



Aquatic Resources Delineation Report

West Davis Active Adult

Davis, Yolo County, California
September 2019



Prepared for:

Bretton Woods, LLC.
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1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the West Davis Active Adult Project Area (Study Areas 1 and 2; total acreage approximately 148 acres) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 21-acre Study Area 1 and 127-acre Study Area 2 are generally located west of State Route 113 (SR 113), in northwestern Davis, Yolo County, California. The Study Areas are within portions of Sections 5 and 8, Township 8 North, Range 2 East (MDB&M) of the "Merritt, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2015) (Figure 1).

1.1 Contact Information

Property Owner

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Agent

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2.0 METHODOLOGY

Madrone biologist Matt Shaffer conducted a delineation of aquatic resources within the Study Areas on the 16, 17, and 21 of August 2018, and 19 August 2019. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on an ortho-rectified aerial photograph (YCO 2018).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (Lichvar et al. 2016) was used to determine the wetland indicator status of plants observed in the Study Areas. The *Jepson eFlora* (Jepson Flora Project 2019) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

The West Davis Active Adult Project Area has been divided into two Study Areas. We are requesting a Preliminary Jurisdictional Determination for Study Area 1 which consists of the southern portion of the Project Area and contains Covell Drainage Channel, a jurisdictional Aquatic Resource. We are requesting

an Approved Jurisdictional Determination for Study Area 2 which consists of the rest of the Project Area and contains several non-jurisdictional ditches and a portion of a non-jurisdictional detention basin.

3.0 EXISTING CONDITIONS

The Study Areas are located west of SR 113; the site is bounded to the south by residential housing and West Covell Boulevard. The eastern portion of the site is bounded by Sutter Davis Hospital, along with agricultural fields, Sutter Detention Basin, and portions of John Jones Road. The abutting parcels to the north and west consist of agricultural fields and associated infrastructure. The Study Areas are accessible in the southeast corner from Risling Court. The Study Areas are flat with elevations ranging from approximately 45 to 55 feet above mean sea level.

The site primarily consists of agricultural fields. The fields were fallow at the time of the survey, and had been graded and disked. They are mostly unvegetated, with occasional patches of scattered alkali mallow (*Malvella leprosa*), field bindweed (*Convolvulus arvensis*), and alkali weed (*Cressa truxillensis*). Vegetation along the perimeter of the fields predominantly consists of non-native ruderal species such as wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), prickly lettuce (*Lactuca serriola*), and perennial ryegrass (*Festuca perennis*). Additional vegetation within these areas includes perennial pepperweed (*Lepidium latifolium*), common spikeweed (*Centromadia pungens*), and turkey mullein (*Croton setiger*). A walking trail travels along the eastern side of Study Area 2, then turns east and ends at John Jones Road. The path features planted valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and an ornamental pine (*Pinus sp.*). Vegetation in this area consists of non-native annual grassland, with common plant species including wild oat, ripgut brome, perennial ryegrass, prickly lettuce, yellow star thistle (*Centaurea solstitialis*), perennial pepperweed, soft chess (*Bromus hordeaceus*), and wall barley (*Hordeum murinum*).

A small basin is located in the northern portion of Study Area 2. The basin appears to have been constructed within existing agricultural fields and may have been used to retain irrigation water; it consists of a partial berm less than five feet high on all sides, except for the south side. San Joaquin spearscale (*Extriplex joaquinana*), a CRPR List 1B.2 plant, is growing along the slopes of the berms on the north, west, and east margins of the basin. Other plant species growing along the berms include perennial ryegrass, wild oat, soft chess, saltgrass (*Distichlis spicata*) common spikeweed, and Mojave silverscale (*Atriplex argentea var. expansa*). The base of the basin is dominated by ruderal species including wild oat, yellow star thistle, and some perennial pepperweed.

Study Area 1 at the southern portion of the site consists of West Covell Boulevard, landscaping associated with the residential development to the south and the hospital to the east, and Covell Drainage Channel. At the northwest corner of the intersection of Risling Court and West Covell Boulevard, the site consists of a disturbed area that was historically a farmstead, and was previously used as a soil spoil area and overflow parking for the nearby hospital. This area has recently been cleared of vehicles, soil spoils, and vegetation, and now consists of sparsely vegetated gravelly and mowed ruderal areas.

3.1 Hydrology

Surface water within the Study Areas is driven by rainfall and irrigation runoff and flows through an existing storm drain system to Covell Drainage Channel or the Sutter Detention Basin. Covell Drainage Channel is an intermittent tributary to Willow Slough Bypass, which flows into the Yolo Bypass, and ultimately the Sacramento River. The Study Areas are located in the *Lower Sacramento River Watershed* (HUC 18020163) (USGS 1978).

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2019), seven soil mapping units occur within the Study Areas (Figure 2). Two of these soil units, Willows clay (Wb) and Willows clay, sodic (Wc) consist of hydric components. Five units, Capay silty clay (Ca), Marvin silty clay loam (Mf), Pescadero silty clay (Pb), Willows clay, and Willows clay, sodic contain hydric inclusions (NRCS 2019). The soils within the Study Areas fall within the hydrological soil groups C and D, which generally have a slow infiltration rate when thoroughly wet, a slow to very slow rate of water transmission, and typically a higher runoff potential. Soils found within the Study Areas are summarized in Table 1.

Table 1. Hydric Rating of Soils within the Study Areas

Soil Unit Name	Map Unit Symbol	Hydric Rating
Brentwood silty clay loam, 0 to 2 percent slopes	BrA	No
Capay silty clay, 0 percent slopes, MLRA 17	Ca	No
Marvin silty clay loam	Mf	No
Pescadero silty clay, saline-alkali	Pb	No
Rincon silty clay loam	Rg	No
Willows clay, 0 percent slopes, MLRA 17	Wb	Yes
Willows clay, 0 percent slopes, sodic, MLRA 17	Wc	Yes

3.3 Driving Directions

The Study Areas are located off of Risling Court, Davis, California, 95616. To access the Study Areas from Sacramento, drive west on I-80 towards Davis. Take exit 70 from I-80 west onto SR 113. Follow SR 113 until exit 29, then turn left onto West Covell Boulevard. Continue past John Jones Road and turn right onto Risling Court, which is the main entrance for the Sutter Davis Hospital. The Study Areas are predominantly located to the left and ahead.

4.0 RESULTS

A total of approximately 1.000 acre of aquatic resources were delineated within the Study Areas, including 0.572 acre of jurisdictional waters in Study Area 1 and 0.428 acre of non-jurisdictional waters in Study Area 2. Two segments of Covell Drainage Channel were delineated within Study Area 1. Two irrigation ditch segments, two roadside ditches, a drainage ditch in two segments, and a portion of the Sutter Detention

Basin were delineated within Study Area 2. No wetlands were delineated within either Study Area. A summary of the aquatic resources found within the Study Areas and their acreages is shown in Table 2.

Table 2. Aquatic Resources Delineated within the Study Areas

Resource Type	Acreage
Study Area 1	
<i>Other Waters</i>	
Covell Drainage Channel	0.572
Study Area 2	
<i>Non-Jurisdictional Waters</i>	
Detention Basin	0.034
Drainage Ditch	0.063
Irrigation Ditch	0.295
Roadside Ditch	0.036
Total	1.000

Data sheets are included in Attachment A. Maps of the aquatic resources within the Study Areas are included as Figure 3 and Attachment B, and a list of the plant species observed in the Study Areas with their wetland indicator status is included in Attachment C. Representative site photographs are included in Attachment D. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheets* for the aquatic resources shown on Figure 3 and Attachment B are included on a CD in Attachment E. Each of the feature types is described below.

4.1 Perennial Drainage (Covell Drainage Channel)

Covell Drainage Channel (CDC-1, CDC-2) flows from west to east through Study Area 1. Flows within the channel are perennial in nature, with slow-flowing water observed during the site visits. The channel runs along the southern portion of the site in two segments (0.572 acre), paralleling West Covell Boulevard. It passes beneath Risling Court and John Jones Road via a double culvert and underpass, respectively. The channel is a manmade trapezoidal ditch approximately 10-feet in depth. Vegetation within the channel is dominated by broad-leaved cattail (*Typha latifolia*) and tall flatsedge (*Cyperus eragrostis*). Other species growing within the feature include western yellowcress (*Rorippa curvisiliqua*), watergrass (*Echinochloa crus-galli*), curly dock (*Rumex crispus*), rabbitsfoot grass (*Polypogon monspeliensis*), common knotweed (*Persicaria lapathifolia*), tall wheat grass (*Elymus ponticus*), and johnsongrass (*Sorghum halepense*). The slopes of the channel are covered in upland vegetation including wild oat, ripgut brome, and prickly lettuce. Scattered native trees such as Fremont cottonwood (*Populus fremontii*), western sycamore (*Platanus racemosa*), and Goodding's black willow (*Salix gooddingii*) occur along the channel, as well as some non-native ornamental trees associated with the surrounding development. The channel is an indirectly connected tributary to the navigable Sacramento River, as previously described, and is therefore likely to be a jurisdictional water of the U.S. The channel was mapped at the Ordinary High Water Mark (OHWM), which was identified based on sediment deposits, water marks, vegetation, and topographic breaks.

4.2 Detention Basin

A portion of the Sutter Detention Basin (NJB-1) totaling 0.034 acre is located at the eastern end of Study Area 2. Most vegetation within the basin occurs along the margins of the feature, and includes broad-leaved cattail, tall flatsedge, and sandbar willow (*Salix exigua*). The basin receives stormwater runoff from nearby development and agricultural farmland, and was dry during the site visits. Detention basins and other storm water facilities that are not impoundments of jurisdictional waterways, and were constructed in uplands to convey, treat, or store stormwater are generally considered Excluded Waters under CWR Section 328.3(b)(6); as such, we believe that this feature is not jurisdictional. The feature was mapped at the OHWM based on water marks, vegetation, and topographic breaks.

4.3 Drainage Ditch

A drainage ditch (NJDD-1, NJDD-2) flows in the eastern portion of Study Area 2, with two segments falling within the site. Approximately 0.063 acre of the ditch are within the site. Vegetation within the ditch is fairly abundant, and is dominated by ruderal species, such as perennial pepperweed, perennial ryegrass, ripgut brome, and soft chess. Hydrology within the ditch is driven by irrigation runoff from an agricultural field to the east. In addition, the ditch receives storm water runoff from a paralleling walking trail. The ditch flows first north, then east, and eventually enters a culvert which drains into the Sutter Detention Basin, located just to the north. As previously described, the Sutter Detention Basin is likely an Excluded Water; thus, we believe that this feature is also non-jurisdictional. Furthermore, the drainage ditch is an ephemeral feature that is not a relocated tributary; therefore, we believe that the ditch would be considered an Excluded Water under both CWR Section 328.3(b)(3)(i) and Section 328.3(b)(3)(iii). The ditch was mapped at the OHWM, which was identified based on topographic breaks.

4.4 Irrigation Ditch

Two segments of an irrigation ditch (ID-01, ID-02), totaling approximately 0.295 acre, are located within Study Area 2 along the northern portion of the site. The ditch is steeply inclined and somewhat devoid of vegetation at the base. Plant species within the feature includes wild oat, ripgut brome, prickly lettuce, milk thistle, yellow star thistle, perennial pepperweed, rabbitsfoot grass, and Mojave silverscale. The ditch serves to convey irrigation water to and from the adjacent agricultural fields. The irrigation ditch is an intermittent feature that was created in uplands and is not a relocated tributary; therefore, we believe that the ditch would be an Excluded Water under CWR Section 328.3(b)(3)(ii). The OHWM was mapped based on topographic breaks.

4.5 Roadside Ditch

Two roadside drainage ditches (0.068 acre) are located within Study Area 2. One (NJR-1) is located along Risling Court and another (NJR-2) parallels John Jones Road. The roadside ditch along Risling Court is dominated by mowed wild oat, while the ditch along John Jones Road is gravelly and sparsely vegetated with ruderal plants including perennial pepperweed, yellow-star thistle, milk thistle, johnsongrass,

watergrass, and rabbitsfoot grass. The roadside ditches were created in uplands to drain upland runoff, receive ephemeral flows, and are not relocated tributaries; as such, we believe that these features would be considered Excluded Waters under CWR Section 328.3(b)(3)(i). In addition, NJRD-1 drains into the non-jurisdictional Sutter Detention Basin, and thus is also an Excluded Water under CWR Section 328.3(b)(3)(iii). The ditches were mapped at the OHWM based on water marks and topographic breaks.

5.0 CONCLUSION

The applicant is requesting a Preliminary Jurisdictional Determination for the Aquatic Resources Delineation Map for Study Area 1, which we believe fall under jurisdiction of the USACE and an Approved Jurisdictional Determination for the Aquatic Resources Delineation Map for Study Area 2, which we believe are excluded from USACE jurisdiction (**Attachment B**). A letter providing USACE staff accompanied access to the Study Area is included as **Attachment F**.

6.0 REFERENCES

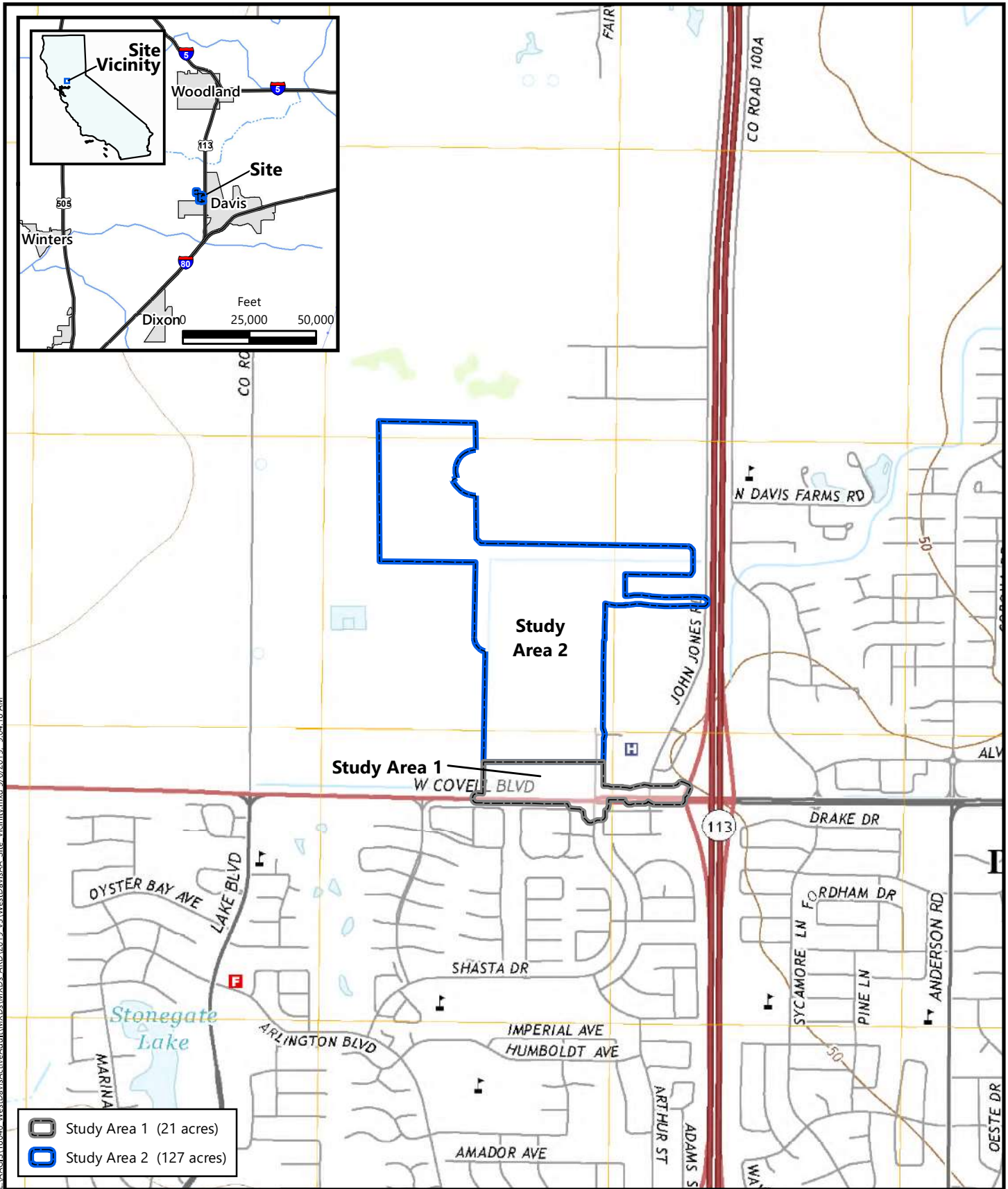
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Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources



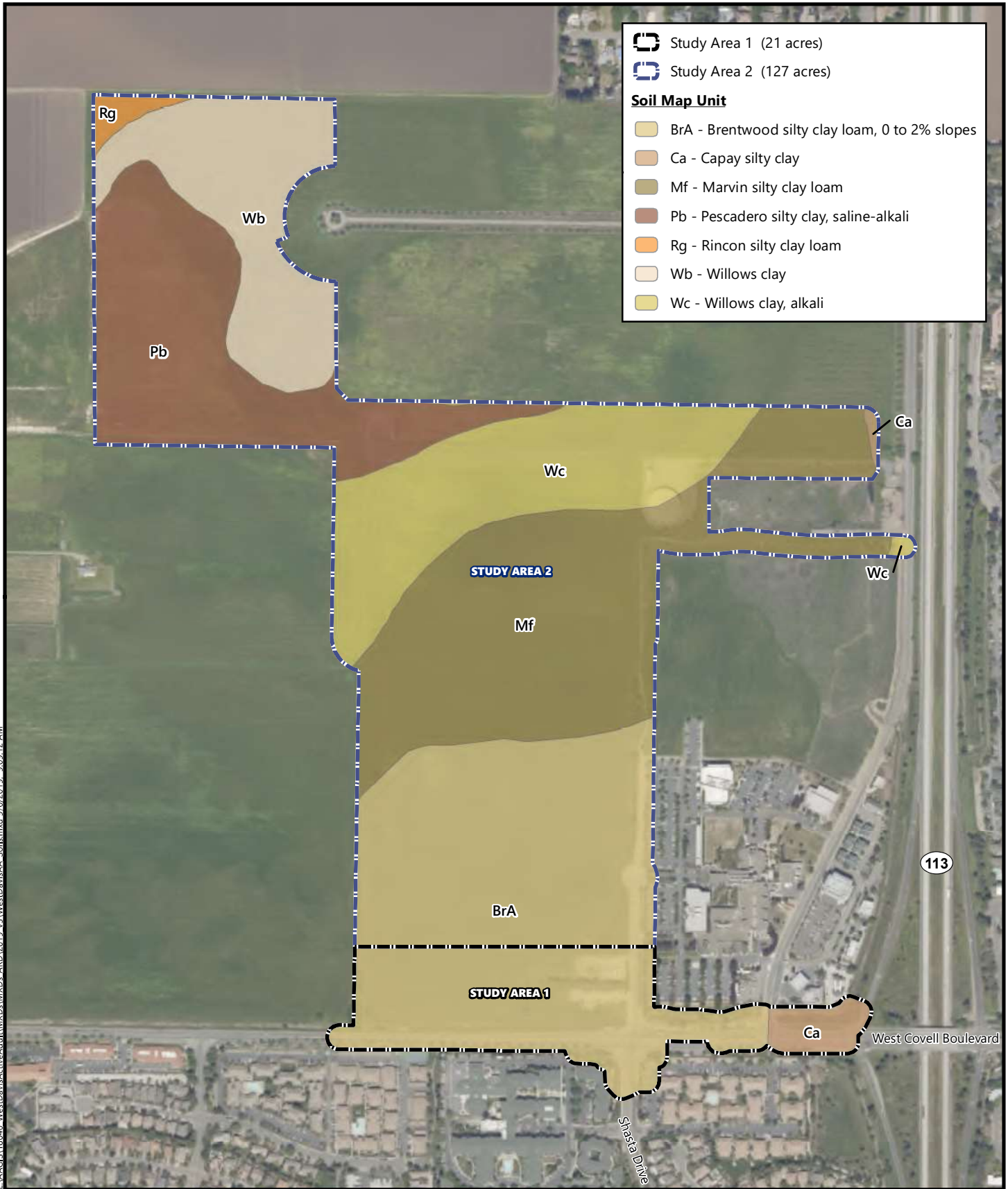
E:\MAGIS\18046_WestDavisActiveAdult\MXDs\ARD\2019_v3\WestDavisAA_Site_Vicinity.mxd 9/6/2019 9:04:18 AM

Figure 1
Site Vicinity

Source: United States Geologic Survey, 2015.
 "Merritt, California" 7.5-Minute Topographic Quadrangle
 Sections 5 and 8, Township 8 North, Range 2 East, MDB&M
 Longitude -121.775217, Latitude 38.566444

West Davis Active Adult,
 City of Davis, Yolo County, California





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Figure 2
Natural Resources Conservation
Service Soils

Soil Survey Source: *USDA, Soil Conservation Service.*
Soil Survey Geographic (SSURGO) database for Yolo County, California
 Aerial Source: *Yolo County Orthophotos, 13 April 2018.*

West Davis Active Adult,
City of Davis, Yolo County, California





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Figure 3
Aquatic Resources Delineation

* Rounding may result in small summation errors.
Aerial Source: *Yolo County Orthophotos*, 13 April 2018.



Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation Map

Attachment C. Plant Species Observed within the Study Areas

Attachment D. Representative Site Photographs

Attachment E. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Attachment F. Access Letter

Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/16/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 01
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): 4
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7768581 Long: 38.56139595 Datum: NAD 83
 Soil Map Unit Name: Brentwood silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Heavily vegetated ditch along agricultural field. Appears to not have been in use for some time. Constructed in uplands to drain/irrigate field. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>100</u> x3 = <u>300</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Festuca perennis</u>	<u>100</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Malvella leprosa</u>	<u>T</u>		<u>FACU</u>	
3. <u>Asclepias fascicularis</u>	<u>T</u>		<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Segments of ditch dominated by Lactuca serriola (FACU)

SOIL

Sampling Point: DP 01

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		
0-8	2.5Y 3/2	100					sandy loam	rocky

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present): Type: <u>Clay hardpan</u> Depth (inches): <u>8</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No redox.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	

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

Remarks: No signs of hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/16/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 02
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): none Slope (%): _____
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.776888 Long: 38.56139183 Datum: NAD 83
 Soil Map Unit Name: Brentwood silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Upland point paired w/ DP 01. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. <u>Juglans x paradox</u>	<u>10</u>			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____				
3. _____				
4. _____	<u>10</u> =Total Cover			
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>90</u> x3 = <u>270</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>5</u> x5 = <u>25</u> Column Totals: <u>100</u> (A) <u>315</u> (B) Prevalence Index = B/A = <u>3.2</u>
2. _____				
3. _____				
4. _____				
5. _____	<u>0</u> =Total Cover			
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Festuca perennis</u>	<u>90</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Lactuca serriola</u>	<u>5</u>		<u>FACU</u>	
3. <u>Avena fatua</u>	<u>3</u>		<u>UPL</u>	
4. <u>Bromus diandrus</u>	<u>2</u>		<u>UPL</u>	
5. _____				
6. _____				
7. _____				
8. _____	<u>100</u> =Total Cover			
Woody Vine Stratum (Plot size: _____)				
1. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

Remarks:

SOIL

Sampling Point: DP 02

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		
0-5	10YR 3/2	100					sandy loam	
5-10	2.5Y 3/2	100					loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present): Type: <u>Clay hardpan</u> Depth (inches): <u>10</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Rocky soil	

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<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"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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

Remarks: No indicators of OHWM, other hydrology indicators not present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/17/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 03
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7764241 Long: 38.56872981 Datum: NAD 83
 Soil Map Unit Name: Pescado silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: Raised berm of basin; paired with DP 04. *Climatic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ 1 (A) Total Number of Dominant Species Across All Strata: _____ 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ 100% (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>75</u> x3 = <u>225</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>5</u> x5 = <u>25</u> Column Totals: <u>90</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>3.2</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Avena fatua</u>	<u>5</u>		<u>UPL</u>	
2. <u>Lactuca serriola</u>	<u>T</u>		<u>FACU</u>	
3. <u>Extriplex joaquinana</u>	<u>10</u>		<u>FACU</u>	
4. <u>Festuca perennis</u>	<u>75</u>	<u>Y</u>	<u>FAC</u>	
5. <u>Dittrichia graveolens</u>	<u>T</u>		<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>90</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Basin walls dominated by Festuca perennis with Centromadia pungens, Distichlis spicata, Atriplex argentea var. expansa, Extriplex joaquinana

SOIL

Sampling Point: DP 03

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		
0-4	2.5Y 3/1	98	2.5Y 4/3	2	C	M	loam	
4-12	5Y 2.5/1	100					silt loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" 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)			

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

Restrictive Layer (if present): Type: <u>Clay hardpan</u> Depth (inches): <u>12</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Rocky soil.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/17/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 04
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7764639 Long: 38.56868755 Datum: NAD 83
 Soil Map Unit Name: Prescadero silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: Floor of basin, paired with DP 03. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>100</u> x5 = <u>500</u> Column Totals: <u>100</u> (A) <u>500</u> (B) Prevalence Index = B/A = <u>5.0</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Avena fatua</u>	<u>65</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Centaurea solstitialis</u>	<u>35</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Lactuca serriola</u>	<u>T</u>	_____	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Basin is dominated by Avena fatua, Centaurea solstitialis, with some Lactuca serriola, Rumex crispus, Silybum marianum, Lepidium latifolium.

SOIL

Sampling Point: DP 04

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		
0-5	2.5Y 3/1	99	2.5Y 4/3	1	C	M	loam	rocky
5-12	2.5Y 2.5/1	75	2.5Y 3/3	25	C	M	loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" 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)			

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

Restrictive Layer (if present):	
Type: <u>Clay hardpan</u>	
Depth (inches): <u>12</u>	
	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water Marks (B1) (Riverine)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	
	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/17/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 05
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): 20
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7762617 Long: 38.56827012 Datum: NAD 83
 Soil Map Unit Name: Pescado silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes <u>X</u> No _____		

Remarks: Point in irrigation ditch. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ =Total Cover	<u>0</u>			
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>1 meter²</u>) 1. <u><i>Polypogon monspeliensis</i></u> 2. <u><i>Centaurea solstitialis</i></u> 3. <u><i>Lepidium latifolium</i></u> 4. <u><i>Avena fatua</i></u> 5. <u><i>Bromus diandrus</i></u> 6. <u><i>Silybum marianum</i></u> 7. <u><i>Lactuca serriola</i></u> 8. <u><i>Hordeum murinum</i></u> _____ =Total Cover	<u>10</u>		<u>FACW</u>	
	<u>2</u>		<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	<u>3</u>		<u>FAC</u>	
	<u>20</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
	<u>20</u>	<u>Y</u>	<u>UPL</u>	
	<u>1</u>		<u>UPL</u>	_____ % Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>
	<u>4</u>		<u>FACU</u>	
	<u>T</u>		<u>FACU</u>	_____ % Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____
	<u>60</u>		<u>FACU</u>	
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ =Total Cover	_____	_____	_____	

Remarks:

SOIL

Sampling Point: DP 05

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		
0-4	2.5Y 3/2	100					loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present): Type: <u>Clay hardpan</u> Depth (inches): <u>4</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Rocky soil.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/17/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 06
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): 4
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.772668 Long: 38.56270636 Datum: NAD 83
 Soil Map Unit Name: Brentwood silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Roadside ditch for stormwater drainage. Large stones within ditch. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	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>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>85</u> x5 = <u>425</u> Column Totals: <u>90</u> (A) <u>445</u> (B) Prevalence Index = B/A = <u>4.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Avena fatua</u>	<u>85</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Lactuca serriola</u>	<u>4</u>		<u>FACU</u>	
3. <u>Malvella leprosa</u>	<u>1</u>		<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>90</u> =Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Vegetation mowed.

SOIL

Sampling Point: DP 06

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		
0-3	5Y 2.5/2	100					silt loam	
3-10	2.5Y 3/2	80	2.5Y 2.5/1	19	C	M	loam	
			7.5YR 4/6	1	C	M		

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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 checked="" 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)			

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

Restrictive Layer (if present):	
Type: <u>Clay hardpan</u>	
Depth (inches): <u>10</u>	
	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Shovel refusal at 4".	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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

Remarks: Storm drain inlet within ditch; conveys seasonal storm water runoff.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/17/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 07
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7750992 Long: 38.5611048 Datum: NAD 83
 Soil Map Unit Name: Brentwood silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: DP within perennial drainage (Covell Drainage Channel). *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>30</u> x1 = <u>30</u> FACW species <u>35</u> x2 = <u>70</u> FAC species <u>5</u> x3 = <u>15</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>70</u> (A) <u>115</u> (B) Prevalence Index = B/A = <u>1.6</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Typha sp.</u>	<u>25</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Cyperus eragrostis</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>	
4. <u>Polypogon monspeliensis</u>	<u>T</u>		<u>FACW</u>	
5. <u>Sorghum halepense</u>	<u>T</u>		<u>FACU</u>	
6. <u>Rorippa curvisiliqua</u>	<u>5</u>		<u>OBL</u>	
7. <u>Echinochloa crus-galli</u>	<u>5</u>		<u>FACW</u>	
8. <u>Persicaria lapathifolia</u>	<u>T</u>		<u>FACW</u>	
	<u>70</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>30*</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: *water cover. Also nearby Elymus ponticus

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/21/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 08
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): 4
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7707213 Long: 38.56699549 Datum: NAD 83
 Soil Map Unit Name: Marvin silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: DP within drainage ditch. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>50</u> x3 = <u>150</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>20</u> x5 = <u>100</u> Column Totals: <u>70</u> (A) <u>250</u> (B) Prevalence Index = B/A = <u>3.6</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Lepidium latifolium</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Festuca perennis</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Bromus diandrus</u>	<u>10</u>		<u>UPL</u>	
4. <u>Bromus hordeaceous</u>	<u>10</u>		<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>70</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>30</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP 08

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		
0-3	10YR 3/2	100					silt loam	
3-8	2.5Y 3/2	90	2.5Y 3/3	10	C	M	loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present):	
Type: <u>Clay hardpan</u>	
Depth (inches): <u>8</u>	
	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Redox faint.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 checked="" 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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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

Remarks: Evidence of OHWM, other indicators (such as presenece of culvert).

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/21/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 09
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Concave Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7717033 Long: 38.56715432 Datum: NAD 83
 Soil Map Unit Name: Marvin silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Suspect patch of <i>Festuca perennis</i> in an otherwise <i>Avena fatua</i> dominant annual grassland. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>100</u> x3 = <u>300</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>100</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u><i>Festuca perennis</i></u>	<u>90</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u><i>Lepidium latifolium</i></u>	<u>10</u>		<u>FAC</u>	
3. <u><i>Avena fatua</i></u>	<u>T</u>		<u>UPL</u>	
4. <u><i>Carduus pycnocephalus</i></u>	<u>T</u>		<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP 09

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		
0-5	2.5Y 3/2	75	2.5Y 2.5/1	25	C	M	clay loam	
5-8	2.5Y 3/2	90	5Y 2.5/1	10	C	M	sandy loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present):	
Type: <u>Clay hardpan</u>	
Depth (inches): <u>8</u>	
	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Redox concentrations faint, not distinct/prominent	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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

Remarks: No signs of wetland hydrology

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/21/18
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 10
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Valley Floor Local relief (concave, convex, none): Convex Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.7716404 Long: 38.56711335 Datum: NAD 83
 Soil Map Unit Name: Marvin silty clay loam NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X* (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: Upland DP paired with DP 09. *Climactic conditions abnormal, rainfall totals well-above average for the 2018-2019 winter, and rain events occurred late in season.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>15</u> x3 = <u>45</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>80</u> x5 = <u>400</u> Column Totals: <u>95</u> (A) <u>445</u> (B) Prevalence Index = B/A = <u>4.7</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)	_____	_____	_____	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Avena fatua</u>	<u>35</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Lepidium latifolium</u>	<u>10</u>	_____	<u>FAC</u>	
3. <u>Bromus hordeaceus</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Trifolium hirtum</u>	<u>5</u>	_____	<u>UPL</u>	
5. <u>Centaurea solstitialis</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
6. <u>Festuca perennis</u>	<u>5</u>	_____	<u>FAC</u>	
7. <u>Hordeum murinum</u>	<u>T</u>	_____	<u>FACU</u>	
8. _____	_____	_____	_____	
<u>95</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	_____ =Total Cover
% Bare Ground in Herb Stratum <u>5</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP 10

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		
0-10	2.5Y 3/2	80	2.5Y 4/3	15	C	M	silty loam	
			2.5Y 2.5/1	5	C	M		

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present): Type: <u>Clay hardpan</u> Depth (inches): <u>10</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Redox faint.	

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<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 type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<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="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____ (includes capillary fringe)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/19/19
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 11
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.779698 Long: 38.568945 Datum: NAD 83
 Soil Map Unit Name: Pescadero silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Disked agricultural field in a previously mapped wetland point. No vegetation.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

Remarks: Disked agricultural field; no living vegetation present. Scattered small pieces of dead grasses (possibly Avena).

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/19/19
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 12
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.779961 Long: 38.569019 Datum: NAD 83
 Soil Map Unit Name: Pescadero silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Paired upland DP w/ DP 12 (from previous ARD). Within disked field with no vegetation.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ 0 (A) Total Number of Dominant Species Across All Strata: _____ 0 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ 0% (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ =Total Cover	0			
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ =Total Cover	0			
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover	0			
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>100</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: Within disked field, no vegetation present.

SOIL

Sampling Point: DP 12

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		
0-6	2.5Y 3/2	99	2.5Y 4/3	1	C	M	loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present):	Hydric Soil Present?	Yes _____	No <u>X</u>
Type: <u>Clay hardpan</u>			
Depth (inches): <u>6</u>			

Remarks: Redox not significant; not enough present. Doesn't satisfy hydric soils. Soils powdery, didn't stay together when shovelled.

HYDROLOGY

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

Field Observations:	Wetland Hydrology Present?	Yes _____	No <u>X</u>
Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____			
Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____			
Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)			

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

Remarks: No hydrology present

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/19/19
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 13
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.78068 Long: 38.56911 Datum: NAD 83
 Soil Map Unit Name: Pescadero silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Suspect area of slightly darker soil within disked agricultural field. No vegetation.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>		

Remarks: No vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: West Davis Active Adult City/County: Davis, Yolo County Sampling Date: 08/19/19
 Applicant/Owner: David Taormino (Taormino & Associates) State: CA Sampling Point: DP 14
 Investigator(s): Matt Shaffer Section, Township, Range: S5, T8N, R2E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: -121.779738 Long: 38.569316 Datum: NAD 83
 Soil Map Unit Name: Pescadero silty clay, saline-alkali NWI Classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>		
Wetland Hydrology Present? Yes _____ No <u>X</u>		

Remarks: Previously mapped wetland point, now disked agricultural field.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				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>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> =Total Cover				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x1 = <u>0</u> FACW species _____ x2 = <u>0</u> FAC species _____ x3 = <u>0</u> FACU species _____ x4 = <u>0</u> UPL species _____ x5 = <u>0</u> Column Totals: _____ (A) <u>0</u> (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>		

Remarks: No vegetation

SOIL

Sampling Point: DP 14

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		
0-8	2.5Y 3/2	90	2.5Y 2.5/1	10	C	M	loam	

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.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<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)			

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

Restrictive Layer (if present):	
Type: <u>Clay hardpan</u>	
Depth (inches): <u>8</u>	
	Hydric Soil Present? Yes _____ No <u>X</u>

Remarks: First ~3" consist of disked soils

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<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 _____ No <u>X</u> Depth (inches): _____	
Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____	
Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	
	Wetland Hydrology Present? Yes _____ No <u>X</u>

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

Remarks: No hydrology.

Attachment B

Aquatic Resources Delineation Map

Attachment C

Plant Species Observed within the Study Areas

**Plant Species Observed within the
West Davis Active Adult Study Areas
16, 17, 21 August 2018; 31 May, 19 August 2019**

Species Name	Common Name	Wetland Indicator Status
<i>Acer negundo</i>	Box elder	FACW
<i>Achyrachaena mollis</i>	Blow wives	FAC
<i>Amaranthus albus</i>	Pigweed amaranth	FACU
<i>Amsinckia intermedia</i>	Common fiddleneck	UPL
<i>Anthemis cotula</i>	Mayweed	FACU
<i>Asclepias fascicularis</i>	Narrow leaf milkweed	FAC
<i>Atriplex argentea var. expansa</i>	Mojave silverscale	FAC
<i>Avena barbata</i>	Slender wild oat	UPL
<i>Avena fatua</i>	Wild oat	UPL
<i>Baccharis pilularis subsp. pilularis</i>	Coyote brush	UPL
<i>Brassica nigra</i>	Black mustard	UPL
<i>Briza minor</i>	Annual quaking grass	FAC
<i>Bromus diandrus</i>	Ripgut brome	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Carduus pycnocephalus subsp. pycnocephalus</i>	Italian thistle	UPL
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Centromadia pungens</i>	Common spikeweed	FAC
<i>Convolvulus arvensis</i>	Field bindweed	UPL
<i>Cressa truxillensis</i>	Alkali weed	FACW
<i>Croton setiger</i>	Turkey-mullein	UPL
<i>Crypsis schoenoides</i>	Swamp grass	FACW
<i>Cucurbita pepo var. pepo</i>	Field pumpkin	UPL
<i>Cuscuta campestris</i>	Field dodder	UPL
<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
<i>Cyperus involucratus</i>	Umbrella plant	FACW
<i>Distichlis spicata</i>	Saltgrass	FAC
<i>Dittrichia graveolens</i>	Stinkwort	UPL
<i>Echinochloa crus-galli</i>	Watergrass	FACW
<i>Elymus glaucus</i>	Western wild-rye	FACU
<i>Elymus ponticus</i>	Tall wheat grass	UPL
<i>Elymus triticoides</i>	Beardless wild-rye	FAC
<i>Epilobium brachycarpum</i>	Panicled willow-herb	FAC
<i>Epilobium ciliatum subsp. ciliatum</i>	Fringed willow-herb	FACW
<i>Erodium botrys</i>	Filaree	FACU
<i>Extriplex joaquinana</i>	San Joaquin spearscale	FACU
<i>Festuca bromoides</i>	Brome fescue	FACU
<i>Festuca myuros</i>	Rattail sixweeks grass	FACU
<i>Festuca perennis</i>	Perennial ryegrass	FAC

<i>Frankenia salina</i>	Alkali heath	FACW
<i>Fraxinus latifolia</i>	Oregon ash	FACW
<i>Galium aparine</i>	Sticky willy	FACU
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Glycine max</i>	Soybean	UPL
<i>Heteromeles arbutifolia</i>	Toyon	UPL
<i>Holocarpha virgata</i>	Narrow tarplant	UPL
<i>Hordeum marinum subsp. gussoneanum</i>	Mediterranean barley	FAC
<i>Hordeum murinum</i>	Wall barley	FACU
<i>Juglans hindsii</i>	Northern California black walnut	UPL
<i>Juncus bufonius</i>	Toad rush	FACW
<i>Juniperus sp.</i>	Juniper	FACU
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Leontodon saxatilis subsp. saxatilis</i>	Hairy hawkbit	FACU
<i>Lepidium latifolium</i>	Perennial pepperweed	FAC
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Malvella leprosa</i>	Alkali mallow	FACU
<i>Matricaria discoidea</i>	Pineapple weed	FACU
<i>Medicago polymorpha</i>	California burclover	FACU
<i>Medicago sativa</i>	Alfalfa	UPL
<i>Melilotus indicus</i>	Sourclover	FACU
<i>Melilotus officinalis</i>	Yellow sweetclover	FACU
<i>Olea europaea</i>	Olive	UPL
<i>Persicaria lapathifolia</i>	Common knotweed	FACW
<i>Phalaris paradoxa</i>	Hood canary grass	FAC
<i>Phoenix canariensis</i>	Canary island date palm	UPL
<i>Physalis philadelphica</i>	Tomatillo	UPL
<i>Pinus sp.</i>	Pine	-
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Platanus racemosa</i>	California sycamore	FAC
<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	FACW
<i>Populus fremontii</i>	Fremont cottonwood	FAC
<i>Quercus lobata</i>	Valley oak	FACU
<i>Quercus wislizeni</i>	Interior live oak	UPL
<i>Ranunculus muricatus</i>	Spiny fruit buttercup	FACW
<i>Robinia pseudoacaria</i>	Black locust	FACU
<i>Rorippa curvisiliqua</i>	Western yellowcress	OBL
<i>Rosa californica</i>	California rose	FAC
<i>Rumex crispus</i>	Curly dock	FAC
<i>Salix exigua</i>	Sandbar willow	FACW
<i>Salix gooddingii</i>	Goodding's black willow	FACW
<i>Salsola tragus</i>	Tumbleweed	FACU
<i>Sambucus nigra subsp. caerulea</i>	Blue elderberry	FACU
<i>Schoenoplectus acutus var. occidentalis</i>	Common tule	OBL

<i>Sherardia arvensis</i>	Field madder	UPL
<i>Silybum marianum</i>	Milk thistle	UPL
<i>Sonchus oleraceus</i>	Common sow thistle	UPL
<i>Sorghum halepense</i>	Johnson grass	FACU
<i>Spergula arvensis</i>	Starwort	UPL
<i>Spergularia media var. media</i>	Greater sea-spurrey	FACW
<i>Stipa pulchra</i>	Purple needle grass	UPL
<i>Tragopogon porrifolius</i>	Salsify	UPL
<i>Triadica sebifera</i>	Chinese tallowtree	FAC
<i>Trifolium depauperatum var. depauperatum</i>	Dwarf sack clover	FAC
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Trifolium variegatum var. variegatum</i>	Variiegated clover	FAC
<i>Triticum aestivum</i>	Common wheat	UPL
<i>Typha latifolia</i>	Broad-leaved cattail	OBL
<i>Veronica anagallis-aquatica</i>	Water speedwell	OBL
<i>Veronica peregrina subsp. xalapensis</i>	Purslane speedwell	FAC
<i>Vicia sativa subsp. sativa</i>	Spring vetch	FACU
<i>Vicia villosa</i>	Winter vetch	UPL
<i>Vitis vinifera</i>	Wine grape	UPL

Attachment D

Representative Site Photographs



Data Point DP-01 – 16 August 2018



Data Point DP-02 – 16 August 2018

Data Point DP-04 - 17 August 2018



Data Point DP-03 - 17 August 2018





Data point DP-05 – 17 August 2018



Data point DP-06 – 17 August 2018

Data point DP-08 – 21 August 2018



Data point DP-07 – 17 August 2018

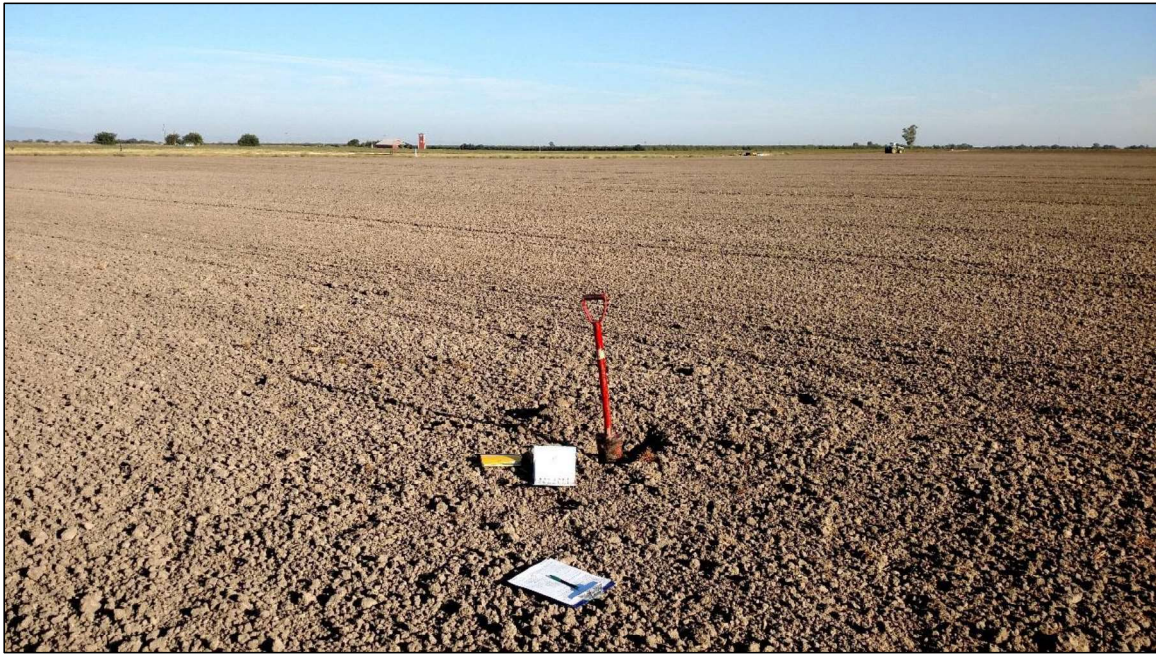




Data point DP-09 – 21 August 2018



Data point DP-10 – 21 August 2018



Data point DP-11 – 19 August 2019



Data point DP-12 – 19 August 2019

Data point DP-14 - 19 August 2019



Data point DP-13 - 19 August 2019



Disturbed area, facing northeast – 19 August 2019



Constructed basin, facing southeast – 19 August 2019





Covell Drainage Channel (CDC-1), facing southwest – 17 August 2018



Non-jurisdictional detention basin (NJB-1), facing south – 19 August 2019



Non-jurisdictional drainage ditch (NJDD-2), facing east – 16 August 2018



Non-jurisdictional irrigation ditch (NJID-2), facing west – 16 August 2018



Non-jurisdictional roadside ditch (NJR-2), facing south – 16 August 2018

Attachment E

GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Attachment F

Access Letter



September 9, 2019

Project Manager
Regulatory Division
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814-2922

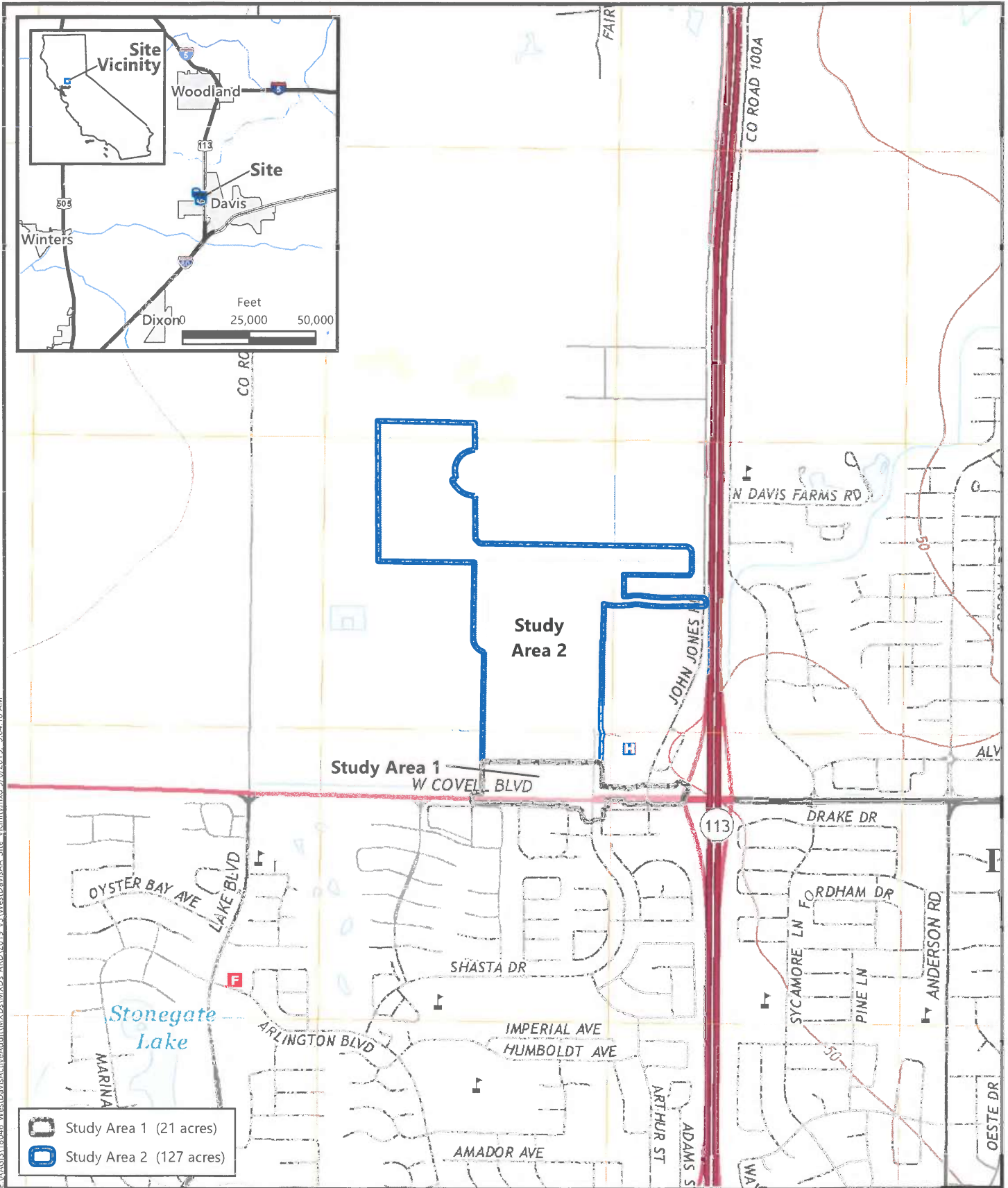
Re: Bretton Woods/West Davis Active Adult

This letter serves as written permission to enter the Bretton Woods/West Davis Active Adult property shown on the attached **Figure 1** when accompanied by Madrone Ecological Consulting, LLC (Madrone) staff and/or representatives of the applicant. When accompanied by Madrone staff, you may dig soil pits by hand and collect plant materials related to the verification of potential Waters of the U.S. on the Bretton Woods/West Davis Active Adult property. If you have any questions, please contact Ben Watson at Madrone (916) 822-3230 or bwatson@madroneeco.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. David Taormino", is written over a horizontal line.

J. David Taormino
Manager, Bretton Woods LLC



E:\A\GIS\18046 WestDavisActiveAdult\MXD\AR\2019_v3\WestDavisAA_Site_Vicinity.mxd 9/6/2019 9:04:18 AM

Source: United States Geologic Survey, 2015.
 "Merritt, California" 7.5-Minute Topographic Quadrangle
 Sections 5 and 8, Township 8 North, Range 2 East, MDB&M
 Longitude -121.775217, Latitude 38.566444



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

December 11, 2019

Regulatory Division (SPK-2019-00685)

David Taormino
Bretton Woods, LLC
260 Russell Blvd, Suite 260
Davis, CA, 95616
assistdt@taormino.org

Dear David Taormino:

We are responding to your September 24, 2019, request for a jurisdictional determination for the Bretton Woods Development, for Study Area 1 and Study Area 2. The approximately 148-acre project site is located north of West Covell Boulevard and west of CA-113, Latitude 38.564886°, Longitude -121.77411°, Davis, Yolo County, California.

Based on available information, we concur with your aquatic resources delineation for the site, as depicted on the enclosed September 3, 2019, *Figure 3, Aquatic Resources Delineation*, drawing prepared by Madrone Ecological Consulting (enclosures 1). Approximately 1.00 acre of aquatic resources are present within the survey area.

Preliminary Jurisdictional Determination:

Based on available information, the approximately 0.57 acre of aquatic resources (drainage ditch (Covell Drainage Channel)) identified in Study Area 1 are potential jurisdictional aquatic resources ("waters of the United States") regulated under Section 404 of the Clean Water Act. At your request, we have completed a preliminary jurisdictional determination for Study Area 1. Enclosed find a copy of the *Preliminary Jurisdictional Determination Form* (enclosure 2). Please sign and return the completed form to this office, at the address listed below, within 30 days of the date of this letter. If you do not return the signed form within 30 days, we will presume concurrence and finalize the preliminary jurisdictional determination (JD).

You may request an approved JD for Study Area 1 at any time prior to starting work within waters, including after a permit decision is made.

This preliminary jurisdictional determination has been conducted to identify the potential limits of wetlands and other aquatic resources at the project site which may be subject to U.S. Army Corps of Engineers jurisdiction under Section 404 of the Clean

Water Act and/or Sections 9 and 10 of the Rivers and Harbors Act. A *Notification of Appeal Process and Request for Appeal Form* for the preliminary jurisdictional determination is enclosed to notify you of your options with this determination (enclosure 3).

Approved Jurisdictional Determination

Based on available information, we have determined that the 0.03 acre of detention basin, depicted as NJB-1, the 0.06 acre of drainage ditch, depicted as NJDD-1 and NJDD-2, the 0.30 acre of irrigation ditch, depicted as NJID-1 and NJID-2, and the 0.04 acre of roadside ditch, depicted as NJRD-1 and NJRD-2 in Study Area 2 on the above mentioned drawing (Enclosure 1), are excluded by 33 CFR §328.3(b)(3)(i) and (b)(6) of the 2015 Clean Water Rule (80 FR 37105, June 29, 2015) (CWR), as these ditches are intermittent or ephemeral in flow and do not relocate a tributary or drain wetlands, and do not flow directly or indirectly through another water, or into a water identified as (a)(1) under the CWR. Waters excluded from Clean Water Act jurisdiction may be subject to other state, tribal or local regulations. This disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act.

We are enclosing a copy of the *Approved Jurisdictional Determination Form* for your site (enclosure 4).

This approved jurisdictional determination is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 Code of Federal Regulations (CFR) Part 331. The preliminary jurisdictional determination has been conducted to identify the potential limits of wetlands and other aquatic resources at the project site which may be subject to U.S. Army Corps of Engineers jurisdiction under Section 404 of the Clean Water Act and/or Section 9 and 10 of the Rivers and Harbors Act.

A *Notification of Appeal Process (NAP) and Request for Appeal (RFA) Form* for the approved jurisdictional determination is enclosed (enclosure 5). If you request to appeal this determination, you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPDPDO, 1455 Market Street, 2052B, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, we must determine that the form is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that the form was received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office unless you object to the determination in this letter.

This approved jurisdictional determination has been conducted to identify the limits of aquatic resources subject to U.S. Army Corps of Engineers jurisdiction under Section

404 of the Clean Water Act and/or Sections 9 and 10 of the Rivers and Harbors Act for the particular site identified in this request.

We recommend that you provide a copy of this letter containing the preliminary and approved jurisdictional determinations to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property. We appreciate feedback, especially about interaction with our staff and our processes.

Please refer to identification number SPK-2019-00685 in any correspondence concerning this project. If you have any questions, please contact Thomas Faughnan by email at thomas.j.faughnan@usace.army.mil, or telephone at (916) 557-6652. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,



Chandra Jenkins
Senior Project Manager
CA Delta Section

Enclosures

cc: (w/o encls)

Mr. Ben Watson, Madrone Ecological Consulting, bwatson@MadroneEco.com

Central Valley Regional Water Quality Control Board,

centralvalleysacramento@waterboards.ca.gov

U.S. Fish and Wildlife Service, SFWO_mail@fws.gov

Mr. Joseph Morgan, U.S. Environmental Protection Agency, Morgan.Joseph@epa.gov

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Bretton Woods, LLC Attn: David Taormino	File No.: SPK-2019-00685	Date: December 11, 2019
Attached is:		See Section below
→	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT:** You may accept or appeal the permit
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.
- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
 - **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Chandra Jenkins
 Sr. Regulatory Project Manager
 U.S. Army Corps of Engineers
 Phone: (916) 557-6652
 Email: chandra.l.jenkins@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Thomas J. Cavanaugh
 Administrative Appeal Review Officer
 U.S. Army Corps of Engineers
 South Pacific Division
 1455 Market Street, 2052B
 San Francisco, California 94103-1399
 Phone: 415-503-6574, FAX 415-503-6646
 Email: Thomas.J.Cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

 Signature of appellant or agent.

Date:

Telephone number:

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Bretton Woods, LLC Attn: David Taormino	File No.: SPK-2019-00685	Date: December 11, 2019
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