

2019-20 Dry-Season & Wet- Season Branchiopod Survey 90-Day Report

SVLC 23 Property
(2020-TA-0318)

Placer County, California
19 August 2020



Prepared for:

SVLC 23, LLC
c/o Sierra View Land Company
105 Alta Vista Drive
Roseville, CA 95678

Recommended Citation:

Madrone Ecological Consulting, Inc. (Madrone). 2020. *2019-20 Dry-Season & Wet-Season Branchiopod Survey 90-Day Report, SVLC 23 Property (2020-TA-0318)*. Prepared for SVLC 23, LLC. Published on 19 August 2020.

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1.0 OBJECTIVE

The purpose of this report is to summarize the results of protocol surveys for listed large vernal pool branchiopods conducted by Madrone Ecological Consulting (Madrone) within the SVLC 23 Property (formally Sierra View – Westpark) Project Area (Study Area) during the 2019-2020 dry-season and wet-season. Target species included the federally endangered conservancy fairy shrimp (*Branchinecta conservatio*) and vernal pool tadpole shrimp (*Lepidurus packardii*), as well as the federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*). Dry-season and wet-season surveys were conducted under the authority of U.S. Fish and Wildlife Service (USFWS) Recovery Permits for Dustin Brown (TE85084C-0) and Bonnie Peterson (TE205600-1) of Section 10(a)(1)(A) of the ESA, 16 U.S. Code 1531 et seq. and in accordance with the 13 November 2017 Survey Guidelines for the Listed Large Branchiopods (Guidelines) (USFWS 2017). Authorization to conduct dry-season surveys was issued by the USFWS in an e-mail to Dustin Brown on 8 November 2019 and wet-season surveys was issued by the USFWS in an e-mail to Dustin Brown on 19 December 2019 (USFWS reference number 2020-TA-0318).

2.0 LOCATION

The approximately 23-acre Study Area is located north of Shasta Street and south of Diamond Oaks Road, just east of the Sierra View Country Club in the City of Roseville, Placer County, California. The Study Area falls within Section 35, Township 11 North, Range 6 East (MDB&M) of the “Roseville, California” 7.5-Minute Series USGS Topographic Quadrangle (USGS 1992) (Figure 1).

3.0 METHODS AND MATERIALS

3.1 Dry-Season Survey

All potential large vernal pool branchiopod habitat within the Study Area was sampled. Potential habitat for federally listed large branchiopods is defined as any seasonally inundated depression that, on average, ponds water at a sufficient depth and duration for a listed large branchiopod to complete its lifecycle. Habitats that swiftly flow water (e.g., creeks, streams, and ephemeral drainages) or habitats that are semi-to-permanently inundated and support perennial populations of predators (e.g., bullfrogs, fish, and crayfish) generally do not provide suitable habitat for listed large branchiopods (USFWS 2017). Figure 2 is an exhibit of potential branchiopod habitat within the Study Area (City of Roseville 2019). All vernal pools, seasonal wetlands, and seasonal wetland swales were sampled during the dry-season survey totaling 19 features. The seasonal wetland swale (SWS-1) was sampled during the dry season survey. It was not sampled during the wet season survey because it did not pond and exhibited flowing water during rain events and was unsuitable habitat for vernal pool branchiopods.

Dry soil/substrate was collected from the top 1 to 3 centimeters with a hand spade from the lowest topographic areas within each sampled feature. Wherever possible, substrate samples were collected in chunks to avoid damaging branchiopod eggs. The number and volume of soil/substrate samples collected was proportionate

to the size of the sampled feature pursuant with the requirements summarized in Table 1 of the Guidelines (USFWS 2017). Soil/substrate samples were transferred to liter-sized plastic bags and marked with the project name, aquatic feature number, and collection date for transport to Madrone's laboratory. Madrone senior biologist Dustin Brown collected soil samples for 16 features on 12 November 2019. Three additional habitat features were identified during the wet season survey and soil for those three features (SW-13, 14, and 15) were collected by Bonnie Peterson upon drying. Dry-season samples were collected in accordance with the Guidelines (USFWS 2017) and the special terms and conditions of Mr. Brown's and Ms. Peterson's permits.

A brine solution was prepared in the lab by stirring non-iodized salt with lukewarm tap water in a large container. Soils/substrate samples collected from each aquatic feature were individually placed into the brine solution, and manually worked by hand to reduce soil structure. Floating organic material was decanted into either a 710-micron-diameter pore-size sieve stacked atop a 150- micron-diameter pore-size sieve. The soil material was processed through the top sieve by flushing it with lukewarm tap water while gently rubbing it with a soft-bristle brush. The organic material retained from the 150-micron-diameter pore-size sieve was then removed and thinly spread into plastic petri dishes.

All sieved fractions were microscopically inspected for the presence of large branchiopod eggs by Mr. Brown. Soil samples were prepared and inspected pursuant to the Guidelines (USFWS 2017) and the special terms and conditions of Mr. Brown's Take Permit (TE85084C-0) dated 5 March 2019.

If present, total egg abundance information for each sampled feature was reported in terms of: low abundance (estimate of 1-10 eggs/sampled feature); medium abundance (estimate of 11-50 eggs/sampled feature); and high abundance (estimate of more than 50 eggs/sampled feature).

Scanning electron micrographs of eggs (Gilchrist 1978, Hill and Shepard 1998, Mura 1991) are used to identify and compare any branchiopod eggs observed within the soil samples. Evidence of other aquatic invertebrates encountered was also noted on the lab data sheet. **Attachment A** contains the Dry-Season Lab Data Sheet, which lists sampled aquatic features.

3.2 Wet-Season Survey

Field surveys were conducted by Mr. Brown or Ms. Peterson every 14 days between 11 December 2019, and 28 April 2020, in accordance with the Guidelines (USFWS 2017). Sampling of inundated features occurred on 11 and 24 December 2019, 8 and 22 January, 5 and 19 February, 4 and 18 March, and 1 and 14 April 2020. All features representing appropriate federally-listed large vernal pool branchiopod habitat were dry by the final sampling date of 28 April 2019.

All potential large vernal pool branchiopod habitat was sampled with a 5-foot long dip net equipped with a 12-inch D-ring and 650 micron mesh. Sampling involved making a series of pulls by extending the net out and pulling it back in a sweeping motion. The net was examined for the presence of large vernal pool branchiopods and then cleaned of debris between pulls. The number of pulls made in each feature was commensurate to

feature size and ponding depth. In addition, all potential habitat was visually inspected for the presence of large vernal pool branchiopods throughout the sampling sessions. Air temperature, water temperature, and approximate maximum depth of ponding was measured and recorded during the sampling sessions. **Attachment B** contains the wet-season data sheets with the above described field data.

4.0 GENERAL SITE CONDITIONS AND HABITATS

The Study Area is bounded on the north by Diamond Oak Road and to the south by Shasta Street. The abutting area east of the Study Area is a residential development, and to the west is a community of townhomes and the Sierra View Country Club and Golf Course.

The Study Area ranges from approximately 160-175 feet above mean seal level (AMSL), with rolling terrain sloping towards the north and south. A transmission line corridor is located within the northern portion of the Study Area, and another bisects the center of the Study Area. An unnamed intermittent tributary to South Branch Pleasant Grove Creek flows to the northwest through the Study Area (SFEI 2020), and a drainage ditch from south to north towards the intermittent tributary.

The principal vegetation community within the Study Area is non-native annual grassland. This vegetation community is fairly sparse in the southern portion of the site, with a mix of non-native annual grasses including soft brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), perennial ryegrass (*Festuca perennis*), medusahead grass (*Elymus caput-medusa*), and wild oats (*Avena fatua*), and forbs such as Spanish lotus (*Acmispon americanus* var. *americanus*), Fitch's spikeweed (*Centromadia fitchii*), blue dicks (*Dichelostemma capitatum*), filaree (*Erodium botrys*), miniature lupine (*Lupines bicolor*), hairy hawkbit (*Leontodon saxatilis*), vetch (*Vicia* spp.), and English plantain (*Plantago lanceolata*). In the northern portion of the site, the annual grasslands are much denser in vegetation with a higher percentage of grass species and fewer forbs.

Interspersed throughout the grassland are a number of mature oaks, primarily blue oaks (*Quercus douglasii*), with scattered Valley oak (*Quercus lobata*) and live oak (*Quercus wislizeni*). A number of native and non-native trees are located along a drainage ditch and intermittent tributary including Chinese tallowtree (*Triadica sebifera*), southern catalpa (*Catalpa bignonioides*), honey locust (*Gleditsia triacanthos*), and willows (*Salix* spp.). Common shrubs in the riparian understory of the intermittent tributary include Himalayan blackberry (*Rubus armeniacus*), wild rose (*Rosa californica*), and narrow-leaf willow (*Salix exigua*).

Aquatic resource features delineated within the Study Area consist of the south to north flowing drainage ditch, an intermittent drainage and associated riparian wetland, a seasonal wetland swale and a number of scattered vernal pools and seasonal wetlands. See **Figure 2** for the sampling locations.

5.0 FINDINGS

No listed or non-listed large vernal pool branchiopod eggs (cysts) were observed in any sample collected during the 2019 and 2020 dry-season sampling. No listed or non-listed large branchiopods were observed within the Study Area during the 2019-20 wet-season protocol surveys.

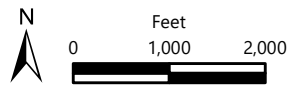
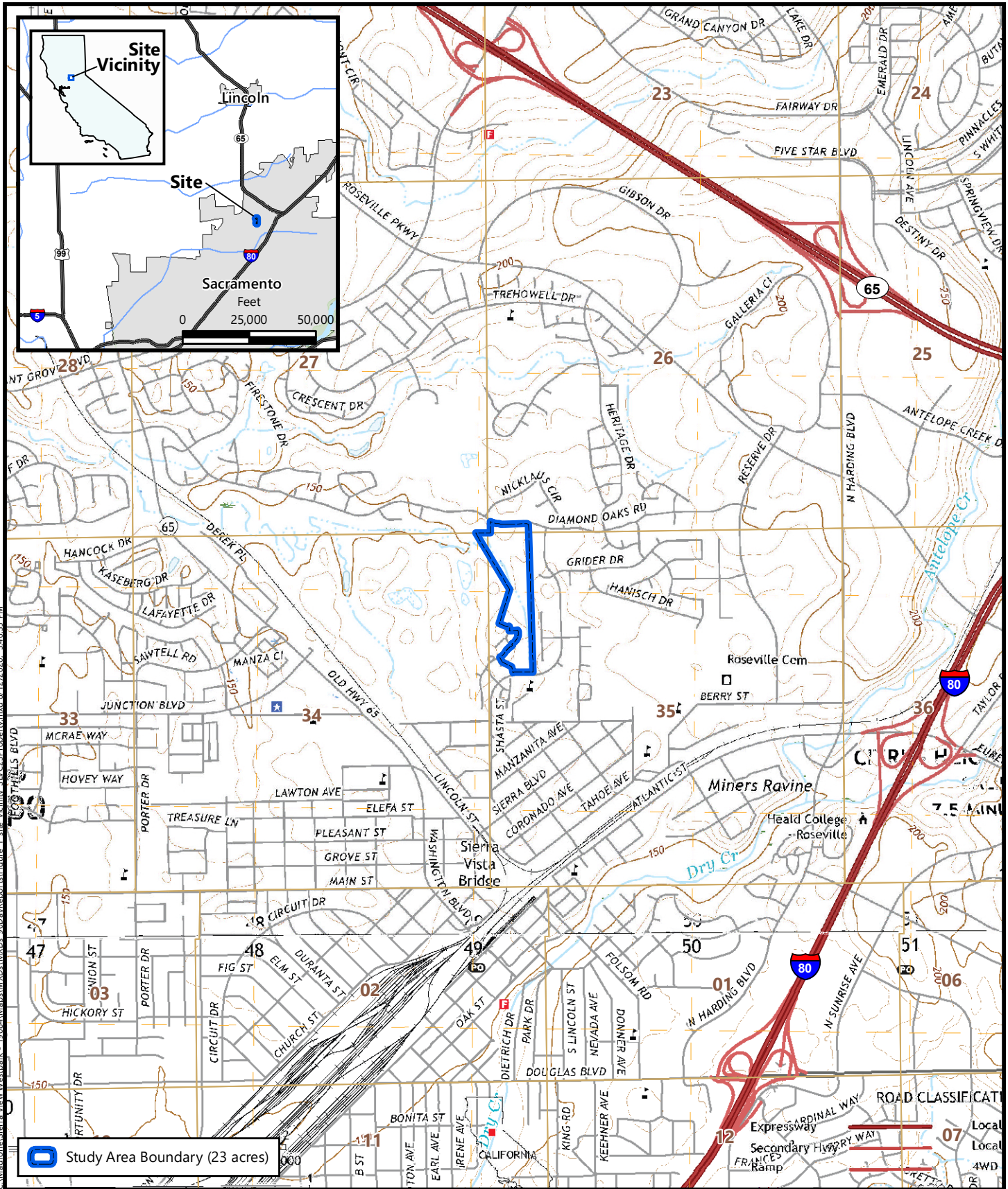
6.0 REFERENCES

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- U.S. Department of the Interior, Geological Survey (USGS). 1992. *Roseville, California 7.5-minute Quadrangle*. Geological Survey. Denver, Colorado.
- U.S. Department of the Interior, Fish and Wildlife Service. 2017. *Survey Guidelines for the Listed Large Branchiopods*. Sacramento, California. Revised November 13, 2017.

Figures

Figure 1. Site and Vicinity

Figure 2. Sampling Locations

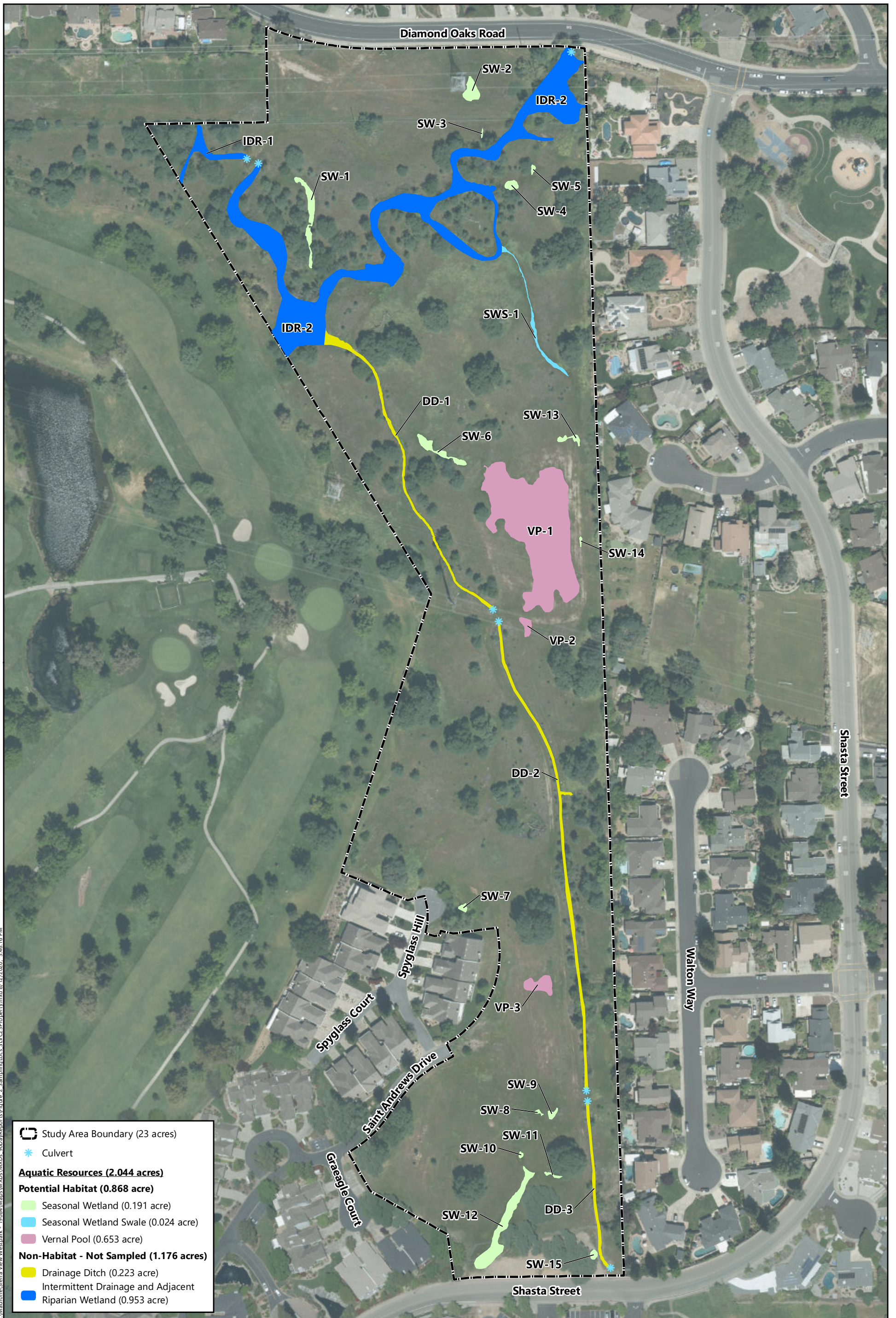


Source: United States Geologic Survey, 2018
 "Roseville, California" 7.5-Minute Topographic Quadrangle
 Sections 26, 34, and 35, Township 11 North, Range 6 East
 Longitude -121.283085, Latitude 38.764232

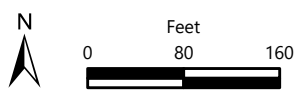
Figure 1
Site and Vicinity

SLVC 23 Property
 Roseville, Placer County, California





C:\Madrone\Sierra View Westpark - 191084\Maps\MXD\SLVC 23 Property.mxd 8/12/2020 3:46:16 PM



Aerial Base: City of Roseville, 22 April 2019

Figure 2
Sampling Locations

SLVC 23 Property
Roseville, Placer County, California



Attachments

- Attachment A. Dry-Season Lab Data Sheet
- Attachment B. Wet-Season Data Sheets
- Attachment C. Representative Photographs

Attachment A

Dry-Season Lab Data Sheet

Dry Season Lab Data Sheet

Project Information		Biologist Information	
Project Name: <i>Sierra View</i>	Quad: <i>Roseville</i>	Name of Person(s) Who Conducted the Following Tasks and Permit Number(s):	
USFWS Project Number: <i>2020-TA-318</i>	Township: <i>11 North</i>	Soil Collection Conducted By: <i>Bonnie Peterson TE 205600-1</i>	
County: <i>Placer</i>	Range: <i>6 East</i>	Soil Processing Conducted By: <i>Dustin Brown TE 85084C-0</i>	
Lat: <i>38.763889</i>	Section: <i>35</i>	Soil Analysis/Cysts ID Conducted By: <i>Dustin Brown</i>	
Long: <i>121.282714</i>		Soil Collection Date: <i>11/12/19 and 4/15/20</i>	Soil Processing Date: <i>12/2, 3+4/2020 and 4/7/2020</i>

Feature Number	Invertebrates Present (X)														Comments		
	Insect Exo-Skeletons	Micro-Turbellaria Cysts	Cladocera ephippia	Gadocera	Ostracods Live/Cysts/Carapaces	Copepods Live/Cysts	Number of Large Branchiopod Eggs					Hydracarina Live	Nematoda	Collembola		Other Species	
							Branchinecta sp.	Lepidurus packardii	Linderiella occidentalis	Lynceus brachyurus	Cyzicus californicus						
VP-3	X	X			X												3 plates
SW-6	X	X															6 plates
SW-11	X																5 plates
SW-5	X														X		5 plates
SW-10	X	X			X										X		4 plates
SW-4	X														X		4 plates
SW-9	X																8 plates
SW-3	X														X		5 plates
SW-2	X														X		3 plates
SW-8	X														X		6 plates
SW-1	X	X													X	Rotofirs	12 plates
SW-12	X	X			X										X	Rotofirs	7 plates
VP-1	X	X	X	X	X	X									X	Rotofirs	6 plates
VP-2	X	X			X	X								X		Rotofirs	8 plates
SW-7	X														X		5 plates
SWS-1	X	X													X	Rotofirs	6 plates
SW-13	X	X													X		4 plates
SW-14	X	X												X	X		5 plates
SW-15	X	X	X	X	X	X									X		4 plates

4/7/2020

Attachment B

Wet-Season Data Sheets

Wet Season Survey Data Sheet



Project Name: SVLC 23 Property

1/22/2020 Weather Conditions: Overcast, calm Permit #: TE205600-1

Start Time: 1052 Start Air Temperature (°C): 13 Permitted Biologist: Bonnie Peterson

End Time: 1200 End Air Temperature (°C): 16 Assisted By:

Feature No.	Water Temperature (°C)	Present Pounded Depth inches	Current % Surface Area	Micro-Turbellaria	Crustacea										Insecta										Gastropoda	Hydracaini	Herps		Habitat Condition			Land Use						
					Amphipoda	Cladocera	Copepoda	Ostracoda	Large Branchiopods						Coleoptera			Diptera		Ephemeroptera	Hemiptera		Odonata				Bufo boreas	Pseudacris sierra	Undisturbed	Disturbed			Fallow	Agriculture	Grazed			
									BRLY	BRME	CYCA	LEPA	LIOC	LYBR	Dytiscidae	Hydrophilidae	Halipidae	Chironomidae	Culicidae		Coxidae	Notonectidae	Limnephilidae	Zygoptera						Anisoptera	Tire Ruts	Garbage			Plowed or Disked	Light	Moderate	Heavy
SW-12	12	9	100			X																	X	X			X											
SW-11	Dry																							X			X											
SW-10	12	5	100	X																				X	old		X											
SW-8/9	11	4	80																					X			X											
VP-3	Dry																							X			X											
SW-7	Dry																									old road												
VP-2	11	5	100	X																					old road													
VP-1	11	12	100	X	X	X						X			X	X							X	X			X											
SW-6	11	10	25	X			X																	X			X											
SW-4	Dry																							X			X											
SW-5	Dry																							X			X											
SW-2	Dry																							X			X											
SW-3	Dry																							X			X											
SW-1	Dry																							X			X											
SW-13	11	2	100				X					X												X			X											
SW-14	Dry																									old road												
SW-15	11	7	100																							old road												

Large Branchiopods: BRLY = Branchinecta lynchi, BRME = Branchinecta mesoavallensis, LIOC = Linderiella occidentalis, LEPA = Lepidurus packardii, CYCA = Cyzicus californicus, LYBR = Lynceus brachyurus
 Land Use: Grazed (C = cattle, H = horse, S = sheep, O = other)
 Hydrology: S = saturated, N/P = not ponded
 X = species present, Large Branchiopods abundance = (1's, 10's, 100's, 1000's)

Attachment C

Representative Photos



Photograph of VP-1 facing north on 12 November 2019



Photograph of the Study Area facing southwest on 12 November 2019



Photograph of SWS-1 facing south on 12 November 2019



Facing southwest at SW-12 on 18 March 2020



Facing north at SW-8 on 18 March 2020



Facing northwest at VP-1 on 18 March 2020

Aquatic Resources Delineation Report

SVLC 23 Property

APN: 015-011-029-000

Placer County, California
31 July 2020



Prepared for:

SVLC 23, LLC
c/o Sierra View Land Company
105 Alta Vista Drive
Roseville, CA 95678

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2020. *Aquatic Resources Delineation Report for SVLC 23 Property*. Prepared for SVLC 23, LLC. Published on 31 July 2020.

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SVLC 23 Property**

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Attachments

- Attachment A. Arid West Wetland Determination Data Forms
- Attachment B. Aquatic Resources Delineation
- Attachment C. Plant Species Observed within the Study Area
- Attachment D. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet
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- Attachment F. Permission to Enter

Tables

Table 1. Aquatic Resources Mapped within the Study Area **3**

1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the SVLC 23 Property site (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 23-acre Study Area is comprised of APN 015-011-029-000, located north of Shasta Street and south of Diamond Oaks Road, just east of the Sierra View Country Club in the City of Roseville, Placer County, California. The Study Area falls within Section 35,34, and 26, Township 11 North, Range 6 East (MDB&M) of the "Roseville, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2018) (Figure 1).

1.1 Contact Information

Property Owner

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2.0 METHODOLOGY

Madrone senior biologist Bonnie Peterson conducted a delineation of aquatic resources within the Study Area on 15 and 16 April and 15 and 20 May 2020. Aquatic features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on an ortho-rectified aerial photograph (City of Roseville 2019).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (Lichvar et al. 2016) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2020) was used for plant nomenclature.

3.0 EXISTING CONDITIONS

The Study Area is bounded on the north by Diamond Oak Road and to the south by Shasta Street. The abutting area east of the Study Area is a residential development, and to the west is a community of townhomes and the Sierra View Country Club and Golf Course.

The Study Area ranges from approximately 160-175 feet above mean seal level (AMSL), with rolling terrain sloping towards the north and south. A transmission line corridor is located within the northern portion of the Study Area, and another bisects the center of the Study Area. An unnamed intermittent tributary to South Branch Pleasant Grove Creek flows to the northwest through the Study Area (SFEI 2020), and a drainage ditch from south to north towards the intermittent tributary.

The principal vegetation community within the Study Area is non-native annual grassland. This vegetation community is fairly sparse in the southern portion of the site, with a mix of non-native annual grasses including soft brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), perennial ryegrass (*Festuca perennis*), medusahead grass (*Elymus caput-medusa*), and wild oats (*Avena fatua*), and forbs such as Spanish lotus (*Acmispon americanus var. americanus*), Fitch's spikeweed (*Centromadia fitchii*), blue dicks (*Dichelostemma capitatum*), filaree (*Erodium botrys*), miniature lupine (*Lupines bicolor*), hairy hawkbit (*Leontodon saxatilis*), vetch (*Vicia spp.*), and English plantain (*Plantago lanceolata*). In the northern portion of the site, the annual grasslands are much denser in vegetation with a higher percentage of grass species and fewer forbs.

Interspersed throughout the grassland are a number of mature oaks, primarily blue oaks (*Quercus douglasii*), with scattered Valley oak (*Quercus lobata*) and live oak (*Quercus wislizeni*). A number of native and non-native trees are located along a drainage ditch and intermittent tributary including Chinese tallowtree (*Triadica sebifera*), southern catalpa (*Catalpa bignonioides*), honey locust (*Gleditsia triacanthos*), and willows (*Salix spp.*). Common shrubs in the riparian understory of the intermittent tributary include Himalayan blackberry (*Rubus armeniacus*), wild rose (*Rosa californica*), and narrow-leaf willow (*Salix exigua*).

3.1 Hydrology

The Study Area includes a central drainage ditch that flows from south to north through the site into an intermittent tributary to South Branch Pleasant Grove Creek in the northern portion of the site. The intermittent tributary flows from east to west through the Study Area. In addition, there are a number of seasonal wetland and vernal pool features scattered throughout the Study Area. The wetlands and other waters are described in more detail within the results portion of this report.

The Study Area is located in the Upper Coon-Upper Auburn Watershed (HUC 18020161) (USGS 2020). Mean annual precipitation for the Study Area is approximately 20.27 inches per year, and the site received approximately 55% of average rainfall in the 2019-2020 water year (NOAA 2020)

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2020), two soil mapping units occurs within the Study Area (**Figure 2**): (141) Cometa-Fiddymont complex, 1 to 5% slopes and (142) Cometa-Ramona sandy loams, 1 to 5% slopes. While neither of these soil types are considered hydric, they contain minor hydric components in Alamo depressions and xerofluent drainageways.

3.3 Driving Directions

To access the Study Area from Sacramento, drive north east on Interstate 80 towards Reno. Exit 105A into Atlantic Street turn right on Yosemite Street, and Right on Shasta Street. The Study Area is directly across from Ferris Spranger Elementary School. The Study Area is fenced and not accessible without prior arrangements.

4.0 RESULTS

Aquatic resource features delineated within the Study Area consist of the south to north flowing drainage ditch, an intermittent drainage and associated riparian wetland, a seasonal wetland swale and a number of scattered vernal pools and seasonal wetlands. Data sheets are included in **Attachment A**, a map of the aquatic resources is included as **Figure 3** and **Attachment B**. A list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheet* for the aquatic resources are included on as **Attachment D**. Photographs of the Study Area and Aquatic Resources is included as **Attachment E**.

Table 1. Aquatic Resources Mapped within the Study Area

Waters Type	Acreage/ Linear Feet
Wetlands	
<i>Seasonal Wetland</i>	
SW-1	0.033
SW-2	0.020
SW-3	0.001
SW-4	0.008
SW-5	0.002
SW-6	0.022
SW-7	0.025
SW-8	0.002
SW-9	0.003
SW-10	0.075
SW-11	0.008
Seasonal Wetland Subtotal	0.199
<i>Seasonal Wetland Swale</i>	
SWS-1	0.024
Seasonal Wetland Swale Subtotal	0.024
<i>Vernal Pool</i>	

VP-1	0.614
VP-2	0.006
VP-3	0.028
Vernal Pool Subtotal	0.648
Other Waters	
<i>Drainage Ditch</i>	
DD-1	0.077/ 614
DD-2	0.109/ 876
DD-3	0.038/ 311
Drainage Ditch Subtotal	0.223/ 1,801
<i>Intermittent Drainage</i>	
IDR-1	0.047/ 215
IDR-2	0.921/ 1,791
Intermittent Drainage Subtotal	0.953/ 2,006
Total	2.047 acres/ 3,807 linear feet

4.1 Wetlands

4.1.1 Seasonal Wetlands

The Study Area contains 11 seasonal wetlands concentrated along the southern and northern boundaries. Seasonal wetlands are shallow ephemeral wetlands area characterized by seasonal ponding, Seasonal wetlands within the Study Area are typically dominated by opportunistic facultative wet to facultative grasses and forbs such as Mediterranean barley (*Hordeum marinum*), Italian ryegrass, rabbitfoot grass (*Polypogon monspeliensis*), Bermuda grass (*Cynodon dactylon*), hyssop loosestrife (*Lythrum hyssopifolium*), and curly dock (*Rumex crispus*).

A few of the seasonal wetlands in the northern portion of the Study Area (SW-4, SW-5) did not display the necessary redox features to meet the redox dark surface hydric soil indicator, however, as saturation was observed during the growing season (May 16) it was assumed that the dark soils in these features were masking redoximorphic features when both wetland vegetation and wetland hydrology were present. None of the seasonal wetlands have a direct surface water connection to the ditch or intermittent drainage.

4.1.2 Seasonal Wetland Swale

The seasonal wetland swale (SWS-1) within the study area flows from south the north and is dominated entirely by Italian ryegrass. This feature lacks evidence of flow or an ordinary highwater mark and did not contain water during the 2019-2020 rainy season, but was saturated at the surface during the April survey. The seasonal wetland swale is connected to intermittent Drainage IDR-2.

4.1.3 Vernal Pools

The Study Area contains three vernal pools towards the center of the property. Vernal pools are shallow ephemeral wetlands characterized by seasonal ponding, and hydrologically similar to seasonal wetlands; however, vernal pools are typically underlain by an imperious substrate resulting in unique flora. The vernal pools in the Study Area were given this designation based on a dominance of vernal pool plant species, including slender pool popcorn flower (*Plagiobothrys stipitatus* var. *micranthus*), dwarf woolyheads

(*Psilocarphus brevissimus* var. *brevissimus*), great valley coyote-thistle (*Eryngium castrense*), creeping spikerush (*Eleocharis macrostachya*) and annual hairgrass (*Deschampsia danthonioides*) and a lower overall vegetative cover. Vernal pools in the Study Area exhibited primary hydrology indicators including inundation, saturation, and oxidized rhizospheres along living roots. Soils exhibited a depleted matrix (D3).

None of the vernal pools on-site have a direct surface water connection to the ditch or intermittent drainage. There is an earthen dam between VP-1 and SW-6 that prevents downstream flow and impounds water in VP-1.

4.2 Other Waters

4.2.1 Drainage Ditch

An earthen drainage ditch conveys irrigation run-off from developments south and east of the Study Area, north to the intermittent drainage. This feature is characterized by steep slopes, and is well vegetated with dense wetland obligates including water plantain (*Alisma lanceolatum*), broad-leaved cattail (*Triadica sebifera*), dotted smartweed (*Persicaria punctata*) and tall nutsedge (*Cyperus eragrostis*) with scattered native and non-native trees including Chinese catalpa, chinese tallow, willows, and Callery pear (*Pyrus calleryan*). This feature was apparently constructed concurrent with the adjacent development to the south and east sometime after 1966 and before 1993 (HistoricAerials.com 2020). A culvert under a dirt maintenance road is located between the two drainage ditch segments (DD-1 and DD-2), and between segments DD-2 and DD-3. Stormwater and irrigation runoff enter the ditch through a culvert at the southern end of DD-3. The ditch flows to the intermittent drainage IDR-2 in the northern portion of the Study Area.

4.2.2 Intermittent Drainage

An intermittent drainage and adjacent riparian wetland are located in the northern portion of the Study Area. This drainage flows from east to west through the Study Area and the two segments (IDR-1 and IDR-2) are connected via a culvert under a dirt maintenance road. The City of Roseville storm drainage system outfalls into the northern portion of IDR-2 in the northeast corner of the Study Area south of Diamond Oaks Road. The intermittent drainage is the upper watershed, and ultimately a tributary to, South Branch Pleasant Grove Creek.

IDR-1 and IDR-2 typically exhibit a bed, bank, and channel, ranging in width from 1-3 ft wide. Portions of this intermittent drainage lack an ordinary high water mark, or clear drainage patterns, and is characterized as riparian wetland with a mix of Santa Barbara sedge (*Carex Barbara*), dallisgrass (*Paspalum dilatatum*), dotted smartweed, tall nutsedge, Italian rygrass, dense Himalayan blackberry thickets, wild rose, and willows. The boundaries of the intermittent drainage were delineated at the ordinary high water mark, or the edge of riparian vegetation, whichever was in the most upland position. Minimal surface water was observed ponding in isolated section of this feature during the April field survey and non during the May visit. This intermittent drainage ultimately connects to the South Branch Pleasant Grove Creek.

5.0 CONCLUSION

Implementation of the USACE delineation protocol resulted in the identification of 2.047 acres/ 3,807 linear feet of wetlands or other waters within the Study Area. Each agency must determine if these wetlands and other waters, once delineated, are regulated by the local, state, and federal laws. The applicant is requesting the USACE concurrence regarding the quantity and locations of aquatic resources mapped within the Study Area (Figure 3, Attachment B) utilizing the USACE delineation protocol, and that the USACE determine Federal jurisdiction of these aquatic resources by providing the applicant with an approved jurisdictional determination letter. A signed form providing USACE staff accompanied access to the Study Area is included as **Attachment F**.

6.0 REFERENCES

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- U.S. Department of the Interior, Geological Survey (USGS). 2020. USGS Water Resources Division (WRD) and U.S. Department of Agricultural (USDA) Natural Resources Conservation Service (NRCS) Watershed Boundaries Dataset (WBD)

Figures

Figure 1. Site and Vicinity

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources

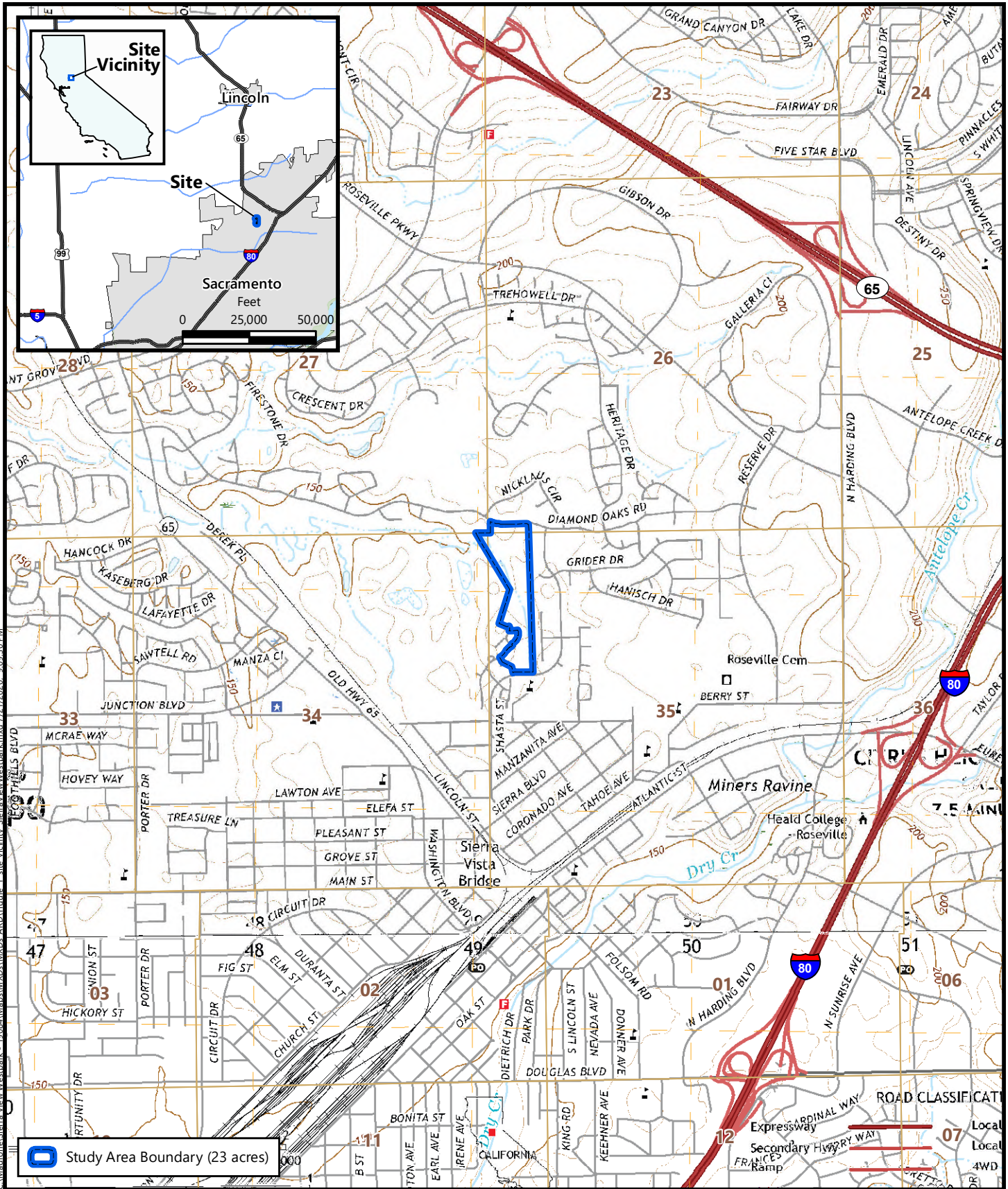
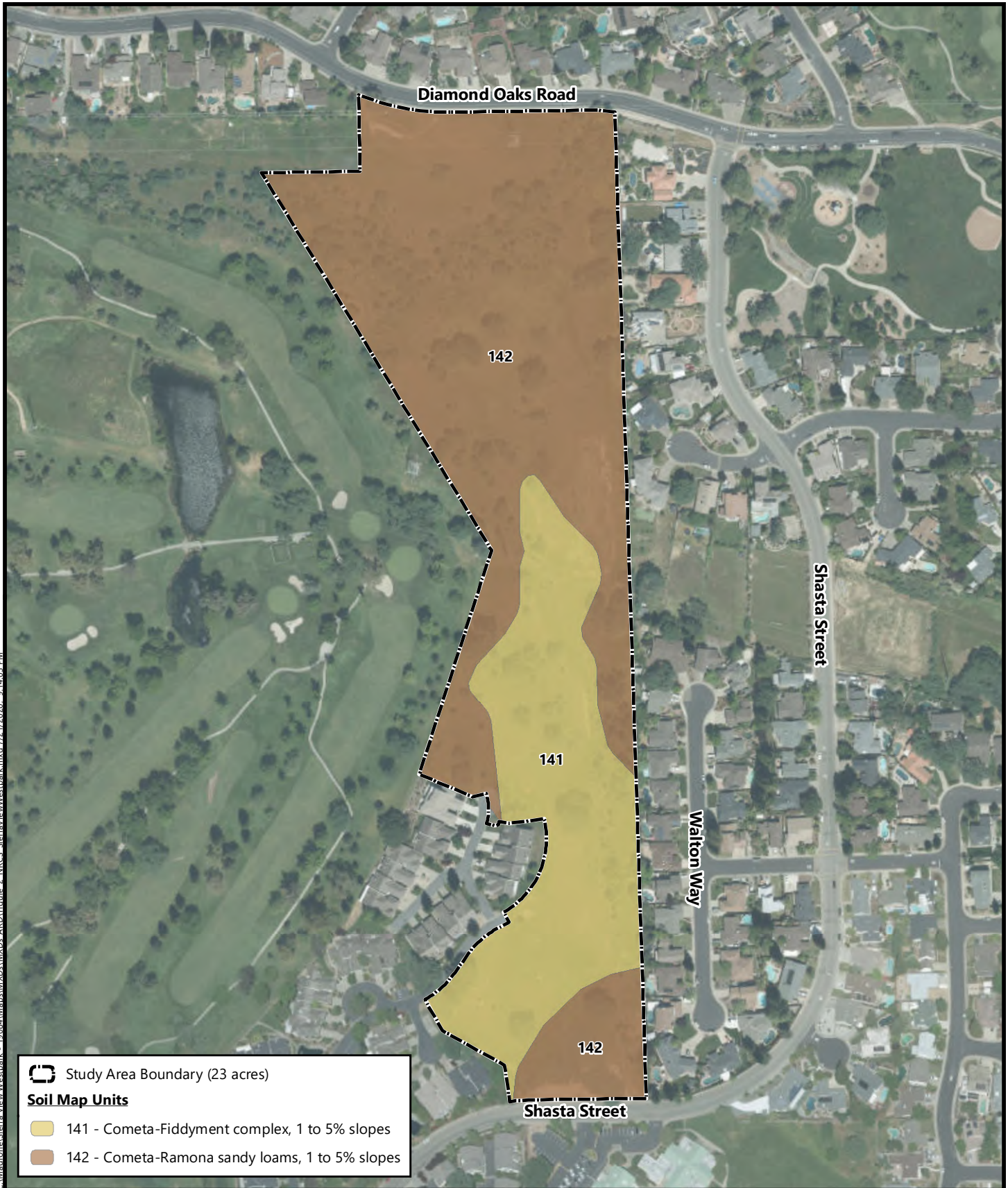


Figure 1
Site and Vicinity

Source: United States Geologic Survey, 2018
 "Roseville, California" 7.5-Minute Topographic Quadrangle
 Sections 26, 34, and 35, Township 11 North, Range 6 East
 Longitude -121.283085, Latitude 38.764232

SVLC 23 Property
 Roseville, Placer County, California





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Soil Survey Source: *USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part*
 Aerial Base: City of Roseville, 22 April 2019

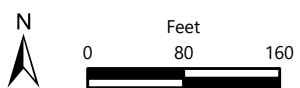
Figure 2
Natural Resources Conservation Service Soils

SVLC 23 Property
 Roseville, Placer County, California





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Aerial Base: City of Roseville, 22 April 2019

Figure 3
Aquatic Resources

SVLC 23 Property
Roseville, Placer County, California



Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation

Attachment C. Plant Species Observed within the Study Area

Attachment D. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet

Attachment E. Representative Site Photographs

Attachment F. Permission to Enter

Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 4.16.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-1
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7662057 Long: -121.2270614 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: <u>Located in lowest point of SW-4</u>	

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. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>10</u> x1 = <u>10</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>45</u> x3 = <u>135</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>15</u> x5 = <u>75</u> Column Totals: <u>90</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3.3</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> meter sq)				
1. <i>Leontodon saxatilis</i>	20	Y	FACU	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Ranunculus bonariensis</i>	10	N	OLB	
3. <i>Rumex crispus</i>	5	N	FAC	
4. <i>Festuca perennis</i>	40	Y	FAC	
5. <i>Trifolium campestre</i>	5	N	UPL	
6. <i>Acemispom americanus</i>	5	N	UPL	
7. <i>Geranium dissectum</i>	5	N	UPL	
8. _____	_____	_____	_____	
	<u>90</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>0</u>			Hydrophytic Vegetation Present? Yes <u>X</u> No _____

Remarks: _____

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		
0-14	10 YR 3/2	100					Sandy loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/>* No <input type="checkbox"/></p>
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Remarks: Note, required redox to meet F6 were not evident, however, they are likely masked by the dark soil.

HYDROLOGY

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

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u></p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u></p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 4.16.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-2
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76619457 Long: -121.2826728 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes <u>X*</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>Located at boundary of SW-4</u>	

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. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>5</u> x1 = <u>5</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>35</u> x3 = <u>105</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>40</u> x5 = <u>200</u> Column Totals: <u>85</u> (A) <u>330</u> (B) Prevalence Index = B/A = <u>3.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> meter sq)				
1. <u>Leontodon saxatilis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Ranunculus bonariensis</u>	<u>5</u>	<u>N</u>	<u>OLB</u>	
3. <u>Festuca perennis</u>	<u>35</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Geranium dissectum</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	
5. <u>Trifolium campestre</u>	<u>35</u>	<u>N</u>	<u>UPL</u>	
6. <u>Festuca bromoides</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
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-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		
0-14	10 YR 3/2	100					Sandy loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

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

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

Remarks: Note, required redox to meet F6 were not evident, however, they are likely masked by the dark soil.

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

Field Observations:	Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)		

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 4.16.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-3
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76620216 Long: -121.2826705 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes <u>X*</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>On very slight hillslope 0.5-1 ft higher then DP-1.</u>	

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>3</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>30</u> x4 = <u>120</u> UPL species <u>55</u> x5 = <u>275</u> Column Totals: <u>95</u> (A) <u>425</u> (B) Prevalence Index = B/A = <u>4.5</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter sq</u>)				
1. <u>Festuca bromoides</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Bromus hordeaceus</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Trifolium campestre</u>	<u>55</u>	<u>Y</u>	<u>UPL</u>	
4. <u>Geranium dissectum</u>	<u>trace</u>	<u>N</u>	<u>UPL</u>	
5. <u>Festuca perennis</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>95</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>5</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: _____

SOIL

Sampling Point: DP-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 3/2	100					Sandy loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/>* No _____</p>
<p>Remarks: Note, required redox to meet F6 were not evident, however, they are likely masked by the dark soil.</p>	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input checked="" type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>		<p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>	
<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 12</p> <p>(includes capillary fringe)</p>			<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____</p>		
<p>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</p>					
<p>Remarks:</p>					

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 4.16.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-4
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76627448 Long: -121.282582 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: <u>Located in lowest point of SW-5</u>	

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>5</u> x1 = <u>5</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>35</u> x3 = <u>105</u> FACU species <u>5</u> x4 = <u>20</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>45</u> (A) <u>130</u> (B) Prevalence Index = B/A = <u>2.9</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> meter sq)				
1. <u>Leontodon saxatilis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Ranunculus bonariensis</u>	<u>5</u>	<u>N</u>	<u>OLB</u>	
3. <u>Rumex crispus</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Festuca perennis</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
5. <u>Juncus bufonus</u>	<u>t</u>	<u>N</u>	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>45</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>55</u>	% Cover of Biotic Crust <u>0</u>			

Remarks: _____

SOIL

Sampling Point: DP-4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10 YR 3/2	100					Sandy loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Remarks: Note, required redox to meet F6 were not evident, however, they are likely masked by the dark soil.

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input checked="" type="checkbox"/> High Water Table (A2)</p> <p><input checked="" type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>		<p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>	
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<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u></p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u></p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 4.16.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-5
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): slope Slope (%): 2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7662729 Long: -121.2826705 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes <u>X*</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Up slope of SW-5, visable shift in vegetation.	

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>3</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>35</u> x4 = <u>140</u> UPL species <u>30</u> x5 = <u>150</u> Column Totals: <u>65</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>4.5</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter sq</u>)				
1. <i>Festuca bromoides</i>	30	Y	FACU	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Leontodon saxatilis</i>	35	Y	FACU	
3. <i>Trifolium campestre</i>	30	Y	UPL	
4. <i>Briza minor</i>	t	N	FAC	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>95</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>5</u>	% Cover of Biotic Crust <u>0</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		
0-14	10 YR 3/2	100					Sandy loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

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

Restrictive Layer (if present):	Hydric Soil Present? Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
Type: _____ Depth (inches): _____	
Remarks: Note, required redox to meet F6 were not evident, however, they may be masked by the dark soil.	

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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water Marks (B1) (Riverine)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.15.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-6
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7615538 Long: -121.2270614 Datum: NAD 83
 Soil Map Unit Name: 141 - Cometa-Fiddymnt complex, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: Located in SW-7, this feature was previously mapped as two smaller features for the purposes for branchiopod surveys, but upon collection of three parameter data was remapped to one larger feature.	

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>15</u> x1 = <u>15</u> FACW species <u>12</u> x2 = <u>24</u> FAC species <u>18</u> x3 = <u>54</u> FACU species <u>45</u> x4 = <u>180</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>273</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>1</u> meter sq)				
1. <i>Rumex crispus</i>	8	N	FAC	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Festuca perennis</i>	8	N	FAC	
3. <i>Polypogon monspeliensis</i>	2	N	FACW	
4. <i>Juncus bufonius</i>	10	N	FACW	
5. <i>Ranunculus bonariensis</i>	15	N	OBL	
6. <i>Cynodon dactylon</i>	45	Y	FACU	
7. <i>Hordeum marinum</i>	2	N	FAC	
8. _____	_____	_____	_____	
	<u>90</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>10</u>			Hydrophytic Vegetation Present? Yes <u>X</u> No _____

Remarks:

SOIL

Sampling Point: DP-6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10 YR 3/2	98	gravel				Gravely loam	
3 - 12	10YR 4/2	95	7.5 yr 4/4	5	C	m	Gravely loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

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

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

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input 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 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 checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.15.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-7
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): none Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76152805 Long: -121.2270614 Datum: NAD 83
 Soil Map Unit Name: 141 - Cometa-Fiddymont complex, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Located at upland limit of SW-7.	

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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</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>27</u> x3 = <u>81</u> FACU species <u>35</u> x4 = <u>140</u> UPL species <u>25</u> x5 = <u>125</u> Column Totals: <u>87</u> (A) <u>346</u> (B) Prevalence Index = B/A = <u>4.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> meter sq)				
1. <i>Elymus caput-medusea</i>	25	Y	UPL	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Festuca perennis</i>	25	Y	FAC	
3. <i>Leontodon saxatilis</i>	25	Y	FACU	
4. <i>Brodea elegans</i>	5	N	FACU	
5. <i>Lupinus bicolor</i>	trace	N	OBL	
6. <i>Trifolium dubium</i>	5	N	FACU	
7. <i>Briza minor</i>	2	N	FAC	
8. _____	_____	_____	_____	
	<u>87</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>13</u>	_____	% Cover of Biotic Crust _____		

Remarks:

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		
0-12	10YR 4/2	90	7.5 yr 4/4	5	C	m	Gravelly loam	
			5 YR 4/6	5	C	m	Gravelly loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

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

HYDROLOGY

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.15.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-8
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76138093 Long: -121.2270614 Datum: NAD 83
 Soil Map Unit Name: 141 - Cometa-Fiddymnt complex, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: Located at in SW-8	

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>3</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>75%</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>25</u> x1 = <u>25</u> FACW species <u>30</u> x2 = <u>60</u> FAC species <u>15</u> x3 = <u>45</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>210</u> (B) Prevalence Index = B/A = <u>2.3</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter sq</u>)				
1. <i>Epilobium torreyi</i>	15	Y	FACW	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Navarretia intertexta</i>	15	Y	FACW	
3. <i>Triteleia hyacinthia</i>	5	N	FAC	
4. <i>Lythrum hyssopifolium</i>	15	Y	OBL	
5. <i>Hordeum marinum</i>	10	N	FAC	
6. <i>Ranunculus bonarensis</i>	10	N	OBL	
7. <i>Leontodon saxatilis</i>	20	Y	FACU	
8. <i>Briza minor</i>	trace	N	FAC	
	<u>90</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>5</u>	% Cover of Biotic Crust <u>5</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		
0-12	10YR 4/2	95	7.5 yr 4/4	5	C	m	Gravelly loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

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

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

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input 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 type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> _____	<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:	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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)	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.15.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-9
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76135796 Long: -121.2270614 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Located in a swale between SW-8 and SW-10. No hydrology observed during wet season branchiopod surveys.	

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>2</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>2</u> x2 = <u>4</u> FAC species <u>21</u> x3 = <u>63</u> FACU species <u>40</u> x4 = <u>160</u> UPL species <u>25</u> x5 = <u>125</u> Column Totals: <u>88</u> (A) <u>352</u> (B) Prevalence Index = B/A = <u>4.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 meter sq</u>)				
1. <i>Bromus hordeaceus</i>	15	N	FACU	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Festuca perennis</i>	15	N	FAC	
3. <i>Elymus caput-medusa</i>	25	Y	UPL	
4. <i>Leontodon saxatilis</i>	25	Y	FACU	
5. <i>Triteleia hyacinthia</i>	2	N	FAC	
6. <i>Epilobium torreyi</i>	2	N	FACW	
7. <i>Rumex crispus</i>	2	N	FAC	
8. <i>Briza minor</i>	2	N	FAC	
	<u>88</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>12</u>	% Cover of Biotic Crust _____			Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</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		
0-12	10 YR 4/2	90	7.5 YR 4/4	10	C	M/PL	Gravelly loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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

HYDROLOGY

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.20.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-10
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76615526 Long: -121.2829282 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: Located in SW-1.	

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>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
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>25</u> x1 = <u>25</u> FACW species <u>15</u> x2 = <u>30</u> FAC species <u>30</u> x3 = <u>90</u> FACU species <u>20</u> x4 = <u>80</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>90</u> (A) <u>225</u> (B) Prevalence Index = B/A = <u>2.5</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> Sq meter)				
1. <i>Polypogon monspeliensis</i>	10	N	FACW	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Lythrum hyssopifolium</i>	5	N	OBL	
3. <i>Leontodon saxatilis</i>	20	Y	FACU	
4. <i>Eleocharis macrostachya</i>	20	Y	OBL	
5. <i>Festuca perennis</i>	30	Y	FAC	
6. <i>Plagiobothrys stipitatus</i>	5	N	FACW	
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>5</u>	% Cover of Biotic Crust <u>5</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		
0-12	7.5 YR 4/1	95	2.5 YR 4-6	5	C	m/pl	Loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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

HYDROLOGY

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.20.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-11
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): 142 - Cometa-Ramona sand Local relief (concave, convex, none): none Slope (%): <1
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7661764 Long: 38.7661764 Datum: NAD-83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X Hydric Soil Present? Yes _____ No X Wetland Hydrology Present? Yes _____ No X	Is the Sampled Area within a Wetland? Yes _____ No X
Remarks: Upland point slightly upslope of SW-1	

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>2</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>10</u> x4 = <u>40</u> UPL species <u>75</u> x5 = <u>375</u> Column Totals: <u>85</u> (A) <u>415</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</u> Sq meter)				
1. <u><i>Aegilops triuncialis</i></u>	<u>30</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u><i>Elymus caput-medusae</i></u>	<u>30</u>	<u>Y</u>	<u>UPL</u>	
3. <u><i>Acemispom americanus</i></u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
4. <u><i>Eschscholzia lobbia</i></u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
5. <u><i>Holocarpha virgata ssp. Virgata</i></u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
6. <u><i>Erodium botrys</i></u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
7. <u><i>Leontodon saxatilis</i></u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
8. _____	_____	_____	_____	
	<u>85</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No X
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>15</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP-11

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5 YR 3/2	100					Loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
---	--	---

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

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No X</p>
<p>Remarks:</p>	

HYDROLOGY

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.20.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-12
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): <2
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.76644879 Long: -121.282915 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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 _____ 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: Located in SW-3.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index Worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x1 = <u>0</u> FACW species <u>0</u> x2 = <u>0</u> FAC species <u>77</u> x3 = <u>231</u> FACU species <u>0</u> x4 = <u>0</u> UPL species <u>0</u> x5 = <u>0</u> Column Totals: <u>77</u> (A) <u>231</u> (B) Prevalence Index = B/A = <u>3.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1 Sq meter</u>)				
1. <i>Festuca perennis</i>	<u>75</u>	<u>N</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <i>Rumex crispus</i>	<u>2</u>	<u>Y</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>77</u>	=Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	_____	=Total Cover		
% Bare Ground in Herb Stratum <u>15</u>	% Cover of Biotic Crust <u>0</u>			Hydrophytic Vegetation Present? Yes <u>X</u> No _____
Remarks:				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SVLC 23 Property City/County: Roseville/ Placer County Sampling Date: 5.20.2020
 Applicant/Owner: WP Sierra View, LLC/ SVLC 23, LLC State: CA Sampling Point: DP-13
 Investigator(s): Bonnie Peterson/Madrone Eco Section, Township, Range: M 11N 06E 35
 Landform (hillslope, terrace, etc.): 142 - Cometa-Ramona sand Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): Mediterranean California (LRR C) Lat: 38.7664577 Long: -121.2829424 Datum: NAD 83
 Soil Map Unit Name: 142 - Cometa-Ramona sandy loams, 1 to 5% slopes NWI Classification: _____
 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> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Upland point slightly upslope of SW-1	

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>1</u> x3 = <u>3</u> FACU species <u>1</u> x4 = <u>4</u> UPL species <u>92</u> x5 = <u>460</u> Column Totals: <u>94</u> (A) <u>467</u> (B) Prevalence Index = B/A = <u>5.0</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	=Total Cover		
Herb Stratum (Plot size: <u>1</u> Sq meter)				
1. <u><i>Aegilops triuncialis</i></u>	<u>1</u>	<u>N</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptation ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u><i>Elymus caput-medusae</i></u>	<u>85</u>	<u>Y</u>	<u>UPL</u>	
3. <u><i>Acmispon americanus</i></u>	<u>1</u>	<u>N</u>	<u>UPL</u>	
4. <u><i>Avena barbata</i></u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
5. <u><i>Erodium botrys</i></u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
6. <u><i>Festuca perennis</i></u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>94</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>15</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: DP-13

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5 YR 3/2	100					Loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No X</p>
<p>Remarks:</p>	

HYDROLOGY

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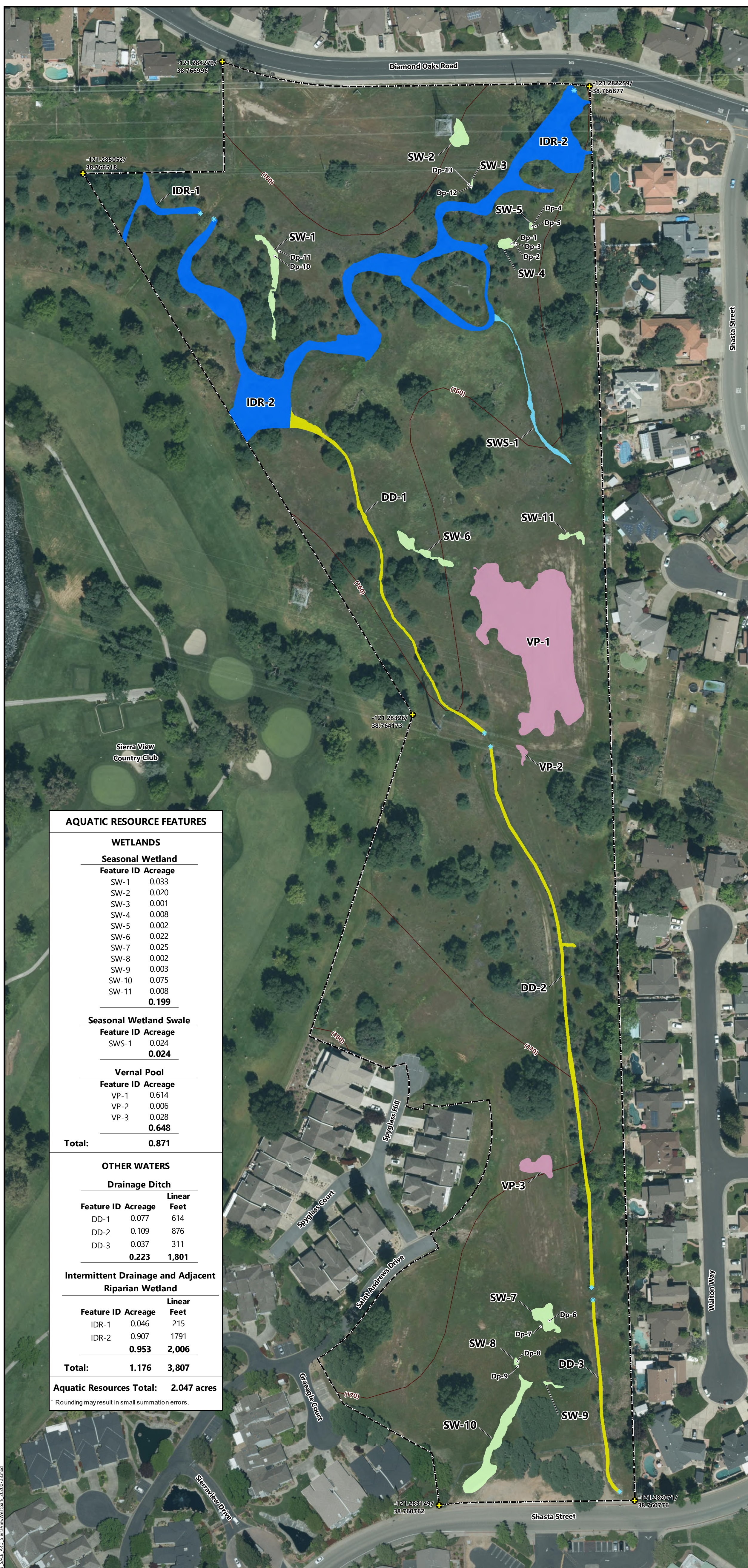
<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No X Depth (inches): _____</p> <p>Water Table Present? Yes _____ No X Depth (inches): _____</p> <p>Saturation Present? Yes _____ No X Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes _____ No X</p>
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

Remarks:

Attachment B

Aquatic Resources Delineation



AQUATIC RESOURCE FEATURES		
WETLANDS		
Seasonal Wetland		
Feature ID	Acres	
SW-1	0.033	
SW-2	0.020	
SW-3	0.001	
SW-4	0.008	
SW-5	0.002	
SW-6	0.022	
SW-7	0.025	
SW-8	0.002	
SW-9	0.003	
SW-10	0.075	
SW-11	0.008	
Total:	0.199	
Seasonal Wetland Swale		
Feature ID	Acres	
SWS-1	0.024	
Total:	0.024	
Vernal Pool		
Feature ID	Acres	
VP-1	0.614	
VP-2	0.006	
VP-3	0.028	
Total:	0.648	
Total:	0.871	
OTHER WATERS		
Drainage Ditch		
Feature ID	Acres	Linear Feet
DD-1	0.077	614
DD-2	0.109	876
DD-3	0.037	311
Total:	0.223	1,801
Intermittent Drainage and Adjacent Riparian Wetland		
Feature ID	Acres	Linear Feet
IDR-1	0.046	215
IDR-2	0.907	1791
Total:	0.953	2,006
Aquatic Resources Total:	2.047 acres	

* Rounding may result in small summation errors.

Notes:
 Scale: 1 inch = 45 feet
 Coordinate System: California State Plane, Zone II
 Datum: NAD83
 Vertical Datum: NAVD 88
 Projection: Lambert Conformal Conic
 Aerial Base: City of Roseville
 Aerial Base Flown: 22 April 2019
 Topographic Contours: USGS NED 1/3 arc-second for Sacramento, California, 1 October 2018
 Date Map Prepared: 23 July 2020
 Map Prepared by: N. Bente
 Delineation Performed by: B. Peterson

Prepared For:
 SVLC 23, LLC
 105 Alta Vista Drive
 Roseville, CA 95678

Aquatic Resources (2.047 acres)

- Wetlands (0.871 acre)**
 - Vernal Pool (0.648 acre)
 - Seasonal Wetland (0.199 acre)
 - Seasonal Wetland Swale (0.024 acre)
- Other Waters (1.176 acres)**
 - Drainage Ditch (0.223 acre)
 - Intermittent Drainage and Adjacent Riparian Wetland (0.953 acre)

Aquatic Resources Delineation SVLC 23 Property
 Roseville, Placer County, California

MADRONE ECOLOGICAL CONSULTING

8421 Auburn Boulevard, Suite 248
 Citrus Heights, California 95610
 (916) 822.3220 | www.madroneeco.com

C:\Madrone\Sierra View Westpark - 1086A\Map\Aerial\Aerial_ARD_SierraViewWestpark_20200723.mxd

Attachment C

Plant Species Observed within the Study Area

SVLC 23 Property

Plant Species Observed 15 and 16 April and 15 and 20 May 2020

Species Name	Common Name	AW Wetland Rating
<i>Achyrrachaena mollis</i>	Blow wives	FAC
<i>Acmispon americanus var. americanus</i>	Spanish lotus	UPL
<i>Aegilops triuncialis</i>	Barbed goat grass	UPL
<i>Agrostis stolonifera</i>	Creeping bent	FACW
<i>Ailanthus altissima</i>	Tree of heaven	FACU
<i>Alisma lanceolatum</i>	Water plantain	OBL
<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	FAC
<i>Avena fatua</i>	Wild oat	UPL
<i>Briza minor</i>	Annual quaking grass	FAC
<i>Brodiaea elegans subsp. elegans</i>	Harvest brodiaea	FACU
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Callitriche marginata</i>	Winged water starwort	OBL
<i>Calochortus luteus</i>	Yellow mariposa lily	UPL
<i>Carduus pycnocephalus subsp. pycnocephalus</i>	Italian thistle	UPL
<i>Carex barbarae</i>	Santa barbara sedge	FAC
<i>Castilleja campestris subsp. campestris</i>	Yellow owl's clover	FACW
<i>Catalpa bignonioides</i>	Southern catalpa	UPL
<i>Centaurea solstitialis</i>	Yellow star-thistle	UPL
<i>Centromadia fitchii</i>	Fitch's spikeweed	FACU
<i>Chlorogalum angustifolium</i>	Narrowleaf soap plant	UPL
<i>Chlorogalum pomeridianum</i>	Wavy-leaf soap plant	UPL
<i>Cynodon dactylon</i>	Bermuda grass	FACU
<i>Cynosurus echinatus</i>	Bristly dogtail grass	UPL
<i>Cyperus difformis</i>	Variable flat sedge	OBL
<i>Cyperus eragrostis</i>	Tall nutsedge	FACW
<i>Delphinium sp.</i>	Larkspur	UPL
<i>Deschampsia danthonioides</i>	Annual hair grass	FACW
<i>Dichelostemma capitatum</i>	Blue dicks	FACU
<i>Dichelostemma multiflorum</i>	Wild hyacinth	UPL
<i>Eleocharis macrostachya</i>	Creeping spikerush	OBL
<i>Elymus caput-medusae</i>	Medusa head	UPL
<i>Epilobium canum</i>	California fuchsia, zauschneria	UPL
<i>Epilobium torreyi</i>	Torrey's willow-herb	FACW
<i>Erigeron canadensis</i>	Horseweed	FACU
<i>Erodium botrys</i>	Filaree	FACU
<i>Eryngium castrense</i>	Great valley coyote-thistle	OBL
<i>Erythranthe guttata</i>	Seep-spring monkeyflower	OBL
<i>Festuca perennis</i>	Rye grass	FAC
<i>Gleditsia triacanthos</i>	Honey locust	FAC
<i>Glyceria declinata</i>	Low manna grass	FACW
<i>Gratiola ebracteata</i>	Bractless hedge-hyssop	OBL
<i>Holocarpha virgata subsp. virgata</i>	Slender tarweed	UPL
<i>Hypericum perforatum subsp. perforatum</i>	Klamathweed	FACU
<i>Juncus bufonius</i>	Toad rush (group 1)	FACW

SVLC 23 Property

Plant Species Observed 15 and 16 April and 15 and 20 May 2020

Species Name	Common Name	AW Wetland Rating
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Leontodon saxatilis</i> subsp. <i>saxatilis</i>	Hairy hawkbit	FACU
<i>Lupinus bicolor</i>	Miniature lupine	UPL
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
<i>Micropus californicus</i>	Q-tips	FACU
<i>Navarretia intertexta</i>	Needle leaf navarretia	FACW
<i>Parthenocissus quinquefolia</i>	Virginia creeper	FAC
<i>Paspalum dilatatum</i>	Dallis grass	FAC
<i>Persicaria punctata</i>	Dotted smartweed	OBL
<i>Plagiobothrys greenei</i>	Greene's spiny-nut popcornflower	FACW
<i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	Slender popcorn flower	FACW
<i>Plantago erecta</i>	Dotseed plantain	UPL
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Pogogyne zizyphoroides</i>	Sacramento beardstyle	OBL
<i>Polygonum aviculare</i> subsp. <i>depressum</i>	Prostrate knotweed	FAC
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont cottonwood	FAC
<i>Prunus cerasifera</i>	Cherry plum	UPL
<i>Pseudognaphalium luteoalbum</i>	Pearly everlasting	FAC
<i>Pseudognaphalium microcephalum</i>	Wright's cudweed	FACU
<i>Psilocarphus brevissimus</i> var. <i>brevissimus</i>	Dwarf woollyheads	FACW
<i>Pyrus calleryan</i>	Callery pear	NL
<i>Quercus douglasii</i>	Blue oak	UPL
<i>Quercus lobata</i>	Valley oak	FACU
<i>Quercus wislizeni</i> var. <i>wislizeni</i>	Interior live oak	UPL
<i>Ranunculus bonariensis</i> var. <i>trisepalus</i>	Carter's buttercup	OBL
<i>Rosa californica</i>	California rose	FAC
<i>Rosa</i> sp.	Cultivated rose	UPL
<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
<i>Rumex crispus</i>	Curly dock	FAC
<i>Salix exigua</i>	Sandbar willow	FACW
<i>Salix</i> sp.	Willow	UPL
<i>Schoenoplectus acutus</i> var. <i>occidentalis</i>	Common tule	OBL
<i>Sonchus asper</i> subsp. <i>asper</i>	Prickly sow thistle	UPL
<i>Torilis arvensis</i>	Tall sock-destroyer	UPL
<i>Tragopogon dubius</i>	Yellow salsify	UPL
<i>Triadica sebifera</i>	Chinese tallowtree	FAC
<i>Trifolium glomeratum</i>	Clustered clover	UPL
<i>Trifolium hirtum</i>	Rose clover	UPL
<i>Trifolium subterraneum</i>	Subterranean clover	UPL
<i>Triteleia hyacinthina</i>	White brodiaea, fool's onion	FAC
<i>Typha latifolia</i>	Broad-leaved cattail	OBL
<i>Vicia sativa</i>	Spring vetch	FACU
<i>Vicia villosa</i>	Hairy vetch, winter vetch	UPL
<i>Vitis californica</i>	California wild grape	FACU

Attachment D

GIS Shapefiles and the Aquatic Resources Excel Spreadsheet

Attachment E

Representative Site Photographs



Seasonal Wetland SW-2 facing south, 15 May 2020



Seasonal wetland (SW-3), facing south, 15 May 2020



Seasonal wetland (SW-1), facing south, 15 May 2020



Seasonal wetland (SW-4), facing west, 16 April 2020



Seasonal wetland (SW-5), facing west, 16 April 2020



Seasonal wetland swale(SWS-1), facing northwest, 16 April 2020



Drainage ditch (DD-1) facing northwest, 18 May 2020



Intermittent drainage (IDR-2) facing south, 18 May 2020



Intermittent drainage (IDR-1) facing west, 18 May 2020



Intermittent drainage (IDR-2) upper reach, City storm drain outfall facing south, 23 July 2020



Seasonal wetland (SW-10) facing south, 18 May 2020



Seasonal wetland (SW-9) facing east, 18 May 2020



Seasonal wetland (SW-7) facing north, 18 May 2020

Attachment F

Permission to Enter



July 30, 2020

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

Re: SVLC 23, LLC Access

This letter serves as written permission to enter the SVLC 23, LLC property shown on the attached **Figure 1** when accompanied by Madrone Ecological Consulting, LLC (Madrone) staff. When accompanied by Madrone staff, you may dig soil pits by hand and collect plant materials related to the verification of potential Waters of the U.S. on the SVLC 23, LLC property. If you have any questions, please contact Sarah VonderOhe at Madrone (916) 822-3230 or svonderohe@madroneeco.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Welch", is written over a light blue horizontal line.

John Welch
President/CEO
Sierra View Land Company