



DRAFT

Aquatic Resources Delineation Report

Wheatland Regional Sewer Pipeline

Wheatland, Yuba County, California

August 2022



Prepared for:

City of Wheatland
Community Development Department, Planning Division
111 C Street
Wheatland, California 95692

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1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Wheatland Regional Sewer Pipeline Project Area (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The Study Area alignment comprises approximately 232 acres and is generally located through portions of the City of Wheatland (south on Malone Avenue to east of State Route 65) and unincorporated Yuba County (north on Jasper Lane, west through farmland, and north towards South Beale Road) (**Figure 1**). The Study Area begins in the south west at about latitude 39.007522 north and longitude -121.422697 west and ends in the north at about latitude 39.043344 north and longitude -121.476238 west. The Study Area is located within unsectioned portions of Township 13 North, Range 5 East and Township 14 North, Ranges 4 and 5 East (MDB&M) of the "Wheatland, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2022).

1.1 Contact Information

The Study Area is an alignment that crosses numerous private parcels, and as a result, there are many property owners within the Study Area. We can provide a list of the property owners upon request.

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2.0 METHODOLOGY

Madrone biologists Daria Snider and Matt Shaffer conducted a delineation of aquatic resources within the Study Area on 28, 29, and 30 June and 27 July 2021. Water features and data points were mapped in the majority of the Study Area 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. Some portions of the Study Area were inaccessible during the aquatic resource delineation. Because access to these areas was not available, aquatic resources in these areas were mapped using a combination of aerial photography interpretation and viewing from adjacent accessible areas. 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 (Maxar 2021).

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. 2021) 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 within and to the north and northeast of the City of Wheatland. The southern portion of the Study Area primarily runs along 6th Street, Spenceville Road, and Jasper Lane between urban and rural residences and agricultural fields (**Figure 3**). In the northern portion of the Study Area, the alignment runs west along farm roads through orchards and other agricultural fields and incorporates annual brome grassland and irrigated pastures. Ruderal and disturbed areas occur along the edges of fields and roadways.

The bulk of the aquatic resources mapped within the Study Area are roadside ditches along the roads, and irrigation ditches that service the agricultural fields in the area. Seasonal wetlands and seasonal wetland swales are present in the annual brome grasslands and hay fields. The Study Area crosses two major intermittent drainages: Dry Creek on Jasper Lane, and Best Slough in the northern portion of the Study Area.

The Study Area is extremely flat, with lower elevations along the Best Slough and Dry Creek channels. Elevations range from about 80 feet above mean sea level at Pump Station 1 to a high of about 110 feet at the Spenceville Road/Jasper Lane intersection near Pump Station 2. From Pump Station 2, the elevation gradually drops to a low of about 75 feet at Best Slough.

Surrounding land uses are largely consistent with land uses within the Study Area (rural residential and agriculture).

3.1 Terrestrial Vegetation Communities

3.1.1 Annual Brome Grassland

Annual brome grasslands occur primarily in the northern portion of the Study Area. Dominant plant species in this community includes soft brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), medusahead grass (*Elymus caput-medusae*), wild oat (*Avena fatua*), perennial ryegrass (*Festuca perennis*), brome fescue (*F. bromoides*), rattail fescue (*F. myuros*), filaree (*Erodium botrys*), rose clover (*Trifolium hirtum*), and hairy hawkbit (*Leontodon saxatilis*).

3.1.2 Hay Field

Hay fields occur in the southern portion of the Study Area. The hay fields are similar to the annual brome grasslands but are dominated by perennial ryegrass and are mowed regularly.

3.1.3 Canarygrass Grassland

An extensive floodplain area south of Best Slough in the northern portion of the Study Area is a canarygrass grassland. This area supports approximately 70% cover of Harding grass (*Phalaris aquatica*). Perennial ryegrass and broad-leaved pepperweed (*Lepidium latifolium*) co-dominate this area, and coyote brush (*Baccharis pilularis*) is scattered throughout. The density of these perennial species appears to preclude almost any other vegetation from establishing in this area.

3.1.4 Armenian Blackberry Bramble

The Armenian blackberry (*Rubus armeniacus*) brambles are monocultures of Armenian blackberry, as this species forms dense patches that shade out all other vegetation. These brambles occur primarily in the northern portion of the Study Area.

3.1.5 Eucalyptus Woodland

A Eucalyptus woodland occurs along the eastern edge of an irrigation ditch in the northern portion of the Study Area. This woodland is a monoculture of red gum (*Eucalyptus camaldulensis*), as these trees produce chemicals that have allelopathic effects on other plant species.

3.1.6 Riparian Woodland

Riparian woodland occurs along the edges of portions of Best Slough and Dry Creek. This vegetation community is dominated by Oregon ash (*Fraxinus latifolia*), Fremont's cottonwood (*Populus fremontii*) and buttonwillow (*Cephalanthus occidentalis*). Other common plant species in this community are black willow (*Salix gooddingii*), poison-oak (*Toxicodendron diversilobum*), Armenian blackberry, and South American vervain (*Verbena bonariensis*). This community is considered a Sensitive Natural Community by CDFW (CDFW 2018).

3.1.7 Sandbar Willow Riparian Scrub

Sandbar willow (*Salix exigua*) riparian scrub occurs along the edges of some of the irrigation ditches in the northern portion of the Study Area. This community is almost entirely a monoculture of sandbar willow, but other plants common in the adjacent ditches also occur, including tall nutsedge (*Cyperus eragrostis*) and slender willowherb (*Epilobium ciliatum*).

3.1.8 Valley Oak Woodland

A few stands of Valley oak (*Quercus lobata*) woodland have been mapped within the Study Area. These occur both as narrow strips along the edges of roadways and as larger stands in more natural settings. This community is typically mature Valley oak trees with an annual brome grassland understory, with an occasional shrub layer and very little herbaceous vegetation. Common shrubs observed in the Valley oak

woodland within the Study Area include California rose (*Rosa californica*), olive (*Olea europaea*), and Armenian blackberry (*Rubus armeniacus*). This community is considered a Sensitive Natural Community by CDFW (CDFW 2022).

3.1.9 High Intensity Agriculture

A substantial portion of the Study Area is comprised of high intensity agricultural crops, including rice fields, irrigated field crops, orchards, and disced fields. Rice fields are primarily occupied by rice (*Oryza sativa*), but also support a number of marsh species such as broad-leaved arrowhead (*Sagittaria latifolia*) and blue mud plantain (*Heteranthera limosa*), especially around the edges. The irrigated field crops were freshly planted in grass that was unidentifiable at the time of the 2021 survey, and aerial photograph review indicates that these fields are regularly irrigated. They appear heavily maintained and likely support a monoculture of the crop plant. The orchards within the Study Areas support almost exclusively the tree crop being grown with very little herbaceous weedy vegetation in the understory. The predominant tree crop is European plum (*Prunus domestica*), but there are also some English walnut (*Juglans regia*) orchards. Quite a few fields in the northern portion of the Study Area were disced and being graded during the field survey. During a subsequent survey, it appeared that these fields were being prepared to be planted with a tree crop, but no planting had occurred. All of these high intensity agricultural crops are heavily maintained, and almost entirely comprised of cultivated non-native plants.

3.1.10 Irrigated Pasture

The irrigated pastures are fields grazed by horses and cattle that are comprised of a variety of facultative plant species, such as perennial ryegrass (*Festuca perennis*), Baltic rush (*Juncus balticus*), and reed fescue (*Festuca arundinacea*).

3.1.11 Ruderal

Ruderal areas are areas dominated primarily by forbs that occur largely in the unmaintained areas adjacent to agricultural fields or roadways. Dominant plant species in the ruderal areas include Russian thistle (*Salsola tragus*), bristly ox-tongue (*Helminthotheca echioides*), cheese weed (*Malva neglecta*), toothpick weed (*Ammi visnaga*), panicked willow-herb (*Epilobium brachycarpum*), black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), prickly wild lettuce (*Lactuca serriola*), and grass species typical of the annual brome grasslands.

3.1.12 Developed

Developed areas include areas mapped as Urban, Rural Residential, and Dirt Roads. These are areas of predominantly impermeable surfaces (pavement, buildings, etc.), regularly maintained dirt roadways, or areas of maintained landscaping adjacent to residential or commercial/industrial development. These areas generally do not support special-status species habitat, apart from foraging perches for raptors or possibly but unlikely, nesting in landscape trees.

3.2 Hydrology

Surface water within the Study Area is driven by a combination of rainfall and stormwater runoff and agricultural irrigation. Water generally drains to either Best Slough or Dry Creek, and then both drain west to their connection with the Bear River. The majority of the Study Area is located in the *Grasshopper Slough-Dry Creek Watershed*, but the northern portion is located within Best Slough-Bear River Watershed. Both of these are part of the larger *Upper Bear River Watershed* (HUC 18020126) (USGS 1984).

Note that the Study Area crosses the historic channel of Grasshopper Slough along Spenceville Road, but no drainage has been mapped there. There is a substantial depression in this area, and culverts that run under the road, but no evidence of any water flow is present, except for a narrow drainage ditch that appears to drain flow from the adjacent field into the historic channel. It appears that the water that used to flow down this channel has since been diverted for irrigation purposes approximately one mile upstream.

3.3 Soils

The Natural Resources Conservation Service identifies six soil mapping units within the Study Area (NRCS 2022) (**Figure 2**): Hollenbeck silty clay loam, 0 to 1 percent slopes (131); Conejo loam, 0 to 1 percent slopes, MLRA 17 (141); Conejo loam, 0 to 2 percent slopes, MLRA 17 (142); Horst silt loam, 0 to 2 percent slopes (170); Redding gravelly loam, 0 to 8 percent slopes, MLRA 17 (208); and San Joaquin loam, 0 to 1 percent slopes (214). None of these soil units consist of hydric components, but four units (131, 170, 208, and 214) contain hydric inclusions (NRCS 2022).

3.4 Driving Directions

The Study Area is located along various roads in Wheatland, California. To access the Study Area from Sacramento, drive east on I-80 towards Roseville, and then head north on Highway 65. Highway 65 runs through Wheatland, and portions of the Study Area can be accessed by taking Main Street in either direction, or by continuing on Highway 65 through town to South Beale Road; the Study Area is adjacent to the eastern edge of the Highway in this area.

4.0 RESULTS

A total of approximately 11.121 acres of aquatic resources were delineated within the Study Area, including approximately 4.226 acres of wetlands and 6.895 acres of other waters. A summary of the aquatic resources delineated within the Study Area and their acreages is shown in **Table 1** below.

Table 1. Aquatic Resources Delineated within the Study Area

Aquatic Resource Type		Acreage
Wetlands		
Seasonal Marsh		0.199
Seasonal Wetland		1.170

Table 1. Aquatic Resources Delineated within the Study Area

Aquatic Resource Type	Acreage
Seasonal Wetland Swale	1.935
Vernal Pool	0.922
<i>Other Waters</i>	
Perennial Creek	1.624
Drainage Ditch	2.016
Irrigation Ditch	0.531
Roadside Ditch	2.724
TOTAL	11.121

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are provided in **Attachment B**, and a list of all 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 **Attachment B** will be digitally conveyed with this report. Each of the feature types are described below.

4.1 Vernal Pool

Vernal pools are topographic basins that are underlain with an impermeable or semi-permeable hardpan or duripan layer. They inundate during the wet season, and typically dry by late spring and remain dry through the summer months. Vernal pools are differentiated from depressional seasonal wetlands based upon the predominance of vernal pool endemic plant species. The vernal pools on-site were largely dominated by wavy-stemmed popcorn flower (*Plagiobothrys undulatus*), smooth goldfields (*Lasthenia glabberima*), Great Valley coyote-thistle (*Eryngium castrense*), and Mediterranean beard grass (*Polypogon maritimus*). Other common plant species within the vernal pools includes hyssop loosestrife (*Lythrum hyssopifolia*), purslane speedwell (*Veronica xalapensis ssp. peregrina*), creeping spikerush (*Eleocharis macrostachya*), Fitch's spikeweed (*Centromadia fitchii*), Mediterranean barley, perennial ryegrass, and hairy hawkbit.

Vernal pools (VPs) 1-5 appear largely isolated, but given sufficient rain could potentially overflow sufficient to drain to Drainage Ditch (DD) 7 or DD 8, which is a tributary of Best Slough. Similarly, VPs 6-8 could overflow into SWS 4, which is tributary to DD 6, which is a tributary of Best Slough. As noted above, Best Slough is a tributary to the Bear River, which is tributary to the navigable Feather River. VP 9 occurs in the southern portion of the Study Area and is quite isolated on the top of a small hill in the middle of a hay field to the north of Grasshopper Slough. Several data points were collected within the vernal pools, and all exhibited hydrophytic vegetation, hydric soils, and wetland hydrology.

4.2 Seasonal Wetland

Seasonal wetlands are depressional wetlands that pond water seasonally. These features are often topographically and hydrologically similar to vernal pools, but have a short hydroperiod, and as a result,

support a slightly different plant community that is not characterized by a dominance of vernal pool endemics. The seasonal wetlands within the Study Area are shallow depressional wetlands that are dominated by facultative grasses and forbs characteristic of disturbed areas, including perennial ryegrass, Mediterranean barley, toad rush (*Juncus bufonius*), hyssop loosestrife, Great Valley coyote-thistle, and shining peppergrass (*Lepidium nitidum*).

Seasonal wetlands (SWs) 1-22 appear largely isolated but given sufficient rain could potentially overflow sufficient to drain to various on-site and off-site roadside and drainage ditches, all of which are tributary to Best Slough. SWs 23-25 could theoretically overflow directly into Best Slough. As noted above, Best Slough is a tributary to the Bear River, which is tributary to the navigable Feather River. SW 26 also appears to be largely isolated, but given sufficient rain could potentially overflow sufficient to drain into Roadside Ditch (RD 28). RD 28 also appears largely isolated, but in such a rain event, it could be tributary to Grasshopper Slough through RD 29. As noted above, Grasshopper Slough is a tributary to the Bear River, which is tributary to the navigable Feather River. Several data points were collected within the vernal pools, and all exhibited hydrophytic vegetation, hydric soils, and wetland hydrology.

4.3 Seasonal Wetland Swale

Seasonal wetland swales are sloping, linear seasonal wetlands that convey storm water runoff, and may detain it for short periods of time. Vegetation within the swales is the same as that found within the depressional seasonal wetlands on-site.

Seasonal wetland swale (SWS) 1 drains south into SW-3, which may overflow into DDs 2, 3, and 4 during heavy rain years. DDs 3 and 4 and SWSs 2 and 3 likely drain southwest across Highway 65 into an off-site ditch. SWSs 4-7 drain west into DD 6. Both DD 6 and the offsite ditches are tributary to Best Slough. As noted above, Best Slough is a tributary to the Bear River, which is tributary to the navigable Feather River. Several Data Points were collected within the seasonal wetland swales, and they all contained hydrophytic vegetation, soils, and wetland hydrology.

4.4 Seasonal Marsh

Two seasonal marshes totaling about 0.20 acre were mapped within the Study Area. Marsh 1 is adjacent to DD 6, which follows and abuts a section of railroad track at the edge of an irrigated pasture. Marsh 2 is within an area of canarygrass grassland that is adjacent to a dirt road that travels between an established orchard and the grassland. These marsh features are dominated by perennial wetland plant species such as Baltic rush (*Juncus balticus*), tall nutsedge (*Cyperus eragrostis*), creeping spikerush, and smartweed (*Persicaria* species).

As noted above, Marsh 1 is adjacent to DD 6, which is tributary to Best Slough. Marsh 2 is located in an apparent oxbow cutoff of Best Slough and could conceivably overflow into Best Slough during extreme rain events. As noted above, Best Slough is a tributary to the Bear River, which is tributary to the navigable Feather River.

4.5 Perennial Creek

Two perennial creeks pass through the Study Area. These are Best Slough near the northern end of the pipeline alignment and Dry Creek where the creek crosses under Jasper Lane. The perennial creeks are primarily unvegetated within the channel due to the depth of the water, but aquatic species, such as parrot's feather (*Myriophyllum aquaticum*), pond weed (*Potamogeton* species), and water primrose (*Ludwigia peploides*) occur sporadically. The lower banks support a diverse suite of perennial hydrophytes, such as rice cutgrass (*Leersia oryzoides*), smartweed, Australian rush (*Juncus usitatus*), Santa Barbara sedge (*Carex barbarae*), and dallisgrass (*Paspalum dilatatum*). Portions of the upper banks support the riparian woodland vegetation community described in Section 3.1.6 above. The two creeks appear to be perennial, although flows may cease in late summer during extremely dry years.

Both Best Slough and Dry Creek drain to the Bear River, which is tributary to the navigable Feather River, as previously described. The creeks were mapped at the OHWM, which was determined based on sediment sorting, extent of vegetation, and topographic breaks.

4.6 Ditches

Three types of ditches occur within the Study Area. These include several segments of drainage ditch (about 2.02 acres total) that convey runoff from developed and agricultural areas; about 0.53 acre of irrigation ditches that convey irrigation water to local farming operations; and about 2.72 acres of roadside ditches that convey stormwater runoff along paved roadways. The roadside ditches are either unvegetated or occupied by weedy ruderal vegetation; these features are ephemeral and convey flow only during and immediately following rain events. The irrigation ditches are mostly unvegetated within the channel as there are either dry (when not conveying flow to fields) or full of several feet of water in the summer when they are conveying flow to the fields. The edges of the irrigation channels support weedy wetland vegetation, such as tall nutsedge, dallisgrass, willowherb (*Epilobium brachycarpum*), and smartweed. The drainage ditches drain both agricultural runoff and stormwater, and they are generally vegetated by marshy vegetation, such as creeping spikerush (*Eleocharis macrostachya*) and cattails (*Typha latifolia*), and bordered by Fremont's cottonwood, black willow (*Salix gooddingii*) and South American vervain (*Verbena bonariensis*).

The ditches were mapped at the OHWM, which was determined based on sediment sorting, extent of adjacent vegetation, extent of scour, and topographic breaks.

5.0 CONCLUSION

The 11.121 acres of aquatic resources mapped on the site may be jurisdictional, and the applicant is requesting a Preliminary Jurisdictional Determination for the Aquatic Resources Delineation Map of the Study Area (**Attachment B**). A JD request form is attached in **Attachment D**. A signed statement providing USACE staff accompanied access to the accessible portions of the Study Area is included as **Attachment E**.

6.0 REFERENCES

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Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources

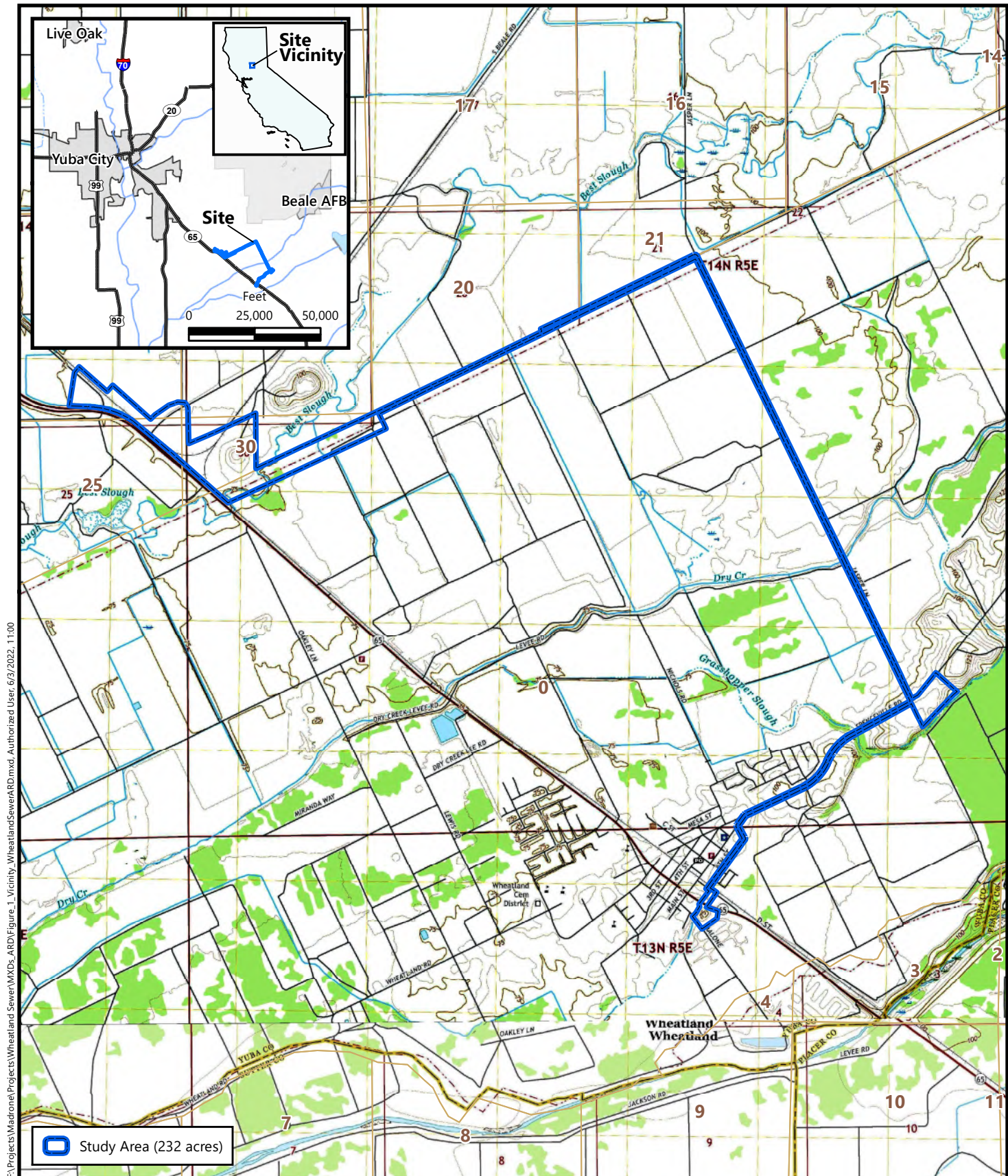
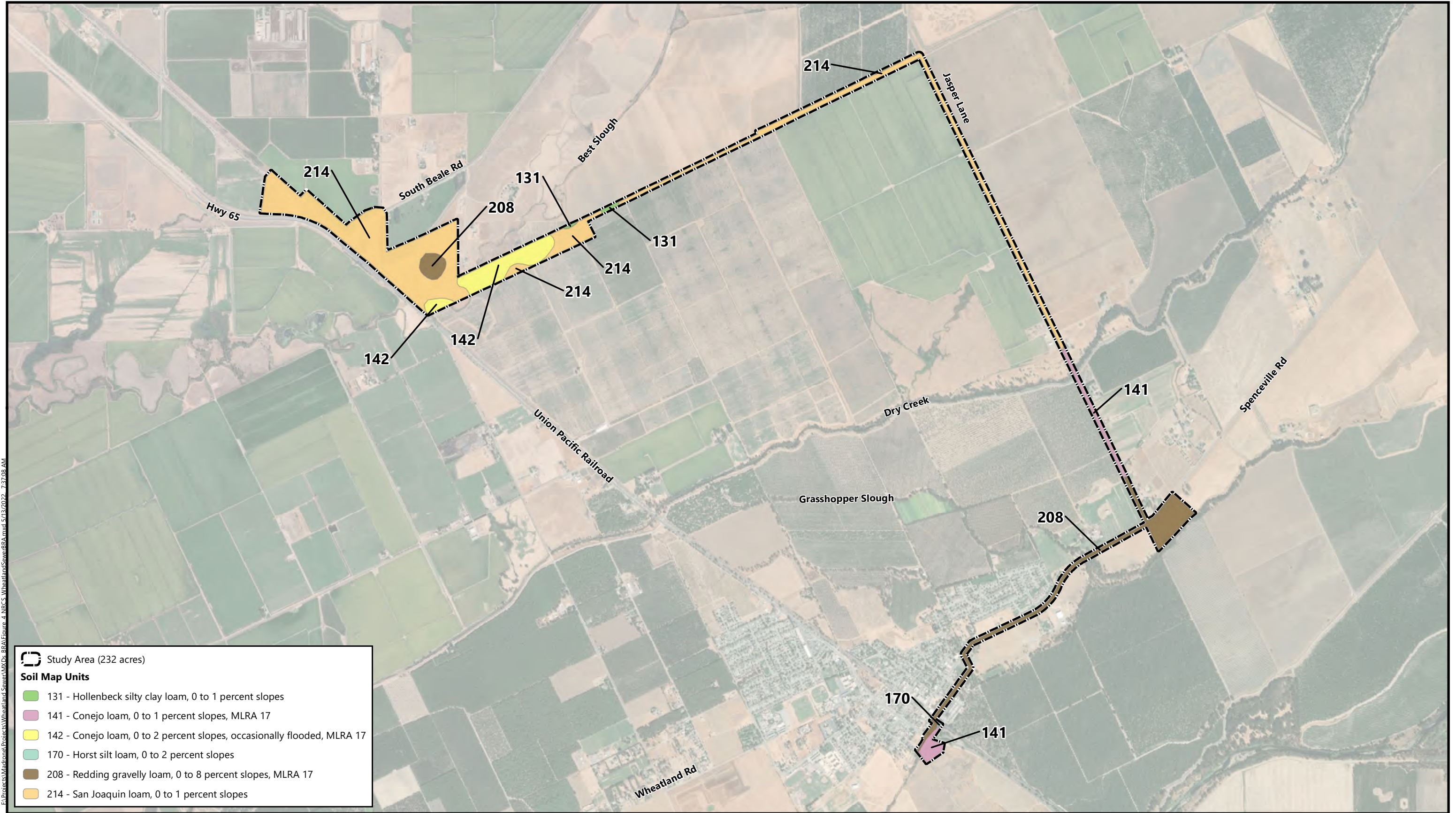


Figure 1
Site and Vicinity

Source: United States Geologic Survey, 2022
 "Wheatland, California" 7.5-Minute Topographic Quadrangle
 Section 24 and 25, Township 14 North, Range 4 East; and
 Section 19 and 30, Township 14 North, Range 5 East, MDB&M
 Longitude -121.448693, Latitude 39.037041

Wheatland Regional Sewer
 Yuba County, California



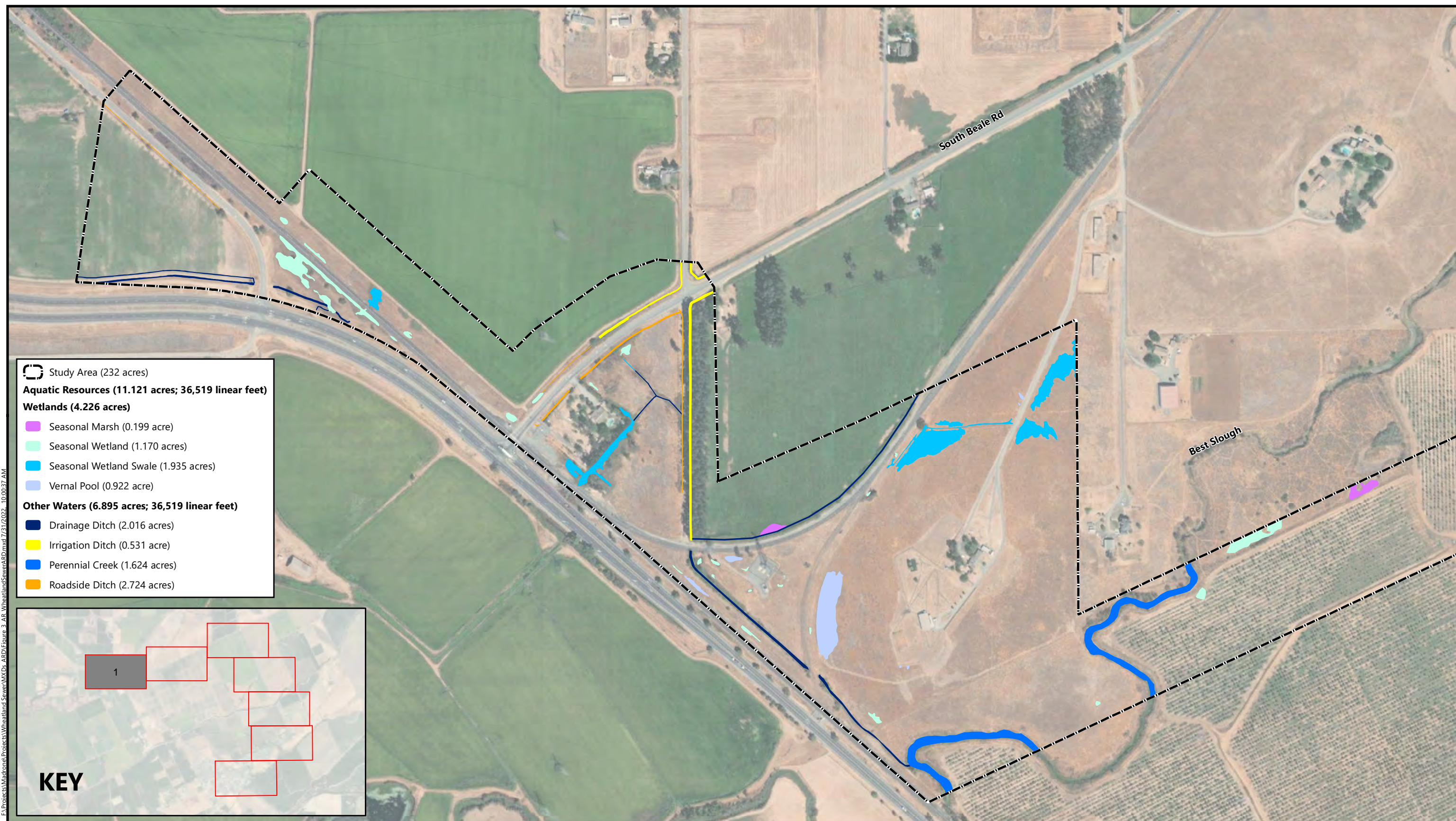


Soil Survey Source: USDA, Soil Conservation Service.
Aerial Source: Maxar, 22 October 2020

Figure 2
Natural Resources Conservation
Service Soils

Wheatland Regional Sewer
Yuba County, California

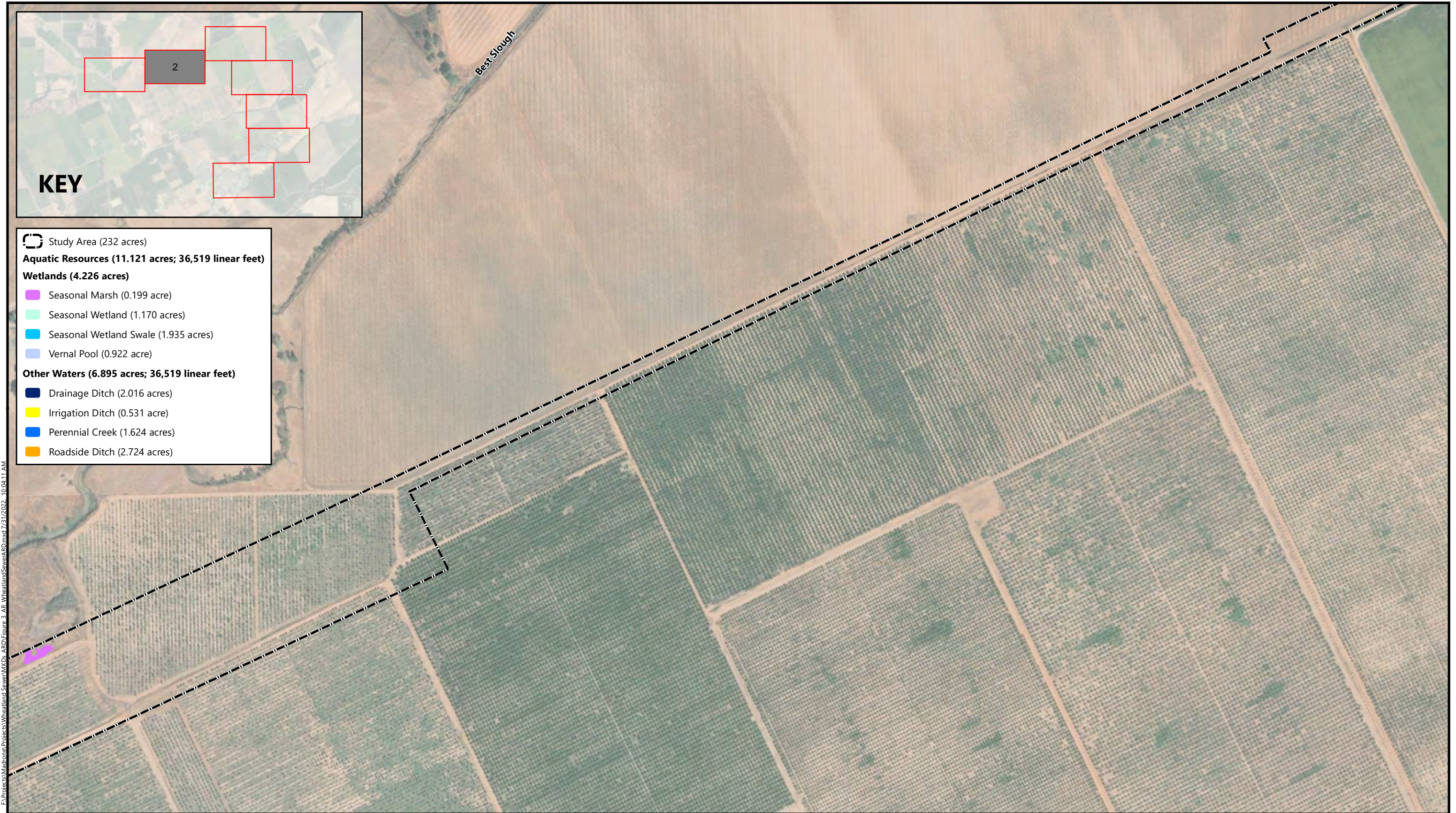





 Feet
 0 200 400

Figure 3 Aquatic Resources

Wheatland Regional Sewer
Yuba County, California



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Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California





Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California





Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California



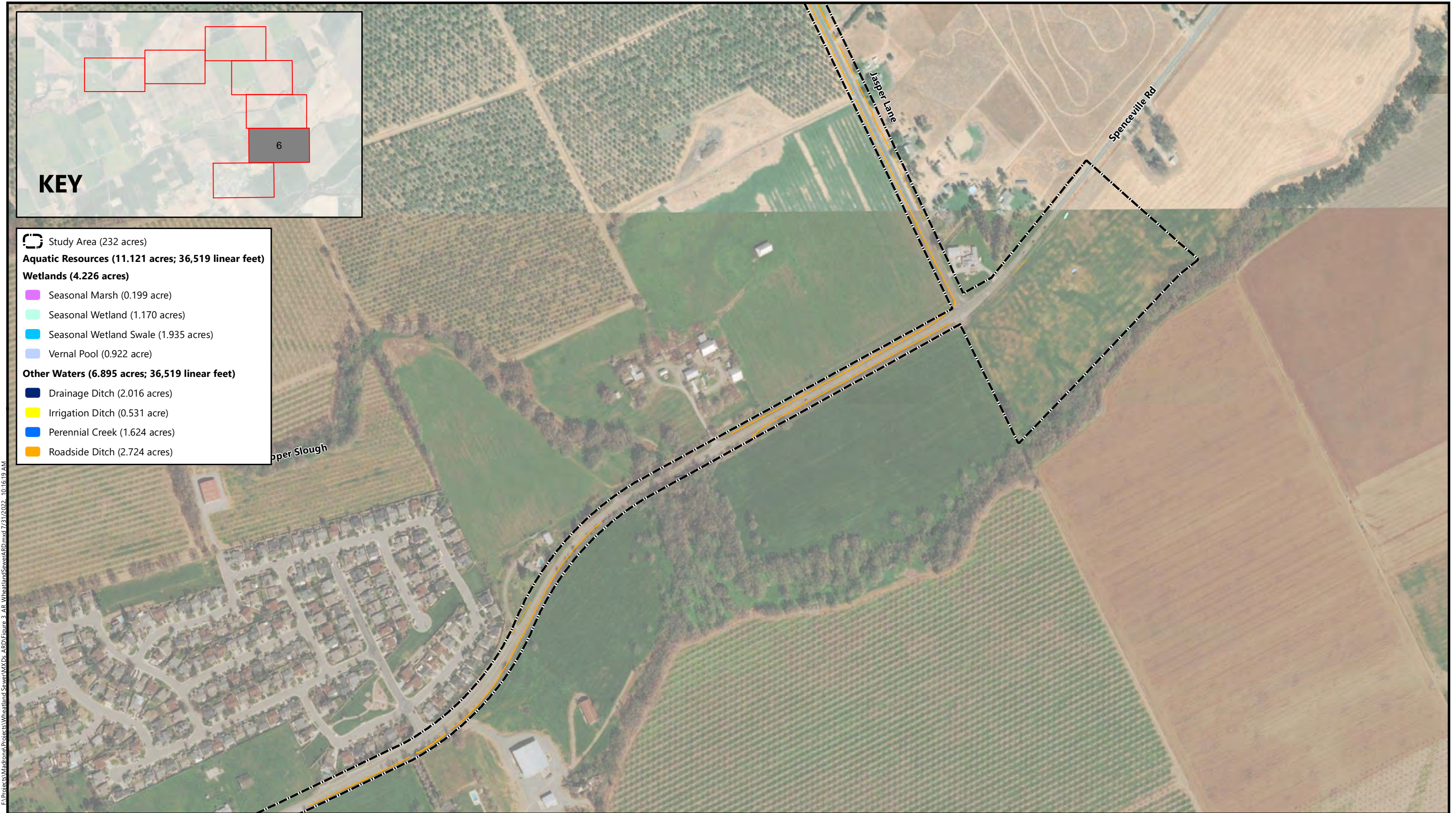


Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California



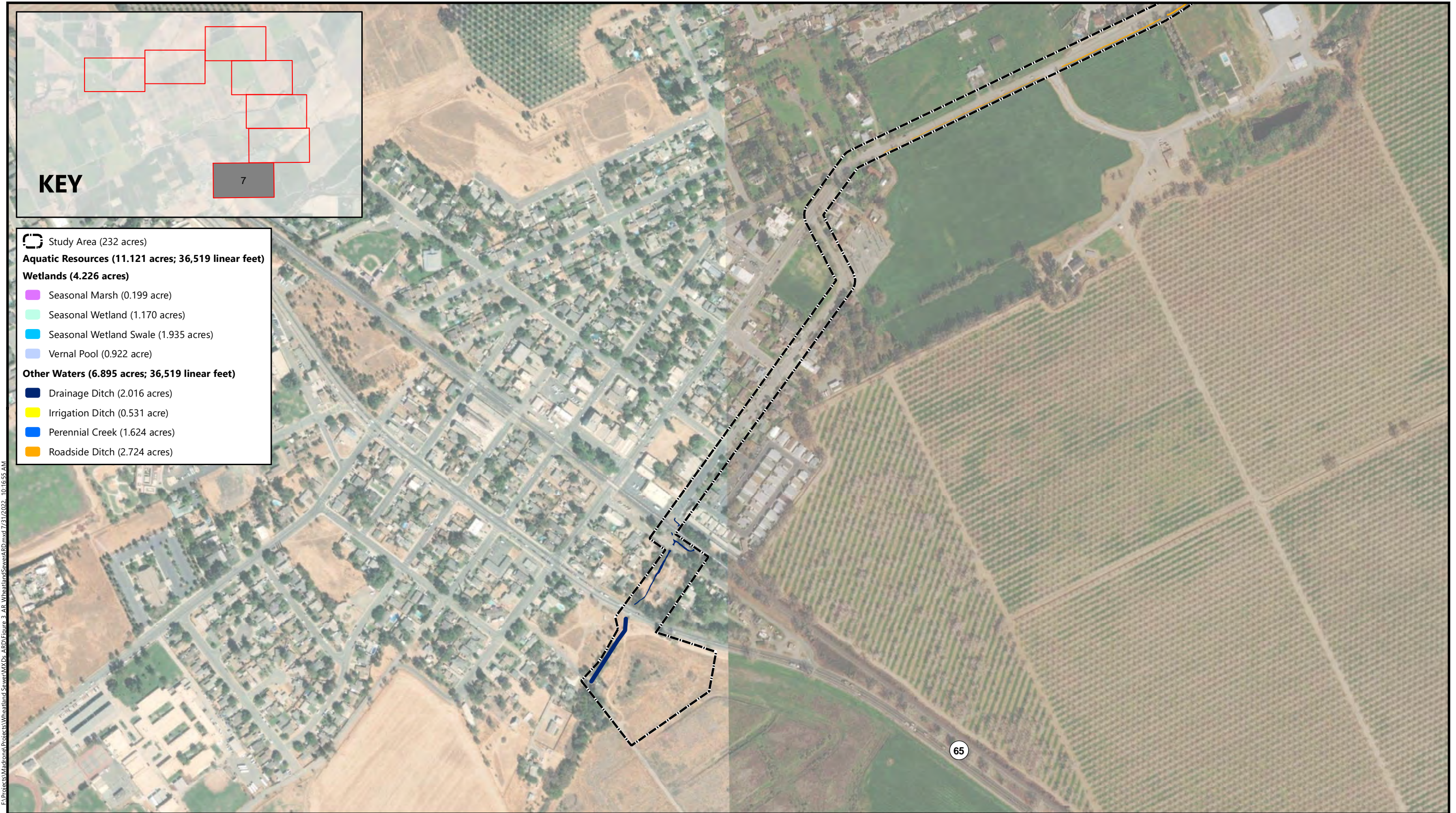


Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California





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Aerial Source: Maxar, 22 October 2020

Figure 3
Aquatic Resources

Wheatland Regional Sewer
Yuba County, California



Attachments

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Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 06/28/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 1
 Investigator(s): Daria Snider Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03717985 Long: -121.4632727 Datum: NAD 83
 Soil Map Unit Name: 142 - Conejo loam, 0 to 2 percent slopes, occasionally flooded, 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>X</u> No <u> </u>	
Remarks: Region is experiencing an extremely dry year. Suspect unvegetated depression; does not exhibit all three wetland criteria.		

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>1</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>	<u> </u>	
<u>0</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>2</u> x3 = <u>6</u> FACU species <u>12</u> x4 = <u>48</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>14</u> (A) <u>54</u> (B) Prevalence Index = B/A = <u>3.9</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>	
5. <u> </u>	<u>0</u>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
Herb Stratum (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>Leontodon saxatilis</u>	<u>10</u>	<u>X</u>	<u>FACU</u>	
2. <u>Festuca perennis</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
3. <u>Festuca bromoides</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
4. <u>Centromadia fitchii</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
5. <u>Briza minor</u>	<u>T</u>	<u> </u>	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. <u>Croton setiger</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
7. <u>Acmispon americanus</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
8. <u>Juncus bufonius</u>	<u>T</u>	<u> </u>	<u>FACW</u>	
9. <u>Bromus hordeaceus</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
<u>14</u> =Total Cover				
Woody Vine Stratum (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>	
<u> </u> =Total Cover				
% Bare Ground in Herb Stratum <u>86</u>	% Cover of Biotic Crust <u>0</u>			

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		
0-1	7.5 YR 3/3	100					clay loam	
1-12	7.5 YR 4/4	98	7.5 YR 3/3	2	D	M	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.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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)

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 **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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 06/28/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 2
 Investigator(s): Daria Snider Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03743649 Long: -121.4617239 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent slopes 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 <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:			
Region is experiencing an extremely dry year.			
Seasonal wetland on floodplain of Best Slough.			

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>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>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				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>80</u> x3 = <u>240</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>5</u> x5 = <u>25</u> Column Totals: <u>85</u> (A) <u>265</u> (B) Prevalence Index = B/A = <u>3.1</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>	<u>80</u>	<u>X</u>	<u>FAC</u>	
2. <u>Elymus caput-medusae</u>	<u>5</u>	<u> </u>	<u>UPL</u>	
3. <u>Briza minor</u>	<u>T</u>	<u> </u>	<u>FAC</u>	
4. <u>Festuca bromoides</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
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> </u>	<u> </u>	<u> </u>	
<u>85</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>15</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

The ground is not in fact visible; the 15% is comprised of thatch.

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		
0-3	7.5 YR 4/2	95	10 YR 2/2	5	C	M	sandy clay loar	
3-10	7.5 YR 4/2	90	7.5 YR 4/6	10	C	PL	sandy clay loar	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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)

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 06/28/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 3
 Investigator(s): Daria Snider Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03741893 Long: -121.4616751 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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> </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> </u> No <u>X</u>		
Remarks: Region is experiencing an extremely dry year.			
Upland comparison to DP 2.			

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>1</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> </u>	<u> </u>	<u> </u>	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u> </u>)				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>10</u> x3 = <u>30</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>50</u> x5 = <u>250</u> Column Totals: <u>70</u> (A) <u>320</u> (B) Prevalence Index = B/A = <u>4.6</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> </u>	<u> </u>	<u> </u>	
	<u>0</u>	=Total Cover		
Herb Stratum (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>Elymus caput-medusae</u>	<u>50</u>	<u>x</u>	<u>UPL</u>	
2. <u>Bromus hordeaceus</u>	<u>10</u>	<u> </u>	<u>FACU</u>	
3. <u>Festuca perennis</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
4. <u>Lactuca serriola</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
5. <u>Croton setiger</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
6. <u>Eryngium castrense</u>	<u>T</u>	<u> </u>	<u>OBL</u>	
7. <u>Limnanthes alba</u>	<u>T</u>	<u> </u>	<u>FACW</u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>70</u>	=Total Cover		
Woody Vine Stratum (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>30</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:
The ground is not in fact visible; the 30% is comprised of thatch.

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		
0-3	7.5 YR 4/2	95	10 YR 2/2	5	C	M	sandy clay loar	
3-10	7.5 YR 4/2	90	7.5 YR 4/6	10	C	PL	sandy clay loar	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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)

<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)

Secondary Indicators (2 or more required)

<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 ☒ 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 observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 06/28/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 4
 Investigator(s): Daria Snider Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03889219 Long: -121.4600057 Datum: NAD 83
 Soil Map Unit Name: 142 - Conejo loam, 0 to 2 percent slopes, occasionally flooded, MLRA 17 NWI Classification: Lake, reservoir, and assoc. vegetation
 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:			
Region is experiencing an extremely dry year.			
Seasonal wetland in roadway within orchard.			

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>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>10</u> x1 = <u>10</u> FACW species <u>60</u> x2 = <u>120</u> FAC species <u>0</u> x3 = <u>0</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>130</u> (B) Prevalence Index = B/A = <u>1.9</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>0</u>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
Herb Stratum (Plot size: <u>1 meter²</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</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>Phyla nodiflora</u>	<u>50</u>	<u>X</u>	<u>FACW</u>	
2. <u>Eleocharis parishii</u>	<u>10</u>	<u> </u>	<u>FACW</u>	
3. <u>Marsilea vestita</u>	<u>10</u>	<u> </u>	<u>OBL</u>	
4. <u>Sorghum halapense</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
5. <u>Convolvulus arvensis</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
6. <u>Acmispon americanus</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
7. <u>Dittrichia graveolens</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
8. <u>Lythrum hyssopifolia</u>	<u>T</u>	<u> </u>	<u>OBL</u>	
9. <u>Epilobium brachycarpum</u>	<u>T</u>	<u> </u>	<u>FAC</u>	
<u>70</u> =Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>30</u>	% Cover of Biotic Crust <u>0</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>		

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		
0-4"	10 YR 4/3	88	10 YR 2/2	10	C	M	sandy clay loar	
			10 YR 4/4	2	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.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input 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)	

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 4"

HYDROLOGY

Wetland Hydrology Indicators:

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

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 5
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.04102251 Long: -121.4644245 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <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:			
Region is experiencing an extremely dry year.			
Linear vernal pool			

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: <u> </u> Multiply by: <u> </u> OBL species <u>45</u> x1 = <u>45</u> FACW species <u>1</u> x2 = <u>2</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>51</u> (A) <u>62</u> (B) Prevalence Index = B/A = <u>1.2</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>X</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>Plagiobothrys undulatus</u>	40	X	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Festuca perennis</u>	5		FAC	
3. <u>Epilobium campestre</u>	5		OBL	
4. <u>Eryngium castrense</u>	1		FACW	
5. <u>Centromadia fitchii</u>	T		FACU	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
6. <u>Trifolium glomeratum</u>	T		UPL	
7. <u>Hordeum marinum</u>	T		FAC	
8. <u>Bromus hordeaceus</u>	T		FACU	
<u>51</u> =Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
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>50</u>	% Cover of Biotic Crust <u>40</u>			

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		
0-6	10 YR 4/2	80	7.5 YR 4/6	20	C	M, PL	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.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 6"

HYDROLOGY

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

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input checked="" 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 checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" 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)

Secondary Indicators (2 or more required)

<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 checked="" type="checkbox"/> 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 6
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.04096803 Long: -121.464432 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <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:			
Region is experiencing an extremely dry year.			
Seasonal wetland swale			

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>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				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>80</u> x3 = <u>240</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>85</u> (A) <u>260</u> (B) Prevalence Index = B/A = <u>3.1</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				
Herb Stratum (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>	<u>70</u>	<u>X</u>	<u>FAC</u>	
2. <u>Hordeum marinum</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
3. <u>Festuca bromoides</u>	<u>5</u>	<u> </u>	<u>FACU</u>	
4. <u>Elymus caput-medusae</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
5. <u>Eryngium castrense</u>	<u>T</u>	<u> </u>	<u>FACW</u>	
6. <u>Bromus hordeaceus</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>85</u> =Total Cover				
Woody Vine Stratum (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>15</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

The ground is not in fact visible; the 15% is comprised of thatch.

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		
0-6	10 YR 4/2	90	7.5 YR 4/6	10	C	PL	sandy clay loar	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 6"

HYDROLOGY

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

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 7
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.04076763 Long: -121.4642413 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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> </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: Region is experiencing an extremely dry year. Suspect are due to slight depression; does not exhibit all three wetland criteria.			

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>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</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> </u>	<u> </u>	<u> </u>	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u> </u>)				Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>0</u> x1 = <u>0</u> FACW species <u>10</u> x2 = <u>20</u> FAC species <u>16</u> x3 = <u>48</u> FACU species <u>14</u> x4 = <u>56</u> UPL species <u>10</u> x5 = <u>50</u> Column Totals: <u>50</u> (A) <u>174</u> (B) Prevalence Index = B/A = <u>3.5</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>	
	<u>0</u>	=Total Cover		
Herb Stratum (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 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Festuca perennis</i>	10	X	FAC	
2. <i>Leontodon saxatilis</i>	10	X	FACU	
3. <i>Plagiobothrys greenei</i>	10	X	FACW	
4. <i>Trifolium dubium</i>	10	X	UPL	
5. <i>Hordeum marinum</i>	6		FAC	
6. <i>Erodium botrys</i>	2		FACU	
7. <i>Festuca bromoides</i>	2		FACU	
8. <i>Bromus hordeaceus</i>	T		FACU	
9. <i>Rumex pulcher</i>	T		FAC	
10. <i>Lepidium nitidum</i>	T		FAC	
11. <i>Castilleja attenuata</i>	T		UPL	
12. <i>Eryngium castrense</i>	T		OBL	
	<u>50</u>	=Total Cover		
% Bare Ground in Herb Stratum <u>50</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:
40% cover of thatch

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		
0-4	10 YR 4/2	80	7.5 YR 4/6	20	C	M, PL	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.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 4".

HYDROLOGY

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

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 8
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.04066883 Long: -121.4642078 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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> </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: Region is experiencing an extremely dry year. Obvious upland comparison point to suspect DP 7.			

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>	<u> </u>	
<u>0</u> =Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				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>1</u> x3 = <u>3</u> FACU species <u>64</u> x4 = <u>256</u> UPL species <u>15</u> x5 = <u>75</u> Column Totals: <u>80</u> (A) <u>334</u> (B) Prevalence Index = B/A = <u>4.2</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				
Herb Stratum (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 bromoides</u>	30	X	FACU	
2. <u>Leontodon saxatilis</u>	30	X	FACU	
3. <u>Elymus caput-medusae</u>	15		UPL	
4. <u>Erodium botrys</u>	2		FACU	
5. <u>Bromus hordeaceus</u>	2		FACU	
6. <u>Briza minor</u>	1		FAC	
7. <u>Festuca perennis</u>	T		FAC	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>80</u> =Total Cover				
Woody Vine Stratum (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>20</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		
0-3	10 YR 4/2	80	7.5 YR 4/6	20	C	M, PL	gravelly clay lo	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 3".

HYDROLOGY

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

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 9
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03902539 Long: -121.4662426 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <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:			
Region is experiencing an extremely dry year.			
Data point is in a vernal pool.			

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>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</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>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Prevalence Index Worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>61</u> x1 = <u>61</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>6</u> x3 = <u>18</u> FACU species <u>10</u> x4 = <u>40</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>77</u> (A) <u>119</u> (B) Prevalence Index = B/A = <u>1.5</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				
Herb Stratum (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</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>Plagiobothrys undulatus</u>	<u>30</u>	<u>X</u>	<u>OBL</u>	
2. <u>Eryngium castrense</u>	<u>10</u>	<u>X</u>	<u>OBL</u>	
3. <u>Lasthenia glaberrima</u>	<u>10</u>	<u>X</u>	<u>OBL</u>	
4. <u>Polypogon maritimus</u>	<u>10</u>	<u>X</u>	<u>OBL</u>	
5. <u>Festuca perennis</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
6. <u>Centromadia fitchii</u>	<u>5</u>	<u> </u>	<u>FACU</u>	
7. <u>Leontodon saxatilis</u>	<u>5</u>	<u> </u>	<u>FACU</u>	
8. <u>Hordeum marinum</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
9. <u>Lythrum hyssopifolium</u>	<u>1</u>	<u> </u>	<u>OBL</u>	
10. <u>Bromus hordeaceus</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
11. <u>Festuca bromoides</u>	<u>T</u>	<u> </u>	<u>FACU</u>	
12. <u>Trifolium dubium</u>	<u>T</u>	<u> </u>	<u>UPL</u>	
<u>77</u> =Total Cover				
% Bare Ground in Herb Stratum <u>25</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		
0-8	10 YR 4/1	80	7.5 YR 4/6	20	C	PL	sandy 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.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 8"

HYDROLOGY

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

<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 checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" 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)

Secondary Indicators (2 or more required)

<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 checked="" type="checkbox"/> 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 10
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03912585 Long: -121.4659246 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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> </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: Region is experiencing an extremely dry year.			
Upland comparison point to DP 9			

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>1</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> </u>	<u> </u>	<u> </u>	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u> </u>)				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>10</u> x3 = <u>30</u> FACU species <u>80</u> x4 = <u>320</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>350</u> (B) Prevalence Index = B/A = <u>3.9</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>	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				Hydrophytic Vegetation Indicators: 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) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Festuca bromoides</u>	<u>70</u>	<u>X</u>	<u>FACU</u>	
2. <u>Festuca perennis</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
3. <u>Bromus hordeaceus</u>	<u>10</u>	<u> </u>	<u>FACU</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
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> </u>	<u> </u>	<u> </u>	
	<u>90</u>	=Total Cover		
Woody Vine Stratum (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>	
	<u> </u>	=Total Cover		
% Bare Ground in Herb Stratum <u>10</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		
0-3	10 YR 4/2	80	7.5 YR 4/6	20	C	M, PL	gravelly clay lo	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Other (Explain in Remarks)

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:

Refusal at 3".

HYDROLOGY

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

<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 checked="" 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)

Secondary Indicators (2 or more required)

<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 ☒ 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:	<u>Wheatland Regional Sewer</u>		City/County:	<u>Yuba County</u>	Sampling Date:	<u>07/27/21</u>	
Applicant/Owner:	<u>City of Wheatland</u>			State:	<u>CA</u>	Sampling Point:	<u>DP 11</u>
Investigator(s):	<u>Daria Snider</u>		Section, Township, Range:	<u>Section 30, Township 14 N, Range 5 E, MDB&M</u>			
Landform (hillslope, terrace, etc.):	<u>Hillslope</u>		Local relief (concave, convex, none):	<u>None</u>	Slope (%):	<u>0-1</u>	
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>39.03911307</u>	Long:	<u>-121.4659768</u>	Datum:	<u>NAD 83</u>
Soil Map Unit Name:	<u>214 - San Joaquin loam, 0 to 1 percent slopes</u>			NWI Classification:	<u>None</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No <u> </u> (If no, explain in Remarks.)							
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </u> significantly disturbed?	Are "Normal Circumstances" present? Yes <u>X</u> No <u> </u>						
Are Vegetation <u> </u> , Soil <u> </u> , or Hydrology <u> </u> 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: Region is experiencing an extremely dry year. Data point is located in the apparent "wetland fringe" of this vernal pool.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
2.	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3.	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100%</u> (A/B)
4.	_____	<u>0</u>	=Total Cover			
					Prevalence Index Worksheet:	
Sapling/Shrub Stratum (Plot size: _____)					Total % Cover of:	Multiply by:
1.	_____	_____	_____	_____	OBL species <u>0</u>	x1 = <u>0</u>
2.	_____	_____	_____	_____	FACW species <u>11</u>	x2 = <u>22</u>
3.	_____	_____	_____	_____	FAC species <u>51</u>	x3 = <u>153</u>
		<u>0</u>	=Total Cover		FACU species <u>2</u>	x4 = <u>8</u>
					UPL species <u>2</u>	x5 = <u>10</u>
					Column Totals: <u>66</u>	(A) <u>193</u> (B)
Herb Stratum (Plot size: <u>1 meter²</u>)					Prevalence Index = B/A = <u>2.9</u>	
1.	<i>Festuca perennis</i>	50	X	FAC	Hydrophytic Vegetation Indicators:	
2.	<i>Plagiobothrys greenei</i>	10		FACW	<u>X</u>	Dominance Test is >50%
3.	<i>Leontodon saxatilis</i>	1		FACU	<u>X</u>	Prevalence Index is ≤3.0 ¹
4.	<i>Deschampsia danthonioides</i>	1		FACW	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5.	<i>Castilleja attenuata</i>	1		UPL	_____	Problematic Hydrophytic Vegetation ¹ (Explain)
6.	<i>Erodium botrys</i>	1		FACU		
7.	<i>Hordeum marinum</i>	1		FAC		
8.	<i>Trifolium dubium</i>	1		UPL		
9.	<i>Eryngium castrense</i>	T		OBL		
10.	<i>Bromus hordeaceus</i>	T		FACU		
		<u>66</u>	=Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: _____)						
1.	_____	_____	_____	_____	Hydrophytic Vegetation Present?	
2.	_____	_____	_____	_____	Yes <u>X</u> No _____	
% Bare Ground in Herb Stratum		35	% Cover of Biotic Crust		20	

R

SOIL

Sampling Point:

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" 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 checked="" 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): _____ 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:			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 12
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.0407573 Long: -121.464884 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks:			
Region is experiencing an extremely dry year.			
Data point is in a seasonal wetland swale			

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>75</u> x3 = <u>225</u> FACU species <u>7</u> x4 = <u>28</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>82</u> (A) <u>253</u> (B) Prevalence Index = B/A = <u>3.1</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Hordeum marinum</u>	<u>40</u>	<u>X</u>	<u>FAC</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)
2. <u>Festuca perennis</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	
3. <u>Rumex pulcher</u>	<u>5</u>		<u>FAC</u>	
4. <u>Anthemis cotula</u>	<u>5</u>		<u>FACU</u>	
5. <u>Erodium botrys</u>	<u>2</u>		<u>FACU</u>	
6. <u>Bromus hordeaceus</u>	<u>T</u>		<u>FACU</u>	
7. <u>Epilobium torreyi</u>	<u>T</u>		<u>FACW</u>	
8. <u>Leontodon saxatilis</u>	<u>T</u>		<u>FACU</u>	
	<u>82</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 12

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" 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 checked="" type="checkbox"/> No <input 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: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 13
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Constructed channel Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.03747592 Long: -121.4659975 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: Region is experiencing an extremely dry year. Data point is in a marsh on the edge of a drainage ditch.		

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>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</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. <i>Salix exigua</i>	40	X	FACW	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>60</u> x1 = <u>60</u> FACW species <u>53</u> x2 = <u>106</u> FAC species <u>15</u> x3 = <u>45</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>128</u> (A) <u>211</u> (B) Prevalence Index = B/A = <u>1.6</u>
2. <i>Rubus armeniacus</i>	10	X	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>50</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <i>Typha latifolia</i>	40	X	OBL	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Eleocharis macrostachya</i>	20	X	OBL	
3. <i>Paspalum dilatatum</i>	5		FAC	
4. <i>Cyperus eragrostis</i>	5		FACW	
5. <i>Verbena bonariensis</i>	5		FACW	
6. <i>Polypogon monspeliensis</i>	3		FACW	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
	<u>78</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>40</u>	
Remarks:				

SOIL

Sampling Point: DP 13

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)					
<input checked="" type="checkbox"/> Surface Water (A1)		<input type="checkbox"/> Salt Crust (B11)		<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/>	<input type="checkbox"/> Biotic Crust (B12)		<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/>	<input type="checkbox"/> Aquatic Invertebrates (B13)		<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/>	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/>	<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"/>	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/>	<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"/>	<input type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/>	<input type="checkbox"/> Other (Explain in Remarks)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> (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:					

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 14
 Investigator(s): Daria Snider Section, Township, Range: Section 30, Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.0374815 Long: -121.4659687 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 _____ 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:			
Region is experiencing an extremely dry year.			
Upland comparison to DP 13.			

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>10</u> x3 = <u>30</u> FACU species <u>40</u> x4 = <u>160</u> UPL species <u>40</u> x5 = <u>200</u> Column Totals: <u>90</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>4.3</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <i>Bromus hordeaceus</i>	40	X	FACU	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 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Elymus caput-medusae</i>	30	X	UPL	
3. <i>Centaurea solstitialis</i>	10		UPL	
4. <i>Festuca perennis</i>	10		FAC	
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:				

SOIL

Sampling Point: DP 14

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input 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 wetland hydrology indicators observed.			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/27/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 15
 Investigator(s): Daria Snider Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Constructed basin Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.00734831 Long: -121.4224506 Datum: NAD 83
 Soil Map Unit Name: 141 - Conejo loam, 0 to 1 percent 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 _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		
Remarks: Data point taken in the deepest portion of this constructed basin. Although a few riparian trees and shrubs are present, there is no evidence that this area has ever inundated. None of the three wetland criteria are satisfied within this basin.			

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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. <i>Salix exigua</i>	<u>50</u>	<u>X</u>	<u>FACW</u>	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>50</u> x2 = <u>100</u> FAC species <u>0</u> x3 = <u>0</u> FACU species <u>90</u> x4 = <u>360</u> UPL species <u>10</u> x5 = <u>50</u> Column Totals: <u>150</u> (A) <u>510</u> (B) Prevalence Index = B/A = <u>3.4</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>50</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <i>Medicago polymorpha</i>	<u>80</u>	<u>X</u>	<u>FACU</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)
2. <i>Festuca myuros</i>	<u>10</u>		<u>FACU</u>	
3. <i>Hirschfeldia incana</i>	<u>10</u>		<u>UPL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>100</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>0</u>	% Cover of Biotic Crust <u>0</u>			
Remarks:				

SOIL

Sampling Point: DP 15

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input 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 wetland hydrology indicators observed.			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	<u>Wheatland Regional Sewer</u>	City/County:	<u>Yuba County</u>	Sampling Date:	<u>06/30/21</u>
Applicant/Owner:	<u>City of Wheatland</u>	State:	<u>CA</u>	Sampling Point:	<u>DP 16</u>
Investigator(s):	<u>Matt Shaffer</u>	Section, Township, Range:	<u>Unsectioned Township 14 N, Range 5 E, MDB&M</u>		
Landform (hillslope, terrace, etc.):	<u>Rolling hills</u>	Local relief (concave, convex, none):	<u>Concave</u>	Slope (%):	<u>2</u>
Subregion (LRR):	<u>Mediterranean California (LRR C)</u>	Lat:	<u>39.02261576</u>	Long:	<u>-121.4018579</u>
		Datum:	<u>NAD 83</u>		
Soil Map Unit Name:	<u>208 - Redding gravelly loam, 0 to 8 percent slopes, MLRA 17</u>	NWI Classification:	<u>None</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>X</u> No _____ (If no, explain in Remarks.)					
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed?			Are "Normal Circumstances" present? Yes <u>X</u> 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> </u>
Hydric Soil Present?	Yes <u> X </u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u> X </u>	No <u> </u>			
Remarks: Vernal pool within a hay field					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		0	=Total Cover	
Sapling/Shrub Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		0	=Total Cover	
Herb Stratum (Plot size: 1 meter ²)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Glyceria declinata</i>	60	X	OBL
2.	<i>Eleocharis macrostachya</i>	20	X	OBL
3.	<i>Festuca perennis</i>	10		FAC
4.	<i>Hordeum marinum</i>	5		FAC
5.	<i>Centromadia fitchii</i>	T		FACU
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
		95	=Total Cover	
Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		_____	=Total Cover	
% Bare Ground in Herb Stratum		5	% Cover of Biotic Crust	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL species <u>80</u>	x1 = <u>80</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>0</u>	x5 = <u>0</u>
Column Totals: <u>95</u> (A)	<u>125</u> (B)

Prevalence Index = B/A = 1.3

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:
Shallower portions of this feature are dominated by <i>Plagiobothrys stipitatus</i> var. <i>micranthus</i> , <i>Juncus bufonius</i> , <i>Festuca perennis</i> , <i>Hordeum marinum</i> , <i>Veronica xalapensis</i> ssp. <i>peregrina</i> , and <i>Medicago polymorpha</i> .

SOIL

Sampling Point: DP 16

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" 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 checked="" 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 checked="" 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 checked="" 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:			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 06/30/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 17
 Investigator(s): Matt Shaffer Section, Township, Range: Unsectioned Township 14 N, Range 5 E, MDB&M
 Landform (hillslope, terrace, etc.): Rolling hills Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.02267676 Long: -121.401912 Datum: NAD 83
 Soil Map Unit Name: 208 - Redding gravelly loam, 0 to 8 percent 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 _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: Upland comparison to DP 16.		

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>55</u> x5 = <u>275</u> Column Totals: <u>60</u> (A) <u>295</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>55</u>	<u>X</u>	<u>UPL</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)
2. <u>Lactuca serriola</u>	<u>5</u>		<u>FACU</u>	
3. <u>Polygonum aviculare ssp. depressum</u>	<u>T</u>		<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>60</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>40</u>	% Cover of Biotic Crust <u>0</u>			
Remarks: Avena fatua has been mowed for hay production.				

SOIL

Sampling Point: DP 17

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)	
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input 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 wetland hydrology indicators detected.			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wheatland Regional Sewer City/County: Yuba County Sampling Date: 07/01/21
 Applicant/Owner: City of Wheatland State: CA Sampling Point: DP 18
 Investigator(s): Matt Shaffer Section, Township, Range: Section 25, Township 14 N, Range 4 E, MDB&M
 Landform (hillslope, terrace, etc.): Rolling hills Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 39.04146766 Long: -121.470986 Datum: NAD 83
 Soil Map Unit Name: 214 - San Joaquin loam, 0 to 1 percent 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 <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks:			

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>90</u> x1 = <u>90</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: <u>90</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter²</u>)				
1. <u>Juncus xiphioides</u>	<u>90</u>	<u>X</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Epilobium brachycarpum</u>	<u>T</u>		<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>90</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>10</u>	% Cover of Biotic Crust <u>10</u>			
Remarks:				

SOIL

Sampling Point: DP 18

[illegible]

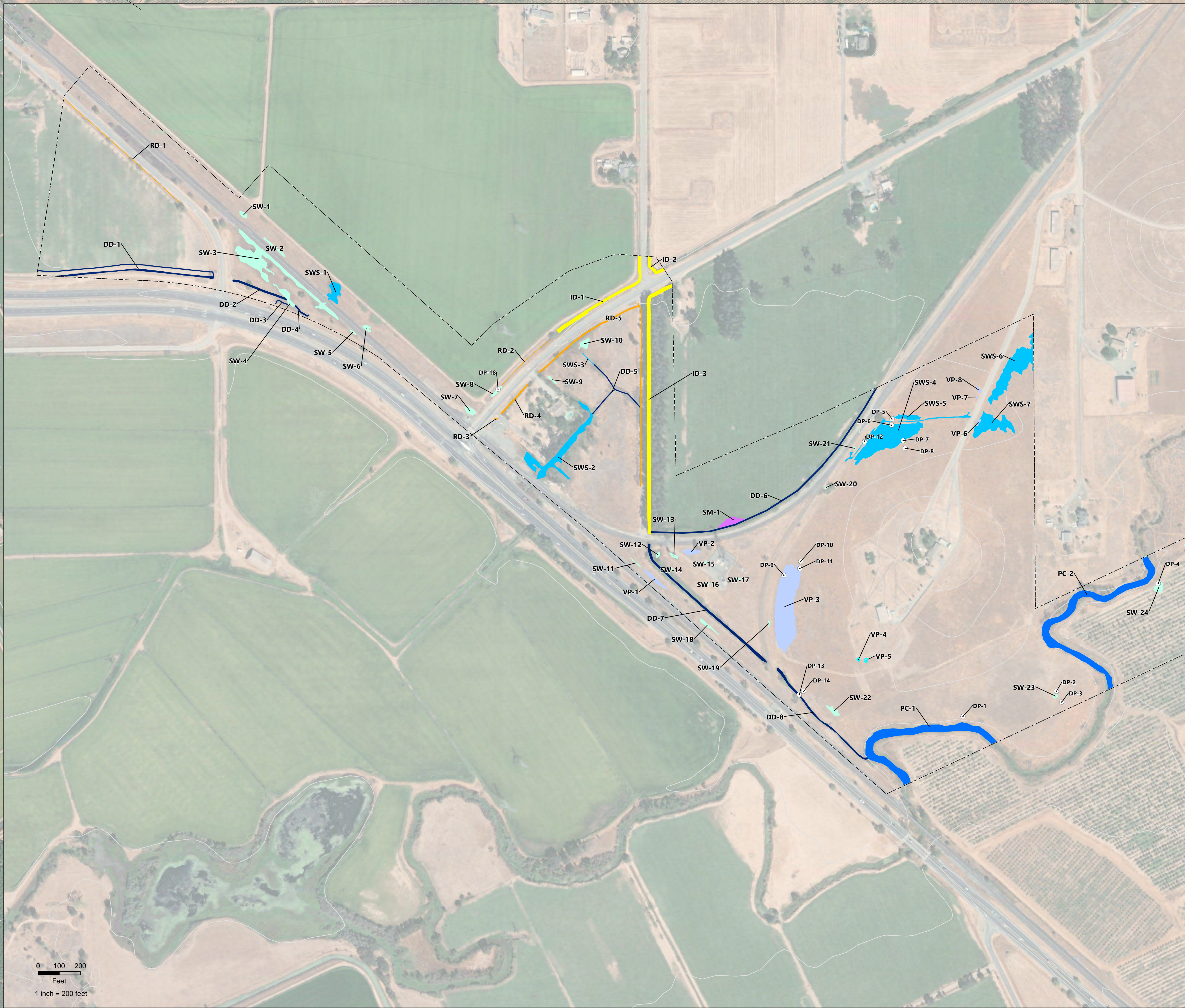
HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" 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): _____ 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:			

Attachment B

Aquatic Resources Delineation Map

Aquatic Resource Features		
Wetlands		
Seasonal Marsh		
Feature ID	Acreage	
SM-1	0.068	
SM-2	0.131	
	0.199	
Seasonal Wetland		
Feature ID	Acreage	
SW-1	0.020	
SW-2	0.022	
SW-3	0.458	
SW-4	0.060	
SW-5	0.007	
SW-6	0.019	
SW-7	0.033	
SW-8	0.023	
SW-9	0.012	
SW-10	0.037	
SW-11	0.007	
SW-12	0.010	
SW-13	0.013	
SW-14	0.004	
SW-15	0.006	
SW-16	0.004	
SW-17	0.006	
SW-18	0.028	
SW-19	0.006	
SW-20	0.005	
SW-21	0.005	
SW-22	0.033	
SW-23	0.009	
SW-24	0.042	
SW-25	0.244	
SW-26	0.007	
	1.170	
Seasonal Wetland Swale		
Feature ID	Acreage	
SWS-1	0.097	
SWS-2	0.372	
SWS-3	0.006	
SWS-4	0.687	
SWS-5	0.053	
SWS-6	0.448	
SWS-7	0.272	
	1.935	
Vernal Pool		
Feature ID	Acreage	
VP-1	0.039	
VP-2	0.863	
VP-3	0.003	
VP-4	0.004	
VP-5	0.009	
VP-6	0.002	
VP-7	0.011	
VP-8	0.006	
VP-9	0.922	
	0.922	
Wetlands Total:		4.226
Other Waters		
Drainage Ditch		
Feature ID	Acreage	Linear Feet
DD-1	0.232	1,572
DD-2	0.063	271
DD-3	0.009	74
DD-4	0.015	820
DD-5	0.054	461
DD-6	0.237	1,363
DD-7	0.202	789
DD-8	0.125	612
DD-9	0.814	2,992
DD-10	0.003	11
DD-11	0.003	65
DD-12	0.007	50
DD-13	0.002	17
DD-14	0.024	119
DD-15	0.051	326
DD-16	0.175	376
	2.016	9,918
Irrigation Ditch		
Feature ID	Acreage	Linear Feet
ID-1	0.120	571
ID-2	0.029	123
ID-3	0.339	1,231
ID-4	0.040	112
ID-5	0.031	151
	0.531	2,188
Perennial Creek		
Feature ID	Acreage	Linear Feet
PC-1	0.718	917
PC-2	0.776	1,139
PC-3	0.130	102
	1.624	2,158
Roadside Ditch		
Feature ID	Acreage	Linear Feet
RD-1	0.043	732
RD-2	0.019	320
RD-3	0.003	23
RD-4	0.034	191
RD-5	0.202	1,416
RD-6	0.274	1,556
RD-7	0.016	266
RD-8	0.196	830
RD-9	0.305	1,726
RD-10	0.125	708
RD-11	0.177	2,370
RD-12	0.040	338
RD-13	0.012	452
RD-14	0.036	304
RD-15	0.014	235
RD-16	0.016	178
RD-17	0.003	54
RD-18	0.031	261
RD-19	0.203	1,726
RD-20	0.003	48
RD-21	0.179	1,023
RD-22	0.004	38
RD-23	0.021	176
RD-24	0.045	382
RD-25	0.026	223
RD-26	0.244	2,134
RD-27	0.021	364
RD-28	0.007	119
RD-29	0.131	1,126
RD-30	0.148	1,296
RD-31	0.008	131
RD-32	0.002	15
RD-33	0.030	173
RD-34	0.063	544
RD-35	0.041	707
RD-36	0.004	70
	2.724	22,255
Other Waters Total:		6.895 36,519
Aquatic Resources Total:		11.121 36,519



Notes:
Map Scale: 1 inch = 400 feet
Coordinate System: NAD 1983 State Plane California 1
Datum: North American Datum 1983
Projection: Lambert Conformal Conic
Vertical Datum: NAVD83 North American Vertical Datum 1988
Aerial Base: Aerial Imagery 2011
Data Map Prepared: 7 August 2022
Map Prepared by: T. S. Sider
Data Collection Performed by: T. S. Sider
Map Scale: 1 inch = 400 feet
Coordinate System: NAD 1983 State Plane California 1
Datum: North American Datum 1983
Projection: Lambert Conformal Conic
Vertical Datum: NAVD83 North American Vertical Datum 1988
Aerial Base: Aerial Imagery 2011
Data Map Prepared: 7 August 2022
Map Prepared by: T. S. Sider
Data Collection Performed by: T. S. Sider

Prepared For:
Randy Planning and Management, Inc.
1501 Sports Drive
Sacramento, CA 95834

Study Area (231.7 acres)
Reference Point
Data Point
Aquatic Resources (11.121 acres; 36,519 linear feet)
Other Waters (6.895 acres; 36,519 linear feet)
Wetlands (4.226 acres)
Seasonal Marsh (0.199 acres)
Seasonal Wetland (1.170 acres)
Seasonal Wetland Swale (1.935 acres)
Vernal Pool (0.922 acre)
Drainage Ditch (2.016 acres)
Irrigation Ditch (0.531 acres)
Perennial Creek (1.624 acres)
Roadside Ditch (2.724 acres)

Aquatic Resources Delineation
Wheatland Regional Sewer
Yuba County, California
MADRONE
CONSULTING
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Sacramento, CA 95834
916.441.1111
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Attachment C

Plant Species Observed within the Study Area

**Plant Species Observed within the
Wheatland Regional Sewer Pipeline Study Area
28 and 29 June 2021, 2 and 27 July 2021, and 2 May 2022**

Species Name	Common Name	Wetland Indicator
		Status
<i>Abutilon theophrasti</i>	Velvet-leaf	UPL
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish lotus	UPL
<i>Agave americana</i>	Century plant	UPL
<i>Agrostis avenacea</i>	Pacific bent grass	UPL
<i>Ailanthus altissima</i>	Tree of heaven	FACU
<i>Aira caryophyllea</i>	Silver hair grass	FACU
<i>Alisma triviale</i>	Northern water plantain	OBL
<i>Ammi visnaga</i>	Bisnaga	UPL
<i>Amsinckia menziesii</i>	Common fiddleneck	UPL
<i>Anaphalis margaritacea</i>	Pearly everlasting	FACU
<i>Andropogon virginicus</i> var. <i>virginicus</i>	Broomsedge bluestem	FAC
<i>Anthemis cotula</i>	Mayweed	FACU
<i>Artemisia douglasiana</i>	Mugwort	FAC
<i>Arundo donax</i>	Giant reed	FACW
<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	FAC
<i>Asclepias speciosa</i>	Showy milkweed	FAC
<i>Avena barbata</i>	Slender wild oat	UPL
<i>Avena fatua</i>	Wild oat	UPL
<i>Baccharis pilularis</i> subsp. <i>pilularis</i>	Coyote brush	UPL
<i>Brassica nigra</i>	Black mustard	UPL
<i>Briza maxima</i>	Rattlesnake grass	UPL
<i>Briza minor</i>	Annual quaking grass	FAC
<i>Brodiaea elegans</i> subsp. <i>elegans</i>	Harvest brodiaea	UPL
<i>Bromus diandrus</i>	Ripgut grass	UPL
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Bromus sterilis</i>	Sterile brome	UPL
<i>Callitriche marginata</i>	Winged water starwort	OBL
<i>Cardamine oligosperma</i>	Little western bittercress	FAC
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian thistle	UPL
<i>Carex barbarae</i>	Santa Barbara sedge	FAC
<i>Castilleja attenuata</i>	Valley tassels	UPL
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Cephalanthus occidentalis</i>	California button willow	OBL
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	Common soap plant	UPL
<i>Cichorium intybus</i>	Chicory	FACU
<i>Convolvulus arvensis</i>	Bindweed	UPL

Species Name	Common Name	Wetland Indicator
		Status
<i>Crassula aquatica</i>	Water pygmyweed	OBL
<i>Crassula tillaea</i>	Moss pygmyweed	FACU
<i>Croton setiger</i>	Turkey-mullein	UPL
<i>Cynodon dactylon</i>	Bermuda grass	FACU
<i>Cyperus eragrostis</i>	Tall nutsedge	FACW
<i>Deschampsia danthonioides</i>	Annual hair grass	FACW
<i>Dichelostemma multiflorum</i>	Wild hyacinth	UPL
<i>Digitaria sanguinalis</i>	Hairy crab grass	FACU
<i>Dipterostemon capitatus</i> subsp. <i>capitatus</i>	Blue dicks	FACU
<i>Dittrichia graveolens</i>	Stinkwort	UPL
<i>Downingia ornatissima</i>	Ornate downingia	OBL
<i>Dysphania ambrosioides</i>	Mexican tea	FAC
<i>Echinochloa crus-galli</i>	Barnyard grass	FACW
<i>Eleocharis macrostachya</i>	Creeping spikerush	OBL
<i>Eleocharis parishii</i>	Parish's spikerush	FACW
<i>Elymus caput-medusae</i>	Medusa head	UPL
<i>Elymus ponticus</i>	Tall wheat grass	UPL
<i>Elymus triticoides</i>	Beardless wild-rye	FAC
<i>Epilobium brachycarpum</i>	Willowherb	FAC
<i>Epilobium campestre</i>	Smooth boisduvalia	OBL
<i>Epilobium ciliatum</i> subsp. <i>ciliatum</i>	Slender willowherb	UPL
<i>Epilobium torreyi</i>	Torrey's willowherb	FACW
<i>Erigeron canadensis</i>	Horseweed	FACU
<i>Erodium botrys</i>	Filaree	FACU
<i>Erodium cicutarium</i>	Redstem filaree	UPL
<i>Eryngium castrense</i>	Great valley coyote-thistle	OBL
<i>Eucalyptus camaldulensis</i>	River red gum	FAC
<i>Eucalyptus globulus</i>	Blue gum	UPL
<i>Euphorbia maculata</i>	Spotted spurge	UPL
<i>Euphorbia serpillifolia</i>	Thyme-leafed spurge	UPL
<i>Festuca arundinacea</i>	Tall fescue	UPL
<i>Festuca bromoides</i>	Brome fescue	FACU
<i>Festuca myuros</i>	Rattail sixweeks grass	FACU
<i>Festuca perennis</i>	Rye grass	FAC
<i>Ficus carica</i>	Edible fig	FACU
<i>Fraxinus latifolia</i>	Oregon ash	FACW
<i>Galium aparine</i>	Goose grass	FACU
<i>Galium parisiense</i>	Wall bedstraw	UPL
<i>Geranium dissectum</i>	Cut-leaf geranium	UPL
<i>Geranium molle</i>	Soft geranium	UPL
<i>Glyceria declinata</i>	Low manna grass	FACW
<i>Gnaphalium palustre</i>	Western marsh cudweed	FACW

Species Name	Common Name	Wetland Indicator
		Status
<i>Gratiola ebracteata</i>	Bractless hedge-hyssop	OBL
<i>Grindelia camporum</i>	Great Valley gumplant	FACW
<i>Helminthotheca echioides</i>	Bristly ox-tongue	FAC
<i>Hirschfeldia incana</i>	Shortpod mustard	UPL
<i>Holocarpha virgata</i> subsp. <i>virgata</i>	Slender tarweed	UPL
<i>Hordeum marinum</i> subsp. <i>gussoneanum</i>	Mediterranean barley	FAC
<i>Hordeum murinum</i>	Wall barley	FACU
<i>Hypericum perforatum</i> subsp. <i>perforatum</i>	Klamathweed	FACU
<i>Hypochaeris glabra</i>	Smooth cat's-ear	UPL
<i>Juglans hindsii</i>	Northern California black walnut	FAC
<i>Juncus bufonius</i>	Toad rush	FACW
<i>Juncus usitatus</i>	Australian rush	FACW
<i>Juncus xiphioides</i>	Iris-leaved rush	OBL
<i>Kickxia elatine</i>	Sharp-leaved fluellen	UPL
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Lasthenia glaberrima</i>	Smooth goldfields	OBL
<i>Leontodon saxatilis</i> subsp. <i>saxatilis</i>	Hairy cat's ear	FACU
<i>Lepidium didymum</i>	Lesser swine cress	UPL
<i>Lepidium latifolium</i>	Perennial pepperweed	FAC
<i>Lepidium nitidum</i>	Shining peppergrass	FAC
<i>Leptochloa fusca</i> subsp. <i>fascicularis</i>	Bearded sprangletop	UPL
<i>Ligustrum species</i>	Privet	UPL
<i>Limnanthes alba</i> subsp. <i>alba</i>	White meadowfoam	FACW
<i>Logfia gallica</i>	Daggerleaf cottonrose	UPL
<i>Lotus corniculatus</i>	Bird's-foot trefoil	FAC
<i>Ludwigia peploides</i>	Water primrose	OBL
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lysimachia arvensis</i>	Scarlet pimpernel	FAC
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Lythrum tribracteatum</i>	Threebract loosestrife	OBL
<i>Madia elegans</i>	Common madia	UPL
<i>Marsilea vestita</i> subsp. <i>vestita</i>	Hairy water fern	OBL
<i>Matricaria discoidea</i>	Pineapple weed	FACU
<i>Medicago lupulina</i>	Black medick	FAC
<i>Medicago polymorpha</i>	California burclover	FACU
<i>Medicago sativa</i>	Alfalfa	UPL
<i>Mentha pulegium</i>	Pennyroyal	OBL
<i>Morus alba</i>	White mulberry	FACU
<i>Myriophyllum aquaticum</i>	Parrot's feather	OBL
<i>Navarretia intertexta</i>	Needle-leaf navarretia	FACW
<i>Navarretia tagetina</i>	Marigold navarretia	FACW
<i>Olea europaea</i>	Olive	UPL

Species Name	Common Name	Wetland Indicator
		Status
<i>Oryza sativa</i>	Rice cutgrass	OBL
<i>Oxalis micrantha</i>	Dwarf wood-sorrel	UPL
<i>Paspalum dilatatum</i>	Dallis grass	FAC
<i>Paspalum distichum</i>	Knot grass	FACW
<i>Persicaria lapathifolia</i>	Willow weed	FACW
<i>Phalaris aquatica</i>	Harding grass	FACU
<i>Phalaris lemmonii</i>	Lemmon's canary grass	FACW
<i>Phalaris paradoxa</i>	Hood canary grass	FAC
<i>Phoradendron leucarpum</i> subsp. <i>macrophyllum</i>	Mistletoe	UPL
<i>Phyla nodiflora</i>	Frogfruit	FACW
<i>Phytolacca americana</i> var. <i>americana</i>	Pokeweed	FAC
<i>Pistacia vera</i>	Pistachio	UPL
<i>Plagiobothrys bracteatus</i>	Bracted popcornflower	FACW
<i>Plagiobothrys greenei</i>	Greene's popcornflower	FACW
<i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	Slender popcornflower	FACW
<i>Plagiobothrys undulatus</i>	Wavy-stemmed popcornflower	OBL
<i>Plantago coronopus</i>	Buck's-horn plantain	FAC
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Plantago major</i>	Common plantain	FAC
<i>Platanus racemosa</i>	Western sycamore	FAC
<i>Poa annua</i>	Annual blue grass	FAC
<i>Poa pratensis</i> subsp. <i>pratensis</i>	Kentucky blue grass	FAC
<i>Polygonum aviculare</i> subsp. <i>depressum</i>	Prostrate knotweed	FAC
<i>Polypogon maritimus</i>	Mediterranean beard grass	OBL
<i>Polypogon monspeliensis</i>	Annual rabbitfoot grass	FACW
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont cottonwood	FAC
<i>Portulaca oleracea</i>	Purslane	FAC
<i>Prunus cerasifera</i>	Cherry plum	UPL
<i>Prunus dulcis</i>	Almond	UPL
<i>Prunus persica</i>	Peach	UPL
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i>	Dwarf woollyheads	FACW
<i>Psilocarphus oregonus</i>	Oregon woollyheads	OBL
<i>Quercus lobata</i>	Valley oak	FACU
<i>Quercus wislizeni</i> var. <i>wislizeni</i>	Interior live oak	UPL
<i>Ranunculus muricatus</i>	Spiny-fruit buttercup	FACW
<i>Raphanus sativus</i>	Radish	UPL
<i>Robinia pseudoacacia</i>	Black locust	FACU
<i>Rorippa curvisiliqua</i>	Curvepod yellowcress	OBL
<i>Rosa setigera</i>	Climbing rose	UPL
<i>Rubus armeniacus</i>	Armenian blackberry	FAC
<i>Rumex crispus</i>	Curly dock	FAC
<i>Rumex pulcher</i>	Fiddle dock	FAC

Species Name	Common Name	Wetland Indicator
		Status
<i>Sagittaria latifolia</i>	Broadleaf arrowhead	OBL
<i>Salix exigua</i>	Sandbar willow	FACW
<i>Salix gooddingii</i>	Goodding's black willow	FACW
<i>Salix laevigata</i>	Red willow	FACW
<i>Salix lasiolepis</i>	Arroyo willow	FACW
<i>Salsola tragus</i>	Russian thistle	FACU
<i>Sambucus nigra subsp. caerulea</i>	Blue elderberry	FACU
<i>Schoenoplectus acutus var. occidentalis</i>	Common tule	OBL
<i>Silene gallica</i>	Small-flower catchfly	UPL
<i>Silybum marianum</i>	Milk thistle	UPL
<i>Solanum elaeagnifolium</i>	White horse-nettle	UPL
<i>Sonchus asper subsp. asper</i>	Prickly sow thistle	FAC
<i>Sonchus oleraceus</i>	Common sow thistle	UPL
<i>Sorghum halepense</i>	Johnson grass	FACU
<i>Spergula arvensis</i>	Corn spurrey	UPL
<i>Spergularia rubra</i>	Red sand-spurrey	FAC
<i>Stipa miliacea var. miliacea</i>	Smilo grass	UPL
<i>Stipa pulchra</i>	Purple needle grass	UPL
<i>Toxicodendron diversilobum</i>	Western poison oak	FACU
<i>Tragopogon porrifolius</i>	Salsify	UPL
<i>Tribulus terrestris</i>	Puncture vine	UPL
<i>Trichostema lanceolatum</i>	Vinegar weed	FACU
<i>Trifolium dubium</i>	Little hop clover	UPL
<i>Trifolium fragiferum</i>	Strawberry clover	FAC
<i>Trifolium glomeratum</i>	Clustered clover	UPL
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Trifolium hybridum</i>	Alsike clover	FAC
<i>Trifolium tomentosum</i>	Woolly clover	UPL
<i>Triticum aestivum</i>	Wheat	UPL
<i>Typha angustifolia</i>	Narrow-leaved cattail	OBL
<i>Typha latifolia</i>	Broad-leaved cattail	OBL
<i>Verbascum blattaria</i>	Moth mullein	UPL
<i>Verbena bonariensis</i>	South American vervain	FACW
<i>Vicia villosa subsp. varia</i>	Winter vetch	UPL
<i>Vitis californica</i>	California wild grape	FACU
<i>Xanthium strumarium</i>	Cocklebur	FAC
<i>Zeltnera muehlenbergii</i>	Monterey centaury	FAC

Attachment D

JD Request Form

REQUEST FOR AQUATIC RESOURCES DELINEATION VERIFICATION

OR JURISDICTIONAL DETERMINATION

A separate jurisdictional determination (JD) is not necessary to process a permit. An Approved Jurisdictional Determination (AJD) is required to definitively determine the extent of waters of the U.S. and is generally used to disclaim jurisdiction over aquatic resources that are not waters of the U.S., in cases where the review area contains no aquatic resources, and in cases when the recipient wishes to challenge the water of the U.S. determination on appeal. Either an Aquatic Resources Delineation Verification or a Preliminary Jurisdictional Determination (PJD) may be used when the recipient wishes to assume that aquatic resources are waters of the U.S. for the purposes of permitting. In some circumstances an AJD may require more information, a greater level of effort, and more time to produce. If you are unsure which product to request, please speak with your project manager or call the Sacramento District's general information line at (916) 557-5250.

I am requesting the product indicated below from the U.S. Army Corps of Engineers, Sacramento District, for the review area located at:

Street Address: _____ City: _____ County: _____ State: _____ Zip: _____ Section: _____ Township: _____ Range: _____ Latitude (decimal degrees): _____ Longitude (decimal degrees): _____ The approximate size of the review area for the JD is _____ acres. (Please attach location map)	
Choose one: I own the review area I hold an easement or development rights over the review area I lease the review area I plan to purchase the review area I am an agent/consultant acting on behalf of the requestor Other: _____	Choose one product: I am requesting an Aquatic Resources Delineation Verification I am requesting an Approved JD I am requesting a Preliminary JD I am requesting additional information to inform my decision about which product to request
Reason for request: (check all that apply) I need information concerning aquatic resources within the review area for planning purposes. I intend to construct/develop a project or perform activities in this review area which would be designed to avoid all aquatic resources. I intend to construct/develop a project or perform activities in this review area which would be designed to avoid those aquatic resources determined to be waters of the U.S. I intend to construct/develop a project or perform activities in this review area which may require authorization from the Corps; this request is accompanied by my permit application. I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district's list of navigable waters under Section 10 of the Rivers and Harbors Act of 1899 and/or is subject to the ebb and flow of the tide. My lender, insurer, investors, local unit of government, etc. has indicated that an aquatic resources delineation verification is inadequate and is requiring a jurisdictional determination. I intend to contest jurisdiction over particular aquatic resources and request the Corps confirm that these aquatic resources are or are not waters of the U.S. I believe that the review area may be comprised entirely of dry land. Other: _____	
Attached Information: Maps depicting the general location and aquatic resources within the review area consistent with Map and Drawing Standards for the South Pacific Division Regulatory Program (Public Notice February 2016, http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/) Aquatic Resources Delineation Report, if available, consistent with the Sacramento District's Minimum Standards for Acceptance (Public Notice January 2016, http://1.usa.gov/1V68lYa)	
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 review area. Your signature shall be an affirmation that you possess the requisite property rights for this request on the subject property.	
*Signature: <u>Sarah VonderOhe</u> Date: _____ Name: _____ Company name: _____ Address: _____ Telephone: _____ Email: _____	

***Authorities:** 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 Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 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 project area 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 as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the 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 information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Attachment E

Access Letter