



Aquatic Resources Delineation Report

Meadowview 102

City of Sacramento,
Sacramento County, California

September 2024



Prepared for:

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1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Meadowview Safe Parking Property (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 102-acre Study Area is located south of Meadowview Road in the City of Sacramento, Sacramento County, California. The Study Area is located in portions of Sections 7 and 18, Township 7 North, Range 5 East (MDB&M) of the "Florin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) (Figure 1).

1.1 Contact Information

Property Owner

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2.0 METHODOLOGY

Madrone biologists Bonnie Peterson and Daria Snider conducted a delineation of aquatic resources within the Study Area on 2 January, 8 and 15 February, 21 March, 4 and 5 April 2022, and 24 March 2023. 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 ortho-rectified aerial photographs (Maxar 2022).

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* (USACE 2022) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2022) was used for plant nomenclature.

3.0 EXISTING CONDITIONS

The Study Area is located south of Meadowview Road and north of Consumnes River Boulevard and is comprised of a disturbed non-native annual brome grassland interspersed with occasional disturbed areas and bordered to the east and west by a row of Eucalyptus trees. The property was a California Highway Patrol training academy established in 1954 and then was owned by the Federal Job Corps. Per historic aerials (Historicaerials.com) by 1964 the property was modified regularly for training purposes, including the establishment of a cantilevered track along the perimeter and frequent grading, disking and associated land modifications. This regular disturbance has continued to the present time. Given the extended duration of the disturbance, this disturbance is considered "Normal Circumstances" for purposes of the wetland delineation. In 2007, a detention basin and associated ditch were excavated in the northwest corner of the Study Area. The Study Area is located at an average elevation of approximately 12 to 18 feet above mean sea level.

Surrounding properties include similar habitat to the west and north, a residential development to the east, and a planned residential development to the south and southeast.

3.1 Terrestrial Plant Communities

3.1.1 Annual Brome Grassland

The majority of the Study Area supports disturbed annual brome grasslands that are characterized by soft chess (*Bromus hordeaceus*), wild oats (*Avena fatua*), rip-gut brome (*Bromus diandrus*), and perennial rye (*Festuca perennis*). Common forbs within this community include prickly lettuce (*Lactuca serriola*), yellow star-thistle (*Centaurea solstitialis*), and alkali mallow (*Malvella leprosa*).

3.1.2 Disturbed

Disturbed areas include dilapidated paved roads and margins. These areas are comprised of compacted broken asphalt, earth and/or gravel and are largely unvegetated. The edges of these roads support ruderal vegetation, including stinkwort (*Dittrichia graveolens*), Russian thistle (*Salsola tragus*), black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), milk thistle (*Silybum marianum*), bindweed (*Convolvulus arvensis*), and broad leaf filaree (*Erodium botrys*).

3.1.3 Eucalyptus Windbreaks

The eastern and western Study Area boundaries are characterized by windbreaks comprised by mature blue gum (*Eucalyptus globulus*). The understory of this habitat is dominated by annual brome grassland species including soft chess, wild oats, rip-gut brome, and perennial rye.

3.2 Hydrology

Surface water in the Study Area all appears to be from natural stormwater runoff and groundwater. The paved cantilevered track along the perimeter of the Study Area has created a basin effect with a number of seasonal wetlands located in the center of the track. A retention pond and swale were installed in 2007 directing run-on from the parcel north of the Study Area into the on-site retention pond. Additionally, it appears that soil excavation has created three basins in the southern portion of the Study Area that also fill seasonally with rain water. There is no evidence of water in the Study Area draining off-site. The Study Area is located in the *Morrison Creek Subshed* (HUC 1802016304) of the *Lower Sacramento Watershed* (USGS 1978). When the delineation was conducted, the Study Area was located in an area that was identified as experiencing “Extreme Drought” (Drought.gov, 2022).

3.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2024), five soil mapping units occur within the Study Area (**Figure 2**):

- Clear Lake clay, partially drained, 0 to 2% slopes, frequently flooded (114) – the Clear Lake component and the Dierssen and Egbert inclusions are classified as hydric. This soil map unit is non-saline to slightly saline; and the pH ranges from slightly acid to moderately alkaline within the upper portion of the root zone.
- Galt clay, 0 to 1% slopes, MLRA 17 (152) – the Galt component and the Clear Lake inclusion are classified as hydric. This soil map unit is non-saline; and the pH ranges from slightly acid to neutral within the upper portion of the root zone.
- Galt-Urban land complex, 0 to 1% slopes, MLRA 17 (154) – the Galt component and the Clear Lake and Egbert inclusions are classified as hydric. This soil map unit is non-saline; and the pH ranges from slightly acid to neutral within the upper portion of the root zone. . This soil is known to support duripan vernal pools.
- San Joaquin silt loam, 0 to 3% slopes, MLRA 17 (214) – the Galt inclusion is classified as hydric in depressions. This soil map unit is non-saline; and the pH ranges from slightly acid to neutral within the upper portion of the root zone.
- San Joaquin- Urban land complex, 0 to 2% slopes, MLRA 17 (219) – the Galt inclusions are classified as hydric on terraces. This soil map unit is non-saline; and the pH ranges from slightly acid to neutral within the upper portion of the root zone.

3.4 Driving Directions

The Study Area is currently landlocked by private property and requires special accommodations with the City to access. To access the Study Area from downtown Sacramento, drive south of I-5 to the Pocket Road exit (Exist 512). Proceed east on Pocket Road for 2.4 miles and turn right on Detroit Boulevard. Turn right on Shrader Circle to a locked pedestrian gate directly west of Susan B Anthony Elementary School.

4.0 RESULTS

A total of approximately 10.475 acres of aquatic resources were delineated within the Study Area, including approximately 6.921 acres of wetlands and 3.554 acres of other waters. Seasonal wetlands, a constructed pond, and a ditch were delineated within the Study Area. The aquatic resources found on-site and their acreages are summarized in **Table 1** below.

Table 1. Aquatic Resources Delineated within the Study Area

Resource Type	Acreage
<i>Wetlands</i>	
Seasonal Wetland	6.921
<i>Other Waters</i>	
Ditch	0.243
Pond	3.311
Total	10.475

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are included as **Figure 3** and **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheet* for the aquatic resources shown on **Figure 3** and **Attachment B** will be digitally transmitted with this document when it is submitted. Each of the feature types are described below.

4.1 Seasonal Wetland

Thirty-two seasonal wetlands, ranging in size from less than a tenth of an acre to over one acre, have been mapped within the Study Area. As noted above, the Study Area has experienced extensive disturbance, including substantial earth moving. This disturbance has resulted in a number of basins forming within the Study Area that now function as seasonal wetlands. These seasonal wetlands range from marginal features that are almost exclusively comprised of the facultative perennial ryegrass to deeper features that support forbs that require longer inundation periods, such as hyssop loosestrife (*Lythrum hyssopifolia*), slender popcorn flower (*Plagiobothrys stipitatus*), Carter's buttercup (*Ranunculus bonariensis ssp. trisepalus*), water starwort (*Crassula aquatica*), and smooth goldfields (*Lasthenia glaberrima*).

Four data points were collected within seasonal wetlands (DP 1, DP 5, DP 8, and DP 10). Wetland hydrology indicators at these points included soil saturation, oxidized rhizospheres along living roots, biotic crust, aquatic invertebrates (particularly carapaces), and the Fac-neutral test. Soils at the points were considered hydric based on the presence of Field Indicators F3 (Depleted Matrix) and F6 (Redox Dark Surface). The soil at DP 8 did not exhibit hydric soil indicators and may have been too recently disturbed to have developed redoximorphic features. The sampled feature (SW-16) is clearly a wetland as the feature was still inundated at a time when many other seasonal wetlands within the Study Area were dry.

4.2 Drainage Ditch

One drainage ditch has been mapped within the Study Area. This feature appears to have been constructed to drain fields and other areas north of the Study Area into the pond, which has no apparent outlet. During periods of especially high rainfall, the pond backs up into this broad drainage ditch. The ditch below the Ordinary High Water Mark (OHWM) is almost entirely unvegetated. The drainage ditch was mapped at the OHWM, which was identified based on the extent of the adjacent upland vegetation and the extent of inundation (at the time of a spring 2023 field survey, the pond had backed up into the drainage ditch).

4.3 Pond

A single constructed pond has been mapped within the Study Area. This pond appears to have been constructed in its current configuration in approximately 2007, although various forms of detention basins appear to have been present in this approximate area for many years before then. The pond has been excavated, but is surrounded by berms as well, apparently to increase its capacity. The only hydrophytic vegetation observed within the pond are some Fremont's cottonwood (*Populus fremontii*) and willows (*Salix species*) in the eastern portion of the basin. It appears that annual upland vegetation establishes in the bottom of the pond each year as it dries down; during the winter, the leftover plant material decomposes during pond inundation. During the early spring of 2022, the pond was only partially inundated, and the residual dead plant material was still evident. The pond was mapped at the OHWM, which was determined based on the extent of adjacent established vegetation, and shelving.

5.0 CONCLUSION

The 10.475 acres of aquatic resources mapped on the site appear to have no connection to any other Waters of the U.S. and therefore do not appear to be subject to USACE jurisdiction. As such, the applicant is requesting an Approved Jurisdictional Determination for the Aquatic Resources Delineation Map of the Study Area (**Attachment B**). A JD request form is attached in **Attachment D**.

6.0 REFERENCES

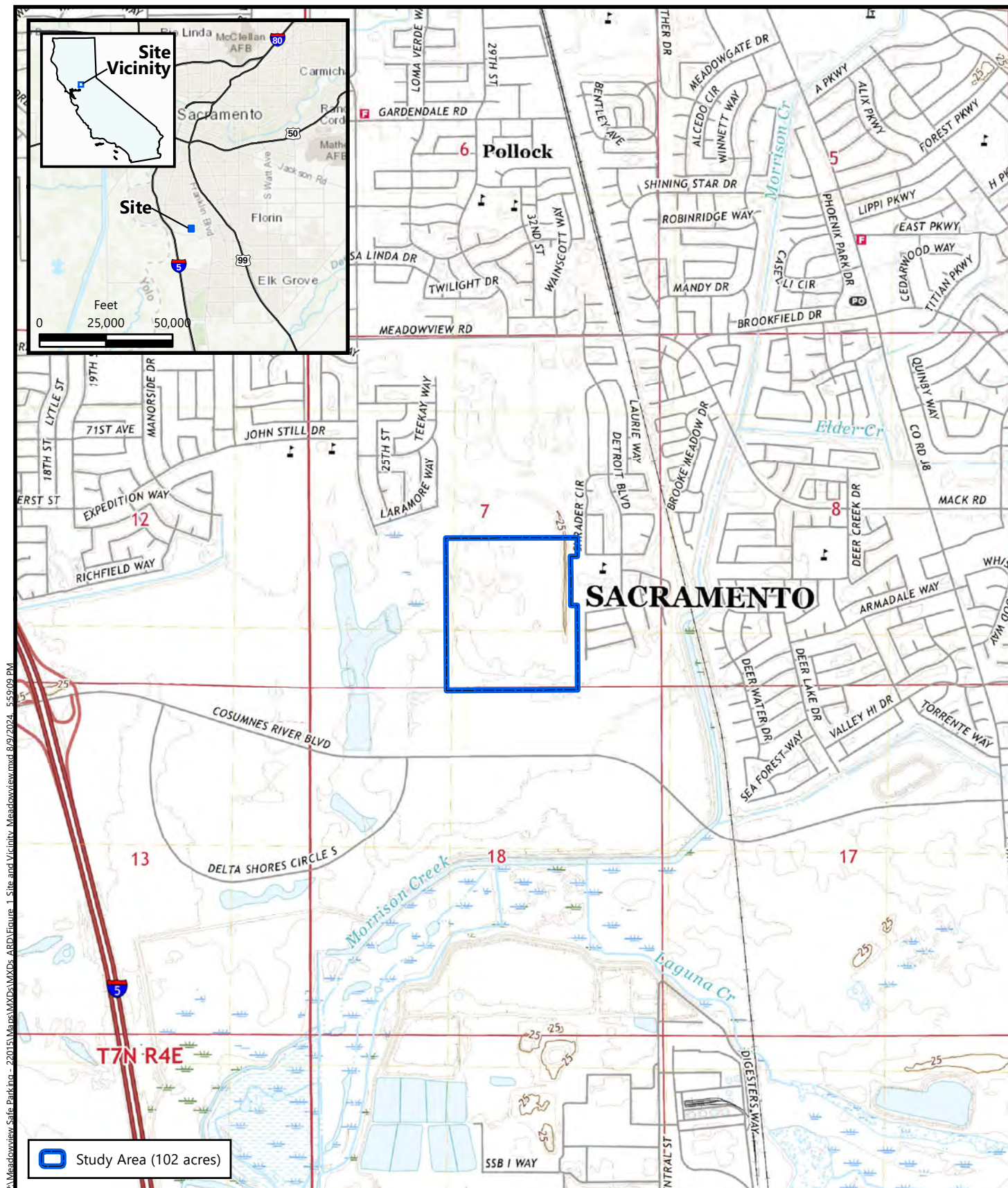
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.
- Jepson Flora Project (eds.) 2024. *Jepson eFlora*. Available on-line at: <http://ucjeps.berkeley.edu/eflora/> [accessed January 2022 through August 2024].
- Maxar. 2022. *Aerial Photograph of the Study Area*. Dated 12 April 2022.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture (NRCS). 2024. *Web Soil Survey*. Available online at <http://websoilsurvey.nrcs.usda.gov/> . Accessed August 2024.
- U.S. Army Corps of Engineers (USACE). 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Army Corps of Engineers (USACE). 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual*. Prepared by R. W. Lichvar and S. M. McColley. ERDC/CRREL TR-08-12. Cold Regions Research and Engineering Laboratory.
- U.S. Army Corps of Engineers (USACE). 2016a. *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*. Dated February 10, 2016. Available online at: <http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/>.
- U.S. Army Corps of Engineers (USACE). 2016b. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Sacramento District. Dated January 2016. Available online at: http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf.
- U.S. Army Corps of Engineers (USACE). 2022. National Wetland Plant List, version 3.6. Available online at <http://wetland-plants.usace.army.mil/> U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH
- U.S. Department of the Interior, Geological Survey (USGS). 1984. *Hydrologic Unit Map, State of California*. Geological Survey. Reston, Virginia.
- U.S. Department of the Interior, Geological Survey (USGS). 2021. *Florin, California 7.5-minute Quadrangle*. Geological Survey. Denver, Colorado.

Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources



Source: United States Geologic Survey, 2021.
 "Florin, California" 7.5-Minute Topographic Quadrangle
 Sections 7 and 18, Township 7 North, Range 5 East
 Latitude (NAD83) 38.470032°, Longitude (NAD83) -121.472371°

Figure 1
Site and Vicinity

Meadowview 102
 Sacramento County, California





Figure 2
Natural Resources Conservation
Service Soils

Soil Survey Source: USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) Database for Sacramento County, California
Aerial Source: Maxar, 12 April 2022

Meadowview 102
 Sacramento County, California





Aerial Source: Maxar, 12 April 2022

Figure 3
Aquatic Resources

Meadowview 102
Sacramento County, California



Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation Map

Attachment C. Plant Species Observed within the Study Area

Attachment D. JD Request Form

Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP-1
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.469774 Long: -121.4750118 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Point selected in a minimally vegetated depression that is functioning as a seasonal wetland.			

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u>0</u>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>5</u> x1 = <u>5</u> FACW species <u>1</u> x2 = <u>2</u> FAC species <u>10</u> x3 = <u>30</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>8</u> x5 = <u>40</u> Column Totals: <u>24</u> (A) <u>77</u> (B) Prevalence Index = B/A = <u>3.2</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u>0</u>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Festuca perennis</u>	10	X	FAC	
2. <u>Lythrum hyssopifolia</u>	5	X	OBL	
3. <u>Geranium molle</u>	5	X	UPL	
4. <u>Convolvulus arvensis</u>	1		UPL	
5. <u>Brassica nigra</u>	1		UPL	
6. <u>Juncus balticus</u>	1		FACW	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>23</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
% Bare Ground in Herb Stratum <u>67*</u>	% Cover of Biotic Crust <u>10</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>		

Remarks:* ostrocod exoskeletons present.

SOIL

Sampling Point: DP-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10 YR 4/1	40	10 YR 3/2	20	C	M	clay	
			10 YR 5/2	40	C	M	clay	
4-12	10 YR 4/1	50	10 YR 4/6	5	C	M	clay	
			10 YR 5/2	40	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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☒ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☒ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☒ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:
 Surface Water Present? Yes ☐ No ☒ Depth (inches): _____
 Water Table Present? Yes ☐ No ☒ Depth (inches): _____
 Saturation Present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: No inundation or saturation visible on aerial imagery.

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
Applicant/Owner: City of Sacramento CA Sampling Point: DP-2
Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): Mediterranean California (LRR C) Lat: 38.46978471 Long: -121.4750671 Datum: NAD 83
Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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.)

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: Sacramento County is in a Severe Drought, which is typical of recent rain years. Upland comparison to DP 1.			

Tree Stratum (Plot size: _____)			Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1.	_____	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ 1 (A)		
2.	_____	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ 2 (B)		
3.	_____	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ 50% (A/B)		
4.	_____	_____	_____	_____	_____			
			0	=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)						Prevalence Index Worksheet:		
1.	_____	_____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____		
2.	_____	_____	_____	_____	_____	OBL species	0	x1 = 0
3.	_____	_____	_____	_____	_____	FACW species	5	x2 = 10
4.	_____	_____	_____	_____	_____	FAC species	50	x3 = 150
5.	_____	_____	_____	_____	_____	FACU species	10	x4 = 40
			0	=Total Cover		UPL species	35	x5 = 175
						Column Totals:	100 (A)	375 (B)
						Prevalence Index = B/A = 3.8		
Herb Stratum (Plot size: <u>1 meter²</u>)						Hydrophytic Vegetation Indicators:		
1.	<i>Festuca perennis</i>	_____	50	X	FAC	_____ Dominance Test is >50%		
2.	<i>Juncus balticus</i>	_____	5		FACW	_____ Prevalence Index is $\leq 3.0^1$		
3.	<i>Geranium molle</i>	_____	10		UPL	_____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
4.	<i>Medicago polymorpha</i>	_____	10		FACU	_____ Problematic Hydrophytic Vegetation ¹ (Explain)		
5.	<i>Brassica nigra</i>	_____	20	X	UPL			
6.	<i>Erodium brachycarpum</i>	_____	5		UPL			
7.	<i>Lythrum hyssopifolia</i>	_____	T		OBL			
8.	_____	_____	_____	_____	_____			
			100	=Total Cover				
Woody Vine Stratum (Plot size: _____)						¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
1.	_____	_____	_____	_____	_____			
2.	_____	_____	_____	_____	_____			
				=Total Cover				
% Bare Ground in Herb Stratum 0			% Cover of Biotic Crust 0					
Remarks:						Hydrophytic Vegetation Present? Yes _____ No X _____		

SOIL

Sampling Point: DP-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 4/2	95	10 YR 5/4	5	C	M	Clay	

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.)

☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)
☐ 1 cm Muck (A9) (LRR D)	☒ Depleted Matrix (F3)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)
☐ Sandy Gleyed Matrix (S4)	☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

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

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

Restrictive Layer (if present):

Type: _____
Depth (inches): _____Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☐ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP-3
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.47234711 Long: -121.4741598 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No _____		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years.			

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>1</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>50%</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>45</u> x3 = <u>135</u> FACU species <u>15</u> x4 = <u>60</u> UPL species <u>40</u> x5 = <u>200</u> Column Totals: <u>100</u> (A) <u>395</u> (B) Prevalence Index = B/A = <u>4.0</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 Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Festuca perennis</u>	<u>40</u>	<u>X</u>	<u>FAC</u>	
2. <u>Brassica nigra</u>	<u>30</u>	<u>X</u>	<u>UPL</u>	
3. <u>Medicago polymorpha</u>	<u>10</u>		<u>FACU</u>	
4. <u>Erodium brachycarpum</u>	<u>5</u>		<u>UPL</u>	
5. <u>Stellaria media</u>	<u>5</u>		<u>FACU</u>	
6. <u>Geranium molle</u>	<u>5</u>		<u>UPL</u>	
7. <u>Achyrrachaena mollis</u>	<u>5</u>		<u>FAC</u>	
8. _____	_____	_____	_____	
	<u>100</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
		=Total Cover		
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>		

Remarks:

SOIL

Sampling Point: DP-3

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		
0-15	10 YR 5/2	92	10 YR 3/1	3	C	M	Clay	
			10 YR 5/8	5	C	M	Clay	

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.)**

☐ Histic Solonchale (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☒ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☐ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

No wetland hydrology indicators detected.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 4
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.47267627 Long: -121.4716455 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Mesic depression, but the vegetation criterion is not met here.			

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u>0</u>	<u> </u> =Total Cover		Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>60</u> x3 = <u>180</u> FACU species <u>1</u> x4 = <u>4</u> UPL species <u>31</u> x5 = <u>155</u> Column Totals: <u>92</u> (A) <u>339</u> (B) Prevalence Index = B/A = <u>3.7</u>
<u> </u> =Total Cover				
<u>0</u> =Total Cover				
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u>92</u>	<u> </u> =Total Cover		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
<u>0</u> =Total Cover				
<u>0</u> =Total Cover				
<u>0</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Festuca perennis</u>	30	X	FAC	
2. <u>Brassica nigra</u>	30	X	UPL	
3. <u>Poa annua</u>	10		FAC	
4. <u>Spergularia rubra</u>	10		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. <u>Polygonum aviculare</u>	10		FAC	
6. <u>Erodium brachycarpum</u>	1		UPL	
7. <u>Stellaria media</u>	1		FACU	
8. <u> </u>	<u>92</u>	<u> </u> =Total Cover		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
<u>0</u> =Total Cover				
<u>0</u> =Total Cover				
<u>0</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
% Bare Ground in Herb Stratum <u>20</u>	% Cover of Biotic Crust <u>5</u>			Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>

Remarks:

SOIL

Sampling Point: DP-4

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		
0-15	10 YR 5/2	92	10 YR 3/1	3	C	M	clay	
			10 YR 5/8	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.)**

☐ Histic Sol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☒ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: No inundation or saturation visible on aerial imagery.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 5
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.47277897 Long: -121.4713262 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Representative seasonal wetland.			

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>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 =Total Cover				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>20</u> x1 = <u>20</u> FACW species <u>5</u> x2 = <u>10</u> FAC species <u>45</u> x3 = <u>135</u> FACU species <u>1</u> x4 = <u>4</u> UPL species <u>1</u> x5 = <u>5</u> Column Totals: <u>72</u> (A) <u>174</u> (B) Prevalence Index = B/A = <u>2.4</u>
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 0 =Total Cover				
Herb Stratum (Plot size: <u>1 meter²</u>) 1. <u>Lythrum hyssopifolia</u> 20 X OBL 2. <u>Festuca perennis</u> 10 X FAC 3. <u>Poa annua</u> 10 X FAC 4. <u>Spergularia rubra</u> 10 X FAC 5. <u>Polygonum aviculare</u> 10 X FAC 6. <u>Rumex crispus</u> 5 FAC 7. <u>Ranunculus muricatus</u> 5 FACW 8. <u>Erodium brachycarpum</u> 1 UPL 9. <u>Stellaria media</u> 1 FACU 72 =Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ _____ =Total Cover				
% Bare Ground in Herb Stratum <u>28</u> % Cover of Biotic Crust <u>25</u>				

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0¹
 _____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DP 5

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		
0-15"	10 YR 4/1		10 YR 3/1	5	C	M	Clay	
			5 YR 4/4	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.)**

☐ Histic Solonchale (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☒ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 6
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.4727574 Long: -121.4713754 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Upland comparison to DP 5.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	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. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u>0</u>	<u> </u> =Total Cover		Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>1</u> x1 = <u>1</u> FACW species <u>5</u> x2 = <u>10</u> FAC species <u>20</u> x3 = <u>60</u> FACU species <u>35</u> x4 = <u>140</u> UPL species <u>35</u> x5 = <u>175</u> Column Totals: <u>96</u> (A) <u>386</u> (B) Prevalence Index = B/A = <u>4.0</u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> <u>0</u> =Total Cover				
Herb Stratum (Plot size: <u>1 meter²</u>) 1. <u>Medicago polymorpha</u> <u>30</u> <u>X</u> <u>FACU</u> 2. <u>Brassica nigra</u> <u>30</u> <u>X</u> <u>UPL</u> 3. <u>Polygonum aviculare</u> <u>10</u> <u> </u> <u>FAC</u> 4. <u>Festuca perennis</u> <u>5</u> <u> </u> <u>FAC</u> 5. <u>Juncus balticus</u> <u>5</u> <u> </u> <u>FACW</u> 6. <u>Poa annua</u> <u>5</u> <u> </u> <u>FAC</u> 7. <u>Stellaria media</u> <u>5</u> <u> </u> <u>FACU</u> 8. <u>Erodium brachycarpum</u> <u>5</u> <u> </u> <u>UPL</u> 5. <u>Lythrum hyssopifolia</u> <u>1</u> <u> </u> <u>OBL</u> <u>96</u> =Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> =Total Cover % Bare Ground in Herb Stratum <u>4</u> % Cover of Biotic Crust <u>0</u>				

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: DP-6

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		
0-12	10 YR 4/2	100					clay 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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes _____ No **X**

Remarks:

No hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☐ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No **X** Depth (inches): _____
 Water Table Present? Yes _____ No **X** Depth (inches): _____
 Saturation Present? Yes _____ No **X** Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No **X**

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

Remarks:

No wetland hydrology indicators. Some small soil cracks are present, but they are not of sufficient size to be considered a wetland hydrology indicator.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 7
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): slight concave Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.46935768 Long: -121.4705074 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin silt loam, 0 to 3% slopes 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 <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: Sacramento County is in a Severe Drought, which is typical of recent rain years. Suspect data point due to aerial signature; however, only two of the three wetland criteria are satisfied, and the vegetation was very marginal.			

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>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)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 =Total Cover				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: OBL species <u>1</u> x1 = <u>1</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>7</u> x3 = <u>21</u> FACU species <u>1</u> x4 = <u>4</u> UPL species <u>1</u> x5 = <u>5</u> Column Totals: <u>10</u> (A) <u>31</u> (B) Prevalence Index = B/A = <u>3.1</u>
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____	_____	_____	_____	
0 =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				
1. <u>Poa annua</u>	6	X	FAC	
2. <u>Festuca perennis</u>	1		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Geranium dissectum</u>	1		UPL	
4. <u>Lythrum hyssopifolia</u>	1		OBL	
5. <u>Stellaria media</u>	1		FACU	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
8. _____	_____	_____	_____	
10 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>90</u>	% Cover of Biotic Crust <u>5</u>			
Remarks: Extremely marginal and quite sparse hydrophytic vegetation				

SOIL

Sampling Point: DP-7

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	10 YR 4/3	100					clay loam	
3-8	10 YR 5/6	100					sandy clay	Refusal at 8"

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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes _____ No **X**

Remarks:

No hydric soil indicators detected.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No **X** Depth (inches): _____

Water Table Present? Yes _____ No **X** Depth (inches): _____

Saturation Present? Yes _____ No **X** Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes **X** No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 8
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.46874911 Long: -121.4700326 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Data point in the drier fringes of a currently inundated wetland. Wetland as a whole is currently approximately 60% inundated.			

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>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)
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>90</u> x3 = <u>270</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>4</u> x5 = <u>20</u> Column Totals: <u>94</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>3.1</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 Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Festuca perennis</u>	<u>90</u>	<u>X</u>	<u>FAC</u>	
2. <u>Geranium molle</u>	<u>2</u>		<u>UPL</u>	
3. <u>Vicia villosa</u>	<u>2</u>		<u>UPL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>94</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>6</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP-8

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		
0-16	10 YR 4/1	100					clay	

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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes ☒ No ☐

Remarks:

Presumed hydric based on presence of hydrophytic vegetation and wetland hydrology, particularly the presence of soil saturation at a time when soils in many of the on-site wetlands are dry.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☐ Biotic Crust (B12)
☒ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☒ No ☐ Depth (inches): 6"

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 02/15/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 9
 Investigator(s): Bonnie Peterson/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.46876899 Long: -121.4700608 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Upland comparison to DP 8. This location is stepped up from the adjacent wetland by about 1 ft.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	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)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<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>71</u> x3 = <u>213</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>20</u> x5 = <u>100</u> Column Totals: <u>91</u> (A) <u>313</u> (B) Prevalence Index = B/A = <u>3.4</u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Festuca perennis</u>	<u>70</u>	<u>X</u>	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Brassica nigra</u>	<u>10</u>	<u> </u>	<u>UPL</u>	
3. <u>Vicia villosa</u>	<u>5</u>	<u> </u>	<u>UPL</u>	
4. <u>Geranium molle</u>	<u>5</u>	<u> </u>	<u>UPL</u>	
5. <u>Rumex crispus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u>91</u>	=Total Cover		
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
=Total Cover				
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP-9

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		
0-16	10 YR 4/1	100					clay	

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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes _____ No **X**

Remarks:

No hydric soil indicators

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☐ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No **X** Depth (inches): _____
 Water Table Present? Yes _____ No **X** Depth (inches): _____
 Saturation Present? Yes _____ No **X** Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No **X**

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

Remarks:

No wetland hydrology indicators

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Meadowview Safe Parking City/County: Sacramento/Sacramento County Sampling Date: 03/21/22
 Applicant/Owner: City of Sacramento CA Sampling Point: DP 10
 Investigator(s): Daria Snider/Madrone Ecological Section, Township, Range: Section 7, Township 7 North, Range 5 East
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.46697923 Long: -121.4744285 Datum: NAD 83
 Soil Map Unit Name: 152 - Galt clay, 0 to 1% slopes, MLRA 17 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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: Sacramento County is in a Severe Drought, which is typical of recent rain years. Representative seasonal wetland.		

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>3</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>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 =Total Cover				Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>10</u> x1 = <u>10</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>35</u> x3 = <u>105</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>45</u> (A) <u>115</u> (B) Prevalence Index = B/A = <u>2.6</u>
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 0 =Total Cover				
Herb Stratum (Plot size: <u>1 meter²</u>) 1. <u>Hodeum marinum</u> 20 X FAC 2. <u>Lythrum hyssopifolia</u> 10 X OBL 3. <u>Rumex pulcher</u> 10 X FAC 4. <u>Veronica peregrina</u> 5 FAC 5. <u>Plagiobothrys stipitatus ssp. micranthus</u> Trace FACW 6. <u>Juncus bufonius</u> Trace FACW 7. <u>Lasthenia glaberrima</u> Trace OBL 8. <u>Crassula aquatica</u> Trace OBL 45 =Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ =Total Cover				
% Bare Ground in Herb Stratum <u>55</u> % Cover of Biotic Crust <u>30</u>				

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0¹
 _____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

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		
0-3"	10 YR 2.5/1	95	10 YR 3/3	5	C	PL	clay	Refusal at 3"

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.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) (LRR C)	☐ Depleted Matrix (F3)
☐ 1 cm Muck (A9) (LRR D)	☒ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)	☐ Vernal Pools (F9)
☐ Sandy Gleyed Matrix (S4)	

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**Type: _____
Depth (inches): _____**Hydric Soil Present?** Yes ☒ No ☐

Remarks: Thick oak roots at 8"

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☒ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☒ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Attachment B

Aquatic Resources Delineation Map



AQUATIC RESOURCE FEATURES		
WETLANDS		
Seasonal Wetland		
Feature ID	Acreage	
SW-1	0.101	
SW-2	0.526	
SW-3	0.003	
SW-4	0.743	
SW-5	0.073	
SW-6	0.113	
SW-7	0.048	
SW-8	0.235	
SW-9	0.042	
SW-10	0.199	
SW-11	0.047	
SW-12	0.005	
SW-13	0.009	
SW-14	0.089	
SW-15	0.022	
SW-16	0.598	
SW-17	0.100	
SW-18	0.082	
SW-19	0.458	
SW-20	1.336	
SW-21	0.051	
SW-22	0.802	
SW-23	0.010	
SW-24	0.257	
SW-25	0.047	
SW-26	0.119	
SW-27	0.203	
SW-28	0.052	
SW-29	0.443	
SW-30	0.093	
SW-31	0.008	
SW-32	0.007	
	6.921	
Total Wetlands: 6.921 acres		
OTHER WATERS		
Ditch		
Feature ID	Acreage	Linear Feet
D-1	0.243	409
	0.243	409
Pond		
Feature ID	Acreage	
P-1	3.311	
	3.311	
Total Other Waters:	3.554	409
Aquatic Resources Total: 10.475 acres		

Notes:
Map Scale: 1 inch = 100 feet
Coordinate System: NAD 1983 State Plane California II
Datum: NAD83 (North American Datum 1983)
Projection: Lambert Conformal Conic
Vertical Data: NAVD88 (North American Vertical Datum 1988)
Aerial Base: Maxar
Aerial Base Flown: 12 April 2022.
Topographic Contours: USGS NED 1/3 arc-second Contours for Sacramento W, California. 1 October 2018

Delineation Performed by: B. Peterson, D. Snider
Map Prepared by: N. Bente
Date Map Prepared: 27 March 2023
Definitions:
NAD = North American Datum
NAVD = North American Vertical Datum
NED = National Elevation Dataset
USGS = United State Geological Survey

Prepared For:
City of Sacramento
915 I Street
Sacramento, CA 95814

Aquatic Resources (10.475 acres)
Wetlands (6.921 acres)
Seasonal Wetland (6.921 acres)
Other Waters (3.554 acres)
Ditch (0.243 acre)
Pond (3.311 acres)

Aquatic Resources Delineation

Meadowview 102
Sacramento County, California

MADRONE
ECOLOGICAL
CONSULTING
8421 Auburn Boulevard, Suite 248
Citrus Heights, California 95620
(916) 822-3230 | www.madroneco.com

Attachment C

Plant Species Observed within the Study Area

**Plant Species Observed within the
Meadowview 102 Study Area
2 January, 8 and 15 February, 21 March, and 4 and 5 April 2022**

Species Name	Common Name	Wetland Indicator
		Status
<i>Abutilon theophrasti</i>	Velvet-leaf	UPL
<i>Achyrachaena mollis</i>	Blow wives	FAC
<i>Acmispon wrangelianus</i>	Chilean bird's foot trefoil	UPL
<i>Amsinckia menziesii</i>	Common fiddleneck	UPL
<i>Anthemis arvensis</i>	Corn chamomile	UPL
<i>Avena barbata</i>	Slender wild oat	UPL
<i>Avena fatua</i>	Wild oat	UPL
<i>Brassica nigra</i>	Black mustard	UPL
<i>Bromus diandrus</i>	Ripgut grass	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Calandrinia menziesii</i>	Red maids	UPL
<i>Capsella bursa-pastoris</i>	Shepherd's purse	FACU
<i>Carduus pycnocephalus subsp. pycnocephalus</i>	Italian thistle	UPL
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Crassula aquatica</i>	Water pygmyweed	OBL
<i>Dittrichia graveolens</i>	Stinkwort	UPL
<i>Downingia sp.</i>	Calico flower	OBL
<i>Epilobium brachycarpum</i>	Willowherb	FAC
<i>Epilobium densiflorum</i>	Dense flowered boisduvalia	FACW
<i>Erodium botrys</i>	Filaree	FACU
<i>Erodium brachycarpum</i>	filaree	UPL
<i>Erodium cicutarium</i>	Redstem filaree	UPL
<i>Erodium moschatum</i>	Greenstem filaree	UPL
<i>Eucalyptus globulus</i>	Blue gum	UPL
<i>Festuca bromoides</i>	Brome fescue	FACU
<i>Festuca myuros</i>	Rattail sixweeks grass	FACU
<i>Festuca perennis</i>	Rye grass	FAC
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Geranium molle</i>	Soft geranium	UPL
<i>Holocarpha virgata subsp. virgata</i>	Slender tarweed	UPL
<i>Hordeum marinum subsp. gussoneanum</i>	Mediterranean barley	FAC
<i>Hordeum murinum subsp. murinum</i>	Barley	FACU
<i>Hypochaeris glabra</i>	Smooth cat's-ear	UPL
<i>Juncus balticus</i>	Baltic rush	FACW
<i>Juncus bufonius</i>	Toad rush	FACW
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Lasthenia glaberrima</i>	Smooth goldfields	OBL

Species Name	Common Name	Wetland Indicator
		Status
<i>Lepidium nitidum</i>	Shining peppergrass	FAC
<i>Limnanthes alba</i>	Meadowfoam	FACW
<i>Logfia gallica</i>	Daggerleaf cottonrose	UPL
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lysimachia arvensis</i>	Scarlet pimpernel	FAC
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Malvella leprosa</i>	Alkali-mallow, white-weed	FACU
<i>Medicago polymorpha</i>	California burclover	FACU
<i>Phalaris paradoxa</i>	Hood canary grass	FAC
<i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	Slender popcornflower	FACW
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Platanus racemosa</i>	Western sycamore	FAC
<i>Poa annua</i>	Annual blue grass	FAC
<i>Polygonum aviculare</i>	Knotweed, knotgrass	FAC
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont cottonwood	FAC
<i>Ranunculus bonariensis</i> var. <i>trisepalus</i>	Carter's buttercup	OBL
<i>Ranunculus muricatus</i>	Spiny-fruit buttercup	FACW
<i>Raphanus sativus</i>	Radish	UPL
<i>Rumex crispus</i>	Curly dock	FAC
<i>Rumex pulcher</i>	Fiddle dock	FAC
<i>Salix species</i>	Willow	
<i>Senecio vulgaris</i>	Common groundsel	FACU
<i>Silybum marianum</i>	Milk thistle	UPL
<i>Solanum nigrum</i>	Black nightshade	FACU
<i>Spergula arvensis</i>	Corn spurrey	UPL
<i>Spergularia rubra</i>	Red sand-spurrey	FAC
<i>Stellaria media</i>	Common chickweed	FACU
<i>Stipa miliacea</i> var. <i>miliacea</i>	Smilo grass	UPL
<i>Veronica peregrina</i> subsp. <i>xalapensis</i>	Purslane speedwell	FAC
<i>Vicia villosa</i> subsp. <i>varia</i>	Winter vetch	UPL

Attachment D

JD Request Form

U.S. Army Corps of Engineers (USACE)
REQUEST FOR JURISDICTIONAL DETERMINATION (JD)

For use of this form, see Sec 404 CWA, Sec 10 RHA, Sec 103 MPRSA; the proponent agency is CECW-COR.

Form Approved -
OMB No. 0710-0024
Expires 2024-04-30

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332.

Principal Purpose The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the review area that are or that may be subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice or FOIA request as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in any approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure Submission of requested information is voluntary, however, if the information is not provided there may be some delay in processing your request. Failure to provide this information will not result in an adverse action.
System of Record Notice (SORN): The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website:
<http://dpcl.dod.mil/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx>

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0024, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. To (*District Name*): Sacramento District

2. I am requesting a JD on property located at (*Street Address*): N/A

City/Township/Parish: Sacramento

County: Sacramento

State: California

Acreage of Parcel/Review Area for JD: 102

Section: 7 and 18

Township: 7 North

Range: 5 East

Latitude (*decimal degrees*): 38.470032 °

Longitude (*decimal degrees*): -121.47237 °

(For linear projects, please include the center point of the proposed alignment.)

3. Please attach a survey/plat map and vicinity map identifying location and review area for the JD.

4. ☒ I currently own this property.

☐ I plan to purchase this property.

☐ I am an agent/consultant acting on behalf of the requester.

☐ Other (*please explain*):

5. Reason for request: (check as many as applicable)

- ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
- ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
- ☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
- ☐ A Corps JD is required in order to obtain my local/state authorization.
- ☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- ☐ I believe that the site may be comprised entirely of dry land.
- ☒ Other:

I intend to construct/develop a project or perform activities on this parcel, and believe that Corps jurisdiction does not exist on the parcel. I need to know the extent of Corps jurisdiction in order to determine which regulatory process to follow.

6. Type of determination being requested:

- ☒ I am requesting an approved JD.
- ☐ I am requesting a preliminary JD.
- ☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
- ☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

7. Typed or Printed Name: Tom Pace

Daytime Phone No.: 916-808-2691

Company Name: City of Sacramento, Planning Division

Email Address: tpace@cityofsacramento.org

Address: 300 Richards Blvd, 3rd Floor
Sacramento, CA 95811

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

Signature: *Thomas S. Pace*

Date: Nov 18, 2024