 17, Township	12N, Range 6E
Landform (hillslope, terrace, etc.): terrace	Loc	al relief (concave, convex, none): <u>concave</u>	Slope (%): 2
C Subregion (LRR): <u>Mediterranean</u> California	Lat: <u>38.896364°</u>	Long: <u>-121.389688°</u>	Datum: <u>NAD83</u>
Soil Map Unit Name: Soil Map Unit Name:	ometa-Romona sandy loam	s, 1 to 5 percent slope; Ramona NWI classifica	tion: <u>N/A</u>
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes 🔲 No 🖾 (If no, explain in Rema	rks.)
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	significantly disturbed	? Are "Normal Circumstances" present?	Yes 🛛 No 🗖
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	naturally problematic?	(If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling point	locations, transects, important features, et	с.
Hydrophytic Vegetation Present?	Yes 🛛 No 🗌		
Hydric Soil Present?	Yes 🗌 No 🖾	Is the Sampled Area within a Wetland?	Yes 🗌 No 🖾
Wetland Hydrology Present?	Yes 🛛 No 🗌		
Remarks: Currently in a drought year, however, ve	getation and hydrology we	re not problematic.	
VEGETATION – Use scientific names of plants	s.		
Tree Stratum (Plot size:)	Absolute Dominant <u>% Cover</u> Species?	Indicator Status Dominance Test Worksheet:	
1		Number of Dominant Species	1 (A)
2		That Are OBL, FACW, or FAC:	<u> </u>
3		Total Number of Dominant	1 (B)
4		Species Across All Strata:	_ 、 、
50% =, 20% =	= Total Cover	Percent of Dominant Species	<u>100</u> (A/B)
Sapling/Shrub Stratum (Plot size:)			
1		Prevalence Index worksheet:	
2		Iotal % Cover of :	<u>Multiply by:</u>
3		OBL species	x1 =
4		FACW species	x2 =
5			x3 =
30% = , $20% =$			x4 =
<u>Herb Stratum</u> (Plot size. <u>TMZ</u> )	00	TACH (A)	(D)
1. <u>Festuca pratensis</u>	<u>90 yes</u>	FACU Column Totals: (A)	(B)
2. <u>Rumex crispus</u>	<u>10 no</u>	FAC Prevalence Index =	B/A =
3		Hydrophytic Vegetation Indicators:	
4		Dominance Test is >50%	
5		$\square$ Prevalence Index is $\leq 3.0^{\circ}$	
6		Morphological Adaptations	(Provide supporting
<i>1.</i>			1
8		Problematic Hydrophytic Ve	egetation' (Explain)
50% = , $20% = $ )	<u>100</u> = 10tal Cover	¹ Indicators of hydric soil and wetland h	ydrology must
		be present, unless disturbed or probler	natic.
··		—	
2 50% 20% -	- Total Cavar	Hydrophytic	′es ⊠ No □
% Bare Ground in Herb Stratum	Cover of Biotic Crust	Present?	
Remarks: Vegetation dominated by wetland	plant species		
US Army Corps of Engineers			Arid Wast Varsian 2.0

US Army Corps of Engineers

Project Site:	Gill Annexation
---------------	-----------------

SOI	L											Sampl	ing Point:	<u>SP02</u>
Prof	ile Descr	iption: (Describe to	the depth	needed to d	ocumen	t the indica	ator or conf	irm the absence o	of indica	ators.)				
D	epth	Matrix				Redox Fe	atures							
<u>(in</u>	<u>ches)</u>	Color (moist)	%	Color (Mo	i <u>st)</u>	<u>%</u>	Type ¹	Loc ²	Text	ure	Remarks			
<u>(</u>	<u>)-16</u>	<u>7.5yr 3/1</u>	<u>80</u>	<u>7.5yr 4/4</u>	<u>/4</u> <u>20</u>		<u>C</u>	M	<u>cla</u>	<u>v</u>				
_														
_														
_														
_														
¹ Typ	e: C= Cor	ncentration, D=Deple	etion, RM=R	educed Matr	ix, CS=C	Covered or (	Coated San	d Grains. ² Locatio	on: PL=	Pore Lining,	M=Matrix.			
Hydi	ric Soil In	dicators: (Applicat	ole to all LR	Rs, unless	otherwis	e noted.)			Inc	dicators for	Problematic	Hydric	Soils ³ :	
	Histosol	(A1)			Sandy	Redox (S5	)			1 cm M	uck (A9) <b>(LR</b>	R C)		
	Histic E	pipedon (A2)			Strippe	ed Matrix (S	6)			2 cm M	uck (A10) <b>(Ll</b>	RR B)		
	Black H	istic (A3)			Loamy	Mucky Min	eral (F1)			Reduce	d Vertic (F18	6)		
	Hydroge	en Sulfide (A4)			Loamy	Gleyed Ma	atrix (F2)			Red Pa	rent Material	(TF2)		
	Stratifie	d Layers (A5) ( <b>LRR</b>	C)		Deplet	ed Matrix (F	-3)			Other (I	Explain in Re	marks)		
	1 cm Mu	uck (A9) ( <b>LRR D</b> )		Redox Dark Surface (F6)										
	Deplete	d Below Dark Surfac	e (A11)		Deplet	ed Dark Su	rface (F7)							
	Thick Da	ark Surface (A12)			Redox	Depressior	ns (F8)			³ Indicate	ors of hydrop	hytic veg	etation a	nd
	Sandy N	Mucky Mineral (S1)			Vernal	Pools (F9)				wetla	nd hydrology	must be	present,	
	Sandy C	Gleyed Matrix (S4)								unle	ess disturbed	or proble	ematic.	
Rest	rictive La	ayer (if present):												
Туре	:	<u>n/a</u>												
Dept	h (Inches	):						Hydric Soils Pre	esent?		Yes		No	$\boxtimes$
Rem	arks:	Hydric soils not obse	erved											
HYD	ROLOG	SY												
Wetl	and Hydi	rology Indicators:												
Prim	ary Indica	ators (minimum of on	e required;	check all that	t apply)				Sec	ondary Indic	ators (2 or m	ore requi	red)	
	Surface	e Water (A1)			Salt Cr	ust (B11)				Water Mar	ks (B1) <b>(Rive</b>	erine)		
	High W	ater Table (A2)			Biotic (	Crust (B12)				Sediment I	Deposits (B2)	(Riveriı	ne)	
	Saturat	ion (A3)			Aquation	c Invertebra	ates (B13)			Drift Depos	sits (B3) <b>(Riv</b>	erine)		
	Water N	Marks (B1) <b>(Nonrive</b>	rine)		Hydrog	gen Sulfide	Odor (C1)		Drainage Patterns (B10)					
	Sedime	ent Deposits (B2) (No	onriverine)		Oxidize	ed Rhizospl	heres along	Living Roots (C3)		Dry-Seaso	n Water Tab	e (C2)		
$\boxtimes$	Drift De	posits (B3) (Nonrive	erine)		Preser	nce of Redu	ced Iron (C4	4)		Crayfish B	urrows (C8)			
Surface Soil Cracks (B6)							ction in Tille	d Soils (C6)		Saturation Visible on Aerial Imagery (C9)				

Wetland Hydrology Indicators:												
Primary Indicators (minimum of one required; check	all tha	t apply)	Sec	ondary Indicators (2 or more required)								
Surface Water (A1)		Water Marks (B1) (Riverine)										
High Water Table (A2)	Sediment Deposits (B2) (Riverine)											
Saturation (A3)		Aquatic Invertebrates (B13)		Drift Deposits (B3) (Riverine)								
Water Marks (B1) (Nonriverine)		Drainage Patterns (B10)										
Sediment Deposits (B2) (Nonriverine)		Oxidized Rhizospheres along Living Roots (C3)	)	Dry-Season Water Table (C2)								
Drift Deposits (B3) (Nonriverine)		Presence of Reduced Iron (C4)		Crayfish Burrows (C8)								
Surface Soil Cracks (B6)		Recent Iron Reduction in Tilled Soils (C6)		Saturation Visible on Aerial Imagery (C9)								
Inundation Visible on Aerial Imagery (B7)		Thin Muck Surface (C7)		Shallow Aquitard (D3)								
Water-Stained Leaves (B9)		Other (Explain in Remarks)	Other (Explain in Remarks)									
Field Observations:												
Surface Water Present? Yes 🛛 No		Depth (inches):										
Water Table Present? Yes 🛛 No		Depth (inches):										
Saturation Present? Yes No (includes capillary fringe)	Saturation Present? Yes I No Depth (inches): V (includes capillary fringe)											
Describe Recorded Data (stream gauge, monitoring	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks: Surface water, water table, saturation	n or pri	mary hydrology indicators observed										

US Army Corps of Engineers

Project Site: Gill Annexation		City/Count	y: Lincoln/Placer	Sampling Date:	04/03/14	<u>1</u>
Applicant/Owner: Genesis Engineering			State: <u>CA</u>	Sampling Point:	<u>SP03</u>	
Investigator(s): Sam Bacchini		Section, To	ownship, Range: <u>Section 17, Townsh</u>	ip 12N, Range 6E	<u>:</u>	
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (cor	ncave, convex, none): <u>concave</u>	Slop	be (%): <u>2</u>	<u>.</u>
Subregion (LRR): <u>Mediterranean</u>	Lat: <u>38.896364°</u>		Long: <u>-121.389688°</u>	Datum: <u>N</u>	AD83	
Soil Map Unit Name: California <u>Cometa-Fiddyment complex; C</u> sandy loam, 2 to 9 percent slop	ometa-Romona sandy loam	is, 1 to 5 percently flooded	cent slope; Ramona NWI classifi	cation: <u>N/A</u>		
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes 🗌	No 🛛 (If no, explain in Ren	narks.)		
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	significantly disturbed	? Are "I	Normal Circumstances" present?	Yes	⊠ No	□ c
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	naturally problematic	? (If ne	eded, explain any answers in Remark	s.)		
SUMMARY OF FINDINGS – Attach site map sh	nowing sampling point	locations,	transects, important features,	etc.		
Hydrophytic Vegetation Present?	Yes 🗌 No 🖾					
Hydric Soil Present?	Yes 🗌 No 🖾	Is the Sam	pled Area within a Wetland?	Yes		o ⊠
Wetland Hydrology Present?	Yes 🗌 No 🖾					
Remarks: Currently in a drought year. however, ye	getation and hydrology w	ere not prob	lematic.			
VEGETATION – Use scientific names of plants	S.					
Tree Stratum (Plot size:)	Absolute Dominant % Cover Species?	Indicator Status	Dominance Test Worksheet:			
1	<u></u>		Number of Dominant Species	_		<i></i>
2			That Are OBL, FACW, or FAC:	<u>0</u>		(A)
3			Total Number of Dominant			-
4			Species Across All Strata:	<u>1</u>		(B)
50% =, 20% =	= Total Cover		Percent of Dominant Species			
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, or FAC:	<u>0</u>		(A/B)
1			Prevalence Index worksheet:			
2			Total % Cover of :	Multiply	<u>/ by:</u>	
3			OBL species	x1 =		
4			FACW species	x2 =		
5			FAC species 20	x3 =	<u>60</u>	
50% =, 20% =	= Total Cove		FACU species	x4 =		
Herb Stratum (Plot size:1M2)			UPL species 75	x5 =	375	
1. Elvmus caput-medusae	55 ves	UPL	Column Totals: 95 (A)		435 (B)	
2 Holocaroba virgata	<u></u> 5 no		Prevalence Inde	PX = B/A = 4.58	<u></u> (-)	
3 Vulpia bromoides	<u>o no</u> 20 no	FAC	Hydrophytic Vegetation Indicators	<u>x = B//( = <u>1.00</u></u>		
4 Erodium cicutarium	<u>20 no</u>			~		
5 Vicia sp	<u>5 no</u>	<u></u>		1		
6 Coronium dissoctum	<u>5 110</u>		Prevalence Index is <3.0	1		
7	<u> </u>		data in Remarks or on a	separate sheet)	orting	
8			Problematic Hydrophytic	Vegetation ¹ (Exp	lain)	
50% =, 20% =	100 = Total Cover		4			
Woody Vine Stratum (Plot size:)			¹ Indicators of hydric soil and wetland	I hydrology must		
1						
2			Hydrophytic			
50% =, 20% =	= Total Cover		Vegetation	Yes 🗌	No	$\boxtimes$
% Bare Ground in Herb Stratum	% Cover of Biotic Crust		Present?			
Remarks: Vegetation dominated by upland p	plant species					
US Army Corps of Engineers				Arid West –	Version 2	.0

Project Site: <u>Gill Annexation</u>

SO	IL											San	npling Point	t: <u>SP03</u>
Prof	file Descr	iption: (Describe to t	he depth	n needed to d	ocumen	t the indica	tor or con	firm the a	bsence	of indicato	rs.)			
0	Depth	Matrix				Redox Fe	atures			_				
<u>(ir</u>	<u>nches)</u>	Color (moist)	<u>%</u>	Color (Moi	ist)	<u>%</u>	Type ¹	<u>Lc</u>	$bc^2$	Texture	<u>Remarks</u>			
	<u>0-16</u>	<u>7.5yr 3/4</u>	<u>100</u>							<u>clay loan</u>	<u>n</u>			
-														
-														
-														
-														
-														
¹ Typ	e: C= Co	ncentration, D=Depleti	on, RM=I	Reduced Matr	ix, CS=0	Covered or C	Coated San	d Grains.	² Loca	tion: PL=Por	e Lining, M=Matrix.			
Hyd	ric Soil Ir	dicators: (Applicable	e to all Ll	RRs, unless o	otherwis	se noted.)				Indica	ators for Problemat	ic Hydr	ic Soils ³ :	
	Histosol	(A1)			Sandy	Redox (S5)					1 cm Muck (A9) <b>(L</b>	RR C)		
	Histic E	pipedon (A2)			Strippe	ed Matrix (S	6)				2 cm Muck (A10) (	LRR B)		
	Black H	istic (A3)			Loamy	Mucky Min	eral (F1)				Reduced Vertic (F	18)		
	Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)							Red Parent Materi	al (TF2)		
	Stratifie	d Layers (A5) ( <b>LRR C</b> )	)		Deplet	ed Matrix (F	3)				Other (Explain in F	Remarks	)	
	1 cm Mi	uck (A9) ( <b>LRR D</b> )			Redox	Dark Surfa	ce (F6)							
	Deplete	d Below Dark Surface	(A11)		Deplet	ed Dark Su	face (F7)							
	Thick D	ark Surface (A12)			Redox	Depression	is (F8)				³ Indicators of hvdro	ophytic v	egetation a	and
	Sandy M	/lucky Mineral (S1)			Vernal	Pools (F9)					wetland hydrolog	gy must	be present	,
	Sandy C	Gleyed Matrix (S4)									unless disturbe	ed or pro	blematic.	
Res	trictive La	ayer (if present):												
Тур	e:	<u>n/a</u>												
Dep	th (Inches	):						Hydric	Soils P	resent?	Yes		No	$\boxtimes$
Rem	narks:	Hydric soils not obser	ved											
HYI	DROLOG	BY												
Wet	land Hyd	rology Indicators:												

Prima	ary Indicators (minimum	n of one re	equired	; check	all that	t apply)	Sec	ondary Indicators (2 or more required)			
	Surface Water (A1)					Salt Crust (B11)	Water Marks (B1) (Riverine)				
	High Water Table (A2	2)				Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)			
Saturation (A3)						Aquatic Invertebrates (B13)		Drift Deposits (B3) (Riverine)			
Water Marks (B1) (Nonriverine)						Hydrogen Sulfide Odor (C1)	łydrogen Sulfide Odor (C1)				
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3								Dry-Season Water Table (C2)			
Drift Deposits (B3) (Nonriverine)								Crayfish Burrows (C8)			
Surface Soil Cracks (B6) Rece						Recent Iron Reduction in Tilled Soils (C6)	ecent Iron Reduction in Tilled Soils (C6)				
	Inundation Visible on	Aerial Ima	agery (I	37)		Thin Muck Surface (C7)		Shallow Aquitard (D3)			
	Water-Stained Leaves	s (B9)				Other (Explain in Remarks)		FAC-Neutral Test (D5)			
Field	Observations:										
Surfa	ce Water Present?	Yes		No	$\boxtimes$	Depth (inches):					
Wate	r Table Present?	Yes		No	$\boxtimes$	Depth (inches):					
Satur (inclu	Saturation Present? Yes No (includes capillary fringe)				$\boxtimes$	Depth (inches): Wet	tland Hy	drology Present? Yes 🗌 No 🛛			
Desc	ribe Recorded Data (st	ream gau									
Rer	narks: No surface w	ater. wate	er table.	saturat	tion or	primary hydrology indicators observed					

US Army Corps of Engineers

Project Site: Gill Annexation		City/Count	y: Lincoln/Placer	Sampling Date:	04/03/14	<u>.</u>
Applicant/Owner: Genesis Engineering			State: CA	Sampling Point:	<u>SP04</u>	
Investigator(s): Sam Bacchini		Section, To	ownship, Range: Section 17, Town	nship 12N, Range 6	<u>=</u>	
Landform (hillslope, terrace, etc.): terrace	Lo	cal relief (cor	ncave, convex, none): <u>concave</u>	Slo	pe (%): <u>2</u>	
Subregion (LRR): <u>Mediterranean</u> California	Lat: <u>38.896364°</u>		Long: <u>-121.389688°</u>	Datum: <u>N</u>	<u>1AD83</u>	
Soil Map Unit Name: Cometa-Fiddyment complex; C sandy loam, 2 to 9 percent slop	cometa-Romona sandy loam be; and Xerofluvents, freque	is, 1 to 5 per ntly flooded	cent slope; Ramona NWI clas	sification: <u>N/A</u>		
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes 🛛	No 🛛 (If no, explain in F	(emarks.)		
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	significantly disturbed	? Are "	Normal Circumstances" present?	Yes	🖾 No	→ □
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	naturally problematic?	? (If ne	eded, explain any answers in Rem	arks.)		
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling point	locations,	transects, important feature	s, etc.		
Hydrophytic Vegetation Present?	Yes 🗌 No 🖾					
Hydric Soil Present?	Yes 🛛 No 🗖	Is the Sam	pled Area within a Wetland?	Yes	🗆 No	> ⊠
Wetland Hydrology Present?	Yes 🛛 No 🗖					
Remarks: Currently in a drought year, however, ve	getation and hydrology w	ere not prob	lematic.			
VEGETATION – Use scientific names of plant	s.					
Tree Stratum (Plot size:)	Absolute Dominant % Cover Species?	Indicator Status	Dominance Test Worksheet:			
1			Number of Dominant Species	4		(4)
2			That Are OBL, FACW, or FAC:	<u>1</u>		(A)
3			Total Number of Dominant	2		(P)
4			Species Across All Strata:	2		(D)
50% =, 20% =	= Total Cover		Percent of Dominant Species	33		(A/B)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, or FAC:	<u></u>		(,,,_)
1			Prevalence Index worksheet:			
2			Total % Cover of :	Multiply	<u>y by:</u>	
3			OBL species <u>10</u>	x1 =	<u>10</u>	
4			FACW species 20	x2 =	<u>40</u>	
5			FAC species <u>20</u>	x3 =	<u>60</u>	
50% =, 20% =	= Total Cover		FACU species <u>20</u>	x4 =	<u>120</u>	
<u>Herb Stratum</u> (Plot size: <u>1M2</u> )			UPL species 50	x5 =	<u>250</u>	
1. <u>Elymus caput-medusae</u>	<u>45 yes</u>	<u>UPL</u>	Column Totals: <u>100</u> (A)		<u>480</u> (B)	
2. <u>Festuca pratensis</u>	<u>20 yes</u>	FACU	Prevalence I	ndex = B/A = 4.8		
3. <u>Plagiobothrys stipitatus</u>	<u>20 yes</u>	FACW	Hydrophytic Vegetation Indicat	ors:		
4. <u>Ranunculus aquatilis</u>	<u>10 no</u>	<u>OBL</u>	Dominance Test is >5	0%		
5. <u>Trifolium dubium</u>	<u>5 no</u>	<u>UPL</u>	Prevalence Index is	3.0 ¹		
6 7			Morphological Adapta data in Remarks or or	itions ¹ (Provide supp a separate sheet)	orting	
8			Problematic Hydrophy	vtic Vegetation ¹ (Exc	olain)	
50% = , 20% =	100 = Total Cover		r toblemane r yaroph.	ao regetatori (Exp	lain)	
Woody Vine Stratum (Plot size:)			¹ Indicators of hydric soil and wetle	and hydrology must		
1			be present, unless disturbed of p	obiematic.		
2			Hydrophytic			
50% =, 20% =	= Total Cover		Vegetation	Yes 🗌	No	$\boxtimes$
% Bare Ground in Herb Stratum	% Cover of Biotic Crust		Present?			
Remarks: Vegetation dominated by upland p	plant species					
US Army Corps of Engineers				Arid West –	Version 2	.0

SOI	L									Sampling Point:	<u>SP04</u>
Prof	ile Descri	ption: (Describe to	o the dept	h needed to de	ocument the ind	icator or confirr	n the absenc	e of indicator	s.)		
D	Pepth	Matrix			Redox	Features					
<u>(in</u>	<u>iches)</u>	Color (moist)	<u>%</u>	Color (Moi	<u>st) %</u>	Type ¹	Loc ²	Texture	Remarks		
	<u>0-6</u>	<u>7.5yr 3/2</u>	<u>90</u>	<u>7.5yr 4/4</u>	<u>10</u>	<u>C</u>	M	clay loam	<u>1                                    </u>		
_											
_											
_											
¹ Typ	e: C= Cor	centration, D=Deple	etion, RM=	Reduced Matri	ix, CS=Covered o	or Coated Sand G	Grains. ² Loca	ation: PL=Pore	e Lining, M=Matrix.		
Hyd	ric Soil In	dicators: (Applical	ble to all I	_RRs, unless o	otherwise noted.	)		Indica	tors for Problematic	Hydric Soils ³ :	
	Histosol	(A1)			Sandy Redox (S	S5)			1 cm Muck (A9) (LRR	2 C)	
	Histic Ep	pipedon (A2)			Stripped Matrix	(S6)			2 cm Muck (A10) (LR	RB)	
	Black Hi	stic (A3)			Loamy Mucky M	lineral (F1)			Reduced Vertic (F18)		
	Hydroge	en Sulfide (A4)			Loamy Gleyed I	Matrix (F2)		$\boxtimes$	Red Parent Material (	TF2)	
	Stratified	d Layers (A5) ( <b>LRR</b>	<b>C</b> )		Depleted Matrix	(F3)			Other (Explain in Ren	narks)	
	1 cm Mu	ıck (A9) ( <b>LRR D</b> )			Redox Dark Sur	face (F6)					
	Depleted	d Below Dark Surfac	ce (A11)		Depleted Dark S	Surface (F7)					
	Thick Da	ark Surface (A12)			Redox Depressi	ions (F8)			³ Indicators of hydroph	wtic vegetation an	d
	Sandy M	lucky Mineral (S1)			Vernal Pools (F	9)			wetland hydrology	must be present.	u
	Sandy G	Gleyed Matrix (S4)							unless disturbed	or problematic.	
Rest	trictive La	ayer (if present):									
Туре	e:	<u>hardpan</u>									

#### HYDROLOGY

Depth (Inches):

Remarks:

<u>6</u> Hydric soils observed

Wetl	and Hydrology Indica	itors:											
Prim	ary Indicators (minimur	m of one r	equired	; check	all that	t apply)		Secondary Indicators (2 or more required)					
$\boxtimes$	Surface Water (A1)		] Water Marks (B1) (Riverine)										
High Water Table (A2)						Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)					
Saturation (A3)						Aquatic Invertebrates (B13)			Drift Deposits (B3) (Ri	verine)			
Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)									Drainage Patterns (B1	0)			
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3)									Dry-Season Water Tat	ole (C2)			
Drift Deposits (B3) (Nonriverine)								Crayfish Burrows (C8)					
	Surface Soil Cracks	(B6)				Recent Iron Reduction in Tilled So	ils (C6)	$\boxtimes$	Saturation Visible on A	erial Image	ery (C9)	)	
	Inundation Visible on	Aerial Im	agery (	B7)		Thin Muck Surface (C7)			Shallow Aquitard (D3)				
	Water-Stained Leave	es (B9)				Other (Explain in Remarks)	Other (Explain in Remarks)   Image: FAC-Neutral Test (D5)						
Field	Observations:												
Surfa	ace Water Present?	Yes	$\boxtimes$	No		Depth (inches):							
Wate	er Table Present?	Yes	$\boxtimes$	No		Depth (inches):							
Satu (inclu	Saturation Present? (includes capillary fringe) Yes 🛛 No					Depth (inches): Wetland Hydrology Present? Yes 🛛 N					No	$\boxtimes$	
Desc	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Ro	marks: Surface wate	v water t	ahle sa	turation		mary hydrology indicators observed							

Hydric Soils Present?

US Army Corps of Engineers

Arid West – Version 2.0

 $\boxtimes$ 

No

Yes

Project Site: Gill Annexation			City/Count	y: Lincoln/Placer	Sampling Date:	<u>04/03/1</u>	4
Applicant/Owner: Genesis Engineering				State: CA	Sampling Point:	<u>SP05</u>	
Investigator(s): Sam Bacchini			Section, To	ownship, Range: <u>Section 17, Towns</u>	nip 12N, Range 6E	<u>:</u>	
Landform (hillslope, terrace, etc.): terrace		Loc	al relief (cor	ncave, convex, none): <u>concave</u>	Slop	)e (%):	<u>2</u>
Subregion (LRR): <u>Mediterranean</u> California	Lat: <u>38.8</u>	96364°		Long: <u>-121.389688°</u>	Datum: <u>N</u>	AD83	
Soil Map Unit Name: Cometa-Fiddyment complex; C sandy loam, 2 to 9 percent slop	Cometa-Romo	ona sandy loam luvents, freque	s, 1 to 5 percently flooded	cent slope; Ramona NWI classi	ication: <u>N/A</u>		
Are climatic / hydrologic conditions on the site typi	cal for this tir	ne of year?	Yes 🗌	No 🛛 (If no, explain in Re	marks.)		
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	signific	antly disturbed	? Are "l	Normal Circumstances" present?	Yes	M N	10 🗆
Are Vegetation $\Box$ , Soil $\Box$ , or Hydrology	natural	lly problematic?	(If ne	eded, explain any answers in Remark	(S.)		
SUMMARY OF FINDINGS – Attach site map sl	howing sar	npling point	locations,	transects, important features,	etc.		
Hydrophytic Vegetation Present?	Yes 🛛	No 🗌					
Hydric Soil Present?	Yes 🗆	No 🖾	Is the Sam	pled Area within a Wetland?	Yes		lo 🛛
Wetland Hydrology Present?	Yes 🗌	No 🖾					
Remarks: Currently in a drought year, however, ve	getation and	hydrology we	ere not prob	lematic.			
VEGETATION – Use scientific names of plant	s.						
Tree Stratum (Plot size:)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1				Number of Dominant Species	4		(4)
2				That Are OBL, FACW, or FAC:	<u>_</u>		(A)
3				Total Number of Dominant	1		
4				Species Across All Strata:	1		(D)
50% =, 20% =		= Total Cover		Percent of Dominant Species	100		(A/B)
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW, or FAC:	100		(A/B)
1				Prevalence Index worksheet:			
2				Total % Cover of :	Multiply	<u>/ by:</u>	
3				OBL species	x1 =		
4				FACW species	x2 =		
5				FAC species	x3 =		
50% =, 20% =		= Total Cover		FACU species	x4 =		
Herb Stratum (Plot size:1M2)				UPL species	x5 =		
1. Vulpia bromoides	60	ves	FAC	Column Totals (A)			(B)
2. Erodium cicutarium	15	no	UPL	Prevalence Inde	x = B/A =		( )
3 Briza minor	10	<u>no</u>	FAC	Hydrophytic Vegetation Indicator	s:		
4. Lupinus bicolor	5	no	UPL	Dominance Test is >509	6		
5 Vicia sp	6	<u>no</u>	-		- 0 ¹		
6 Holocarnha virgata	2	<u>no</u>		Frevalence index is <u>&lt;</u> 3.			
7 Centaurea solstitialis	2	<u>no</u>		data in Remarks or on a	ins' (Provide suppo	orting	
o	<u> </u>	<u>110</u>			1		
5	100		—	Problematic Hydrophytic	Vegetation (Expl	ain)	
50% = 20% = 20%	100	= Total Cover		¹ Indicators of hydric soil and wetlan	d hydrology must		
				be present, unless disturbed or prot	plematic.		
·			—				
2		Tatal Ori	—	Hydrophytic Vegetation	Yes 🖾	No	
50% = , $20% =$	0/ Cover	= Total Cover		Present?	2		
	% Cover	of Blotic Crust					
Remarks: Vegetation dominated by wetland	species						
US Army Corps of Engineers					Arid West -	Version '	2.0

Project Site: <u>Gill Annexation</u>

SOIL	-												Sampl	ing Point:	<u>SP05</u>
Profi	le Descr	iption: (Describe to tl	he depth	needed to d	ocume	nt the indica	ator or con	firm the ab	sence	of indicator	s.)				
D	epth	Matrix				Redox Fe	atures								
<u>(inc</u>	<u>ches)</u>	Color (moist)	%	Color (Moist)		%	Type ¹	Loc	2	Texture		emarks			
<u>0</u>	-16	<u>7.5yr 3/4</u>	<u>100</u>						_	<u>clay loar</u>	<u> </u>				
									_						
									_						
									_						
¹ Type	e: C= Cor	ncentration, D=Depletion	on, RM=F	Reduced Matr	ix, CS=	Covered or	Coated San	d Grains.	² Locati	on: PL=Pore	e Lining, M=	Matrix.			
Hydr	ic Soil In	dicators: (Applicable	e to all LF	RRs, unless o	otherwi	se noted.)				Indica	tors for Pro	oblematic	Hydric	Soils ³ :	
	Histosol	(A1)			Sandy	/ Redox (S5	)				1 cm Muck	(A9) <b>(LR</b>	R C)		
	Histic E	pipedon (A2)			Stripp	ed Matrix (S	6)				2 cm Muck	(A10) <b>(Li</b>	RR B)		
	Black H	stic (A3)			Loam	y Mucky Mir	neral (F1)				Reduced \	/ertic (F18	)		
	Hydroge	en Sulfide (A4)			Loam	y Gleyed Ma	atrix (F2)				Red Paren	t Material	(TF2)		
	Stratifie	d Layers (A5) (LRR C)			Deple	ted Matrix (F	F3)				Other (Exp	lain in Re	marks)		
	1 cm Mu	uck (A9) ( <b>LRR D</b> )			Redo	k Dark Surfa	ice (F6)								
	Deplete	d Below Dark Surface	(A11)		Deple	ted Dark Su	rface (F7)								
	Thick Da	ark Surface (A12)			Redo	k Depression	ns (F8)				³ Indicators	of hydrop	hvtic veo	etation a	nd
	Sandy N	lucky Mineral (S1)			Verna	l Pools (F9)					wetland hydrology must be present,				
	Sandy C	Bleyed Matrix (S4)									unless	disturbed	or probl	ematic.	
Rest	rictive La	ayer (if present):													
Type	:	<u>n/a</u>													
Depth	n (Inches	):						Hydric S	oils Pr	esent?		Yes		No	$\boxtimes$
Rema	arks:	No hydric soils observe	ed												
нур		Ŷ													
Wetla	and Hydi	ology Indicators:													

	, .,											
Prima	Primary Indicators (minimum of one required; check all that apply)							Secondary Indicators (2 or more required)				
	Surface Water (A1)					Salt Crust (B11)			] Water Marks (B1) (Riverine)			
High Water Table (A2)						Biotic Crust (B12)			Sediment Deposits (B2) (Riverine)			
Saturation (A3)						Aquatic Invertebrates (B13)			Drift Deposits (B3) (Riverine)			
Water Marks (B1) (Nonriverine)						Hydrogen Sulfide Odor (C1)			Drainage Patterns (B10)			
Sediment Deposits (B2) (Nonriverine)				)		Oxidized Rhizospheres along Living Roots (C3)			Dry-Season Water Table (C2)			
	Drift Deposits (B3) (Nonriverine)				Presence of Reduced Iron (C4)			Crayfish Burrows (C8)				
	Surface Soil Cracks (B6)				Recent Iron Reduction in Tilled Soils (C6)			] Saturation Visible on Aerial Imagery (C9)				
	Inundation Visible on Aerial Imagery (B7)				Thin Muck Surface (C7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9) Other (Explain in Remark				Other (Explain in Remarks)			FAC-Neutral Test (D5)					
Field	Observations:											
Surfa	ce Water Present?	Yes		No	$\boxtimes$	Depth (inches):						
Wate	r Table Present?	Yes		No	$\boxtimes$	Depth (inches):						
Satur (inclu	Saturation Present? Yes I No (includes capillary fringe)				Depth (inches): Wetland Hydrology Present? Yes		drology Present? Yes 🗌 No 🛛					
Desc	ribe Recorded Data (st	ream gau	ge, mo	nitoring	well, a	aerial photos, previous inspections), if availab	ole:					
Rer	Remarks: No surface water water table saturation or primary hydrology indicators observed											

US Army Corps of Engineers

Project Site: Gill Annexation		City/Count	ty: Lincoln/Placer	Sampling Date: 04	/03/14
Applicant/Owner: Genesis Engineering			State: <u>CA</u>	Sampling Point: SP	06
Investigator(s): Sam Bacchini		Section, T	ownship, Range: Section 17, Townsh	<u>iip 12N, Range 6E</u>	
Landform (hillslope, terrace, etc.): terrace		Local relief (cor	ncave, convex, none): <u>concave</u>	Slope (%	%): <u>2</u>
Subregion (LRR): <u>Mediterranean</u> California	Lat: <u>38.896364°</u>		Long: <u>-121.389688°</u>	Datum: NAD	33
Soil Map Unit Name: Soil Map Unit Name:	ometa-Romona sandy loe; and Xerofluvents, fre	oams, 1 to 5 per	cent slope; Ramona NWI classifi	ication: <u>N/A</u>	
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes 🗆	No 🛛 (If no, explain in Ren	narks.)	
Are Vegetation D, Soil D, or Hydrology	significantly distu	rbed? Are "	Normal Circumstances" present?	Yes 🛛	No 🗌
Are Vegetation D, Soil D, or Hydrology	naturally problem	atic? (If ne	eded, explain any answers in Remark	s.)	
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling po	oint locations.	transects, important features,	etc.	
Hydrophytic Vegetation Present?	Yes 🛛 No Г	<u>,</u> ר ר			
Hydric Soil Present?	Yes 🖾 No 🗆	Is the Sam	ppled Area within a Wetland?	Yes 🖂	No 🗆
Wetland Hydrology Present?	Yes 🛛 No 🗆				
Remarks: Currently in a drought year, however, ye	getation and hydrolog	v were not prot	plematic.		
VEGETATION – Use scientific names of plants	5	, p			
Tree Stratum (Plot size:)	Absolute Dominan	t Indicator Status	Dominance Test Worksheet:		
1.		Olalus	Number of Dominant Species		
2.			That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3			Total Number of Dominant		
4			Species Across All Strata:	<u>3</u>	(B)
50% =, 20% =	= Total C	over	Percent of Dominant Species	100	(1)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW, or FAC:	<u>100</u>	(A/B)
1			Prevalence Index worksheet:		
2			Total % Cover of :	Multiply by:	
3			OBL species	x1 =	
4			FACW species	x2 =	
5			FAC species	x3 =	
50% =, 20% =	= Total C	over	FACU species	x4 =	
Herb Stratum (Plot size:1M2)			UPL species	x5 =	
1. <u>Plagiobothrys stipitatus</u>	<u>25 yes</u>	FACW	Column Totals: (A)		(B)
2. Lasthenia glaberrima	20 ves	OBL	Prevalence Index	< = B/A =	
3. Ranunculus aquatilis	25 ves	OBL	Hydrophytic Vegetation Indicators	3:	
4. Eryngium castrense	10 no	OBL	Dominance Test is >50%	, 0	
5. Lythrum hyssopifolium	10 no	OBL		1	
6. Pilularia americana	<u> </u>	OBL		no ¹ (Brovido gupportir	
7. Erodium cicutarium	5 no	UPL	data in Remarks or on a	separate sheet)	ig
8				Vegetation ¹ (Evaluin)	
50% = 20% =	100 = Total C	over			
Woody Vine Stratum (Plot size: )			¹ Indicators of hydric soil and wetland	hydrology must	
1.			be present, unless disturbed or prob	lematic.	
2.					
50% = 20% =	= Total C	over	Hydrophytic Vegetation	Yes 🛛 🛛	No 🗆
% Bare Ground in Herb Stratum	% Cover of Biotic Cr	rust	Present?		
Remarks: Vegetation dominated by wetland	species		1		
				A 11347 - 51	
US Army Corps of Engineers				Arid West – Vers	sion 2.0

Project Site:	Gill Annexation
---------------	-----------------

SOI	L								Sampling Point: SP06	
Prof	ile Descr	iption: (Describe to	the depth	needed to d	ocument the in	ndicator or conf	irm the absence c	of indica	ators.)	
Depth Matrix			Redo	x Features						
(inches) Color (moist) %		Color (Moist) %			Loc ²	Text	ure <u>Remarks</u>			
<u>(</u>	<u> 0-12</u>	<u>7.5yr 3/2</u>	<u>80</u>	<u>7.5yr 4/4</u>	<u>4 20</u>	<u>C</u>	M	<u>cla</u>	<u> </u>	
_										
_										
-										
_										
			. <u></u>							
¹ Typ	e: C= Co	ncentration, D=Deple	tion, RM=F	Reduced Matr	ix, CS=Covered	d or Coated Sand	d Grains. ² Locatio	on: PL=l	Pore Lining, M=Matrix.	
Hyd	ric Soil Ir	ndicators: (Applicab	le to all Li	RRs, unless o	otherwise note	ed.)		Inc	licators for Problematic Hydric Soils ³ :	
	Histosol	l (A1)			Sandy Redox	: (S5)			1 cm Muck (A9) <b>(LRR C)</b>	
Histic Epipedon (A2)				Stripped Matr	ix (S6)		2 cm Muck (A10) (LRR B)			
Black Histic (A3)				Loamy Mucky	/ Mineral (F1)			Reduced Vertic (F18)		
Hydrogen Sulfide (A4)				Loamy Gleye	d Matrix (F2)		$\boxtimes$	Red Parent Material (TF2)		
Stratified Layers (A5) (LRR C)				Depleted Mat	rix (F3)			Other (Explain in Remarks)		
	1 cm Mi	uck (A9) ( <b>LRR D</b> )			Redox Dark S	Surface (F6)				
	Deplete	d Below Dark Surfac	e (A11)		Depleted Dar	k Surface (F7)				
	Thick D	ark Surface (A12)			Redox Depre	ssions (F8)			³ Indicators of hydrophytic vegetation and	
	Sandy M	Mucky Mineral (S1)			Vernal Pools	(F9)			wetland hydrology must be present,	
	Sandy C	Gleyed Matrix (S4)							unless disturbed or problematic.	
Rest	rictive La	ayer (if present):								
Туре	<b>:</b> :	<u>n/a</u>								
Dept	th (Inches	):					Hydric Soils Pre	esent?	Yes 🛛 No 🗌	
Rem	arks:	Hydric soils observed	ł							
HYD	OROLOO	ΞY								
Wetl	and Hyd	rology Indicators:								
Prim	ary Indica	ators (minimum of on	e required;	check all that	t apply)			Sec	ondary Indicators (2 or more required)	
	Surface	e Water (A1)			Salt Crust (B1	1)			Water Marks (B1) (Riverine)	
$\boxtimes$	High W	ater Table (A2)			Biotic Crust (I	312)		$\boxtimes$	Sediment Deposits (B2) (Riverine)	
$\boxtimes$	Saturat	ion (A3)		$\boxtimes$	Aquatic Inver	tebrates (B13)			Drift Deposits (B3) (Riverine)	
$\boxtimes$	Water M	Marks (B1) <b>(Nonrive</b> i	ine)		Hydrogen Su	lfide Odor (C1)			Drainage Patterns (B10)	
	Sedime	ent Deposits (B2) (No	nriverine)		Oxidized Rhiz	cospheres along	Living Roots (C3)		Dry-Season Water Table (C2)	
	Drift De	posits (B3) (Nonrive	rine)	Presence of Reduced Iron (C4			ł)		Crayfish Burrows (C8)	

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Depth (inches):

Depth (inches):

Depth (inches):

Other (Explain in Remarks)

 $\boxtimes$ 

Wetland Hydrology Present?

Saturation Visible on Aerial Imagery (C9)

No

 $\boxtimes$ 

Yes

Arid West - Version 2.0

Shallow Aquitard (D3)

FAC-Neutral Test (D5)

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

No

No

No

Remarks: Surface water, water table, saturation or primary hydrology indicators observed US Army Corps of Engineers

 $\boxtimes$ 

 $\boxtimes$ 

 $\boxtimes$ 

Yes

Yes

Yes

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Surface Soil Cracks (B6)

Water-Stained Leaves (B9)

Inundation Visible on Aerial Imagery (B7)

Gill Property

# APPENDIX



# PLANT SPECIES OBSERVED WITHIN STUDY AREA

Family	Scientific Name	Common Name	Wetland Indicator
Apiaceae	Eryngium castrense	Great Valley button celery	OBL
Asteraceae	Agoseris sp.	Chicory species	
Asteraceae	Centaurus solstitialis	Yellow star thistle	UPL
Asteraceae	Lasthenia glaberrima	Smooth goldfields	OBL
Asteraceae	Leontodon saxatilis	Hawkbit	FACU
Asteraceae	Xanthium strumarium	Cocklebur	FAC
Boraginaceae	Amsinckia menziesii	Fiddleneck	UPL
Boraginaceae	Plagiobothrys stipitatus	Popcornflower	FACW
Brassicaceae	Brassica nigra	Black mustard	UPL
Brassicaceae	Capsella bursa-pastoris	Shepherd's purse	UPL
Caryophyllaceae	Cerastium fontanum	Mouse ear chickweed	FACU
Caryophyllaceae	Spergula arvensis	Corn spurry	UPL
Cyperaceae	Eleocharis macrostachya	Creeping spike rush	UPL
Fabaceae	Astragalus sp.		
Fabaceae	Lupinus bicolor	Miniature lupine	UPL
Fabaceae	Trifolium dubium	Shamrock clover	UPL
Fabaceae	Trifolium hirtum	Rose clover	UPL
Fabaceae	Vicia benghalensis	Purple vetch	UPL
Fabaceae	Vicia bithynica	Bithynian vetch	UPL
Fagaceae	Quercus lobata	Valley oak	FACU
Fagaceae	Quercus wislizenii	Interior live oak	UPL
Geraniaceae	Erodium cicutarium	Coastal Heron's bill	UPL
Geraniaceae	Geranium dissectum	Cranebill	UPL
Juncaceae	Juncus effusus	Bog rush	FACW
Juncaceae	Juncus xiphioides	Iris leaved rush	OBL
Limnanthaceae	Limnanthes alba	White meadowfoam	FACW
Lythraceae	Lythrum hyssopifolium	Hyssop loosestrife	OBL
Marsileaceae	Pilularia americana	Pillwort	OBL
Montiaceae	Calandrinia ciliata	Red maids	FACU
Onagraceae	Epilobium brachycarpum	Annual fireweed	UPL
Onagraceae	Ludwigia peploides	Floating primrose	OBL
Orobanchaceae	Castilleja campestris	Owl's clover	FACW
Plantaginaceae	Callitriche heterophylla	Water startwort	OBL
Plantaginaceae	Plantago erecta	English plantain	UPL
Poaceae	Avena fatua	Common wild oats	
Poaceae	Briza minor	Little rattlesnake grass	FAC
Poaceae	Bromus nordeaceus	Soft chess	FACU
Poaceae	Elymus caput-medusae	Medusa head	
Poaceae	Hordeum murinum ssp. Ieporinum	Foxtall barley	FAC
Poaceae	Stipa pulchra	Purple needle grass	UPL
Poaceae	Vulpia bromoides	Foxtail	FAC
Polygonaceae	Persicaria lapathifolia	Comon knotweed	FACW
Polygonaceae	Rumex crispus	Curly dock	FAC
Polygonaceae	Rumex pulcher	Fiddle dock	FAC
Ranunculaceae	Ranunculus aquatilis	Whitewater crowfoot	OBL
Ranunculaceae	Ranunculus muricatus	Buttercup	FACW
Rubiaceae	Galium porrigens	Climbing bedstraw	UPL

Themidaceae	Triteleia hyacinthina	Wild hyacinthina	FAC
Themidaceae	Triteleia ixioides ssp.	Golden brodiaea	FAC
Typhaceae	Typha latifolia	Common cattail	OBL