



To: Tamara Spear
Environmental Specialist
SDG&E Environmental Services
8315 Century Park Court, CP21E
San Diego, CA 92123

From: Chambers Group, Inc.

Date: 07/29/15

RE: Delineation Memo regarding Energy Division Data Request #17 (Question 7) for the SX to PQ 230kV Transmission Line CPCN Project

**Aquatic Resources Memorandum for the San Diego Gas & Electric Carmel Valley Staging Yard,
Sycamore to Penasquitos 230 Kilovolt Transmission Line Project,
San Diego County, California**

This Aquatic Resources Memorandum (Memo) was prepared by Chambers Group, Inc. (Chambers Group) biologist Paul Morrissey as a response to the Energy Division Data Request #17 (Question 7) for the Sycamore to Penasquitos (SX to PQ) 230 Kilovolt (kV) Transmission Line Project (Proposed Project).

San Diego Gas & Electric (SDG&E) plans to utilize the Carmel Valley Road Staging Yard (Study Area) as part of the Proposed Project. Proposed Project activities within the Study Area would include the use of the area for an approximately 6 acre staging yard. The staging yard may be used for equipment and materials storage, re-fueling of equipment, placement of construction trailers and restroom facilities, equipment storage, materials laydown, and helicopter flight operations. Following completion of the Proposed Project, all materials, equipment, and rock base would be removed, soils would be de-compacted and stabilized, and all BMPs would be removed after closeout of applicable portions of the Proposed Project Stormwater Pollution and Prevention Plan (SWPPP).

This memo summarizes a jurisdictional delineation (JD) assessment conducted to determine the presence and/or extent of aquatic resources potentially regulated by the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and/or the California Regional Water Quality Control Board (RWQCB).

Study Area

The Study Area is situated on a mesa top at the northeast corner of the intersection of Carmel Valley Road and Camino Del Sur in the City of San Diego, in San Diego County. The Study Area evaluated during the assessment included the final proposed limits of the Carmel Valley Staging Yard, and included an approximately 6.84 acre area (Study Area) (Attachment B, Figure 1). Topographically, the Study Area is level. To the north of the Study Area, topography descends along a north facing valley slope of the San Dieguito River that is located approximately 500 feet north of the Study Area.



Literature Review

Prior to the field assessment, a desktop analysis was conducted that included an evaluation of United States Geological Survey (USGS) quadrangle maps and blue-line drainages, United States Department of Agriculture (USDA) Natural Resources Conservation Service soil survey maps, National Wetland Inventory (NWI) data, and aerial photography to assist with jurisdictional wetland boundaries.

Based on topographic, USFWS NWI, and USGS maps, no naturally occurring drainage features or streambeds appear to occur within the Study Area (Attachment B, Figure 3) or connect to a jurisdictional waterway.

The NWI indicates that no wetland features or riparian areas occur within the Study Area. The NWI shows a freshwater forested/shrub wetland within the San Dieguito River approximately 500 feet north of the Study Area, and an emergent freshwater wetland area located approximately 1,000 feet west of the Study Area. However, no feature on site appears to convey waters to these features.

Two soil types occur onsite: Olivenhain cobbly loam 2 to 9 percent slopes and Las Flores loamy fine sand 9 to 15 percent slopes (Attachment B, Figure 2). Olivenhain cobbly loam is considered to be partially-hydric.

Past and Present Land Use

Historical aeriels of the site were reviewed from 1953 to present day. Prior to 1996, the site was undeveloped and appears as non-native grassland potentially used for grazing. Sometime between 1996 and 2002, the site was extensively graded for development. By 2002 the existing parking lot, driveway and constructed brow ditches appear on aeriels. Since 2002 the Study Area has been used for material storage.

Preliminary Site Visit and Vegetation Mapping

Blackhawk Environmental, Inc. biologist Ian Maunsell conducted a habitat assessment within the Study Area on June 4 and June 11, 2015. The site visit included a pedestrian survey of the Study Area. Plant communities within the Survey Area were identified, qualitatively described, and mapped onto high resolution aerial photographs. Vegetation communities were classified according to those described within the *SDG&E Subregional Natural Communities Conservation Plan (NCCP)*. The NCCP vegetation community classifications are consistent with, or similar to, the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). For the Proposed Project, vegetation communities within the Study Area were identified according to the estimated percent cover of the combination of dominant plant species observed relative to the list of dominant species for a given Holland vegetation community. Within the Study Area, three vegetation communities/land use types were identified, including: developed lands, non-native grasslands, and disturbed habitat. During a previous survey conducted in June 2015, a small area approximately 0.13 acre in size within the Study Area was misidentified as a meadow/seep (Holland Code 45400). This "meadow/seep area" is surrounded to the south by a developed asphalt parking pad, to the west by a gravel road, and to the north and east by disturbed upland habitat (Attachment B, Figure 2).

Meadow/seeps, a NCCP-vegetation classification, are composed of annual and perennial herbs, including wildflowers and bulbs such as mariposa lily (*Calochortus* spp.), lupine (*Lupinus* spp.), and bluedicks (*Dichelostemma capitatum*). Where meadow/seeps occur, groundwater keeps the soil moist longer than the surrounding uplands, and vegetation often includes rushes (*Carex* spp.), spike rushes (*Eleocharis* spp.) and other plants typically associated with moist or wet areas. Meadow/seeps are located on slopes or at the base of slopes.

This habitat was not identified as a meadow/seep area based on the recent July 24, 2015 survey effort. Species identified within this area include: non-native Italian ryegrass (*Festuca perennis*; Facultative (FAC) species), wild oat (*Avena barbata*; Upland (UPL) species) fringed by tamarisk (*Tamarix* sp.; FAC), Russian thistle (*Salsola tragus*), bristly oxtongue (*Helminthotheca echiloides*; Facultative Upland (FACU) species), and scattered native slender creeping spike-rush (*Eleocharis montevidensis*; Facultative wet (FACW) species). This area also hosted one small pepper tree (*Schinus molle*) and is predominantly surrounded by Russian thistle (Attachment C, Photos). The slender creeping spike-rush and the non-native tamarisk each comprised approximately 10 percent of the soil pit location 1 Survey Area. The non-native Italian ryegrass comprised approximately 50 percent of the area within soil pit location 1, and occurs in both wet and dry environments. Although collectively these species pass the dominance test for hydrophytic vegetation for the soil pit location, the Italian ryegrass is the dominant species and is typically found in non-native grassland communities. Based on the topography, lack of hydrologic connectivity, and existing conditions of the surrounding area, this small 0.13 acre area has been re-classified as non-native grassland.

Jurisdictional Delineation Site Visit

Chambers Group biologist Paul Morrissey and SDG&E environmental resource specialist Tamara Spear visited the Study Area on July 24, 2015. The survey was conducted in response to the Energy Division Data Request #17 (Question 7), in which an additional delineation survey was requested. The focus of the survey was to determine if any aquatic resources exist within the proposed staging yard, which would be mapped for avoidance.

The Study Area was evaluated using the methodology set forth in the USACE Wetland Delineation Manual (USACE 1987) and the Arid West Regional Delineation Supplement (USACE 2008). A total of two Arid West Wetland Delineation Data Forms were completed according to USACE standards. Copies of all field data forms are included in Attachment A. Photographs of site conditions at the time of the survey are included in Attachment C: Site Photographs.

Jurisdictional Delineation Results

The majority of the Study Area is disturbed habitat, characterized by heavily disturbed and previously graded areas interspersed with developed and paved areas. The Study Area exhibited various levels of disturbance ranging from tire tracks, scattered rip-rap, man-made surface water control systems, and gravel/crushed rock base. Vegetation appeared previously mowed as evidenced by lower vegetation height than that in the surrounding areas (typically less than 1 foot in height compared to surrounding areas up to 2-3 feet in height). Dominant plant species observed to occur within these areas included

non-native Russian thistle, ragweed (*Ambrosia psilostachya*), filaree (*Erodium cicutarium*), fennel (*Foeniculum vulgare*), wild oat (*Avena* sp.), mustard (*Heirshfeldia* sp.), and red brome (*Bromus madritensis*). Sub-dominant species occurring occasional throughout the yard included artichoke thistle (*Cynara cardunculus*), crab grass (*Digitaria* sp.), cheeseweed (*Malva parviflora*), and smooth cats ear (*Hypochaeris glabra*). Occasional native species such as coyote bush (*Baccharis pilularis*) and needle grass (*Stipa* sp.) occur, primarily within small fragmented patches immediately adjacent to the paved areas, possibly due to previous landscaping as they are intermixed with non-native wattle trees (*Acacia* sp.).

Based on the results of the delineation, no water features potentially under federal or state jurisdiction were identified within the Study Area. The area evaluated includes non-native grassland habitat, developed, and disturbed habitat as described above.

The delineation was performed under “normal circumstances” for the site, which has undergone regular disturbances and routine land uses as a staging and storage area. The survey was conducted after two weekends of rain events, uncharacteristic for this time of year (July).

Two Arid West Wetland Determination Data Forms were completed for the Study Area. Sample Point (SP)-01 was located within the non-native grassland area, and SP-02 was located to the north of the grassland area, within disturbed habitat. Several test soil pits were also dug within and outside of the non-native grassland area.

Within the SPs, soils were heavily disturbed, and relics of erosion management in the form of gravel were observed within the soil sample. Soils were determined to be non-hydric (SP-01 and SP-02); however, the soils did exhibit signs of infrequent inundation and slightly anaerobic conditions (less than 5 percent redox features within soil matrix). Soils were identified as clay/loam soils ranging in matrix color from 10Y/R 3/3 to 4/4 with up to 4 percent redox features ranging from 7.5Y/R 3/4 to 5/8. No evidence of saturated soils was observed in the feature during the time of the survey. Due to the current drought conditions, hydrology was evaluated according to standards for problematic conditions. The primary source of hydrologic input appears to come from rain water collecting on the flat surface of the Study Area. No ordinary high water marks or other hydrology other than soil surface cracks in exposed clay soils were observed. The paved parking area, driveway, and gravel roads do not allow permeability into the ground and directs surface waters into the non-native grassland area by pavement to the north and water collecting against a gravel road to the west. This is likely the reason for non-native species such as Italian ryegrass and tamarisk, and native slender creeping spike-rush to be present on site and relegated to this small area.

Approximately 0.016 acre of un-vegetated man-made brow ditches constructed in uplands were mapped within the Study Area (Attachment B, Figure 1). These features are approximately 2-feet in width by 1 foot deep, and flow off of the Study Area to a detention basing located to the northwest. No culvert appears to provide flow from the basin into the San Dieguito River to the north. These features are man-made, and according to historical photographs and data, do not follow or direct formerly naturally occurring drainage features within the Study Area. As such, these features are not likely to be considered waters of the US or waters of the State. As such, brow ditches within the Study Area are considered non-jurisdictional by USACE, RWQCB, and CDFW.



Due to the lack of hydric soils and the Study Area being isolated (no hydrological connectivity) from the San Dieguito River or other riparian systems nearby, this proposed staging yard does not contain water features under jurisdiction by the USACE, RWQCB, or CDFW.

CONCLUSION

The survey effort resulted in the determination that the Study Area does not contain non-wetland or wetland waters of the US, wetland or non-wetland waters of the state, or riparian areas under the jurisdiction of USACE, RWQCB and/or CDFW.

If you have any questions regarding this internal memo, please feel free to contact me at (949) 261-5414 extension 7288 or at pmorrissey@chambersgroupinc.com.

Respectfully submitted,

A handwritten signature in blue ink that reads "Paul Morrissey". The signature is fluid and cursive, with a large loop at the end of the last name.

Paul Morrissey
Director of Biology
Chambers Group, Inc.

Attachments

- Attachment A: Arid West Data Sheets
- Attachment B: Project Figures
- Attachment C: Site Photos

ATTACHMENT A – ARID WEST DATA SHEETS



WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carmel Valley Construction Yard City/County: San Diego, San Diego County Sampling Date: July 24, 2015

Applicant/Owner: San Diego Gas & Electric Company State: CA Sampling Point: 01

Investigator(s): Paul Morrissey Section, Township, Range: Sections 1 and 12 of Township 14S Range 3W

Landform (hillslope, terrace, etc.): mesa top Local relief (concave, convex, none): concave Slope (%): <1

Subregion (LRR): C - Mediterranean California Lat: 32.97800 Long: -117.14800 Datum: NAD-83

Soil Map Unit Name: Olivenhein Cobbly Loam 2 to 9 percent slopes NWI classification: None

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 No significantly disturbed? Are "Normal Circumstances" present? Yes No

Are Vegetation Soil or Hydrology No 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 <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks: Sampling point conducted within representative area of a previously developed/graded parcel where facultative vegetation apparently occurs adjacent to a concrete parking lot.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <i>Tamarix sp.</i>	10	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> % (A/B)														
2. <i>Schinus molle</i>	2	No	FACU															
3.																		
4.																		
Total Cover: <u>12</u> %																		
Sapling/Shrub Stratum																		
1.				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td>x 1 =</td> </tr> <tr> <td>FACW species</td> <td>x 2 =</td> </tr> <tr> <td>FAC species</td> <td>x 3 =</td> </tr> <tr> <td>FACU species</td> <td>x 4 =</td> </tr> <tr> <td>UPL species</td> <td>x 5 =</td> </tr> <tr> <td>Column Totals:</td> <td>(A) (B)</td> </tr> </table> Prevalence Index = B/A =	Total % Cover of:	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)
Total % Cover of:	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)																	
2.																		
3.																		
4.																		
5.																		
Total Cover: <u>0</u> %																		
Herb Stratum																		
1. <i>Eleocharis montevidensis</i>	5	No	FACW	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <i>Festuca perennis</i>	50	Yes	FAC															
3. <i>Avena barbata</i>	10	No	UPL															
4. <i>Salsola tragus</i>	25	Yes	FACU															
5. <i>Helminthotheca echioides</i>	10	No	FACU															
6.																		
7.																		
8.																		
Total Cover: <u>100</u> %																		
Woody Vine Stratum																		
1.				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>														
2.																		
Total Cover: <u>0</u> %																		
% Bare Ground in Herb Stratum <u>0</u> % % Cover of Biotic Crust <u>0</u> %																		

Remarks: Hydrophytic vegetation present based on *Festuca perennis* to be facultative. Species occurs in both wet and dry environments but typically requires greater than 11 inches per rain annually. Given current drought conditions the species presence likely indicates that the area collects water in higher frequency/duration than surrounding area.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix		Redox Features				Texture	Remarks		
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-2.5	10YR 3/3	100					CL	organic debris present		
2.5-17	10YR 4/3	90	7.5YR 3/4	4	C	M	CL	6% gravel in sampled horizon		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)						<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)			Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)	
Restrictive Layer (if present): Type: <u>None</u> Depth (inches): <u>NA</u>						Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>				
Remarks: Soils display signs of infrequent inundation and anaerobic conditions but are not hydric.										

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (any one indicator is sufficient)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input type="radio"/> Depth (inches): _____ Saturation Present? Yes <input type="radio"/> No <input type="radio"/> Depth (inches): _____ (includes capillary fringe)		
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No apparent hydrology or drainage patterns within sample plot. Area is flat and collects water with evidence of clay hardpan occurring throughout the area. Water likely accumulates in low area due to gravel roads and the presence of paved parking area immediately to the south. Sampling conducted during dry season.		

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Carmel Valley Construction Yard City/County: San Diego, San Diego County Sampling Date: July 24, 2015
 Applicant/Owner: San Diego Gas & Electric Company State: CA Sampling Point: 02
 Investigator(s): Paul Morrissey Section, Township, Range: Sections 1 and 12 of Township 14S Range 3W
 Landform (hillslope, terrace, etc.): mesa top Local relief (concave, convex, none): concave Slope (%): <1
 Subregion (LRR): C - Mediterranean California Lat: 32.97900 Long: -117.14800 Datum: NAD-83
 Soil Map Unit Name: Olivenhein Cobbly Loam 2 to 9 percent slopes NWI classification: None

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 significantly 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 <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Sampling point conducted within area adjacent to SP-01 approximately 1.5 feet from a gravel road.	

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																													
1. <u>Acacia sp.</u>	15	Yes	Not Listed	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> % (A/B)																												
2. _____	_____	_____	_____																													
3. _____	_____	_____	_____																													
4. _____	_____	_____	_____																													
Total Cover: <u>15</u> %				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">x 1 =</td> <td></td> <td></td> </tr> <tr> <td>FACW species</td> <td align="center">x 2 =</td> <td></td> <td></td> </tr> <tr> <td>FAC species</td> <td align="center">x 3 =</td> <td></td> <td></td> </tr> <tr> <td>FACU species</td> <td align="center">x 4 =</td> <td></td> <td></td> </tr> <tr> <td>UPL species</td> <td align="center">x 5 =</td> <td></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td align="center">(A)</td> <td></td> <td align="center">(B)</td> </tr> </table> Prevalence Index = B/A = _____	Total % Cover of:		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)
Total % Cover of:		Multiply by:																														
OBL species	x 1 =																															
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Column Totals:	(A)		(B)																													
Sapling/Shrub Stratum																																
1. _____	_____	_____	_____																													
2. _____	_____	_____	_____																													
3. _____	_____	_____	_____																													
4. _____	_____	_____	_____																													
5. _____	_____	_____	_____																													
Total Cover: <u>0</u> %																																
Herb Stratum																																
1. <u>Bromus madritensis</u>	45	Yes	UPL																													
2. <u>Erodium sp.</u>	10	No	UPL																													
3. <u>Salsola tragus</u>	15	Yes	FACU																													
4. <u>Brassica sp.</u>	5	No	UPL																													
5. _____	_____	_____	_____																													
6. _____	_____	_____	_____																													
7. _____	_____	_____	_____																													
8. _____	_____	_____	_____																													
Total Cover: <u>75</u> %																																
Woody Vine Stratum																																
1. _____	_____	_____	_____																													
2. _____	_____	_____	_____																													
Total Cover: _____ %																																
% Bare Ground in Herb Stratum <u>15</u> % % Cover of Biotic Crust <u>0</u> %																																

Remarks: Sampled point occurs within upland area.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 4/4	95					CL	5% gravel in sampled horizon
2-18	10YR 4/4	90	7.5YR 5/8	4	C	M	CL	6% gravel in sampled horizon

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils:³
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

1 cm Muck (A9) (LRR C)
 2 cm Muck (A10) (LRR B)
 Reduced Vertic (F18)
 Red Parent Material (TF2)
 Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: None
 Depth (inches): NA

Hydric Soil Present? Yes No

Remarks: Soils display signs of infrequent inundation and anaerobic conditions but are not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input type="radio"/> No <input type="radio"/>	Depth (inches): _____
Water Table Present?	Yes <input type="radio"/> No <input type="radio"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input type="radio"/>	Depth (inches): _____

Wetland Hydrology Present? Yes No

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

Remarks: Area is flat and collects surface water after rain events with evidence of clay hardpan occurring throughout the area, no hydrological connectivity to any body of water in the area. Water likely accumulates in low area due to gravel roads and paved parking area. Sample conducted during dry season; however, survey was conducted one week after two heavy rain events.

ATTACHMENT B – FIGURES





Legend

- Carmel Valley Road Staging Yard
- Brow Ditch
- Soil Pit
- Non-jurisdictional Non-native Grassland

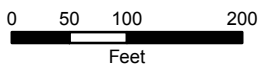
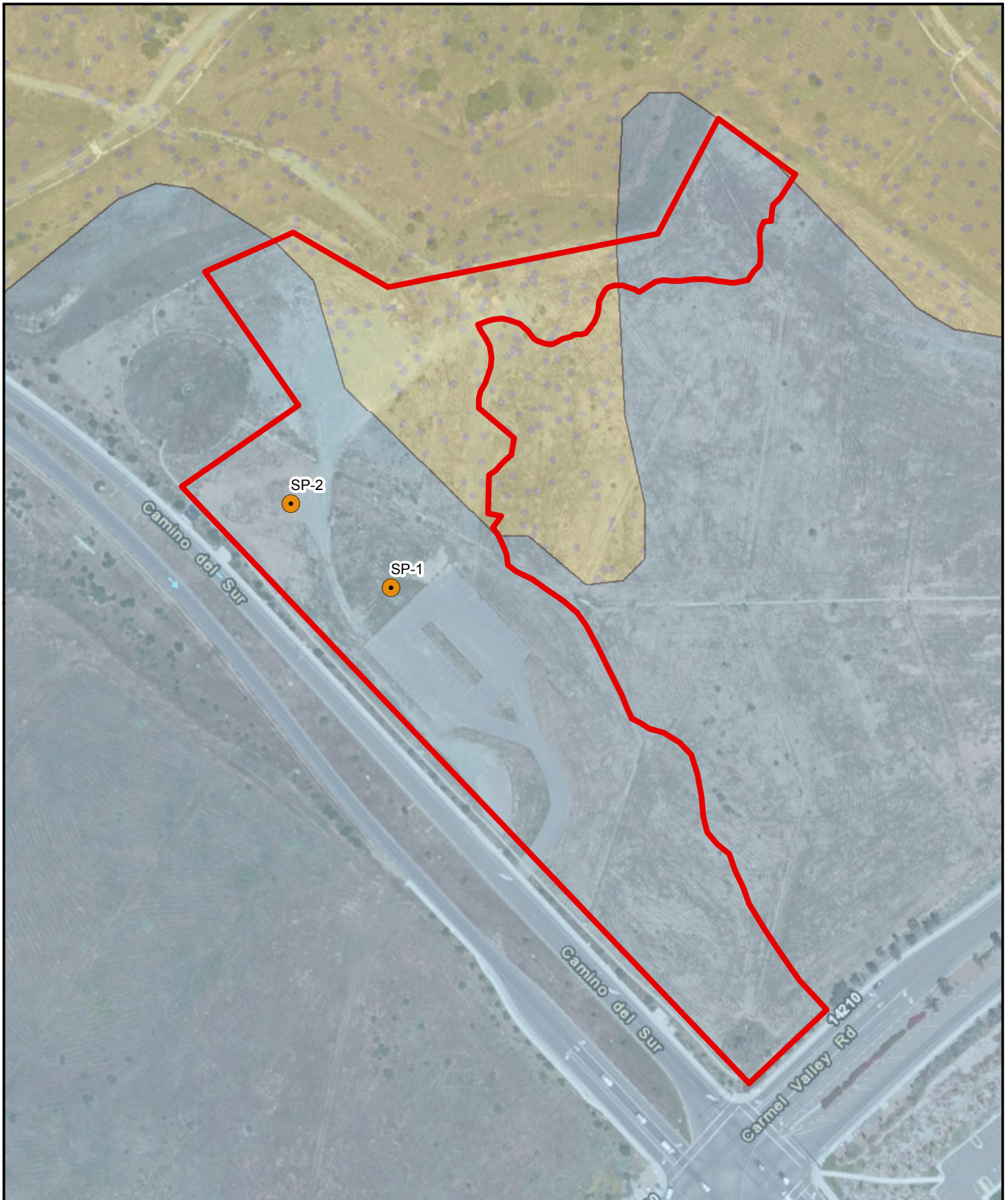



Figure 1
Delineation Results





Legend

 Carmel Valley Road Staging Yard

SSURGO Soils Mapunit Name

 Las Flores loamy fine sand, 9 to 15 percent slopes (Not Hydric)

 Olivenhain cobbly loam, 2 to 9 percent slopes (Partially Hydric)

 Soil Pit

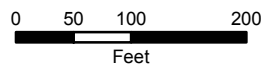


Figure 2
Soils Map



Legend

- Carmel Valley Road Staging Yard
- Soil Pit
- NWI Wetlands

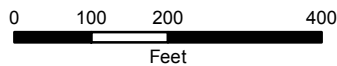


Figure 3
NWI Map

ATTACHMENT C – PHOTO PAGES



SITE PHOTOGRAPHS



Photo 1. Soil Pit 1, within the non-native grassland habitat comprised of Italian ryegrass, wild oat, Russian thistle, bristly oxtongue, and scattered native slender creeping spike-rush fringed by tamarisk.



Photo 2. Area immediately surrounding the non-native grassland at Soil Pit 1. Species include non-native Russian thistle, ragweed, filaree, fennel, wild oat, mustard, and red brome, artichoke thistle, crab grass, cheeseweed, and smooth cats ear.



Photo 3. Soil Pit 2. Vegetation appeared previously mowed as evidenced by lower vegetation height than that in the surrounding areas (typically less than 1 foot in height compared to surrounding areas up to 2-3 feet in height).



Photo 4. Brow ditches constructed within upland habitat within the Survey Area. These features are approximately 2-feet in width by 1 foot deep.