APPENDIX G

WETLAND DELINEATION REPORT



PRELIMINARY DELINEATION OF WATERS OF THE U.S.

VANDEN MEADOWS ANNEXATION AND SPECIFIC PLAN PROJECT SOLANO COUNTY, CA

APRIL 2011

PREPARED FOR:

City of Vacaville Public Works - Engineering Services 650 Merchant Street Vacaville, CA 95688



PREPARED BY:

Analytical Environmental Services 1801 7th Street, Suite 100 Sacramento, CA 95811 (916) 447-3479 www.analyticalcorp.com



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ATTACHMENTS

Attachment 1 Wetland Delineation Data Sheets

1.0 INTRODUCTION

1.1 PURPOSE

Analytical Environmental Services (AES) conducted a formal delineation of potential wetlands and other waters of the U.S. for the Vanden Meadows Specific Plan and Development Project (proposed project) in the City of Vacaville, California. The purpose of the delineation was to identify whether wetlands and other waters of the United States (U.S.), as defined by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), occur within the study area. The results are considered preliminary until the USACE verifies the findings.

1.2 PROJECT APPLICANT AND AGENT

Applicant	Agent
City of Vacaville	Analytical Environmental Services
Planning Department	1801 7th Street, Suite 100
650 Merchant Street	Sacramento, California 95811
Vacaville, California 95688	Phone: (916) 447-3479
	Fax: (916) 447-1665

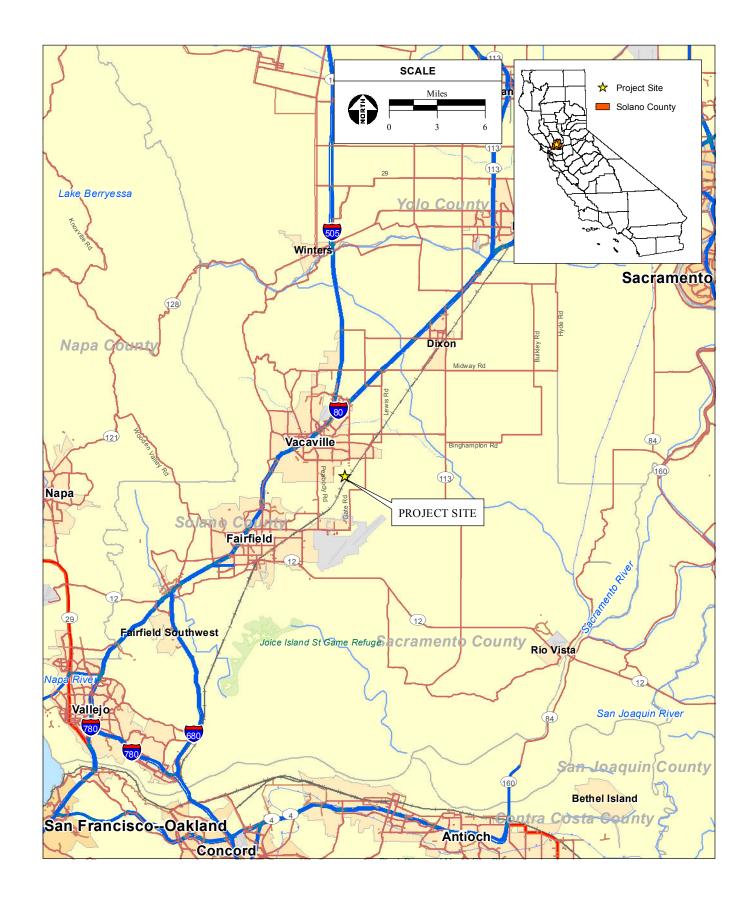
1.3 PROJECT LOCATION

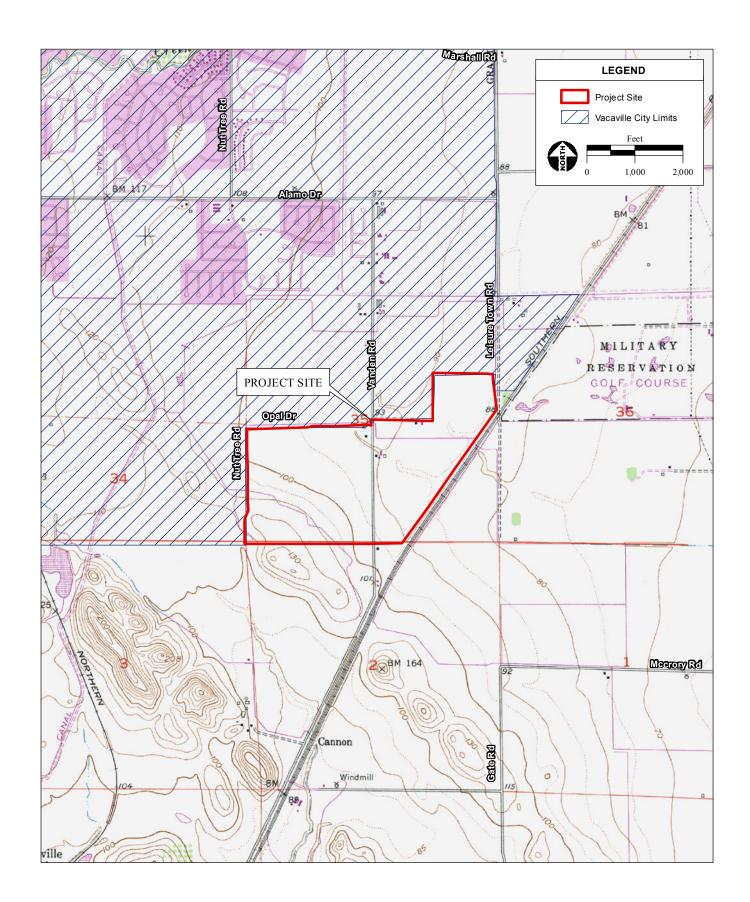
The approximately 238-acre study area is located adjacent to the southwestern boundary of the City of Vacaville in unincorporated Solano County, California. The regional location of the study area is shown in **Figure 1**. The study area is situated on Township 5 North, Range 1 West, Section 2 of the Elmira U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (quad), Mt. Diablo Meridian (USGS, 1980). The centroid of the study area is 38° 18' 45.684" north, 121° 56' 56.5074" west (latitude 38.31269 degrees north, longitude 121.94903 degrees west). The study area is surrounded on the west and north by residential development and on the east and south by agricultural land. Union Pacific Railroad (UPRR) tracks are oriented northeast to southwest, and are adjacent to the study area to the east. A topographic map and an aerial photograph of the study area are shown in **Figures 2** and **3**, respectively.

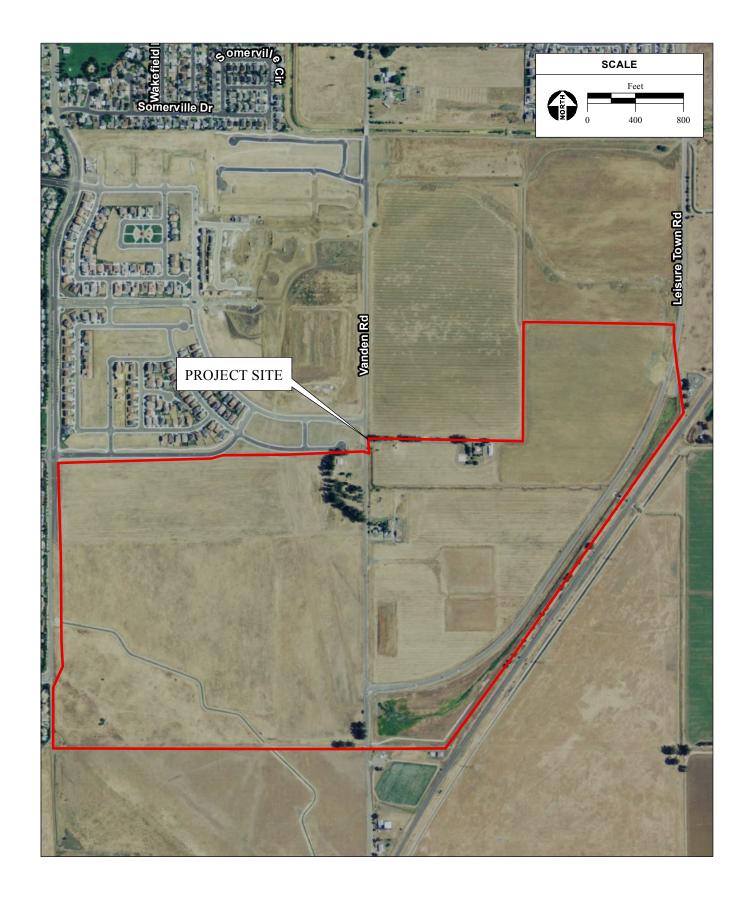
From Sacramento, take I-80 west toward San Francisco for approximately 27 miles. Take the Leisure Town Road/Vaca Valley Parkway exit and turn left onto Leisure Town Road. Drive for 4 miles to the study area.

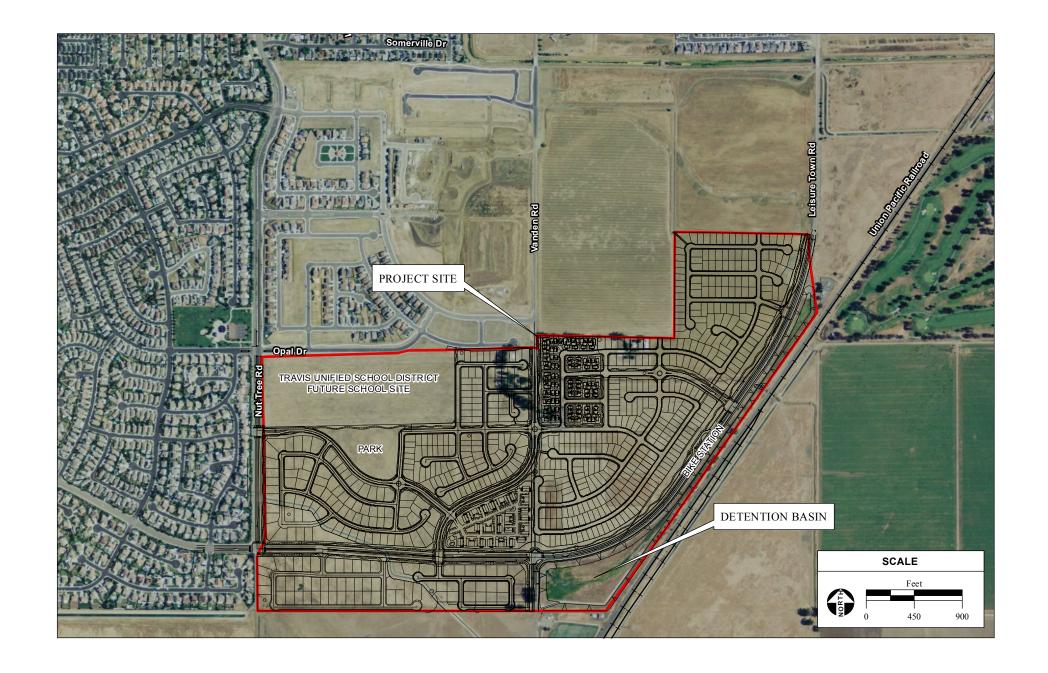
1.4 PROJECT DESCRIPTION

The proposed project consists of the annexation of the 238-acre study area and the approval and implementation of a specific plan for the property that would result in the development of 939 single-family clustered and multi-family units, a 28-acre school site, 6-acres of park, connecting pedestrian trails, and a bike station. The project design is illustrated in **Figure 4**.









— Vanden Meadows Preliminary Delineation of Waters of the U.S. / 210532 ■

1.5 REGULATORY BACKGROUND

Any person, firm, or agency planning to alter or work in navigable waters of the U.S., including the discharge of dredged or fill material, must first obtain authorization from the USACE. Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the USACE (33 U.S.C. 403). Section 301 of the Federal Water Pollution Control Act and Amendments of 1972 (CWA) prohibit the discharge of pollutants, including dredged or fill material, into waters of the U.S. without a Section 404 permit from the USACE (33 U.S.C. 1344). A Section 401 State Water Quality Certification may be required by the Regional Water Quality Control Board (RWQCB) before other permits are issued. If a proposed project will result in the alteration of a California lake or streambed, the California Department of Fish and Game (CDFG) requires notification prior to commencement, and may require a Section 1600 Lake or Streambed Alteration Agreement.

Waters of the U.S. are defined as:

All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters (Section 404 of the CWA; 33 CFR Part 328).

With non-tidal waters, in the absence of adjacent wetlands, the extent of the USACE jurisdiction is defined by the ordinary high water mark. The ordinary high water mark is defined, in 33 CFR Part 329.11, as the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris.

Wetlands are defined as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (Federal Register, 1980, 1982; Braddock and Huppman, 1995).

The USACE and the U.S. Environmental Protection Agency (USEPA) issued the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* on May 30, 2007, to provide guidance based on the Supreme Court's decision regarding *Rapanos v. United States and Carabell v. United States* (Rapanos Guidance) (USACE, 2007). The decision provides new standards that distinguish between traditional navigable waters (TNWs), relatively permanent waters (RPWs), and non-relatively

permanent waters (non-RPWs). Wetlands adjacent to non-RPWs are subject to CWA jurisdiction if: the water body is relatively permanent, or if a water body abuts a RPW, or if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. The significant nexus standard will be based on evidence applicable to ecology, hydrology, and the influence of the water on the "chemical, physical, and biological integrity of downstream traditional navigable waters" (USACE, 2007). Isolated wetlands are not subject to CWA jurisdiction based on the Supreme Court's decision regarding Solid Waste Agency of Northern Cook County (SWANCC) (Guzy, 2001).

Roadside ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are not considered waters of the U.S. because they are not tributaries or they do not have a significant nexus to downstream TNWs (Federal Register, 1983). The December 2008 memorandum summarizing key points of the Rapanos Guidance also states that agencies generally will not assert jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water (USACE and USEPA, 2008).

USACE Regulatory Guidance Letter 07-01 (RGL 07-1), *Practices for Documenting Jurisdiction Under Section 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the CWA* (2007), states that upland swales and erosional features (e.g., gullies, small washes characterized by low volume, infrequent, and short duration flow) are generally not waters of the U.S. because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters.

2.0 METHODOLOGY

2.1 DATA REVIEW

Prior to conducting the field delineation the following information sources were reviewed:

- Elmira quad and street maps (USGS, 1980; StreetMap North America, 2009);
- Color aerial photography of the study area and vicinity (USDA, 2009);
- Soil survey maps and unit descriptions (NRCS, 2011);
- Hydric soil information (NRCS, 2010); and
- U.S. Fish and Wildlife Service (USFWS) Wetlands Online Mapper (USFWS, 2011).

2.2 DELINEATION SURVEY

Davis Environmental, LLC, prepared a *Biological Resources Assessment for the Vanden Meadows Project Site* (BRA; 2009). The BRA includes wetland datasheets obtained from field surveys conducted on July 29 and 30, 2009. Analytical Environmental Services (AES) biologists Kelly Bayne, M.S., and Jessica Griggs conducted a delineation of the study area on June 18, 2010. Ms. Bayne and AES botanist Laura Burris conducted a delineation of the study area on January 31, 2011. The delineation consisted of ground truthing the information documented on the wetland datasheets provided in the BRA, walking

transects approximately 100 feet apart in an east to west direction, mapping habitats types, and documenting wetland features on an aerial photograph in the vicinity of the study area. Data points were obtained by excavating soil pits to a depth of 18 inches or until an impermeable layer was reached. Plant nomenclature followed *The Jepson Manual: Higher Plants of California* (Hickman, 1993). The *National List of Vascular Plant Species that Occur in Wetlands, California* (Reed, 1988), was used to determine the status of observed plants as wetland indicator species.

2.3 DETERMINATION METHODS

This report has been prepared in accordance with the Regulatory Branch of the Sacramento District, USACE Minimum Standards (2001) and the Corps of Engineers Wetlands Delineation Manual (1987). The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (dated September 2008) and the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979) were used to delineate wetlands that are potentially subject to USACE jurisdiction under Section 404 of the CWA. The USACE's regulations (33 CFR Part 328) were used to determine the presence of jurisdictional waters of the U.S. other than wetlands. The U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook (2007) was used to confirm that the delineation was prepared in accordance with the guidance based on the Rapanos decision.

Wetlands are defined by three factors: a majority of dominant vegetation species are wetland associated species; hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and hydric soils are present.

Wetland data sheets were completed at representative locations to determine whether suspect features qualify as jurisdictional waters of the U.S. The data sheets are included in **Attachment 1**. Wetlands were determined based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology indicators.

Vegetation

Hydrophytic vegetation indicators include: prevalence of hydrophytic vegetation (majority of dominant plant species are obligate or facultative wetland plants) as listed in the *National List of Plant Species that Occur in Wetlands*: *California* (Reed, 1988) and morphological or physiological adaptations to saturated soil conditions. Plant species not listed in Reed (1988) are considered upland species. The 50/20 rule states that for each stratum in the plant community, dominant species are the most abundant species that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprises 20 percent or more of the total cover in the stratum (USACE, 2008).

Soils

Hydric soil indicators include: organic soils (histosols); mineral soils saturated and rich in organics (histic epipedon); sulfidic odor; low dissolved oxygen concentration (aquic moisture regime) and

reducing conditions; gleyed and/or low-chroma soils (chroma of 1 or chroma of 2 with bright mottles); iron and manganese concretions (USACE, 2008); and soils listed on National Hydric Soils (NRCS, 2010).

Hydrology

Primary wetlands hydrology indicators include: visual observation of saturated soil or inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks, drift lines, and sediment deposits. Only one primary indicator is necessary to have wetland hydrology. Secondary indicators include: drainage patterns, crayfish burrows, FAC-neutral test, and shallow aquitard. A minimum of two secondary indicators is necessary to establish wetland hydrology (USACE, 2008).

3.0 ENVIRONMENTAL SETTING

3.1 PRECIPITATION

The Sacramento Valley - Davis (#6) climate data obtained in the vicinity of the study area documented an average total annual precipitation of 8.87 inches from November 2010 through January 2011 (CIMIS, 2011). The Davis 1 WSW (042294) monthly record climate data recorded an average total annual precipitation of 9.06 inches from November through January between 1893 and 2010 (WRCC, 2011). Therefore, the average precipitation between November 2010 and December 2011 is approximately 98 percent of the average precipitation for this period documented over the last 117 years.

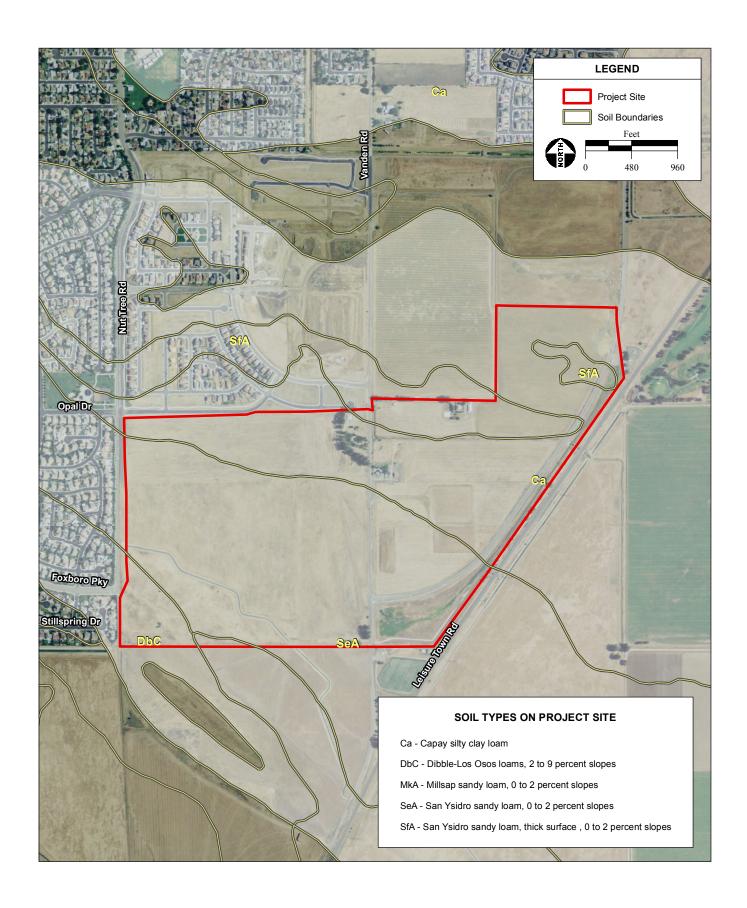
3.2 SOIL TYPES

Six soil types occur in the study area. **Table 1** identifies the soil types by series, map symbols, and hydric characteristics. The soil map is provided in **Figure 5**.

TABLE 1
MAPPED SOIL TYPES

Soil Series	Map Symbol	Hydric
Capay silty clay loam	Ca	
Dibble-Los Osos loam, 2 to 9 percent slopes	DbC	
Millsap sandy loam, 0 to 2 percent slopes	MkA	
San Ysidro Ioam, 0 to 2 percent slopes	SeA	
San Ysidro sandy loam	SfA	

Source: NRCS, 2001-2007; 2007; 2009.



3.3 HABITAT TYPES

The study area contains the following nine habitat types: agricultural land, ruderal/developed areas, eucalyptus grove, Brazeltine Drain, detention basin and manmade earth-lined canal, cement-lined canal, wetland drainage swale, ephemeral drainage swale, roadside ditch, manmade agricultural ditch, and seasonal wetland. Dominant vegetation in each terrestrial habitat type is discussed below. Dominant vegetation in each aquatic habitat type is discussed in **Section 4.0**. Photographs of the study area are shown in **Figures 6a** and **6b**.

Agricultural Land

The majority of the study area is comprised of fallow agricultural land (**Figure 6a**: **Photograph 1**). Borrow piles occur within the southeast portion of the agricultural land. Dominant vegetation observed within the fallow agricultural land includes: wild oat (*Avena fatua*), slender wild oat (*Avena barbata*), filaree (*Erodium botrys*), storksbill (*Geranium molle*), yellow star-thistle (*Centaurea solstitialis*), Russian thistle (*Salsola tragus*), English plantain (*Plantago lanceolata*), and field mustard (*Brassica rapa*).

Ruderal/Developed Areas

Ruderal/developed areas occur within the study area (**Figure 6a**: **Photograph 2**). Ruderal/developed areas include rural residential dwellings and associated infrastructure and paved and graded roads. Dominant vegetation observed within the ruderal/developed areas includes ornamental landscaping.

Eucalyptus Grove

A mature eucalyptus (*Eucalyptus globulus*) grove occurs within the study area (**Figure 6a**: **Photograph 3**). Dominant vegetation observed within the planted eucalyptus grove includes: eucalyptus, California walnut (*Juglans hindsii*), wild oat, slender wild oat, and field mustard.

3.4 HYDROLOGY

The Brazeltine Drain, detention basin and manmade earth-lined canal, cement-lined canal, wetland drainage swale, ephemeral drainage swale, seasonal wetlands, two manmade ditches, and manmade agricultural ditch within the study area drain offsite and flow northward. These features are tributary to New Alamo Creek approximately 0.3 miles north of the study area. New Alamo Creek is tributary to Alamo Creek. Alamo Creek is tributary to Ulatis Creek. Ulatis Creek is tributary to Cache Slough. Cache Slough is tributary to the Sacramento River Deep Water Ship Canal. The Sacramento River Deep Water Ship Canal is a traditionally navigable waters of the U.S.



PHOTO 1: View north of fallow agricultural land on the northeastern portion of the study area. Photograph taken on January 31, 2011.



PHOTO 3: View north of eucalyptus grove on the north-central portion of the study area. Photograph taken on January 31, 2011.



PHOTO 5: View north of manmade earth-lined canal, located north of the detention basin on eastern portion of the study area, east of Leisure Town Road. Photograph taken on January 31, 2011.



PHOTO 2: View northeast of ruderal/disturbed areas and manmade agricultural ditch within the central portion of the study area. Photograph taken on January 31, 2011.



PHOTO 4: View west of Brazeltine Drain on the northeast portion of the study area. Photograph taken on January 31, 2011.



PHOTO 6: View east of cement-lined canal on the southwestern portion of the study area. Photograph taken on June 18, 2010.



PHOTO 8: View east of seasonal wetland on the south western portion of the study area. Photograph taken on June 18, 2010.



PHOTO 10: View north of roadside ditch on the central portion of the study area. Photograph taken on January 31, 2011.



PHOTO 7: View northwest of seasonal wetland on the north-central portion of the study area. Photograph taken on January 31, 2011.



PHOTO 9: View north of ephemeral drainage swale on the northeastern portion of the study area. Photograph taken on January 31, 2011.

4.0 DELINEATION RESULTS

Wetland features in the study area include: Brazeltine Drain, detention basin and irrigation canal, wetland drainage swale, ephemeral drainage swale, roadside ditch, and seasonal wetland. **Table 2** provides a summary of wetland features by acreages within the study area. These acreages are considered preliminary, subject to verification by the USACE. The wetland features are discussed in detail below. Representative photographs of wetland features are shown in **Figures 6a** and **6b**. **Figure 7** illustrates wetland features by acreages and paired data points in the vicinity of the study area. Wetland determination data forms for the paired data points are presented in **Attachment 1**.

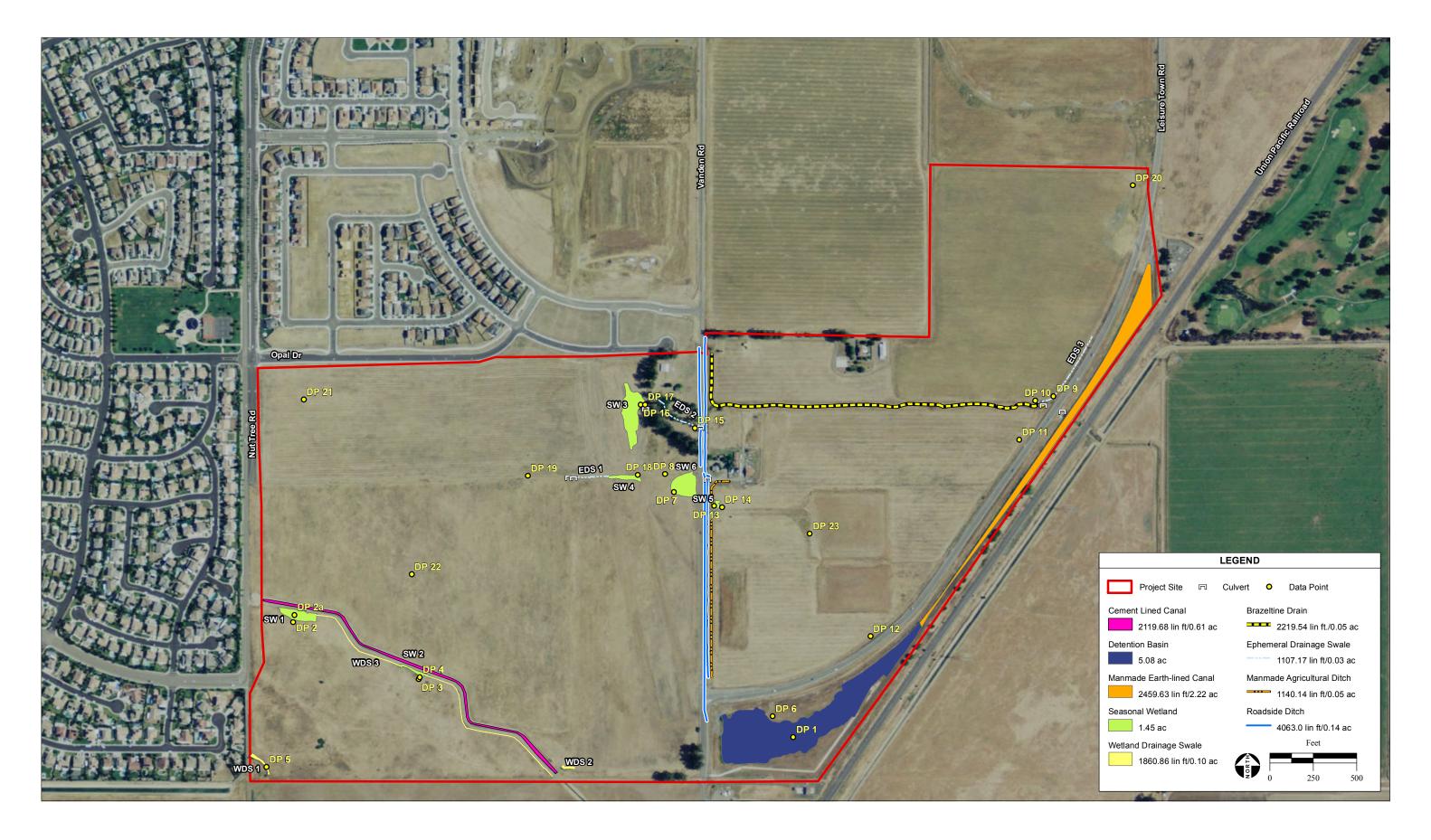
TABLE 2
WETLAND FEATURES BY ACREAGES

Wetland Feature	Acreage ¹	Linear Feet ¹
Brazeltine Drainage Channel	0.05	2,219.54
Earth Lined Canal and Detention Basin	7.30	2,459.63
Concrete-Lined Canal	0.61	2,119.68
Wetland Drainage Swale	0.10	1,860.86
Ephemeral Drainage Swale	0.03	1,107.17
Roadside Ditch	0.14	4,063.00
Remnant Manmade Agricultural Ditch	0.05	1,140.14
Seasonal Wetland	1.45	
Total	9.73	14,970.02

¹Acreages and linear feet represent a calculated estimation and are subject to modification following USACE verification. Source: AES, 2011

Brazeltine Drainage Canal

A remnant segment of the Brazeltine Drain occurs within eastern portion of the study area (**Figure 6a**: **Photograph 4**). The Brazeltine Drain is manmade and earth lined with approximately 10-foot wide, 5-foot deep, scoured bed and banks. The Brazeltine Drain flows eastward beneath Leisure Town Road through 3 culverts and drains to the manmade irrigation canal and detention basin within the southeastern portion of the study area. The Brazeltine Drain contained ponded water during the January 31, 2011 delineation of the study area. The Brazeltine Drain receives surface runoff from the Southtown development situated north of the study area. Water within the Brazeltine Drain drains eastward to the manmade earth lined canal and a detention basin located within the southeastern portion of the study area. Dominant vegetation observed within the Brazeltine Drain includes: Broad-leaved cattail (*Typha latifolia*), English plantain, and curly dock (*Rumex crispus*).



Earth Lined Canal and Detention Basin

A manmade earth lined canal and a detention basin occur on the east side of Leisure Town Road along the eastern boundary of the study area (**Figure 6a**: **Photograph 5**). The manmade canal flows southward and drains to the detention basin on the southeastern portion of the study area. The manmade canal is comprised of approximately 250-foot wide bed and banks in the northeast portion for approximately 100 feet and narrows to approximately 50-foot wide bed and banks until it drains to the detention basin. The canal and detention basin contained ponded water during the January 31 and February 28, 2011 delineations of the study area. The manmade earth lined canal and a detention basin functions as a stormwater detention basin and receives water from direct precipitation, the Brazeltine Drain, and surface runoff from the Southtown development situated north of the study area through storm drains. Water within the canal and basin exits the study area, flows north for approximately 0.3 miles, and drains to New Alamo Creek. Dominant vegetation observed within the canal and detention basin includes: broadleaved cattail, umbrella sedge (*Cyperus eragrostis*), duck-weed fern (*Azolla filiculoides*), and curly dock.

Concrete-Lined Canal

A concrete-lined canal occurs on the southwestern portion of the study area (**Figure 6b**: **Photograph 6**). The canal is comprised of approximately 10-foot wide bed and banks and lacks vegetation. The concrete-lined canal contained flowing water during the January 31 and February 28, 2011 delineations of the study area. The concrete-lined canal receives surface runoff from the residential development located outside of the western boundary of the study area. Water within the concrete-lined canal exits the southern boundary of the study area.

Wetland Drainage Swale

Three wetland drainage swales (WDSs 1 through 3) occur within the study area. The wetland drainage swales contained defined bed and banks and ponded water during the January 31 and February 28, 2011 delineations of the study area. WDS 1 and 2 appear to hold water until it percolates into the ground. WDS 3 flows southeast and exits the southern boundary of the study area. The wetland drainage swales receive water from direct precipitation and surface runoff from the surrounding agricultural land. Dominant vegetation occurring within the wetland drainage swales includes: swamp grass (*Crypsis schoenoides*), cocklebur (*Xanthium strumarium*), and umbrella sedge.

Ephemeral Drainage Swale

Ephemeral drainage swales occur within the study area (**Figure 6b**: **Photograph 9**). The ephemeral drainage swales within the eastern side of the study area (EDS 1 and EDS 2) were likely manmade as they are fairly linear features. The ephemeral drainage swale on the eastern side of the study area (EDS 3) was formed as a result of soil erosion due to runoff from the surrounding area. The ephemeral drainage swales are comprised of approximately one to 1.5-foot wide, one-foot deep defined bed and banks. The ephemeral drainage swales did not contain water during the January 31 and February 28, 2011 delineations of the study area. The ephemeral drainage swales receive water from direct precipitation and surface runoff from the surrounding agricultural land. Dominant vegetation within the ephemeral drainage swales includes: milk thistle (*Silybum marianum*), yellow star-thistle, filaree, and wild oat.

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Remnant Agricultural Ditch

The remnant manmade agricultural ditch occurs along the eastern side of Vanden Road (**Figure 6a**: **Photograph 2**). The manmade agricultural ditch is comprised of approximately one-foot wide, two-foot deep defined bed and banks. The agricultural ditch contained ponded water during the January 31 and February 28, 2011 delineations of the study area. The remnant manmade agricultural ditch appears to begin just south of a residential dwelling and terminate at a cement storm drain or remnant agricultural drain just north of Leisure Town Road on the south side of the study area. The agricultural ditch receives water from direct precipitation and surface runoff from the surrounding agricultural land. Dominant vegetation observed along the banks of the agricultural ditch includes: filaree and wild oat.

Roadside Ditch

Manmade roadside ditches occur along both sides of Vanden Road (**Figure 6b**: **Photograph 10**). The manmade roadside ditches contained ponded water during the January 31 and February 28, 2011 delineations of the study area. The roadside ditches range from one to 3 feet wide defined beds and banks and distinct drainage patterns. The ditches were excavated wholly in and drain only uplands and do not carry a relatively permanent flow of water. The manmade roadside ditches initiate on the south side of the study area where they establish defined beds and banks, flow north, and drain to the Brazeltine Drain. The manmade roadside ditches receive water from direct precipitation, surface runoff from the surrounding agricultural land, and from an ephemeral drainage on the north-central portion of the study area (EDS 2). Dominant vegetation observed within the roadside ditches includes: milk thistle, yellow star-thistle, filaree, and wild oat.

Seasonal Wetland

Five seasonal wetlands (SW) occur within the study area (**Figure 6b**: **Photographs 7 and 8**). The seasonal wetlands contained ponded water during the January 31 and February 28, 2011 delineations of the study area. The seasonal wetlands receive water from direct precipitation, overflow from the cement-lined canal, and an ephemeral drainage swale on the north-central portion of the study area (EDS 1). Dominant vegetation observed within the seasonal wetlands includes: Italian ryegrass (*Lolium multiflorum*), umbrella sedge, Mediterranean barley (*Hordeum marinum*), and curly dock.

5.0 ANALYSIS

All wetland and water features identified within the study area were assessed to determine whether these features would potentially be subject to USACE jurisdiction under Section 404 of the CWA. Two manmade roadside ditches and a manmade agricultural ditch occur within the study area. Although there is an indirect hydrologic connection to New Alamo Creek approximately 0.3 miles from the study area, the ditches were excavated wholly in and drain only uplands and do not carry a relatively permanent flow of water as the manmade ditches only receive water following direct precipitation events and runoff from the adjacent uplands. In accordance with RGL 07-01, the ditches were determined not to be potentially jurisdictional features.

The Brazeltine Drain, concrete-lined canal, earth lined canal and detention basin, wetland drainage swales, ephemeral drainage swales, remnant agricultural ditch, and seasonal wetlands are considered potentially jurisdictional features. These features are tributary to New Alamo Creek. New Alamo Creek is tributary to Alamo Creek is tributary to Ulatis Creek. Ulatis Creek is tributary to Cache Slough. Cache Slough is tributary to the Sacramento River Deep Water Ship Canal. The Sacramento River Deep Water Ship Canal is a traditionally navigable waters of the U.S.

6.0 CONCLUSION

In conclusion, there are a total of 9.77 acres of wetlands and waters within the study area that are potentially jurisdictional features.

The roadside ditches and agricultural ditch are excavated wholly in, drain only uplands, and do not carry a relatively permanent flow of water, and therefore, are not considered waters of the U.S. because they do not have a significant nexus to downstream TNWs (51 FR 41206, 41217). The approximately 0.19 acres of these ditches are not likely subject to USACE jurisdiction.

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ATTACHMENTS

ATTACHMENT 1

DELINEATION DATA SHEETS

Project/Site: Vanden Meadows		city/County: Solo	200 Sampling Date: 7/29/C
Applicant/Owner:			State: Sampling Point:
Investigator(s):			Range:
Landform (hillslope, terrace, etc.): Lasin			e, convex, none): OTNCAUL Slope (%):
			Long: Datum:
			NWI classification:
Are climatic / hydrologic conditions on the site typical fi			
Are Vegetation, Soil, or Hydrology			e "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			needed, explain any answers in Remarks.)
			locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No		
Hydric Soil Present? Yes	No	is the Sample within a Weth	V
Wetland Hydrology Present?	No	within a wet	and: tes No No
Remarks: In Drainage basin			
VEGETATION			
Tree Stratum (Use scientific names.) 1		Dominant Indicator Species? Status	
2			Total Number of Dominant
3			Species Across All Strata: (B)
	 Cover:		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum 1			Prevalence index worksheet:
2.			Total % Cover of:Multiply by:
3			OBL species <u>95</u> x1 = <u>95</u>
4.			FACW species 10 x2 = 20
5			FAC species x 3 =
Total C	Cover:		FACU species x 4 =
Herb Stratum 1. Two ha latifolia	95	Dan_ DBC	UPL species x5 =
2. Polyproph monspeliensis		- FACW	Column Totals: 105 (A) 115 (B)
			Prevalence Index = B/A = 1.09
4			Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
6			Prevalence Index is ≤3.0¹
7			Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8			Problematic Hydrophytic Vegetation¹ (Explain)
Total C Woody Vine Stratum	over: <u>10 5</u>		/ resternate riyarophytic vegetation (Explain)
1			Indicators of hydric soil and wetland hydrology must
2.			be present.
	over:		Hydrophytic
% Bare Ground in Herb Stratum % C	over of Biotic Cr	ust	Vegetation Present? Yes Yes No
Remarks:	2.01 01 21010 01		100
'			

Project/Site: Vanden Weadows City/County: Solano Sampling Date: 7/2	9/07
Applicant/Owner: State: Sampling Point: 500	1-10
Investigator(s): Davi5 Section, Township, Range:	
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%)	:
Subregion (LRR):	
Soil Map Unit Name: NWI classification:	
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 X	lo
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 feature	s, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area	
Hydric Soil Present? Yes X No within a Wetland? Yes X No	
Wetland Hydrology Present? Yes X No	
Remarks:	
,	
VEGETATION	
Absolute Dominant Indicator Dominance Test worksheet:	
Tree Stratum (Use scientific names.) War Cover Species Status	(A)
2.	(~)
Total Number of Dominant Species Across All Strata:	(B)
4	
Total Cover: That Are OBL. FACW, or FAC: // \(\sigma \)	(A/B)
Sapling/Shrub Stratum 1. Prevalence Index worksheet:	
2.	-
4. FACW species Ψ $x_2 = 12$	
5. FAC species 90 x3 = 270	_
Total Cover:	_
Herb Stratum 1. Lolium Derenne 90 Dom FAC Column Totals: 120 (A) 330	-
1. Collum Derenne 10 Dam FAC Column Totals: 120 (A) 322 2. Elep charis macrostachya 20 — OBL	_ (B)
3. Placis bothrys Stipitatus var. micranthus 5 - FACW Prevalence Index = B/A = 2.68	
4. Takniatherum Caput 2 - WR Hydrophytic Vegetation Indicators:	
5. Canvolvulus arvensis 4 - UPL / Dominance Test is >50%	
6. Rumex cr.saus 1 — FACW _ Prevalence Index is ≤3.0	
7 Morphological Adaptations¹ (Provide support data in Remarks or on a separate sheet)	ling
8. Problematic Hydrophytic Vegetation* (Evolgi	n)
Total Cover: T	"
1 ¹Indicators of hydric soil and wetland hydrology m	nust
2. be present.	
Total Cover: Hydrophytic	
% Bare Ground in Herb Stratum % Cover of Biotic Crust Present? Yes No	
Per: meter of low spot seasonal wetland.	İ
permeter or the sport session of	

Project/Site: Varden Weadows		City/Cou	nty:	Sampling Date: 4/29/09
Applicant/Owner:				
Investigator(s):		Section,	Township, Ra	ange:
Landform (hillslope, terrace, etc.):				
Subregion (LRR):				
Soil Map Unit Name;				NWI classification:
Are climatic / hydrologic conditions on the site typical for this				· · ·
Are Vegetation, Soil, or Hydrologys				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology n	naturally pro	blematic		eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map				ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	- ×	1		
Hydric Soil Present? Yes N	° X		the Sampled	\
Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	o 🗡	w	ithin a Wetla	nd? Yes No <u>X</u> _
Remarks:		•		
VEGETATION				
Tree Stratum (Use scientific names.)			ant Indicator s? Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4	· 			Percent of Dominant Species
Total Cover Sapling/Shrub Stratum	:	•		That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2.				Total % Cover of:Multiply by:
3.				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
Total Cover:	:		(FACU species x 4 = UPL species x 5 =
1. Taenia therum Capat medusa	90	Don	1 wil	Column Totals:
2. Canvolvulus arvensis	_2		UPL	,
3. Avena fatua	10		UPL	Prevalence Index = B/A =
4. Raphanus sativus			_11br	Hydrophytic Vegetation Indicators:
5. Vicia americana			LIPL	Dominance Test is >50%
6				Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8 Total Cover:	105	-		Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum				
1				Indicators of hydric soil and wetland hydrology must
2				be present.
Total Cover:				Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover	of Biotic Cr	rust		Present? Yes No
Remarks:				
				·

Project/Site: Vanden Meadaws	City/County:	S	ampling Date: 7/29
		State: Sa	
Investigator(s): Davi 5			
Landform (hillslope, terrace, etc.):			
Subregion (LRR): Lat:			
Soil Map Unit Name:			
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation, Soil, or Hydrology significantly		"Normal Circumstances" pres	
Are Vegetation, Soil, or Hydrology naturally pr		eeded, explain any answers i	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point	locations, transects, ir	nportant features, etc.
Hydrophytic Vegetation Present? Yes NoX	Is the Sample	d Aroa	
Hydric Soil Present? Yes	i		NoX
	Within a Weda	165	
Remarks: Upland for a	40 4 DI	5W2	
VEGETATION			
Absolute Tree Stratum (Use scientific names.) % Cover	Dominant Indicator Species? Status	Dominance Test workshe	
1		Number of Dominant Spec That Are OBL, FACW, or F	
2		Total Number of Dominant	
3		Species Across All Strata:	(B)
4		Percent of Dominant Speci	es — n
Total Cover: Sapling/Shrub Stratum	-	That Are OBL, FACW, or F	
1	- 	Prevalence Index worksh	eet:
2		Total % Cover of:	Multiply by:
3		OBL species	
4		FACW species 12	
5.		FAC species 50	
Total Cover:	_	FACU species	- '`
1. Taenia therum caput-medusa 50	Don WPL	Column Totals: 11 3	
2. Lolium Derenne 50	Dom FAC		- · · · · · · · · · · · · · · · · ·
3. Hordeum hystrix 10	- FACW	Prevalence Index = E	
4. Convolvalusarvensis 21	- ul	Hydrophytic Vegetation II	
5. Kurnex crispus L2	- FACW	Dominance Test is >50	
6		Prevalence Index is ≤3	ions ¹ (Provide supporting
7		data in Remarks or	on a separate sheet)
Total Cover: 113		Problematic Hydrophyt	ic Vegetation¹ (Explain)
Woody Vine Stratum	-],	
1		¹ Indicators of hydric soil and be present.	d wetland hydrology must
2		Hydrophytic	
Total Cover:		Vegetation	~
% Bare Ground in Herb Stratum % Cover of Biotic C	rust	Present? Yes	No
Remarks:			
On upper edge of seasonal	wetland	denceccionen	n. sec
· J		- de consolat	ca en

WEILAND DEIERMINATIO	DATA FORM – Arid West Region ap 4
Project/Site: Vanden Meadows Ci	y/County: Vacavi/Le Sampling Date: 7/29/0
Applicant/Owner:	
	ction, Township, Range:
	cal relief (concave, convex, none): Siope (%):
	Long: Datum:
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrology naturally problem	·
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _ X No	
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area
Wetland Hydrology Present? Yes X No	within a Wetland? Yes No
Remarks [*]	
seasonal we	land of
VEGETATION	
	ominant Indicator Dominance Test worksheet:
	pecies? Status Number of Dominant Species
1	That Are OBL, FACW, or FAC: (A)
2	Total Number of Dominant
3	`,
Total Cover:	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum	
1	
2	
4	0.15
5	FAC species 1 x3 = 3
Total Cover;	FACU species x4 =
Herb Stratum	UPL species 10 x5= 50
1. Polypogion monspellensis 50 J 2. Rumex crisnus 20	$\frac{FACW}{FACW}$ Column Totals: 131 (A) 293 (B)
3. Canvolvulus arvensis 10	Prevalence Index = B/A = 2.23
4. Horderm hustrix 50 7	DM FACW Hydrophytic Vegetation Indicators:
5. Capsella bursa-Dastoris 1	FAC Dominance Test is >50%
6.	Prevalence Index is ≤3.0¹
7	Morphological Adaptations ¹ (Provide supporting
8.	data in Remarks or on a separate sheet)
Total Cover: 131	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	¹ Indicators of hydric soil and wetland hydrology must
1	be present.
Total Cover:	Hydrophytic
	Vegetation \(\square\)
% Bare Ground in Herb Stratum % Cover of Biotic Crus	Present? Yes No
Remarks:	

WETLAND DETE	RMINATI	ON DATA	FORM	- Arid West Regi	on	/
Project/Site: Vanden Meachons		City/County:	: <u>Sdc</u>	ano	Sampling Date:	7/29
Applicant/Owner:				State:	Sampling Point:	
Investigator(s): Danie		Section, To	wnship, Ra	ange:		
Landform (hillslope, terrace, etc.):						pe (%):
Subregion (LRR):						
Soil Map Unit Name:						-
Are climatic / hydrologic conditions on the site typical for thi						
Are Vegetation, Soil, or Hydrologys				"Normal Circumstances	·	No
Are Vegetation, Soil, or Hydrology r				eeded, explain any ans		110
					/	
SUMMARY OF FINDINGS – Attach site map	snowing	sampling	g point i	ocations, transec	ts, important fe	atures, etc
Hydrophytic Vegetation Present? Yes $\frac{\chi}{\chi}$ N	lo	Is the	e Sampleo	1 Area	•	
	0		n a Wetla		<u> </u>	
Wetland Hydrology Present? Yes N Remarks:	o					<u>.</u>
,						
wd5)						
						
VEGETATION						
Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?		Dominance Test wo	• •	
1.				Number of Dominant That Are OBL, FACV	Species) V, or FAC:	(A)
2.				Total Number of Don	·	
3				Species Across All S		(B)
4				Percent of Dominant	Species	_
Total Cover Sapling/Shrub Stratum	:			That Are OBL, FACV		(A/B)
1				Prevalence Index w	orksheet:	
2.				Total % Cover or		/ by:
3.				OBL species 8	$\frac{1}{5}$ x 1 = $\frac{8}{5}$	3
4.				FACW species		
				FAC species		
Total Cover: Herb Stratum	:			FACU species		
1. Yanthium Strumarium	80	Dom	086	UPL species Column Totals:	×5=	
2. Crusis schoemides			OBL			<u>) </u>
3				Prevalence Inde	ex = B/A =	
4				Hydrophytic Vegeta		
5				Dominance Test		
6				✓ Prevalence Index		
7					daptations ¹ (Provide : rks or on a separate	
8Total Cover:	85			Problematic Hyd	rophytic Vegetation 1	(Explain)
Woody Vine Stratum						
1				¹ Indicators of hydric s be present.	oil and wetland hydr	ology must
2				·		
Total Cover:				Hydrophytic Vegetation	,	
% Bare Ground in Herb Stratum % Cover	of Biotic Cr	ust		Present?	′es No	
Remarks:	\C*6C* L	~~^	01 ^	مد:ی		
Wetland trainage swale c Culverted on either side	x000cd	001	GI O	+ 0175		
Culverted on either side						

Project/Site: Varden Uladows		City/Cour	nty: <u>S</u>	Sampling Date: 7/29
Applicant/Owner:				State: A Sampling Point: + & / a
Investigator(s): Dan 15		Section,	Township, R	ange:
				, convex, none): Slope (%):
				Long: Datum:
				NWI classification:
Are climatic / hydrologic conditions on the site typical				•
Are Vegetation, Soil, or Hydrology _				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally pro	oblematic'	? (If n	eeded, explain any answers in Remarks.)
		sampl	ing point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No ×	le	the Sample	d Area
Hydric Soil Present? Yes	No X	ī	ithin a Wetla	
Wetland Hydrology Present? Yes	No		umi a viesa	ind: res NO _X
VEGETATION				
Tree Stratum (Use scientific names.)	Absolute % Cover		nt Indicator	Dominance Test worksheet:
1		<u> </u>	<u> </u>	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.			_	,
3.				Total Number of Dominant Species Across All Strata: (B)
•				
Tota <u>Sapling/Shrub Stratum</u>	l Cover:			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4			- 	FACW species x2 =
5				FAC species x3 =
Herb Stratum	Cover:			FACU species $\frac{2}{20}$ $x4 = \frac{8}{100}$ UPL species $\frac{20}{20}$ $x5 = \frac{100}{100}$
1. Lolium Derenne	70	Don	1 FAC	07
2. Ranhamus Sativus			wic	_
3. Picris echioides			FAC	Prevalence Index = B/A = 3.43
4. Trifolium sop.	ユ		FACU	Hydrophytic Vegetation Indicators:
5. Avena fatua	15	Dom	UPL	Dominance Test is >50%
6. Brassica compestris			_ upi	Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum	Cover:			(Lxpiair)
1				¹ Indicators of hydric soil and wetland hydrology must
2.			_	be present.
Total	Cover:		-	Hydrophytic
% Bare Ground in Herb Stratum %	_	710t		Vegetation ,
			·	Present?
Side edge of excavate	ed drain	ræge	. basi	e e e e e e e e e e e e e e e e e e e

× 1	WETLAND DETER	RMINAT	ION DAT	A FORM	- Arid West	Region	1		
Project/Site: Vanden	Meadows		City/Coun	ty: <u>\ac</u>	caville		Sampling	Date: 1/31	111
Applicant/Owner:					State: _	CA	Sampling I	Point:	9
Investigator(s): Kelly Bac	me. Laura Bu	in	Section, 1	ownship, R	ange:				
Landform (hillslope, terrace, etc.):	/							Slope (%	s): [
Subregion (LRR):									
Soil Map Unit Name:									
Are climatic / hydrologic conditions									
Are Vegetation, Soil					"Normal Circum			es 🗸	Nο
Are Vegetation, Soil					eeded, explain				
SUMMARY OF FINDINGS -					•	-		•	es etc
		,	,				,porte		
Hydrophytic Vegetation Present?	Yes No		ls t	he Sample	d Area				
Hydric Soil Present? Wetland Hydrology Present?	Yes No	° -v -	wit	hin a Wetla	nd?	Ye s	No	V	
Remarks:	TesN				.		-		 -
WO!							•		
, · · · ·									
VEGETATION									
Tree Stratum (Use scientific nam	200)			t Indicator ? Status	Dominance	Test work	sheet:		
1	•				Number of De That Are OBI		pecies or FAC:	<u> l </u>	/A\
2.									_ (/\)
3.					Total Number Species Acro			3	(B)
4							_		_ (0)
	Total Cover:	:	_		Percent of Do			33	(A/B)
Sapling/Shrub Stratum					Prevalence I	ndov wor	kshooti		
1 2						Cover of:		Aultiply by:	
3.					OBL species				_
4.					FACW specie				
5					FAC species				
	Total Cover:				FACU specie	s	x4=	·	
Herb Stratum		HA	D	L.O.	UPL species		x5=		
1. Holcus lanatus 2. Lolium multifle		30	Don	EAC	Column Total	s: <u>3</u>	(A)	13	(B)
3. Avena barbata		40	Bom	LPI	Prevale	nce Index	= B/A =	4.3	
4. Pon so		5	<u> </u>	101	Hydrophytic				
5				-	Dominan	ce Test is	>50%		
6					Prevalen	ce Index i	s ≤3.0¹		
7,					Morpholo	gical Ada	ptations¹ (Pr	ovide suppo	rting
8				- 	data Problema		s or on a sep		•
MA LAC Chicking	Total Cover:	115			Flobleins	anc myuro	priyac veget	alion (⊏xpia	ain)
Woody Vine Stratum 1					1Indicators of	hydric soi	l and wetlan	d bydrology	must
2				· 	be present.	,	· Gira Wouldin	a rij ar ologj	mast
Z	Total Cover:		• • •		Hydrophytic				
9/ Para Craund in Harb Stratum					Vegetation Present?	Va	sI	10.0	
% Bare Ground in Herb Stratum Remarks:	76 Cover	- DIORE CI		 -	r resent (16		*U <u>-\/</u>	
, contains.									

Project/Site: Vanden Madaws		City/Co	ounty:	Vac	aville	Sam	pling Date: 1/3/	10		
							pling Point: Óp			
Investigator(s): K. Baune L. Burris		Sectio	n, Tov	vnship. Ra	nae:					
Landform (hillslope, terrace, etc.): Wilslope): \		
Subregion (LRR): C										
Soil Map Unit Name:							Butan,			
Are climatic / hydrologic conditions on the site typical for this										
Are Vegetation, Soil, or Hydrology si							nt? Yes N	40		
Are Vegetation, Soil, or Hydrology no SUMMARY OF FINDINGS - Attach site map s					•	any answers in F	•	os atc		
	,	1	,ş	pomen		unoodio, imp				
Hydrophytic Vegetation Present? Yes No is the Sampleon No						d Area				
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetla			n a Wetlar	nd? YesNo					
		L		1 .	1.0.0	.10	0 3			
Remarks: Upl - Mapped just west bed ; bank	of w	yev	æ	ea 1	10252	42 C16	hneci			
VEGETATION										
T 0. / //	Absolute			Indicator	Dominance	Test worksheet	•			
	% Cover					ominant Species				
1					That Are OB	L, FACW, or FAC	;; . <u> U</u>	_ (A)		
3						er of Dominant	4	(D)		
4					Species Acro	oss All Strata:		_ (B)		
Total Cover: Sapling/Shrub Stratum						ominant Species L, FACW, or FAC		(A/B)		
1					Prevalence	index workshee	t:			
2.					Total %	Cover of:	Multiply by:			
3					OBL species		x 1 =	_		
4					FACW speci	es	x 2 =	_		
5			 -				x 3 =			
Total Cover:						es				
1. Centaurea solstitialis	20	DX	ጉ	un	UPL species	- 6	$x5 = \frac{20}{20}$	–		
2. Avena fatua	30	NOC	<u>^</u>	UPL	Column Tota	is: <u>"</u>	(A) <u>20</u>	(B)		
3. Brassica midra	20	Da	<u>m</u>	WPL	Prevale	ence Index = B/A	.= <u> </u>			
4. Gerlanium Molle	20	Don	n	wei	Hydrophytic	Vegetation Ind	icators:			
5					Dominar	nce Test is >50%				
6						ice Index is ≤3.01				
7					Morphole	ogical Adaptation	s¹ (Provide suppor a separate sheet)	rting		
8	<u> </u>						Vegetation ¹ (Expla			
Total Cover:	70			}		ado i iyalopiiy ilo	vegetation (Expla	"",		
1					¹ Indicators of	hydric soil and w	vetland hydrology r	must		
2					be present.	·	, ,			
Total Cover:					Hydrophytic Vegetation					
% Bare Ground in Herb Stratum % Cover of Biotic Crust						Voc	No <i>X</i> /	}		
Remarks:	J. DIGIIO ON				Present?	. 53				
(SOLIGING)										
•										

Project/Site: Vanden Meado	ws		City/C	County	r: <u>Vac</u>	aville	Sampling Date: 13111	
Applicant/Owner:							_ Sampling Point: DPI	
Investigator(s): Kelly Rayne. La	LYOU BLU	<u> </u>	Section	on, To	wnship, Ra	ange:		
Landform (hillslope, terrace, etc.): <u>Qrass</u>								
Subregion (LRR):								
Soil Map Unit Name:								
Are climatic / hydrologic conditions on the site	tynical for this	time of ve	ar? V	/es V	No	(If no, evolain in F	Pemarke)	
							_	
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.								
The state of the s	one map a		3 4,1	Pilit	g point i		, important reatures, et	
	No	/		Is th	e Sampled	l Area		
	i No	,	Ì		in a Wetlaı		No	
Wetland Hydrology Present? Yes	No							
Remarks: Upland								
,								
VEGETATION								
		Absolute	_		Indicator	Dominance Test work	(sheet:	
Tree Stratum (Use scientific names.)		<u>% Cover</u>				Number of Dominant S		
1						That Are OBL, FACW,	or FAC: (A)	
2.						Total Number of Domin		
3 4						Species Across All Stra	ata: (B)	
	Total Cover:					Percent of Dominant Sp		
Sapling/Shrub Stratum	7014 007011					That Are OBL, FACW,	or FAC: (A/B)	
1						Prevalence Index wor		
2						Total % Cover of:		
3							x 1 =	
4						FACW species	x2=	
5.								
Herb Stratum	Total Cover:					FACU species	x4= x5= 25	
1. Centarea solstitialis		10			LIPL	Column Totals:	(A) 34 (B)	
2 Holeus Janatus	 .	20			UPL			
3. Avena fatua		<u>35 </u>	Do		ur		$= B/A = \underline{U \cdot 25}$	
4. Ldium multiflorum		20	<u>D(</u>	<u>)AĀ</u>	FAC	Hydrophytic Vegetation		
5. <u>Plantago erecta</u>	 ·	_5_			TRF	Dominance Test is		
6. <u>Lactuca Serriola</u>		10			FAC	Prevalence Index is		
7. Geranium molle		_5_		-	<u>wil</u>	Morphological Adar	ptations ¹ (Provide supporting sor on a separate sheet)	
8. Chimex crispus		5			FAC		phytic Vegetation ¹ (Explain)	
<u>Woody Vine Stratum</u>	Total Cover:	110						
1							l and wetland hydrology must	
2.						be present,		
_	Total Cover:					Hydrophytic		
% Bare Ground in Herb Stratum	% Cover o	of Biotic Cr	ust		į	Vegetation Present? Yes	s No	
Remarks:					-			

Project/Site: Varclen Meaclows		City/Count	y: Vac	aville Sampling Date: 1/31/11
Applicant/Owner:				State: (A Sampling Point: do 12
Investigator(s): Laura Burris, Kellin Bo	aune	Section, To	ownship, Ra	ange:
Landform (hillslope, terrace, etc.): willslope	-J	Local relie	f (concave.	convex none): (av Ca ve Sinne (%): 2
Subregion (LRR):				
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for this				
Are Vegetation, Soil, or Hydrology si	_			"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology no SUMMARY OF FINDINGS - Attach site map s	-			eeded, explain any answers in Remarks.) ocations, transects, important features, etc.
		, <u>, , , , , , , , , , , , , , , , , , </u>		
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No			ne Sampleo nin a Wetla	d Area
Remarks:		- 1	1	
= 6				Sure Road and near by
Stork pile. Although	h the	soils	dont	meet the criteria, the sup
VEGETATION modifications				re altered the drainage & to
Tree Stratum (Use scientific names.) 1	% Cover	Dominant Species?	Status	Number of Dominant Species blc Mytric in Father OBL, FACW, or FAC: (A)
2				Total Niverbox of Dossin- at
3				Species Across All Strata:
4				Percent of Dominant Species
Total Cover: Sapling/Shrub Stratum		•		That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2.				Total % Cover of:Multiply by:
3.				OBL species x 1 =
4				FACW species x 2 =
5				FAC species 2 x3 = 0
Total Cover:				FACU species x 4 = 4
Herb Stratum 1. Avena fatua	3 0	Dom	UPL	UPL species $\frac{2}{2}$ $\times 5 = \frac{15}{25}$
2. Hulochaeris alabra	30	Dan	UPL	Column Totals: (A) 25 (B)
3. Stellaria media		-	FACU	Prevalence Index = B/A =
4. Hordeum murinem	20	Dom	upl	Hydrophytic Vegetation Indicators:
5. Plantago lancedata	5		FAC	Dominance Test is >50%
6. Rumel critique	_5_	·	FAC	Prevalence Index is ≤3.0¹
7				Morphological Adaptations¹ (Provide supporting
8				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain)
Total Cover:	95			- Problematic Flydrophlytic Vegetation (Explain)
Woody Vine Stratum 1				¹ Indicators of hydric soil and wetland hydrology must
2				be present.
Total Cover:				Hydrophytic
·				Vegetation \checkmark
% Bare Ground in Herb Stratum % Cover of	N DIDUC C	uət		Present? Yes No No
rest is standing water	.			
10, 10 3,000				

Project/Site: Vanden Meanows		City/Co	unty: Vaca	ville	Sampling Date: 1/3//11		
Applicant/Owner:		011,7001	unity. <u>Vocest</u>	State: C.A	Sampling Point: CO 13		
Investigator(s): Kelly Bayne, Laura Bu	# # ! C	Section	Township Pa	nac:	_ Camping FourtCtp. FS		
Landform (hillstope, terrace, etc.): With land		Localr	oliof/conscirs	convey none). C co	30,400 01 10(1)		
A	7						
Subregion (LRR):							
Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for the				NWI classifi	cation:		
					_		
Are Vegetation, Soil, or Hydrology	•			"Normal Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes	No	l:	s the Sampled	i Area			
Hydric Soil Present? Yes	No	v	vithin a Wetlar	nd? Yes <u>/</u>	No		
Wetland Hydrology Present? Yes	No						
Remarks: SW 13							
VECETATION							
VEGETATION	- AL . CIT	5	. 4 . 4 . 4 . 4 .				
Tree Stratum (Use scientific names.)			ant Indicator es? Status	Dominance Test work			
1				Number of Dominant S That Are OBL, FACW,			
3				Total Number of Domin Species Across All Stra	• • • • • • • • • • • • • • • • • • • •		
4				Percent of Dominant S	necies		
Total Cove	er:			That Are OBL, FACW,			
1				Prevalence Index wor	ksheet:		
2.				Total % Cover of:	Multiply by:		
3				OBL species	x 1 =		
4				FACW species	x2=		
5	<u> </u>				x3= <u>9</u>		
Total Cove	er:			FACU species1			
Herb Stratum 1. Primer Crisous	15		FAC.	UPL species	x5 =		
2. Lolium multiflorum	20	Don		Column Totals:	<u> </u>		
3. Sorahum hab penese	15		FACU	Prevalence Index	=B/A =3.0		
4. Hordeum marinum	35	DOM		Hydrophytic Vegetation			
5. Plantago lanceolata	5		FAC	Dominance Test is	>50%		
6. Cuperis echinatus	<u>5</u>		Wei	Prevalence Index is	s ≤3.0¹		
7					ptations ¹ (Provide supporting		
8					s or on a separate sheet) phytic Vegetation¹ (Explain)		
	r: <u>95</u>			Floblematic mygro	priyuo vegetation (Explain)		
Woody Vine Stratum				Indicators of hydric soi	l and wetland hydrology must		
1				be present.	. 22		
· · · · · · · · · · · · · · · · · · ·	er:			Hydrophytic			
			İ	Vegetation	_ / Na		
	er of Biotic Cr	ust		Present? Yes	sNo		
Remarks: 51. H20							
1 112			÷				

Project/Site: Vanden Meachus	c	city/County: Vac	aville	Sampling Date: 1/31/11
				Sampling Point: do 14
Investigator(s): Kelly Bayne, Laura P				
Landform (hillslope, terrace, etc.):				
71 //			•	Datum:
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for th		/		
Are Vegetation, Soil, or Hydrology			•	present? Yes No
Are Vegetation, Soll, or Hydrology	naturally prob	lematic? (If n	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing s	sampling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes N		is the Sample	d Area	
Hydric Soil Present? Yes N	10 <u>x</u>	within a Wetla		No
Wetland Hydrology Present? Yes Y	<u> </u>			
Remarks: Up paired do w	do 13	(SW)		
	•			
				·
VEGETATION				
		Dominant Indicator	Dominance Test work	sheet:
Tree Stratum (Use scientific names.)		Species? Status	Number of Dominant Sp	
1.			That Are OBL, FACW, o	or FAC: (A)
3.			Total Number of Domina	
4			Species Across All Stra	ta: (B)
			Percent of Dominant Sp That Are OBL, FACW, of	
Sapling/Shrub Stratum				,
1			Prevalence index work	
2			Total % Cover of:	
3			· ·	x 1 = x 2 =
5				x2= x3=3
Total Cove			FACU species	x 4 =
Herb Stratum		_	UPL species	x5= 5
1. Avena tatua	<u> 98</u>	Dom UPL	Column Totals: 2	(A) 8 (B)
2. <u>Plantago lanceolata</u>	2	- FAC		= B/A = 4
3.			Prevalence Index	
4			Hydrophytic Vegetatio Dominance Test is	
5			Prevalence Index is	
6			1	otations ¹ (Provide supporting
7. <u> </u>				or on a separate sheet)
Total Cover			Problematic Hydrop	phytic Vegetation¹ (Explain)
Woody Vine Stratum				
1	· —— -		¹indicators of hydric soil be present.	and wetfand hydrology must
2.			•	
Total Cover	:		Hydrophytic Vegetation	
% Bare Ground in Herb Stratum % Cover	of Biotic Crus	st		s No_X
Remarks:			·	

Project/Site: Vanden Meadows City/County: Vaco	Sampling Date: 18111
	State: CA Sampling Point: do 15
Investigator(s): Helly Bayne Lawra Buris Section, Township, R	ande.
Landform (hillslope, terrace, etc.): <u>grass field</u> Local relief (concave	convey rene): VAIA A Stene (9/):
Subregion (LRR):	
Soil Map Unit Name:	NVVI classification:
Are climatic? hydrologic conditions on the site typical for this time of year? Yes No	(if no, explain in Remarks.)
	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If n	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sample	d Area
Hydric Soil Present? Yes No within a Wetla	· ·
Wetland Hydrology Present? Yes No	
Remarks: Upland	
VEGETATION	
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) % Cover Species? Status 1. Juglans hinds: 5 Dam FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	That Are OBL, FACW, or FAC:(A)
3	Total Number of Dominant Species Across All Strata: (B)
4.	
Total Cover:5	Percent of Dominant Species That Are OBL, FACW, or FAC:
1	Prevalence Index worksheet:
2,	Total % Cover of:Multiply by:
3	OBL species x 1 =
4	FACW species x 2 =
5	FAC species
Total Cover:	UPL species x4 =
1. Avena harbata 100 Don upl	Column Totals: 2 (A) 15 (B)
2	.,
3	Prevalence Index = B/A = 7.5
4,	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Prevalence Index is ≤3.01
7	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8 Total Cover: 100	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	
1	¹ Indicators of hydric soil and wetland hydrology must
2	be present.
Total Cover:	Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes No 7
Remarks:	

Project/Site: Varden Meadows City							
Applicant/Owner:	State: <u>CA</u> Sampling Point: <u>dp 16</u>						
Investigator(s): Lelly Baune, Laura Burris Sec							
Landform (hillslope, terrace, etc.): wetland Lor	cal relief (concave, convex, none): Cave Slope (%):						
	Long: Datum:						
Soil Map Unit Name:							
Are climatic / hydrologic conditions on the site typical for this time of year?							
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No							
Are Vegetation, Soil, or Hydrology naturally problem SUMMARY OF FINDINGS - Attach site map showing sa	matic? (If needed, explain any answers in Remarks.) Impling point locations, transects, important features, etc.						
Underphysic Variation December Var. X No.							
Hydrophytic Vegetation Present? Yes X No Yes X	is the Sampled Area						
Wetland Hydrology Present? Yes Y No No	within a Wetland? Yes No						
Remarks:							
seasonal metland							
VEGETATION							
Absolute Do	ominant Indicator Dominance Test worksheet:						
Tree Stratum (Use scientific names.) <u>% Cover</u> <u>Sr</u>	pecies? Status Number of Dominant Species						
1							
2	1 John Hamber of Dominiant						
3	,						
Total Cover:	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)						
1	Prevalence Index worksheet:						
2.							
3.							
4.							
5.							
Total Cover:	FACU species x 4 =						
Herb Stratum	UPL species x 5 =						
	<u>OM FAC</u> Column Totals: (A) (B)						
	Dom FAC Prevalence Index = B/A = 3						
3. Lolius multiflabetm 10							
4	1 . /						
5							
6							
7	data in Remarks or on a separate sheet)						
Total Cover: 60	Problematic Hydrophytic Vegetation ¹ (Explain)						
Woody Vine Stratum							
1	Indicators of hydric soil and wetland hydrology must						
2	be present.						
Total Cover:	Hydrophytic						
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Vegetation Present? Yes No No						
Remarks: Standing water Dond to	from surrounding areas i seeos						
Standing water pond that Charus frog through	from surrounding areas i seeps ground to ED						
	\supset						

Project/Site: Vanden Meadows City/County: Vac	Sampling Date: 1/3///
	State: <u>CA</u> Sampling Point: <u>AD 17</u>
Investigator(s): Kelly Bayne . Laura Buri S Section, Township, F	Range:
Landform (hillslope, terrace, etc.): arassland Local relief (concave	
Subregion (LRR): Lat:	Long: Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation, Soil, or Hydrology significantly disturbed? Ar	e "Normal Circumstances" present? Yes No
	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	
Hydrophytic Vegetation Present? Yes No Is the Sampti	ad Araa
Hydric Soil Present? Yes No within a Wet	land? Yes No/
Wetland Hydrology Present? Yes No	anu: 165 no
Remarks: Upl-paired dp w/ sw/dp16)	
VEGETATION	
Absolute Dominant Indicator Tree Stratum (Use scientific names.) Medicator Cover Species? Status	
1	- Number of Dominant Species - That Are OBL, FACW, or FAC: (A)
2	
3	Total Number of Dominant Species Across All Strata: (B)
4	
Total Cover:	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum	Prevalence Index worksheet:
1	Total % Cover of: Multiply by:
2	OBL species x1 =
4	FACW species x2 =
5	FAC species x3 =
Total Cover:	FACU species x 4 =
Herb.Stratum C	UPL species 2 x5 = 10
1. Avena tatua 80 Don wel	Column Totals: 2 (A) LO (B)
2. Brassica nigra 20 son WPL	- Books and 1970
3	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50% Prevalence Index is ≤3.0¹
6	Prevalence index is \$3.0 Morphological Adaptations ¹ (Provide supporting
7	data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	
1	Indicators of hydric soil and wetland hydrology must
2	be present.
Total Cover:	Hydrophytic
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Vegetation Present? Yes No
Remarks:	
Tomano.	

WETLAND DETERMINATION DATA FORM - Arid West Region arden Meadows City/County: Vacaville Sampling Date: 1/3/11 State: <u>CA</u> Sampling Point: d Q \8 Applicant/Owner: Investigator(s): <u>Helly</u> Roune , Lauxa Burris Section, Township, Range: Subregion (LRR): Soil Map Unit Name: __ NWI classification: 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? is the Sampled Area Hydric Soil Present? Yes ____ No ____ within a Wetland? Wetland Hydrology Present? Remarks: seasonal me Hand **VEGETATION** Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Use scientific names.) % Cover Species? Status Number of Dominant Species 1. ____ That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species Total Cover: That Are OBL, FACW, or FAC: Sapling/Shrub Stratum Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = ____ FACW species _____ x 2 = ___ FAC species ______ x 3 = ___3 Total Cover: _____ FACU species _____ x 4 = ____ UPL species _____ x 5 = ____ 1. humer Crispus 5 Dom FAC Column Totals: (A) 3 (B) Prevalence Index = B/A = 3 Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% Prevalence Index is ≤3.01 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Total Cover: ろ Woody Vine Stratum ¹Indicators of hydric soil and wetland hydrology must be present. Total Cover: Hydrophytic Vegetation % Bare Ground in Herb Stratum 95 ____ % Cover of Biotic Crust _____ Present? Remarks:

Project/Site: Vanden Meadows		City/County	r. Vaca	G Mile Sampling Date: 1/31/11
Applicant/Owner:				State:(A Sampling Point:(O)O
Investigator(s): Kelly Baune, Laura Bu				
Landform (hillslope, terrace, etc.): <u>gralland</u>				
Subregion (LRR):				
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this				
Are Vegetation, Soil, or Hydrology s	significantly	disturbed?	Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology r	aturally pro	blematic?	(If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	. /			d Arron
Hydric Soil Present? Yes N	۰		ie Sampled in a Wetla	
Wetland Hydrology Present? Yes N	o <u>1</u> /	With	in a wetia	no? Yes No
Remarks:				
VEGETATION				
	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Use scientific names.)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
4				Species Across All Strata: (B)
Total Cover				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
3.				OBL species x1 =
4.				FACW species x 2 =
5				FAC species x3 =
Total Cover				FACU species x 4 =
Herb Stratum	00	^		UPL species x 5 = 1 O
1. Avena tatua 2. Centaurea solstitialis	90		Will	Column Totals: 2 (A) 0 (B)
			WE	Prevalence Index = B/A = 5
3				Hydrophytic Vegetation Indicators:
4				Dominance Test is >50%
5 6				Prevalence Index is ≤3.0¹
7				Morphological Adaptations¹ (Provide supporting
8			·	data in Remarks or on a separate sheet)
Total Cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum				
1				¹ Indicators of hydric soil and wetland hydrology must be present.
2				
Total Cover:				Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover	of Biotic Cr	ust		Present? Yes No X
Remarks:		•		

Project/Site: Varden Wearlows				
Applicant/Owner:				State: <u>(A</u> Sampling Point: <u>JO 20</u>
Investigator(s): Laura Burris, Kolly Bo	une	Section	, Township, Ra	ange:
Landform (hillslope, terrace, etc.): And Sand				
~ //	•			Long: Datum:
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this	time of vo	ar2 Vac	, No	//fine evaluin in Remarks)
				, · · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology signal signal,				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology na	aturally pro	blematic	c? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	samp	ling point I	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No			s the Sampled	d Area
Hydric Soil Present? Yes No		i	s the Samplet vithin a Wetla	
Wetland Hydrology Present? Yes No	<u> </u>	_ `	villilli a vveua	ild? fesNo
Remarks:				
,				
VEGETATION				
	Absolute % Cover		ant Indicator	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				
3.				Total Number of Dominant Species Across All Strafa: (B)
4				
Total Cover:				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
Total Cover:				FACU species x 4 =
Herb Stratum 1. Holcus Vanatus	20	Tout	1101	UPL species x 5 =
	10	<u> 1777/21</u>	124 1	Column Totals: (A) (B)
3. Gerranium molle	30	TY)//	1 UPL	Prevalence Index = B/A =
4	<u></u>	!)		Hydrophytic Vegetation Indicators:
5.				Dominance Test is >50%
6.				Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8.				data in Remarks or on a separate sheet)
Total Cover:	70			Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum				Italiantan ethodes art and annual control
1				¹ Indicators of hydric soil and wetland hydrology must be present.
2				
Total Cover: _				Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of	of Biotic Cr	ust		Present? Yes No
Remarks:				

Project/Site: Vanden Meadows		City/C	ounty	Vac	aville sam	npling Date: 1/31/11
Applicant/Owner:					State: <u></u>	ıpling Point: <u>də 뉯 </u>
Investigator(s): K. Bune 1 Buni	8	Section	on, To	wnship, Ra	ange:	
Landform (hillslope, terrace, etc.):						
Subregion (LRR):						
Soil Map Unit Name:						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrologys					"Normal Circumstances" preser	
Are Vegetation, Soil, or Hydrology n					eeded, explain any answers in I	
SUMMARY OF FINDINGS – Attach site map	•					•
Hydrophytic Vegetation Present? Yes N						
Hydric Soil Present? Yes N		ļ		e Sampled		
Wetland Hydrology Present? Yes N		ľ	withi	in a Wetla	nd? Yes	No
Remarks: Up						
VEGETATION						
	Absolute			Indicator	Dominance Test worksheet	<u>, , , , , , , , , , , , , , , , , , , </u>
Tree Stratum (Use scientific names.)	% Cover				Number of Dominant Species	1
1					That Are OBL, FACW, or FA	C: (A)
2					Total Number of Dominant	3 (B)
					Species Across All Strata:	(B)
Total Covers					Percent of Dominant Species That Are OBL, FACW, or FAC	
1					Prevalence Index workshee	et:
2					Total % Cover of:	Multiply by:
3					OBL species	· · · · · · · · · · · · · · · · · · ·
4					FACW species	x2=
5						
Total Cover:	:				FACU species	10
1. Avena fatua	50	Dan	\wedge	UPL	UPL species 2 Column Totals: 3	$x5 = \frac{10}{3}$
2. Lolium multiflorum	20	Do	m	FAC	Column Totals9	(A) 13 (B)
3. Grevianium molle	<u>25</u>	Do	<u> </u>	USL	Prevalence Index = B/A	1 = <u>4.3</u>
4				·· · · · · · ·	Hydrophytic Vegetation Ind	icators:
5					Dominance Test is >50%	
6			 .		Prevalence Index is ≤3.0	
7					Morphological Adaptation data in Remarks or or	is' (Provide supporting
8.	706				Problematic Hydrophytic	
Total Cover: Woody Vine Stratum	: <u>45</u>					· · · · · · · · · · · · · · · · · · ·
1					¹ Indicators of hydric soil and v	wetland hydrology must
2					be present.	
Total Cover:					Hydrophytic	
•	of Biotic Cr	ust			Vegetation Present? Yes	No X
Remarks:					1.550111, 165	
· · · · · · · · · · · · · · · · · · ·						

Project/Site: Vardon Upadows		City/County:	Vac	aville Sampling Date: 1/31/1/
Applicant/Owner:		U.1,7 UU.1.1,7		State: CA Sampling Point: do25
Investigator(s): Kelly Bayre, Laura T	Buzzie	Section Toy	wnehin Ro	oute.
Landform (hillslope, terrace, etc.):	<u> </u>	Local relief	(concerve	convey papels Old of C Slane (0). A
Subregion (LRR):				
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for the	nis time of ye	ar? Yes		,
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally pro	oblematic?	(if ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampling	g point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X	1- 41		
Hydric Soil Present? Yes I		15 1116	Sampled	nd? Yes No
Wetland Hydrology Present? Yes ✓		WILL	n a wena	nd? Tes No
Remarks:		,		
		•		·
VEGETATION		•		
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)		Species?		Number of Deminant Charles
1				That Are OBL, FACW, or FAC: (A)
2		 -		Total Number of Dominant 2
3				Species Across All Strata: (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum	or:	•		That Are OBL, FACW, or FAC: (A/B)
1	_			Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3.				OBL species x 1 =
4				FACW species x 2 =
5				FAC species
Total Cove	er:			FACU species x4 =
1. Picris echioides	20	Dom	LOL.	UPL species $4 \times 5 = 20$
2. Erodium botrus	30	Dom	INPL	Column Totals: (A)
3. Avena so	10		UPL	Prevalence Index = B/A = 4.6
4. Lolium multiflorum			FAC	Hydrophytic Vegetation Indicators:
5. Brassica niava		Dom	UPL	Dominance Test is >50%
6.				Prevalence Index is ≤3.01
7		<u> </u>		Morphological Adaptations¹ (Provide supporting
8		 -		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Total Cove	r: <u>100</u>			Problematic Hydrophytic Vegetation: (Explain)
Woody Vine Stratum				Indicators of hydric soil and wetland hydrology must
1,				be present.
2Total Cove	r:			Hydrophytic
				Vegetation
	r of Biotic Cr	rust		Present? Yes No V
Remarks:		· ·		