Pleasant Valley Road (SR 49)/Patterson Drive Intersection Signalization Project

Draft Delineation of Waters of the U.S., Including Wetlands

Diamond Springs, El Dorado County, California

February 2009 (revised April 2009)



Prepared for:

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1 Summary

On behalf of the El Dorado County Department of Transportation (DOT), North State Resources, Inc. (NSR) has conducted a delineation of waters of the U.S., including wetlands, occurring at the intersection of State Route 49 (Pleasant Valley Road) and Patterson Drive in El Dorado County, California. The study area is located 1 mile northeast of the community of El Dorado, within the *Placerville*, *California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Township 10 North, Range 10 East, Section 25 MDBM). A map of the study area is presented as Figure 1.

The study area is approximately 9.0 acres, consisting of approximately 1,775 feet of Pleasant Valley Road (960 feet east of the intersection and 815 feet west of the intersection), a short portion of Ryan Drive, the majority of Assessor's Parcel Number (APN) 331-310-09 as a potential staging area, approximately 680 feet of Patterson Drive, and the majority of the Tower Mart frontage. Based on information provided by DOT, portions of the study area were previously delineated for the Harrington/Quigly Property (Corps #199700775).

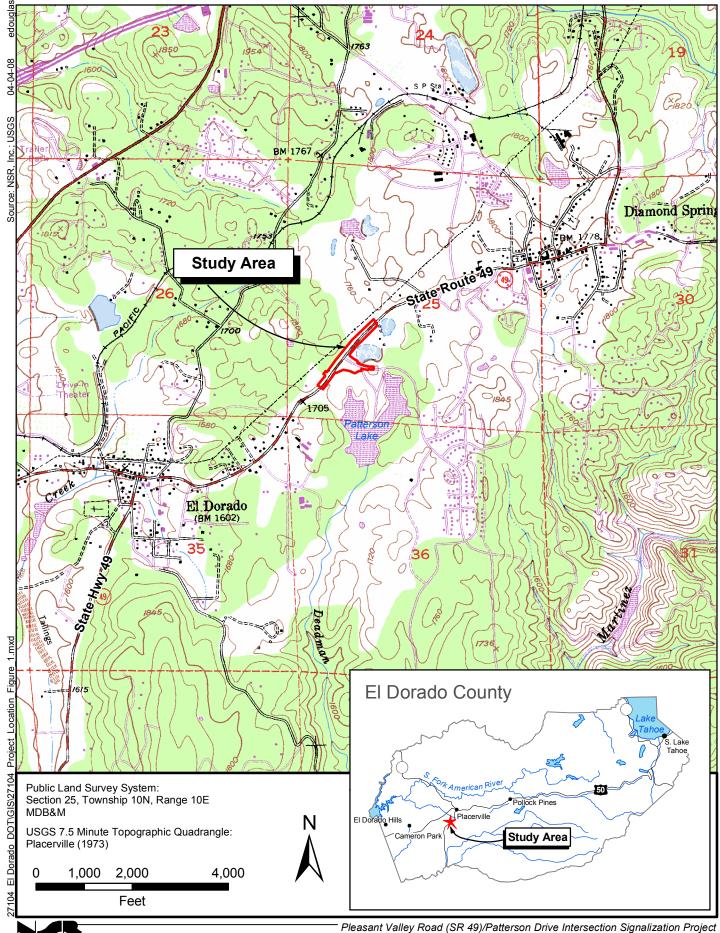
The study area was systematically delineated by an NSR biologist on June 26, 2008. Two seasonal wetland features (0.074 acre and 0.020 acre) occupying a total of 0.094 acre were delineated within the study area. Three roadside ditches, not subject to federal jurisdiction, were also delineated within the study area. The longest ditch is 0.005 acre, (209 linear feet) and the two smaller ditches measure 0.008 acre (68 linear feet) and 0.001 acre (12 linear feet).

This delineation of waters of the U.S., including wetlands, is subject to verification by the U.S. Army Corps of Engineers (Corps). NSR advises all parties to treat the information contained herein as preliminary until the Corps provides written verification of the boundaries of their jurisdiction.

2 Study Area Location

2.1 Study Area Location

The study area is located at the intersection of State Route 49 (Pleasant Valley Road) and Patterson Drive in El Dorado County, California. This location corresponds to Section 25 MDBM, Township 10 North, Ranch 10 East, within the Placerville, California USGS 7.5-minute topographic quadrangle (Figure 1).



2.2 Acreage of Delineation Study Area

The study area is 9.0± acres consisting of approximately 1,775 feet of State Route 49 (960 feet east of the intersection and 815 feet west of the intersection), a short portion of Ryan Drive, the majority of Assessor's Parcel Number (APN) 331-310-09 as a potential staging area, approximately 680 feet of Patterson Drive, and the majority of the Tower Mart frontage

2.3 Proximity to Major Highways and Streets

The study area is located along State Route 49 (Pleasant Valley Road) at the intersection with Patterson Drive in El Dorado County, California. U.S. Highway 50 is located approximately 1.6 miles northwest of the study area.

2.4 USGS Hydrologic Unit

The study area is located within the "South Fork American" USGS Hydrologic Map Unit [Map Unit Number 18020129].

3 Environmental Setting

3.1 Existing Land Uses

The majority of the study area is located along State Route 49 (Pleasant Valley Road) at the intersection with Patterson Drive. Tower Mart, a gas station/mini-market, is located at the southeastern corner of the intersection. An undeveloped lot is located at the southwest corner of the intersection. The surrounding area to the south and west of the study area consists primarily of single family homes. To the immediate north and east (beyond the Tower Mart) are undeveloped areas of grasslands and oak woodland.

3.2 Elevation/Topography

The elevation within the study area ranges from approximately 1,730 to 1,760 feet above mean sea level. The topography of the study area is nearly level to gently sloping as you move north or east away from the intersection.

3.3 Climate

Type

Warm, dry summers and mild, wet winters (Western Regional Climate Center 2008).

Precipitation

The average precipitation is 38.5 inches most of which falls between October and April with an average of 2.7 inches of precipitation being from snowfall (Western Regional Climate Center 2008).

Air temperature

Average maximum temperatures (92.6° F) occur in July and average minimum temperatures (32.4° F) occur in January (Western Regional Climate Center 2008).

Growing season

The average freeze-free period is approximately 10 to 200 days (U.S. Department of Agriculture 1997).

3.4 Hydrology

Hydrology in the study area is driven primarily by precipitation and roadway runoff. The majority of seasonal surface runoff in the northern portion of the Project Area is conveyed through roadside ditches and a wetland swale that passes under Pleasant Valley Road via a culvert. This drainage flows south through the swale-like feature to a ponded area behind the Tower Mart property. From this ponded area, the drainage flows south to Patterson Lake. Patterson Lake drains to Deadman Creek, which flows to Martinez Creek approximately 2 miles south of the Project Area. Martinez Creek eventually flows to the North Fork of the Cosumnes River about 5 miles south of the Project Area. Rain falling on the west and south sides of the Pleasant Valley Road/Patterson Drive intersection are diverted to street storm drains, via drainage ditches and street gutters, which flow west away from the intersection.

3.5 Soils

A map illustrating the distribution of soil map units within the study area is presented as Figure 2. The *Soil Survey of El Dorado County, California* (U.S. Department of Agriculture 1974) identifies three soil map units within the study area:

- Auburn silt loam, 2 to 30 percent slopes
- Diamond Springs very fine sandy loam, 9 to 15 percent slopes
- Mixed alluvial land

Auburn Silt Loam (AwD), 2 to 30 percent slopes

The Auburn series consists of well-drained soils that are underlain by hard metamorphic rocks at a depth of 12 to 26 inches. This particular soil has slopes that are primarily between 5 to 15 percent. This soil is well-drained with a depth of 14-18 inches to lithic unweathered bedrock (U.S. Department of Agriculture 2008). This soil is not listed on the Natural Resources Conservation Service (NRCS) hydric soils list for El Dorado County, nor does this unit have hydric inclusions (U.S. Department of Agriculture March 17, 1992).

Diamond Springs very fine sandy loam (DfC), 9 to 15 percent slopes

Formerly classified as Red-Yellow Podzolic, this well-drained soil has moderate to moderately slow permeability and is found at elevations of 1,000 to 4,000 feet above sea level. This soil was formed in residuum weathered from fine grained acid igneous and rhyolitic rocks. This soil is well-drained with

a depth of 40-44 inches to weathered bedrock and has a medium to rapid runoff (U.S. Department of Agriculture 2008). This soil is not listed on the NRCS hydric soils list for El Dorado County, nor does this unit have hydric inclusions (U.S. Department of Agriculture March 17, 1992).

Mixed Alluvial land (MpB)

This soil type is "somewhat poorly drained," with a depth of 36-40 inches to weathered bedrock (U.S. Department of Agriculture 2008). This soil is listed as a hydric soil in the NRCS hydric soils list for El Dorado County (U.S. Department of Agriculture March 17, 1992).

3.6 Plant Communities

The plant communities or habitats within the study area consist primarily of annual grassland and oak woodland (Figure 3, Habitat Map). Depending on the level of disturbance, moisture level, and other environmental factors, several species are considered dominants within the annual grassland including: ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), English ryegrass (*Lolium perenne*), medusahead grass (*Taeniatherum caput-medusae*), yellow star thistle (*Centaurea solstitialis*), and Mediterranean barley (*Hordeum murinum*). Other common plant species include prickly lettuce (*Lactuca serriola*), Foxtail barley (*Hordeum jubatum*), vetch (*Vicia sativa*), narrowleaf plantain (*Plantago lanceolata*), dovefoot geranium (*Geranium molle*), Fitch's tarweed (*Hemizonia fitchii*), willowweed (*Epilobium* sp.), and curly dock (*Rumex crispus*).

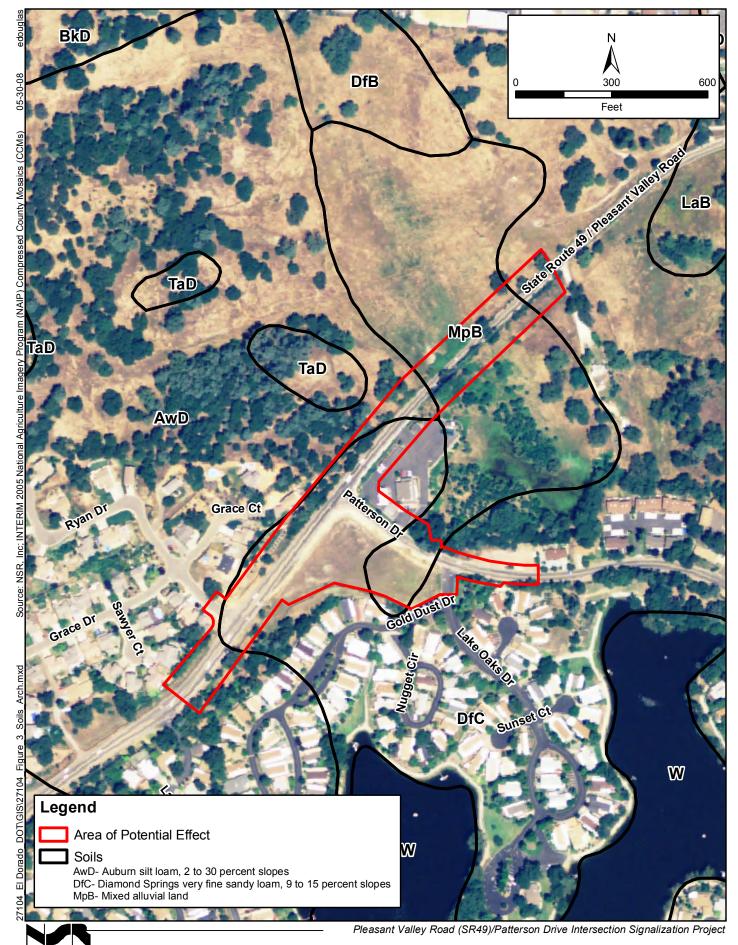
Two seasonal wetlands are present as inclusions in the annual grassland plant community. Common plants within the seasonal wetlands include common spikerush (*Eleocharis macrostachya*), cudweed (*Gnaphalium palustre*), curly dock, English ryegrass, and Himalayan blackberry (*Rubus discolor*).

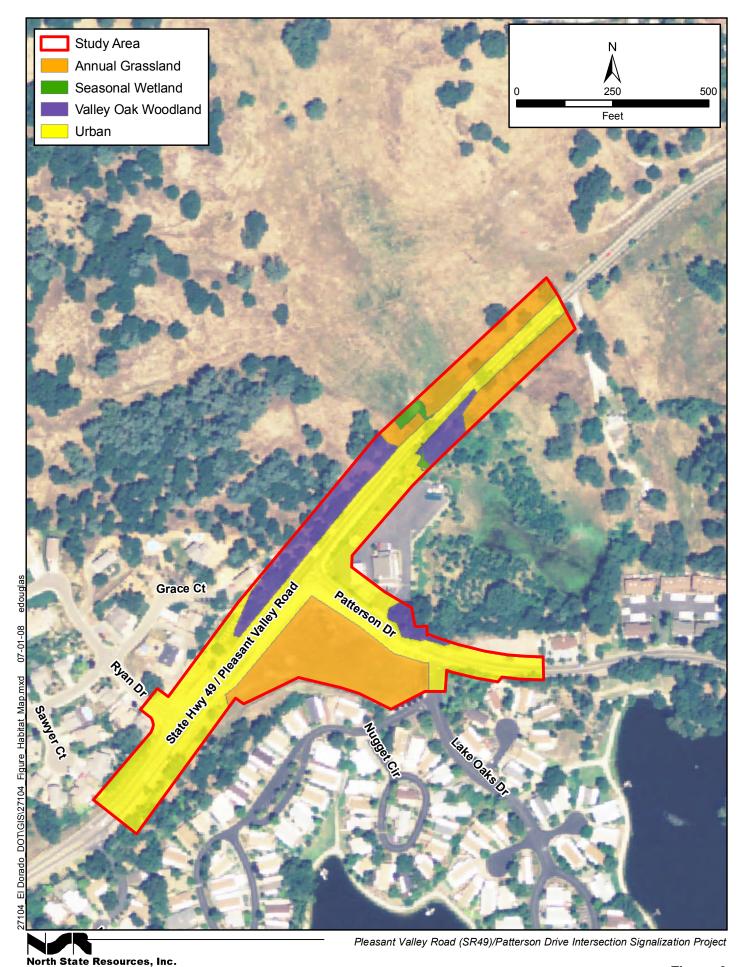
The overstory of the oak woodland consists primarily interior live oak (*Quercus wislizeni*), and valley oak (*Quercus lobata*); with sparse blue oak (*Quercus douglasii*), California black oak (*Quercus kelloggii*), grey pine (*Pinus sabiniana*), ponderosa pine (*Pinus ponderosa*), and black walnut (*Juglans californica*). The understory vegetation is dominated by poison-oak (*Toxicodendron diversilobum*) with annual grasses and forbs growing in areas where canopy coverage allowed for moderate levels of sunlight to reach the woodland floor.

4 Methodology

4.1 Technical Method

The routine on-site determination was based on field observations of soil, vegetation, and hydrologic characteristics as defined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Delineation of "other waters" was based on the presence of an ordinary high water mark (OHWM) as defined in Corps regulations (33 CFR 328.3 and 33 CFR 328.4) and whether the feature qualified as tributary to waters of the U.S. Information for 5 data points was collected during the field delineation. The corresponding routine wetland determination data forms are presented in Attachment A.





4.2 Date of Field Delineation

The field delineation was conducted by NSR biologist Brandon Amrhein on June 26, 2008.

4.3 Wetland Vegetation Indicator Status Reference

National List of Plant Species That Occur in Wetlands, California Region 0 (Reed 1988). Taxonomic nomenclature for plant species is in accordance with The Jepson Manual (Hickman 1993).

4.4 Hydric Soil Method of Determination

Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) A standard Munsell[®] soil color chart (Munsell Color 2000) was used to determine soil matrix and mottle colors.

4.5 Wetland Hydrology Method of Determination

Indicators of depth and duration of soil saturation, drainage patterns, and the ordinary high water mark were observed in the field.

4.6 Determination of Corps Jurisdiction

Guidance provided by the Environmental Protection Agency (EPA) and the Corps in regards to the Rapanos decision (June 19, 2006 Rapanos et ux., et al. v. U.S. Army Corps of Engineers) (Grumbles and John Paul Woodley 2007) was used to determine Corps jurisdiction.

According to the Rapanos guidance, the Corps will assert jurisdiction over:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters; and
- Relatively permanent (i.e., continuous flow for a minimum of three months) non-navigable tributaries of traditional navigable waters, and the wetlands that directly abut relatively permanent tributaries.

The Corps will assert jurisdiction over the following waters if, based on a fact-specific analysis, it is determined they have a significant nexus with traditional navigable waters. The significant nexus analysis includes the assessment of flow characteristics, tributary function, and the function of wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of the downstream navigable waters.

- Non-navigable tributaries that are not relatively permanent and any wetlands adjacent to these tributaries
- Wetlands adjacent to, but that do not directly abut, a relatively permanent non-navigable tributary.

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

Swales or erosional features; and

 Ditches (including roadside ditches) excavated wholly to drain uplands and that do not carry a relatively permanent flow of water.

4.7 Mapping Technique

Mapping the boundaries of each wetland feature involved the combination of aerial photograph/topographic map interpretation and the use of a Trimble Geo XT Global Positioning System (GPS) capable of sub-meter accuracy (NAD 27 projection). Using a recent color aerial photograph of the study area, the entire study area was traversed on foot and all areas were viewed to the degree necessary to determine the presence/absence of waters of the United States. Each identified feature, two seasonal wetlands and three roadside ditch were mapped and photographed and data points were collected to document status determinations. All GPS data were then overlaid onto a U.S. Department of Agriculture (USDA) National Agricultural Imagery Program (NAIP) digital orthorectified color aerial photograph using ARCGIS software.

5 Results

5.1 Features Delineated

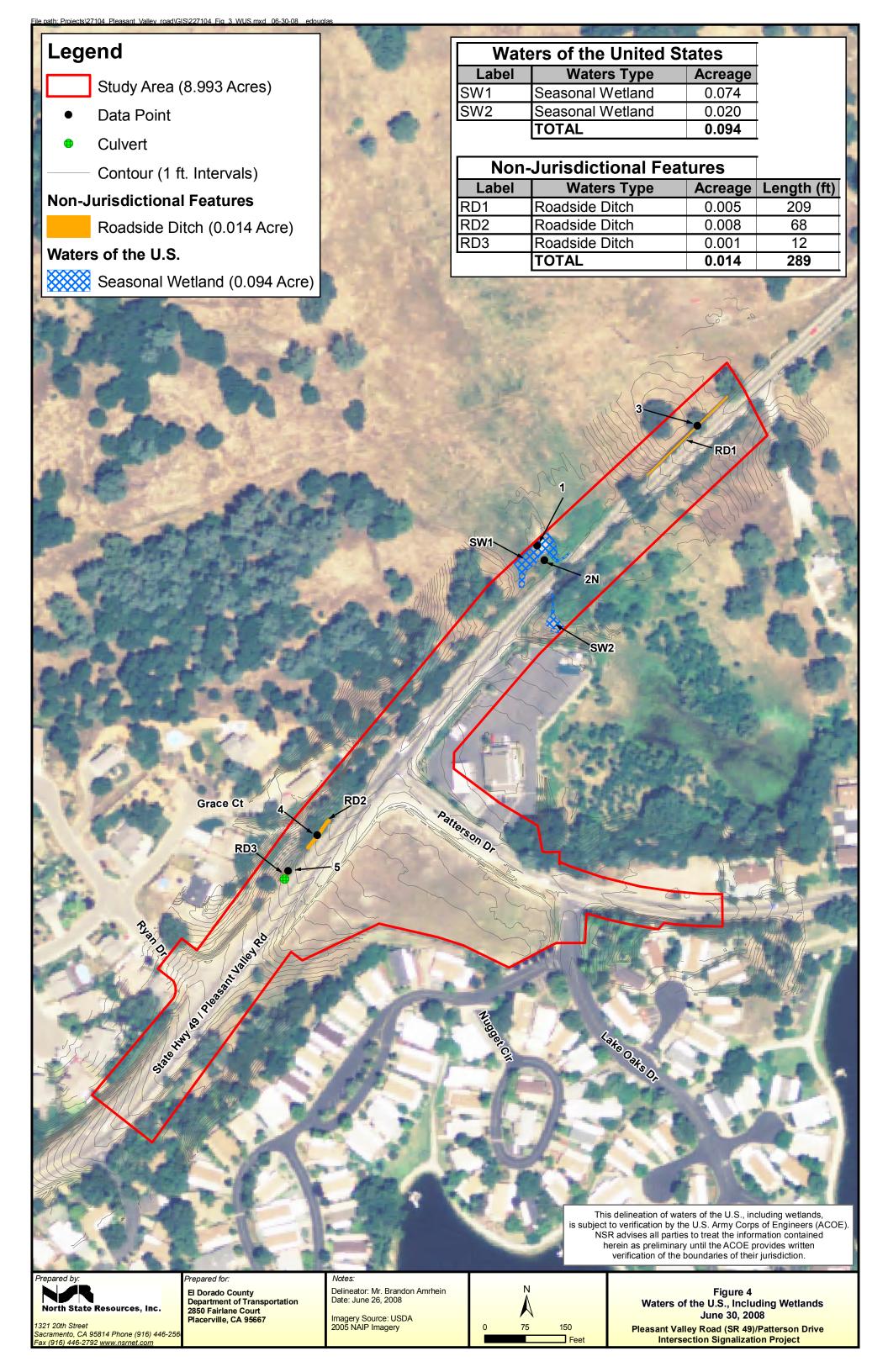
A delineation map depicting the size and location of each delineated feature within the study area is presented as Figure 4. One waters of the U.S. type was delineated within the study area – seasonal wetland. Two seasonal wetlands occupy a total of 0.094 acre of the study area.

One feature type, not subject to federal jurisdiction, was also delineated within the study area – roadside ditch. Three roadside ditches occupy a total of 0.014 acre (289 linear feet) of the study area.

Table 1 below provides an acreage summary for waters of the U.S. and non-federally jurisdictional features within the study area; see the attached *Waters of the U.S. Delineation Map* (Figure 3) for location and acreage detail.

Table 1. Acreage Summary

	WATERS OF THE	E UNITED STA	TES
LABE	L WATE	RS TYPE	ACREAGE
SW1	Seasonal V	Vetland	0.074
SW2	Seasonal V	Vetland	0.020
TOTAL			0.094
	NON-JURISDICT	IONAL FEATU	RES
LABEL	WATERS TYPE	ACREAGE	LENGTH (FT)
RD1	Roadside Ditch	0.005	209
RD2	Roadside Ditch	0.008	68
RD3	Roadside Ditch	0.001	12
TOTAL		0.014	289



5.2 Characteristics of Delineated Features

Federally Jurisdictional Features

Seasonal Wetland

Two seasonal wetlands (SW1 and SW2) totaling 0.094 acre were delineated within the study area. These features are located on either side of Highway 49 just east of the Tower Mart parking lot and are connected by a culvert that passes under the highway. SW1 and SW2 are characterized as localized, topographic depressions that pond water during the winter months and seasonally support a growth of obligate and facultative wetland plants. At the time of the delineation theses features were dry, however signs of recent inundation were apparent in the form of surface soil cracks and horse track imprints, formed in wet soil, still held their shape.

When water is present these seasonal wetlands drain south through a swale-like feature to a ponded area behind the Tower Mart property. From this ponded area, the drainage flows south to Patterson Lake. Patterson Lake eventually drains to the North Fork of the Cosumnes River about 5 miles south of the Project Area though a series of smaller creeks. Because these wetlands are hydrologically connected to Patterson Lake and eventually the North Fork of the Cosumnes River they qualify as waters of the U.S. Representative photographs of the seasonal wetlands are presented in Attachment B, Photographs 1 and 2.

Non-Federally Jurisdictional Features

Roadside Ditch

Three non-vegetated ditches are located on the northern edge of Pleasant Valley Road (RD1, RD2, and RD3 on Figure 3). These features are characterized as excavated, roadside ditches that contain little to no vegetation. RD1 is approximately 1-2 feet wide, 1-2 feet deep, and is approximately 0.005 acre (209 linear feet) in size. RD2 is a wide, shallow ditch that is approximately 4-5 feet wide, no more than 2 feet deep, and is approximately 0.008 acre (68 linear feet) in size. RD3 is a very short, concrete-lined, 2-3 feet wide, 2 feet deep, and is approximately 0.001 acre (12 linear feet) in size. It appears that RD2 may overflow and drain to RD3 during high rain events, however there is no defined swale or ditch that clearly connects these two features. RD3 drains to a culvert under Pleasant Valley Road. Given that these ditches were constructed in uplands to drain upland areas, these ditches do not qualify as waters of the U.S. Representative photograph of these ditches are presented in Attachment B, Photographs 3 through 5.

5.3 Discussion of Results

Waters of the U.S. delineated within the study area include 0.094 acre of seasonal wetlands (2 seasonal wetland features). No discharge of dredged or fill material into waters of the U.S. is permitted unless authorized under a Department of the Army Permit from the Corps.

The delineation also identified three (3) roadside ditches not subject to federal jurisdiction. These features occupy a total of 0.014 acre (289 linear feet) of the study area and do not qualify as waters of the U.S.

This delineation of waters of the U.S., including wetlands, is subject to verification by the Corps. NSR advises all parties to treat the information contained herein as preliminary until the Corps provides written verification of the boundaries of their jurisdiction.

6 References

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Grumbles, Benjamin H., and John Paul Woodley, Jr. 2007. Clean Water Act Jurisdiction Following the U. S. Supreme Court's Decision in Rapanos v. United States & Clarabell v. United States, June 5, 2007.
- Hickman, J. C. (Ed.). 1993. The Jepson Manual: Higher Plants of California. University of California Press. Berkeley, California.
- Munsell Color. 2000. *Munsell Soil Color Charts. Revised 2000 Edition*. GretagMacbeth. New Windsor, New York.
- Reed, P. B., Jr. 1988. National List of Plant Species That Occur in Wetlands: California (Region 0). U.S. Fish and Wildlife Service Biological Report 88(26.10). U.S. Fish and Wildlife Service.
- U.S. Department of Agriculture. 1992. Field Office Official List of Hydric Soil Map Units for El Dorado Area, California. March 17, 1992.
- U.S. Department of Agriculture. 1974. Soil Survey of El Dorado County, California: Natural Resources Service.
- U.S. Department of Agriculture. 1997. Ecological Subregions of California. Prepared by the U.S. Forest Service, Pacific Southwest Region. Available at: http://www.fs.fed.us/r5/projects/ecoregions/toc.htm
- U.S. Department of Agriculture. 2008. Natural Resources Conservation Service: Web Soil Survey. Available on the Internet at: http://websoilsurvey.nrcs.usda.gov/ [accessed June 18, 2008]
- Western Regional Climate Center. 2008. Period of Record Monthly Climate Summary. Available on the Internet at: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6960 [accessed June 18, 2008]





Wetland Determination Data Form - Arid West Region

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Habitat Type ANNWAL GRAJILAND
Wetland Type SEATO WAL WE TLAND

	- 5			···· // —————
Project/Site: PLEASANT VALLEY RD/PATTERSO	N DP	City/County	EL DO	ORADO COUNTY Sampling Date: 4/26/08
Applicant/Owner: EL POPADO COUNTY D	70			State: CA Sampling Point: 1
Investigator(s): BRANDON AMPHEIN			_	
Landform (hillslope, terrace, etc.) WETLAND DEPR	ESSION	Local reli	ef (concave,	convex, none) COW CAVE Slope % <5
Subregion (LRR) !C/ ML RA 22A				· · · · · · · · · · · · · · · · · · ·
Are climatic/hydrologic conditions on the site typical for this ti				
Are vegetation ν , soil ν , or hydrology ν significant	·-	•	-	•
Are vegetation $\stackrel{\smile}{\sim}$, soil $\stackrel{\smile}{\sim}$, or hydrology $\stackrel{\smile}{\sim}$ natural	-			·
				<u> </u>
Summary of Findings (Attach site map showing				•
Hydrophytic vegetation? X Hydric soil? X Wetl	and hydrolo	gy? >	Is sampled	d area a wetland? Other waters?
USACE Jurisdiction Adjacent to Waters Tributary to Waters Isolate Explain:	ed (with inte	rstate comm	erce)	Isolated (non jurisdictional)
Evaluation of features designated "Otl Indicators: Defined bed and bank Scour Feature Designation: Perennial Intermittent Ep Natural Drainage Artificial Drain	Ordin	ary High Wa	ater Mark Ma	apped
Remarks			_	
SEACONAL WETLAND EXHIBITS	POSITIV	E IND	1 CATORS	FOR ALL THREE WETLAND CRITERIA
THIS FEATURE DRAINS INTO A L.				r · ·
* PICTURES 4561-4565*				
Vegetation	Absolute	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum (use scientific names)		Species?		Number of dominant species
1		1		that are OBL, FACW, or FAC: 3 (A)
2				Total number of dominant species
3				across all strata: 3 (B)
4				Percent of dominant species that
50%= Total Cover:				are OBL, FACW, or FAC: 100 (AB)
Sapling/Shrub Stratum (use scientific names)		Species?	Status	Prevalence Index Worksheet
1	21.	. 1		Total % Cover of: Multiply by
2				OBL Species x 1 =
3				FACW Species x 2 =
4				FAC Species x 3 =
50%= Total Cover:				FACU Species x 4 =
Herb Stratum (use scientific names)	% Cover			UPL Species x 5 =
1. ELEOCHARIS MACROSTACHYA		YES_	OBL_	Column Totals
2. GNAPHALIUM PALMSTRE				Prevalance Index = B/A =
3. PUMEX CPISPUS	20	JEL		Frevalance index - B/A
4. LOLEUM PERENNE			FAC*	Hydrophytic Vegetation Indicators
5. POLYPOGON MONSPELIENSIS	_			Dominance Text is >50% Prevalence Index is ≤ 3.0¹
6. <u>Programme</u>				Morphological Adaptations¹ (provide supporting
7				data in Remarks or on a separate sheet)
8	<u>a</u>			Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must
50%= <u>45</u> 20%= <u>18</u> Total Cover:			.	be present.
Woody/Vine Stratum (use scientific names)		Species?		Hydrophytic Vegetation?
1				nyuropnyuc vegetation?
2				
50%= Total Cover:				

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Depth Matrix	Describe to tr	e depth needed to depth needed		e muicator (or confirm	the absence of	r indicators.		•
(inches) Color (moist	<u>%</u>	Color (moist)	<u>%</u>	<u>Type¹</u>	Loc ²	<u>Texture</u>	R	<u>emarks</u>	
107.R.42	<u>6</u> 0	578-46	40	FEC IRON CON	PCIM	CLAY LOATH		CONCENTRATE	OHANN
Types: C = Concentration E				Location: Pl		ing RC = Roo		M = Matrix	
Histosol (A1) Histic Epipedon (A) Black Histic (A3) Hydrogen Sulfide (Stratified Layers (A) 1 cm Muck (A9) (LI Depleted Below Da Thick Dark Surface Sandy Mucky Mine	2) A4) G) (LRR C) RR D) rk Surface (<i>l</i> (A12)	SanStripLoaLoaDepRedDepRed	dy Gleyed M dy Redox (S ped Matrix on Mucky M my Gleyed M eted Matrix ox Dark Sur eted Dark S ox Depressional Pools (FS	Matrix (S4) (S6) (Ineral (F1) Matrix (F2) (F3) face (F6) Gurface (F7) ons (F8)	_	1 cm2 cmRedVegOthe	n Muck (A9) n Muck (A10 uced Vetric Parent Mate etated Sand er (Explain in	(LRR C))) (LRR B) (F18) erials (TF2) I/Gravel Bars	
Restrictive Layer (if prese	nt): Type:_		_ Depth (li	nches)	Hyd:	ric Soil? <u> </u>	_		
Remarks CLAY LOAN WITH MEETS HYDRIC	t IRON	CONCENTRA							-
Remarks CLAY LOAM WITH	t Iron Soil cr	CONCENTRA- MERIA.				OUGHOUT.		or more required)	- • -
Remarks CLAY LOAN WITH MEETS HYDPLC Hydrology Wetland Indicators	A2) Nonriverine) (B2) (Nonriversine) (B6) On	CONCENTRA- TERIA Sufficient) Salt Biot Aqu Hyd erine) Pres Rec Plo		2) prates (B13) e Odor (C1 spheres (C3 duced Iron duction in C6)) (C4)	Secondary I Secondary I Sed Drift Dry Thir Cra Aer Sha	ndicators (2 er Marks (B iment Depos Deposits (E	1) (Riverine) sits (B2) (Riverine) 33) (Riverine) rns (B10) ster Table (C2) ace (C7) s (C8) sle on (C9) d (D3)	- -
Remarks CLAY LOAM WHITE MEETS HY DPLC Hydrology Wetland Indicators Primary Indicators (Any or Surface Water (A1) High Water Table (Saturation (A3) Water Marks (B1) (Sediment Deposits Surface Soil Cracks Inundation Visible of Aerial Imagery (B7)	A2) Nonriverine) (B2) (Nonriversine) (B6) On	CONCENTRA- TERIA Sufficient) Salt Biot Aqu Hyd erine) Pres Rec Plo	Crust (B11) c Crust (B12) atic Invertebrogen Sulfid ized Rhizos ence of Recent Iron Received Soils (C	2) prates (B13) e Odor (C1 spheres (C3 duced Iron duction in C6))) (C4)	Secondary I Secondary I Wat Sed Drift Drai Thir Crai Aer Sha FAC	er Marks (B iment Deposits (E nage Patter Season Wa Muck Surfa yfish Burrow uration Visib ial Imagery llow Aquitar C-Netural Te	1) (Riverine) sits (B2) (Riverine) 33) (Riverine) rns (B10) ster Table (C2) ace (C7) s (C8) sle on (C9) d (D3) est (D5)	-
Remarks CLAY LOAM WHITE MEETS HY DPLC Hydrology Wetland Indicators Primary Indicators (Any or Surface Water (A1) High Water Table (Saturation (A3) Water Marks (B1) (Sediment Deposits Surface Soil Cracks Inundation Visible of Aerial Imagery (B7) Water-Stained Lear Field Observations Surface Water Present? Water Table Present?	A2) Nonriverine) (B2) (Nonrives (B6) on) ves (B9)	Sufficient) Salt Biot Aqu Hyd erine) Pres Plo Oth	Crust (B11) c Crust (B12) atic Invertebrogen Sulfid ized Rhizos ence of Recent Iron Received Soils (C	2) prates (B13) e Odor (C1 spheres (C3 duced Iron duction in C6) n Remarks))) (C4)	Secondary I Secondary I Wat Sed Drift Dry Thir Cra Satt Aer Sha Hydrology? You	er Marks (B iment Deposits (E nage Patter Season Wa Muck Surfa yfish Burrow uration Visib ial Imagery llow Aquitar C-Netural Te	1) (Riverine) sits (B2) (Riverine) 33) (Riverine) rns (B10) ster Table (C2) ace (C7) s (C8) sle on (C9) d (D3) est (D5)	-

REMARKS HEAVILY GRAZED BY HORSES/CATTLE. HORSES/CATTLE FOOTPRINTS FORMED IN MUDSHOW
EVIDENCE OF HYDROLOGY. MULTIPLE WETLAND HYDROLOGY INDICATORS. THIN FEATURE OPAINS
UNDER PLEASANT VALLEY ROAD AND THEN TO A POND FEATURE IN THE SOUTH WEST BEYOND
THE STUDY AREA.

R:\Welland Working Group\Welland Del Form\Welland Del Work Files\Welland Dellineation Form BACK.doc



Wetland Determination Data Form - Arid West Region

Habitat Type ANNUAL GRAULAND Wetland Type UPLAND
Sampling Date: 4/26/09 State: 6A Sampling Point: 2
one) NDNE Slope % 1 XED ALLUVIAL LAND
S.)

•				ADD COUNTY Sampling Date: 4/26/
Applicant/Owner: EL DOPADO COUNTY DOT	.			State: CA Sampling Point: 2
Investigator(s): BRANDON AMPHEIN			_	
Landform (hillslope, terrace, etc.) PLAIH	=	_ Local relie	ef (concave,	convex, none) NDN E Slope % 1
Subregion (LRR) C/MLQA 22A	Soil	Map Unit N	lame: Mr	B-MIXED ALLUVIAL LAND
Are climatic/hydrologic conditions on the site typical for this tin			•	
Are vegetation $\underline{\mathcal{N}}$, soil $\underline{\mathcal{N}}$, or hydrology $\underline{\mathcal{N}}$ significa				
Are vegetation N, soil N, or hydrology N naturall				
Summary of Findings (Attach site map showing s	ampling po	oint locations	transects.	important features, etc.)
Hydrophytic vegetation? ⊢ Hydric soil? ⊢ Wetla				
USACE Jurisdiction Adjacent to Waters Isolated Explain:	d (with inter	rstate comm	erce)	Isolated (non jurisdictional)
Evaluation of features designated "Oth Indicators: Defined bed and bank Scour Feature Designation: Perennial Intermittent Eph Natural Drainage Artificial Drainage	Ordin	ary High Wa Blue-lin	ater Mark Ma e on USGS	apped Quad
Remarks				
UPLAND POINT PAIRED TO JEA		_		
*PICTUREY 45 66 - 4571 * Vegetation Tree Stratum (use scientific names)	Absolute % Cover			Dominance Test Worksheet
			<u>Status</u>	Number of dominant species
1. JUGLANS HINDSH	25	YEV	FAC	that are OBL, FACW, or FAC: (A)
2	25	JEN	FAC	that are OBL, FACW, or FAC:(A) Total number of dominant species
2	25	JEN	FAC	that are OBL, FACW, or FAC:(A)
2 3	2.5	JEN	FAC	that are OBL, FACW, or FAC:(A) Total number of dominant species
2	25	JEN	FAC	that are OBL, FACW, or FAC: (A) Total number of dominant species across all strata: (B) Percent of dominant species that are OBL, FACW, or FAC: (AB) Prevalence Index Worksheet
2	25 	YEV Species?	FAC Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 	YEV Species?	Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet Multiply by OBL Species x 1 =
2	25 	YEV Species?	Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover	YEV Species?	Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet Total % Cover of: Multiply by OBL Species x 1 = FACW Species x 2 = FAC Species x 3 =
2	25 25 % Cover	YEV Species?	Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover	Species? Species?	Status Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3 3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover	Species? Species? Species?	Status Status NL	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25	Species? Species?	Status Status	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3 3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15	Species? Species? YES	Status Status NL NL	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15	Species? Species? YES YES	Status Status NL NL NL	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15 15	Species? Species? YES YES ND	Status Status NL NL NL FACW	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3 3(AB) Prevalence Index Worksheet Multiply by OBL Species x 1 = FACW Species x 2 = FAC Species x 3 = FACU Species x 4 = UPL Species x 5 = Column Totals (A)(B) Prevalance Index = B/A = Hydrophytic Vegetation Indicators Dominance Text is >50% Prevalence Index is ≤ 3.01
2	25 % Cover % Cover 25 15 15 5	Species? Species? YES YES NO	Status Status NL NL PACW FAC **	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15 15 5	Species? Species? YES YES ND ND ND ND	Status Status NL NL NL FACW FACW FACW	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3 3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15 15 5 5	Species? Species? YES YES YES YES NO NO YOU YES YES YES YES YES YES YES YE	Status Status NL NL NL FACW FACW FACW UPL	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3 3(AB) Prevalence Index Worksheet
2	25 % Cover % Cover 25 15 15 5 5	Species? Species? YES YES YES YES NO NO YOU YES YES YES YES YES YES YES YE	Status Status NL NL NL FACW FAC* FACW* UPL OBL	that are OBL, FACW, or FAC:(A) Total number of dominant species across all strata:3(B) Percent of dominant species that are OBL, FACW, or FAC:3(AB) Prevalence Index Worksheet

20%= <u>24</u> Total Cover: <u>120</u>

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust ____

50%=<u>'60</u>

Profile Description: (Describe to the Depth Matrix	Redox Features		1	1002	Taxtura	Domarko
inches) <u>Color (moist)</u> <u>%</u> 1-12 7-5 7/2-44 100	Color (moist)	<u>%</u> <u>Ty</u>	<u>pe</u> 1	Loc ²	Texture LOAMY CLAY	<u>Remarks</u>
		<u> </u>	·	 -		
Types: C = Concentration D = Depletion F				= Pore Lir	<u> </u>	
ydric Soil Indicators: (Applicable t						roblematic Hydric Soils ³
Histosol (A1)	Sandy (•	(S4)			Muck (A9) (LRR C)
Histic Epipedon (A2)	· · · · · · · · · · · · · · · · · · ·	Redox (S5)				Muck (A10) (LRR B)
Black Histic (A3)	Stripped	• •				ced Vetric (F18)
Hydrogen Sulfide (A4)	<u>-</u>	Mucky Mineral				Parent Materials (TF2)
Stratified Layers (AG) (LRR C)	<u>*</u>	Gleyed Matrix	(F2)			tated Sand/Gravel Bars
1 cm Muck (A9) (LRR D)	 •	ed Matrix (F3)			Other	(Explain in Remarks)
Depleted Below Dark Surface (A1	•	•	• •		31 11 - 1 - 1 - 1 - 1	
Thick Dark Surface (A12)	•	ed Dark Surfac				of hydrophytic vegetation and rology must be present.
Sandy Mucky Mineral (S1)		Depressions (F	- 8)		welland nyu	rology must be prosent.
	Vernal	Pools (F9)				
_ 	MA OF 4. N	Depth (Inches			ric Soil? ND	VED. DOEN HOT M
Remarks LDAMY CLAY WITH CHRP HYDRIC SOILL CRITERIA Hydrology Wetland Indicators	MA OF 4. N	`			er observ	
Remarks LDAMY CLAY WITH CHRP HYDRIC SOILL CRITERIA Hydrology Wetland Indicators	MA OF 4. N	`			er observ	/ED. poev ゅし M dicators (2 or more required
Remarks LDAMY CLAY WITH CHRP HYDRIC SOILL CRITERIA Hydrology Wetland Indicators	MA OF 4. N	`			Secondary In	
Remarks LOAMY CLAY WITH CHEP HYDRIC SOILL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s	MA OF 4. N sufficient)Salt Cru	O REDOX			Secondary In	dicators (2 or more required
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLUT CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s	sufficient) Salt Cru Biotic C	O REDOX	FEF		Secondary In Wate Sedir	dicators (2 or more required
Remarks LOAMY CLAY WITH CHRO HYDRIC SOILL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2)	sufficient) Salt Cru Biotic C	ust (B11)	FE#		Secondary In Wate Sedir Drift I	dicators (2 or more required r Marks (B1) (Riverine) nent Deposits (B2) (Riverine
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3)	sufficient) Salt Cru Biotic C Aquatic Hydrog	ust (B11) Frust (B12)	(B13)		Secondary In Sedir Drift I	dicators (2 or more required r Marks (B1) (Riverine) nent Deposits (B2) (Riverine Deposits (B3) (Riverine)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOILL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Oxidize	ust (B11) Frust (B12) Invertebrates en Sulfide Odd	(B13) or (C1) es (C3)	TURE	Secondary In Secondary In Wate Sedir Drift I Dry-S	dicators (2 or more required r Marks (B1) (Riverine) nent Deposits (B2) (Riverine Deposits (B3) (Riverine) age Patterns (B10)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Presence	ust (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere	(B13) or (C1) es (C3)	TURE	Secondary In Wate Sedir Drift I Drain Dry-S Thin	dicators (2 or more required r Marks (B1) (Riverine) nent Deposits (B2) (Riverine Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2)
HYDRIC SOILC CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Present Recent Plowed	Just (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6)	(B13) or (C1) es (C3) I Iron (C	TURE	Secondary In Secondary In Wate Sedir Drift I Drain Thin Crayf	dicators (2 or more required r Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) Muck Surface (C7)
Remarks LDAMY CLAY WITH CHEP HYDDIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Present Recent Plowed	ust (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction	(B13) or (C1) es (C3) I Iron (C	TURE	Secondary In Secondary In Wate Sedir Drift I Drain Thin Crayf Satur Aeria	dicators (2 or more required or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) age Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on al Imagery (C9)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Present Recent Plowed	Just (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6)	(B13) or (C1) es (C3) I Iron (C	TURE	Secondary In Secondary In Wate Sedir Drift I Dry-S Thin Crayf Satur Aeria Shall	dicators (2 or more required or Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Season Water Table (C2) Muck Surface (C7) Fish Burrows (C8) Pation Visible on al Imagery (C9) Ow Aquitard (D3)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLUC CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	sufficient) Salt Cru Biotic C Aquatic Hydrogene) Present Recent Plowed	Just (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6)	(B13) or (C1) es (C3) I Iron (C	TURE	Secondary In Secondary In Wate Sedir Drift I Dry-S Thin Crayf Satur Aeria Shall	dicators (2 or more required or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) age Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on al Imagery (C9)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	sufficient) Salt Cru Biotic C Aquatic Hydrog ne) Oxidize Present Plowed Other (I	Just (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6) Explain in Rem	(B13) or (C1) es (C3) I Iron (C	27URE	Secondary In Secondary In Wate Sedir Drift I Dry-S Thin Crayf Satur Aeria Shall FAC-	dicators (2 or more required or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Muck Surface (C7) Fish Burrows (C8) Fish Burrows (C8) Fish Burrows (C9) Fish Aquitard (D3) Fish Reposit (D5)
Remarks LDAMY CLAY WITH CHAP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations Surface Water Present? Yes No	sufficient) Salt Cru Biotic C Aquatic Hydrog Present Plowed Other (I	ust (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6) Explain in Rem	(B13) or (C1) es (C3) I Iron (C	27UPE	Secondary In Secondary In Wate Sedir Drift I Dry-S Thin Crayf Satur Aeria Shall	dicators (2 or more required or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Muck Surface (C7) Fish Burrows (C8) Fish Burrows (C8) Fish Burrows (C9) Fish Aquitard (D3) Fish Reposit (D5)
Remarks LDAMY CLAY WITH CHEP HYDRIC SOLL CRITERIA Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations Surface Water Present? Yes No Water Table Present? Yes No	sufficient) Salt Cru Biotic C Aquatic Hydrog ne) Oxidize Present Plowed Other (I	Just (B11) Frust (B12) Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction d Soils (C6) Explain in Rem Des) N/A Des) N/A	(B13) or (C1) es (C3) I Iron (C n in marks)	YTURE	Secondary In Secondary In Wate Sedir Drift I Dry-S Thin Crayf Satur Aeria Shall FAC-	dicators (2 or more required or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) Deason Water Table (C2) Muck Surface (C7) Fish Burrows (C8) Fish Burrows (C8) Fish Burrows (C9) Fish Aquitard (D3) Fish Reposit (D5)

North State Resources Wetland Determination Data Form - Arid W	est Regi	ion	Habitat Type ROADSIDE DITCH Wetland Type
Project/Site: PLEASANT VALLEY ROPPATTERS	ONDR	City/County: <u>E</u> し	State: CA Sampling Point: 3
Investigator(s): BRANDON AMRHEIN			state; sampling; smill
Landform (hillslope, terrace, etc.) POADSIDE DEPICE	4510H	Local relief (cor	ncave, convex, none) UNCAVE Slope % 5
Subregion (LRR) C/MLRA 22A	Soi_	- I Map Unit Name:	OF C-DIAMOND SPRINGS VERY FINE SAWON LOAM,
Are climatic/hydrologic conditions on the site typical for this til			
Are vegetation \underline{N} , soil \underline{N} , or hydrology \underline{N} signific	antly distur	bed? Are normal	circumstances present? <u>Y</u>
Are vegetation $\underline{\mbox{\it N}}$, soil $\underline{\mbox{\it N}}$, or hydrology $\underline{\mbox{\it P}}$ natural	ly problema	atic? (If needed, e	explain any answers in Remarks.)
Summary of Findings (Attach site map showing			
Hydrophytic vegetation? N Hydric soil? N Wetl	and hydrolo	gy? <u> </u>	ampled area a wetland? N Other waters? N
USACE Jurisdiction Adjacent to Waters Isolate Explain:	ed (with inte	rstate commerce)	Isolated (non jurisdictional)
Evaluation of features designated "Otl Indicators: Defined bed and bank Scour _ Feature Designation: Perennial Intermittent Ep Natural Drainage Artificial Drain	Ordin hemeral	ary High Water M Blue-line on l	ark Mapped JSGS Quad
			TELY 2 FEET WIDE AND 1 FOOT DEFP
•		•	D DRAIN EAST TO A STORMORAIN
NEMR EASTERN EDGE OF STUDY			
Vegetation	Absolute	Dominant Indic	ator Dominance Test Worksheet
Tree Stratum (use scientific names)	% Cover		That are ODI EACIN or EAC: () (A)
1. GUERCUS WISHZENI		YES N	
2 3			Total number of dominant species across all strata: (B)
4.			
50%= Z0%= Total Cover:	100		Percent of dominant species that are OBL, FACW, or FAC: (AB)
Sapling/Shrub Stratum (use scientific names)	% Cover	Species? Stat	us
1			Prevalence Index Worksheet Total % Cover of: Multiply by
2			
3			FACW Species x 2 =
4			FAC Species x 3 =
50%= Total Cover:		Choologo Ct-t	FACU Species x 4 =
Herb Stratum (use scientific names)		Species? Stat	UPL Species x 5 =
1 2			Column Totals (A)(B)
3			Prevalance Index = B/A =
4.			Hydrophytic Vegetation Indicators
5			Dominance Text is >50%
6			Prevalence Index is ≤ 3.01
7			Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)

50%=____

50%=___

1. _____

20%=____

20%=_

Woody/Vine Stratum (use scientific names)

% Bare Ground in Herb Stratum _____

Total Cover:

Total Cover:

% Cover of Biotic Crust _

% Cover Species? Status

data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation¹ (Explain)
Indicators of hydric soil and wetland hydrology must

be present.

Hydrophytic Vegetation? N

Profile Description: (Describe to the Depth Matrix	depth needed to document the indicator or co Redox Features	onfirm the absence of	of indicators.
inches) Color (moist) %	Color (moist) % Type ¹ L	<u>oc² Texture</u>	Remarks
Types: C = Concentration D = Depletion F	RM = Reduced Matrix ² Location: PL = P	ore Lining RC = Ro	ot Channel M = Matrix
lydric Soil Indicators: (Applicable to	o all LRRs, unless otherwise noted)	Indicators for	Problematic Hydric Soils3
Histosol (A1)	Sandy Gleyed Matrix (S4)	1 ci	m Muck (A9) (LRR C)
Histic Epipedon (A2)	Sandy Redox (S5)	2 cı	m Muck (A10) (LRR B)
Black Histic (A3)	Stripped Matrix (S6)	Red	duced Vetric (F18)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Red	d Parent Materials (TF2)
Stratified Layers (AG) (LRR C)	Loamy Gleyed Matrix (F2)	Ve(getated Sand/Gravel Bars
1 cm Muck (A9) (LRR D)	Depleted Matrix (F3)	Oth	er (Explain in Remarks)
Depleted Below Dark Surface (A1	1) Redox Dark Surface (F6)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators	s of hydrophytic vegetation and
Thick Balk Garlace (A12)	Depleted Dark Surface (F1)		The state of the s
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		drology must be present.
, ,	•		drology must be present.
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type:	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	wetland hy	
Sandy Mucky Mineral (S1)	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	wetland hy	rdrology must be present. E GRAVEL IN DIT
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type:	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	wetland hy	
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) EH. MAN MADE KOADSIDE	Hydric Soil?	E GRAVEL IN DIT
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) EH. MAN MADE KOADSIDE	Hydric Soil?	
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) EH. MAN MADE KOADSIDE	Wetland hy Hydric Soil? DMZt) Som	E GRAVEL IN DIT
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type: Remarks NO SOLLIDATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) KAN MAN MADE KOADSIDE ufficient)	Wetland hy Hydric Soil? O MZ+1 _ So M Secondary	E GRAVEL IN DIT
Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1)	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) EH. MAN MADE KOADSIDE ufficient) Salt Crust (B11)	Wetland hy Hydric Soil?	E GRAVEL IW DIT
Sandy Mucky Mineral (S1) Restrictive Layer (if present): Type: Remarks NO SOLLIDATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2)	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) EH. MAN MADE ROPOSIDE ufficient) Salt Crust (B11) Biotic Crust (B12)	Watland hy Hydric Soil? O MZt) SO M Secondary Watland hy	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3)	### Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	Wetland hy Hydric Soil? DMZt) _ So M Secondary Wa Sec Drit Draw	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Restrictive Layer (if present): Type: Remarks NO SOLLIDATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	### Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	Watland hy Hydric Soil? O MZTI SO M Secondary Watland hy Secondary Watland hy	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10)
Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on	### Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	Wetland hy Hydric Soil? DMZT) SOM Secondary Wa Secondary Drit Drit Thi	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) r-Season Water Table (C2)
Restrictive Layer (if present): Type: Remarks NO SOLL DATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Redox Depressions (F8) Vernal Pools (F9) Depth (Inches) Depth (Inches) WAN MADE ROADS IDE ufficient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (C6)	Wetland hy Hydric Soil? O MOT SO M Secondary Wa Sec Drii Dry Thi Cra Sat	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) f-Season Water Table (C2) fn Muck Surface (C7) furstion Visible on
Restrictive Layer (if present): Type: Remarks NO SOLLS DATA TAKE Hydrology Wetland Indicators Primary Indicators (Any one indicator is s Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on	### Redox Depressions (F8) Vernal Pools (F9) Depth (Inches)	Wetland hy Hydric Soil? DMZT) SOM Secondary Wa Secondary Drit Dry Thi Cra Sat Ae	Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) ft-Season Water Table (C2) ft Muck Surface (C7) ayfish Burrows (C8)

Depth (inches) _

Depth (inches)

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

Water Table Present?

Saturation Present?

Yes

No_

(includes capillary fringe)

North State Resources Wetland Determination Data Form - Arid W	est Reg	ion		Habitat Type POADS NOE OF THE Wetland Type
Project/Site: PLEASANT VALLEY POPPATIERSON DE	2	City/County	EL PC	PRADO COUNTY Sampling Date: 4/24/08
Applicant/Owner: EL DORADO DOT				State: <u>CA</u> Sampling Point: <u>4</u>
Investigator(s): BRANDON AMRHEIN		_	_	
Landform (hillslope, terrace, etc.) LOADSIDE DEPIZE			•	•
- · · · ·		•		- DIAMOND SPRINGS VERY FINE SANDY LOAM
Are climatic/hydrologic conditions on the site typical for this til				
Are vegetation $\frac{N}{N}$, soil $\frac{N}{N}$, or hydrology $\frac{N}{N}$ signific	•			·
Are vegetation _ N , soil _ N , or hydrology N _ natural	ly problema	atic? (If nee	ded, explain	any answers in Remarks.)
Summary of Findings (Attach site map showing and Hydrophytic vegetation? N Hydric soil? N Wetland				,
USACE Jurisdiction Adjacent to Waters Iributary to Waters Isolate Explain:				
Evaluation of features designated "Otl Indicators: Defined bed and bank Scour _ Feature Designation: Perennial Intermittent Ep	Ordir hemeral	nary High Wa Blue-lin	ter Mark Ma e on USGS	pped Quad
				ALLOW WIDE DITCH APPROXIMATELY
4-5 FEET WIDE AND APPROXIMA				
GROWING IN IT, BUT IS PULL OF				****
ARDMINE III AT DOLL IS TOOL OF	CCAL	LIIICK	, LON	DENJE THEE OVERSTURY.
Vegetation	Absolute	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum (use scientific names) 1. QUERCUS WICLIZENII		YES	NL	Number of dominant species that are OBL, FACW, or FAC: (A)
2				Total number of dominant species across all strata:
4 50%= Total Cover:				Percent of dominant species that are OBL, FACW, or FAC: (AB)
Sapling/Shrub Stratum (use scientific names) 1				Prevalence Index Worksheet Total % Cover of: Multiply by
2				OBL Species x 1 =
3				FACW Species x 2 =
4 Total Cover:				FAC Species x 3 =
Herb Stratum (use scientific names)		Species?		FACU Species x 4 =
1		•		UPL Species x 5 =
2				Column Totals (A) (B)
3				Prevalance Index = B/A =
4 5				Hydrophytic Vegetation Indicators Dominance Text is >50%
6				Prevalence Index is ≤ 3.0¹ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation¹ (Explain)
50%= Total Cover:				Indicators of hydric soil and wetland hydrology must be present.
Woody/Vine Stratum (use scientific names) 1		•		Hydrophytic Vegetation? N
2				

^ .			_
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JU	ı	ı	3

DepthMatr	AND DESCRIPTION OF THE PERSON		Redox Features			_				
nches) Color (mo	oist)	<u>6</u>	Color (moist)	<u>%</u> _	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>		
			The state of the s							
					Control of the Contro	And in case of the last of the				
unon: C = Concentration		ion DM -	Daduard Matrix		 _ocation: PL :			et Changel M - Matrix		
<pre>/pes: C = Concentration /dric Soil Indicate</pre>								ot Channel M = Matrix Problematic Hydric Soils ³		
Histosol (A1)	лэ <u>. (дрріі</u>	cable to all				'		m Muck (A9) (LRR C)		
Histic Epipedon (A2)			•	Sandy Gleyed Matrix (S4) Sandy Redox (S5)				2 cm Muck (A10) (LRR B)		
Black Histic (A3)			•	Stripped Matrix (S6)				2 cm Muck (A10) (ERR b) Reduced Vetric (F18)		
Black Histic (A3) Hydrogen Sulfide (A4)			* *	•	ineral (F1)			d Parent Materials (TF2)		
Stratified Layers (AG) (LRR C)			Loamy	-	• •		Vegetated Sand/Gravel Bars			
1 cm Muck (A9)		,	•	ed Matrix (, ,		-	er (Explain in Remarks)		
Depleted Below	, ,	ce (A11)	Redox					(- ,		
Thick Dark Surfa		,			urface (F7)		³ Indicators	s of hydrophytic vegetation and		
Sandy Mucky M	, ,		•	Depression				drology must be present.		
				Pools (F9						
	L DATA	TAKEN.	- DITCH F	ILLED		LEAF				
Remarks NO 201 Hydrology Wetland Indicator	L DATA	TAKEN.	DITCH F	ILLED	WITH	LEAF	LITTE	2		
Remarks NO 201 Hydrology Wetland Indicator Primary Indicators (Any	S one indica	TAKEN.	ent)	ILLED	WITH	LEAF	Secondary	Indicators (2 or more required		
Remarks NO 201 Hydrology Vetland Indicator rimary Indicators (Any Surface Water (s one indica	TAKEN.	ent)Salt Cru	ust (B11)	EMITH Mg.	LEAF	Secondary Wa	Indicators (2 or more required		
Remarks NO 201 Hydrology Vetland Indicator Primary Indicators (Any Surface Water (High Water Tab	s one indica	TAKEN.	ent) Salt Cro	ust (B11) Crust (B12	EMITH Male	LEAF	Secondary Wa Secondary	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine		
Remarks NO 201 Hydrology Vetland Indicators Primary Indicators (Any Surface Water (High Water Tab Saturation (A3)	s one indica A1) e (A2)	TAKEN.	ent) Salt Cru Biotic C	ust (B11) Crust (B12)	e) rates (B13)	LEAF	Secondary Wa Secondary Drift	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine ft Deposits (B3) (Riverine)		
Remarks NO 201 Hydrology Vetland Indicator Primary Indicators (Any Surface Water (High Water Tab Saturation (A3) Water Marks (B	s one indica A1) le (A2)	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog	ust (B11) Crust (B12 c Invertebr	e) Pates (B13) Pates (C1)	LEAF	Secondary Wa Secondary Drift Dra	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) to Deposits (B3) (Riverine) alinage Patterns (B10)		
Primary Indicators (Any Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Depos	s vone indica A1) e (A2) 1) (Nonriverinisits (B2) (No	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize	ust (B11) Crust (B12) Invertebren Sulfide	e Odor (C1)	LEAF	Secondary Wa Sec Drift Dra Dry	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) tit Deposits (B3) (Riverine) hinage Patterns (B10) r-Season Water Table (C2)		
Remarks NO 201 Hydrology Vetland Indicators Primary Indicators (Any Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Depose Surface Soil Cra	s rone indica A1) le (A2) 1) (Nonriverindits (B2) (Nonriverindits (B2) (Nonriverindits (B2))	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize	ust (B11) Crust (B12 c Invertebren Sulfider d Rhizosp	e Odor (C1) pheres (C3)	LEAF	Secondary Wa Sec Drift Dra Dry Thi	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ti Deposits (B3) (Riverine) ainage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7)		
Remarks NO 201 Hydrology Vetland Indicators Indicators (Any Surface Water (Any High Water Tab Saturation (A3) Water Marks (B Sediment Deposition Surface Soil Cray Inundation Visib	s y one indica A1) le (A2) 1) (Nonriverincits (B2) (Noncks (B6)) le on	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Presen	ust (B11) Crust (B12 c Invertebred Rhizospice of Red	rates (B13) e Odor (C1) pheres (C3) luced Iron (Cuction in	LEAF	Secondary Wa Sec Drift Dra Dry Thi Cra	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) tit Deposits (B3) (Riverine) hinage Patterns (B10) -Season Water Table (C2) n Muck Surface (C7) hyfish Burrows (C8)		
Primary Indicators (Any Surface Water (Any Saturation (A3) Water Marks (B Sediment Deposition Visib Aerial Imagery	s vone indica A1) e (A2) 1) (Nonrivering its (B2) (Nonrivering its (B6)) le on (B7)	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent	ust (B11) Crust (B12) Invertebred Rhizospoe of Red	rates (B13) e Odor (C1) pheres (C3) uced Iron (Cuction in 6)	LEAF	Secondary Wa Secondary Drift Dry Thi Cra Sat	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dimage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) duration Visible on		
Hydrology Wetland Indicator Primary Indicators (Any Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Depositions of the control	s vone indica A1) e (A2) 1) (Nonrivering its (B2) (Nonrivering its (B6)) le on (B7)	TAKEN tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent	ust (B11) Crust (B12) Invertebred Rhizospoe of Red	rates (B13) e Odor (C1) pheres (C3) luced Iron (Cuction in	LEAF	Secondary Wa Sec Drit Dra Dry Thi Cra Sat Ae	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dimage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) duration Visible on rial Imagery (C9)		
Primary Indicators (Any Surface Water (Any Saturation (A3) Water Marks (B Sediment Deposition Visib Aerial Imagery	s vone indica A1) e (A2) 1) (Nonrivering its (B2) (Nonrivering its (B6)) le on (B7)	TAKEN	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent	ust (B11) Crust (B12) Invertebred Rhizospoe of Red	rates (B13) e Odor (C1) pheres (C3) uced Iron (Cuction in 6)	LEAF	Secondary Wa Sec Drif Dra Dry Cra Sat Ae	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) tinage Patterns (B10) -Season Water Table (C2) n Muck Surface (C7) ayfish Burrows (C8) turation Visible on rial Imagery (C9) allow Aquitard (D3)		
Agrand Indicator Primary Indicators (Any Surface Water (Any High Water Tab Saturation (A3) Water Marks (B Sediment Depose Surface Soil Cra Inundation Visib Aerial Imagery Water-Stained L	s rone indica A1) (Nonriverialists (B2) (Noncks (B6)) (B6) (B7) eaves (B9)	TAKEN	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent	ust (B11) Crust (B12) Invertebred Rhizospoe of Red	rates (B13) e Odor (C1) pheres (C3) uced Iron (Cuction in 6)	LEAF	Secondary Wa Sec Drif Dra Dry Cra Sat Ae	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dimage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) duration Visible on rial Imagery (C9)		
Hydrology Wetland Indicators Primary Indicators (Any Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Depose Surface Soil Crae Inundation Visib Aerial Imagery Water-Stained L	s rone indica A1) (Nonriverialists (B2) (Noncks (B6)) (B6) (B7) eaves (B9)	tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Recent Plowed Other (ust (B11) Crust (B12) c Invertebred Rhizospece of Red Iron Red d Soils (Ci	rates (B13) e Odor (C1) pheres (C3) luced Iron (Cuction in 6) Remarks)	LEAF	Secondary Wa Sec Drif Dra Dry Thi Cra Sat Ae Sha	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) tinage Patterns (B10) -Season Water Table (C2) n Muck Surface (C7) ayfish Burrows (C8) turation Visible on rial Imagery (C9) allow Aquitard (D3)		
High Water Tab Saturation (A3) Water Marks (B Sediment Depos Surface Soil Cra Inundation Visib Aerial Imagery	s vone indica A1) e (A2) 1) (Nonrivering the sits (B2) (Nonrivering the sits (B2)) cks (B6) le on (B7) eaves (B9)	tor is suffici	ent) Salt Cru Biotic C Aquatic Hydrog Oxidize Present Plowed Other (I	ust (B11) Crust (B12) c Invertebred Rhizospece of Redd Soils (Cienter Explain in	e Odor (C1) pheres (C3) luced Iron (Cuction in 6) Remarks)	LEAF	Secondary Wa Sec Drif Dra Dry Thi Cra Sat Ae Sha	Indicators (2 or more required ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) dimage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) duration Visible on rial Imagery (C9) allow Aquitard (D3) C-Netural Test (D5)		

REMARKS FEATURE IN A RUADSIDE OPAINAGE \$ 4-5 FEET WIDE. APPEARUTD CARRY WATER!

PURING RAIN EVENTS. FEATURE DRAIN ROADWAY AND SURROUNDING UPLANDS. FEATURE ORAIN

WEST WHEN FULL BY SHEET FLOW TO RO3. NO DEFINED WATER PATH TO RO3. DOES NOT QUALIFY AS A

WATERS OF U.S.

R:\(\text{Wetland Working Group\\Wetland Del Form\\Wetland Del Work Files\\\Wetland Delineation Form BACK.doc}\)

North State Resources Wetland Determination Data Form - Arid W	est Regi	ion	Habitat Type <u>POAWID€ DRAINAG</u> € Wetland Type
Applicant/Owner: EL DORA DO DOT			DOPARD COUNTY Sampling Date: <u>6/26/08</u> State: <u>CA</u> Sampling Point: <u>5</u>
Investigator(s): BRANDON AMRHEIN	Off Color		AD 1/41/5 Clare 0/ 5
Landform (hillslope, terrace, etc.) ROAD (IDE DEP)			ave, convex, none) <u>WN 61VE</u> Slope % <u> </u>
Are climatic/hydrologic conditions on the site typical for this tir			0 1
Are vegetation N , soil N , or hydrology N significant	-	•	plain in Tornarkoly
Are vegetation $\[\[\] \] \] \[\] \[\] \] \[\] \] \[\] \] Are vegetation \[\] \] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \] \[\] \[\] \] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \[\] \] \[\] \[\] \[\] \] \[\] \[\] \[\] \[\] \] \[\] \[\] \[\] $	-		-
Summary of Findings (Attach site map showing	sampling po	oint locations, transe	ects, important features, etc.)
Hydrophytic vegetation? N Hydric soil? N Wetla			
USACE Jurisdiction Adjacent to Waters Isolate Explain:			
Evaluation of features designated "Otl Indicators: Defined bed and bank Scour _ Feature Designation: Perennial Intermittent Ep Natural Drainage Artificial Drain	Ordin hemeral	ary High Water Mari	k Mapped
FEET DEEP, \$ 12 FEET LONG, AND	D IS MI R 70 A	OUTLY CONCE	OXIMATELY 2-3 FEET WIDE AND 2 LETE LINED, A CULVERT AT THE WEST WN LOCATION, NO VEGETATION IN
Vegetation Tree Stratum (use scientific names) 1.	Absolute % Cover		lati et et e
2			Total number of dominant species across all strata: (B)
4			Percent of dominant species that are OBL, FACW, or FAC: (AB)
Sapling/Shrub Stratum (use scientific names) 1		Species? Status	Prevalence Index Worksheet Total % Cover of: Multiply by
2			— OBL Species x1 =
3			FACW Species x 2 =
4			FAC Species x 3 =
50%= Total Cover:		Chosing Ctatus	FACU Species x 4 =
Herb Stratum (use scientific names) 1		Species? Status	UPL Species x 5 =
2			Column Totals (A) (B)
3			

Hydrophytic Vegetation Indicators

Dominance Text is >50%

Prevalence Index is < 3.01

Prevalence Index is ≤ 3.01
Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must

be present.

Hydrophytic Vegetation?

Total Cover: _

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust ____

20%=____

50%=____

Profile Description: (Describe to			or or confirm	the absence of i	ndicators.		
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist)	<u>%</u> Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>		
	A STATE OF THE PROPERTY OF THE						
		The state of the s		-			
Types: C = Concentration D = Depletion	n RM = Reduced Matrix	² Location:	PL = Pore Li	ning RC = Root	Channel M = Matrix		
Hydric Soil Indicators: (Applical	<u>ble to all LRRs, unless ot</u>	herwise noted)		Indicators for Pr	oblematic Hydric Soils ³		
Histosol (A1)	Gleyed Matrix (S4)	1 cm /	1 cm Muck (A9) (LRR C)			
Histic Epipedon (A2)	Sandy F	Redox (S5)		2 cm !	Muck (A10) (LRR B)		
Black Histic (A3)	Stripped	d Matrix (S6)		Reduc	ed Vetric (F18)		
Hydrogen Sulfide (A4)	Loamy !	Mucky Mineral (F	1)	Red P	arent Materials (TF2)		
Stratified Layers (AG) (LRR C) Loamy (Gleyed Matrix (F2	<u>'</u>)	Veget	ated Sand/Gravel Bars		
1 cm Muck (A9) (LRR D)	Deplete	ed Matrix (F3)		Other	(Explain in Remarks)		
Depleted Below Dark Surface	(A11) Redox [Dark Surface (F6)					
Thick Dark Surface (A12)	7)	³ Indicators of hydrophytic vegetation and					
Sandy Mucky Mineral (S1)	Redox [Depressions (F8)		wetland hydrology must be present.			
	Vernal F	Pools (F9)					
Restrictive Layer (if present): Type:		Depth (Inches) _	Hyo	fric Soil?			
Remarks NO SOIL DATA	TAKEN FEATURE	IS MOSTU	1 CONCR	ETE LINE	O, SOME SEDIMENT		
DEPOSITS AT BUTTOM	OF FEATURE-		-		,		
Hydrology							
Wetland Indicators Primary Indicators (Any one indicator	is sufficient)			Secondary Inc	dicators (2 or more required)		
Surface Water (A1)	Salt Cru	ust (B11)		Water	Marks (B1) (Riverine)		
High Water Table (A2)		rust (B12)			ent Deposits (B2) (Riverine)		
Saturation (A3)		Invertebrates (B	3)		eposits (B3) (Riverine)		
Water Marks (B1) (Nonriverine)	·	en Sulfide Odor (•	Drainage Patterns (B10)			
Sediment Deposits (B2) (Nonri		•	Dry-Season Water Table (C2)				
Surface Soil Cracks (B6)		ce of Reduced Iro	•		Muck Surface (C7)		
Inundation Visible on		Iron Reduction in	• •	Crayfish Burrows (C8)			
Aerial Imagery (B7)	Plowed	l Soils (C6)		-	ation Visible on		
Materio Otaliana III anno 1700)	Other /		\	Aerial Imagery (C9)			
Water-Stained Leaves (B9)	Other (c	Explain in Remark	(S)				
water-Stained Leaves (B9)	Other (Explain in Remark	(S)	Shallo	n imagery (C9) ow Aquitard (D3) Netural Test (D5)		

Saturation Present? Yes _____ No ____ Depth (inches) _____ (includes capillary fringe)

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

Depth (inches) _____

Depth (inches) ____

Yes _____ No ____

No _____

Yes ____

Field Observations
Surface Water Present?

Water Table Present?

REMARKS FEATURE IS A ROADSIDE DITCH AND IS \$2-3 FEET WIDE, 2 FEET DEEP, FEATURE CAPPLES WATER DURING RAIN EVENT AND DRAINS TO CULVERT UNDER PLEAS ANT VALLY ROAD, FEATURE RECIEVES OVERFLOW WATER FROM ROZ WHEN IT IS FULL VIA SHEET FLOW. NO DEFINED WATER PATH BTWN THESE FEATURES, DOES NOT QUALIFYR: Welland Working Group Welland Del Form Welland Del Work Files Welland Delineation Form BACK.doc AS WATERS OF U.S.

Wetland Hydrology? Yes ____ No ____

ATTACHMENT B Representative Photographs

Representative Photographs Taken June 26, 2008



Photograph $\overline{\textbf{1.}}$ Photograph showing seasonal wetland (SW1) located on the north side of Pleasant Valley Road. Photograph taken from the edge of the study area looking east across SW1.



Photograph 2. Photograph showing seasonal wetland (SW2) located on the south side of Pleasant Valley Road. Photograph taken from the edge of Pleasant Valley Road looking east. The light post in the background is located at the northeastern corner of the Tower Mart parking lot.



Photograph 3. Photograph of roadside ditch (RD1) located on the north side of Pleasant Valley Road near the northern end of the study area. Photograph taken from the eastern end of the ditch looking southwest along Pleasant Valley Road.



Photograph 4. Photograph of roadside ditch (RD2) located in the north side of Pleasant Valley Road between Ryan Drive and Patterson Drive. Photograph taken from middle of RD2 looking the northeast.



Photograph 5. Photograph of roadside ditch (RD3) and culvert located on the north side of Pleasant Valley Road near Ryan Drive. Photograph taken just east of the feature looking southwest along Pleasant Valley Road.