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Aquatic Resources Delineation Report



Green Valley and Bass Lake Road Parcel, Town of Skinners, El Dorado County, California

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ACRONYMS AND ABBREVIATIONS

ACOE Army Corps of Engineers APN Assessor's Parcel Number

CARI California Aquatic Resource Inventory

CWA Clean Water Act

EPA U.S. Environmental Protection Agency

GIS Geographic Information System

NRCS Natural Resources Conservation Service

NWI National Wetlands Inventory

NWP Nationwide Permit

NWPL National Wetland Plant List
OHWM ordinary high-water mark
PEM palustrine emergent
RHA Rivers and Harbors Act

RWQCB Regional Water Quality Control Board

TNW Traditional Navigable Water

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

WDR Waste Discharge Requirements

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1.0 INTRODUCTION

The purpose of this report is to identify and describe aquatic resources in the Study Area. The Study Area includes the entirety of a 5.27-acre parcel in the Town of Skinners, in El Dorado County, California. This report facilitates efforts to:

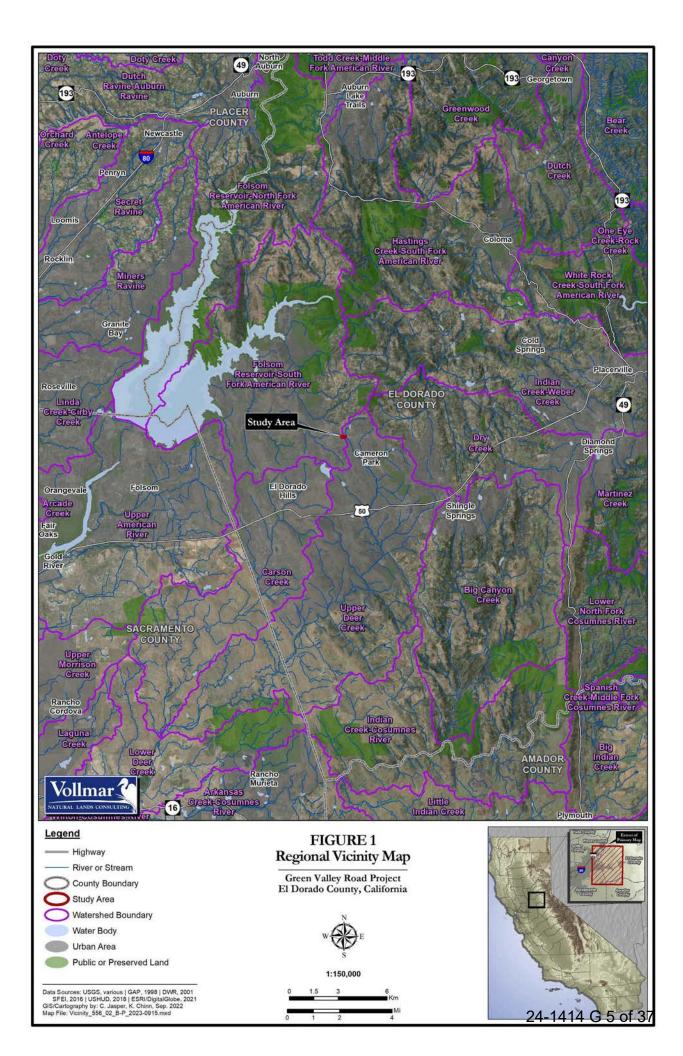
- 1. Avoid or minimize impacts to aquatic resources during the design process; and
- 2. Document aquatic resource boundary determinations for review by regulatory authorities.

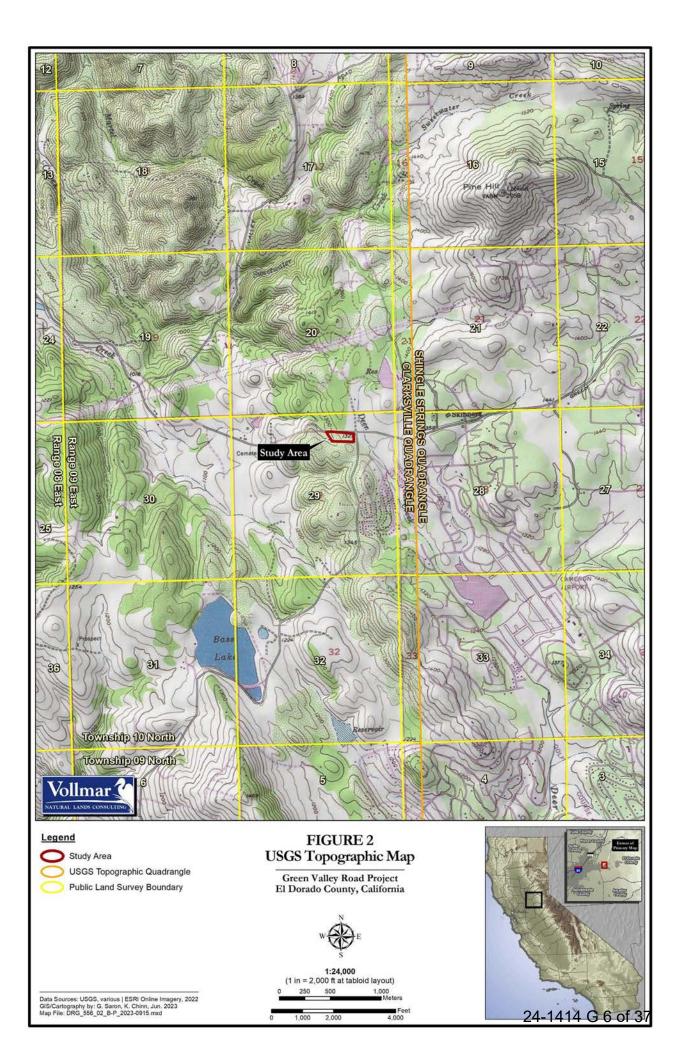
This delineation has been conducted in accordance with the 1987 Army Corps of Engineers (ACOE) "Corps of Engineers Wetland Delineation Manual" (Environmental Laboratory 1987), as well as the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (ACOE 2008) and ACOE's more recent guides to identification of OHWM in the Arid West (ACOE 2022). The Delineation identified 0.034 acre of potential jurisdictional Waters of the United States. Wetland resources were identified as Seasonal Wetland Swale (0.027 acre) and Artificial Wetland Channel (0.007 acre). Resources were found to be disturbed and characterized by nonnative, disturbance-tolerant vegetation.

2.0 LOCATION

The Study Area is located entirely within a 5.27-acre parcel along Green Valley Road in the Town of Skinners, El Dorado County, California (**Figure 1**). The Study Area was selected to cover the entirety of the 5.27-acre parcel (**Figure A-1**). The Study Area occurs in El Dorado County Assessor's Parcel Number (APN) 115-410-011. The Study Area is mapped within the U.S. Geological Survey (USGS) Clarksville 7.5-minute topographic quadrangle and lies entirely within Section 29 of Township 10 North, Range 09 East of the Mount Diablo Principal Meridian (**Figure 2**). The Study Area centroid is located at 38° 41' 52.9057" N", -121° 0' 33.5025" W. The Study Area can be accessed from Interstate 50 via the Bass Lake Road Exit, heading north along Bass Lake Road for 1.4 miles, and continuing east on Green Valley Road for 1.8 miles.

1





3.0 REGULATORY BACKGROUND

3.1 Federal Regulatory Framework

The federal government, through Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA), has jurisdiction over all Waters of the United States. Waters of the United States are divided into four subsets – territorial seas and traditional navigable waters (TNWs); tributaries to TNWs; lakes, ponds, and impoundments of TNWs; and wetlands adjacent to territorial seas and TNWs. Section 404 of the CWA regulates the discharge of dredged or fill material into Waters of the United States. The CWA grants dual regulatory authority of Section 404 to the U.S. Environmental Protection Agency (EPA) and ACOE. The ACOE is responsible for issuing and enforcing permits for activities in jurisdictional Waters in conjunction with prior permitting authorities in navigable Waters under the RHA of 1899. The EPA is responsible for providing oversight of the permit program. In this capacity, the EPA has developed guidelines for permit review (Section 404 [b][1] Guidelines) and has the authority to veto permits by designating certain sites as non-fill areas (Section 404[c] of the CWA). The EPA also has enforcement authority under Section 404. The ACOE generally extends its jurisdiction to all areas meeting the criteria for Waters of the United States.

On May 25, 2023, the U.S. Supreme Court issued a decision in *Sackett v. EPA* which narrowed the then-current jurisdiction of the CWA. The Sackett decision declared that, in order to be regulated by the CWA, wetlands adjacent to TNWs must be indistinguishably part of a body of water that itself constitutes "waters" under the CWA with a "continuous surface connection to those bodies" (Totenberg 2023). On August 29, 2023, the EPA and ACOE issued a final rule to amend the final "Revised Definition of 'Waters of the United States" rule, published in the Federal Register on January 18, 2023. This final rule conforms the definition of "waters of the United States" to the Sackett decision. No new regulatory guidance has been issued to describe the details of the implementation of this rule.

Projects which propose activities that fall under the jurisdiction of Section 404 of the CWA and/or Section 10 of the RHA must obtain approval from the ACOE through the individual or nationwide permit (NWP) process. Individual permits entail a full public interest review that includes consultation with other federal and state agencies.

3.2 California State and Regional Regulatory Framework

California Department of Fish and Wildlife

The CDFW regulates river, stream, and lake habitats through Fish and Game Code section 1600 *et seq*. Fish and Game Code section 1602 requires an entity to notify the CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- Deposit debris, waste, or other materials that could pass into any river, stream, or lake.

A "river, stream, or lake" includes those that are episodic (i.e., they are dry for periods of time) as well as those that are perennial. This definition includes ephemeral streams, desert washes, and watercourses with a subsurface flow (CDFW 2016). It may also apply to work undertaken within the floodplain of a body of water, the boundary of which may be identified as a topographic feature or as riparian vegetation. In addition, the CDFW does not distinguish between a "pond" and a "lake," such that relatively small bodies of water, including both natural and artificial features, may be regulated under section 1600.

The CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources (ibid). A LSA Agreement includes measures necessary to protect existing fish and wildlife resources. The CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing a LSA Agreement, CDFW must comply with the California Environmental Quality Act (CEQA).

Regional Water Quality Control Board

The Study Area is located within the Central Valley (Region 5) Regional Water Quality Control Board (RWQCB), which has authority to regulate projects that could potentially impact wetlands and/or other Waters. According to the California State Water Resources Control Board (2006), this authority derives from the following:

- The state's Porter-Cologne Water Quality Control Act through Waste Discharge Requirements to protect Waters of the state;
- The CWA under Section 4013:
- Governor's Executive Order W-59-93 (i.e., the "California Wetland's Policy" which requires "No Net Loss of Wetlands");
- Senate Concurrent Resolution No. 28; and
- California Water Code Section 13142.5 (applies to coastal marine wetlands).

In addition to the state directives to protect wetlands, for individual permits (but not NWPs), the Basin Plan also directs the Water Board staff to use the EPA's CWA 404(b)(1) guidelines to determine circumstances under which the filling of wetlands may be permitted and requires that attempts be made to avoid, minimize, and only lastly to mitigate for adverse impacts (ibid).

California's jurisdiction to regulate its water resources is much broader than that of the federal government. While the U.S. Supreme Court's 2001 decision in SWANCC vs. U.S. Army Corps of Engineers (the "SWANCC" Decision) called into question the extent to which the federal government may regulate isolated, intrastate, non-navigable waters as "Waters of the United States" under the CWA, state law is unaffected by that decision. The State Water Resource Control Board's (State Water Board's) Executive Director issued a memorandum directing the Regional Water Boards to regulate such waters under Porter-Cologne authorities. Porter-Cologne extends to "Waters of the State," which is broadly defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." This definition includes isolated wetlands and any action that may impact isolated wetlands is subject to the Water Board's jurisdiction, which may include the issuance of Statewide General Waste Discharge Requirements (WDRs). For projects that will impact less than 0.2 acres of "isolated" wetlands, the State Water Board issues Order No. 2004-004-DWQ, WDRs for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction (General WDRs). These General WDRs streamline the permitting process for low impact projects in isolated wetlands (ibid).

Activities or discharges from a project that could affect California's surface, coastal, or ground waters, require a permit from the local RWQCB. Discharging pollutants (or proposing to) into surface water requires the applicant to file a complete National Pollutant Discharge Elimination System permit application form with the RWQCB. Other types of discharges, such as those affecting groundwater or from diffused sources (e.g., erosion from soil disturbance or waste discharges to land) are handled by filing a Report of Waste Discharge with the RWQCB in order to obtain WDRs. For specified situations, some permits may be waived, and some discharge activities can be handled through enrollment in an existing general permit (ibid).

4.0 METHODS

4.1 Preliminary Review and Field Preparation

Prior to conducting the field delineation, the project ecologists reviewed site aerial photography, topographic data, existing preliminary wetland, stream, and watershed mapping, and soil survey maps of the Study Area and surrounding areas. This information was used to help characterize the site, identify any potentially jurisdictional Waters on a preliminary basis, and guide the on-site survey. Background imagery and the Study Area boundary were loaded on to a professional GPS (Trimble GeoXH 6000) for use in navigation and mapping in the field.

4.2 Field Survey

VNLC ecologist Gabe Saron conducted a wetland delineation of the Study Area on August 8, 2023. No ground and vegetation disturbances were observed during the site visit. The August 2023 field survey took place following the dry season, and field conditions three months leading up to the field survey were considered normal; see **Table 1**.

Table 1. WETS Table Analysis for the August 2023 Survey

Precipitation Data from the Last 30 Years (1992 – 2022) Precipitation Data from tl								alysis ¹
Date	30 th Percentile (inches)	70th Percentile (inches)	Date	Recorded Rainfall (inches)	Rainfall Condition Compared to Previous 30 years ²	Numeric Condition Value ³	Weighting Factor ⁴	Product of Condition Value and Weighting Factor ⁵
May	0.9	2.71	May 2023	1.99	Normal	2	1	2
June	0	0.65	June 2023	1.18	Wet	3	2	6
July	0	0	July 2023	0	Normal	2	3	6
² Below 30th 70th percentil ³ Relative rain follows: dry = ⁴ Greater weig influence wha ⁵ The numeric	percentile = dr le = wet. nfall conditions = 1, normal = 2 ght is given to at hydrologic o c condition valuadded to get the	tained from the y; between 30th s are then transled, wet = 3. the most recent r vegetative chaue is then multiple total value. To	and 70th per ated to a nun month as thing aracteristics a plied by the	ercentile = non meric condition s would most are observed. weighting fac	n value, as likely tor, then the		TOTAL 5	14, or NORMAL

During the delineation survey, the ecologist walked the accessible portions of the Study Area, established delineation data points, recorded additional notes on plant community and Study Area characteristics, and took representative photographs of habitats and features of interest. At each delineation data point, data were collected on Version 2.0 of ACOE's Arid West delineation data form. Data were collected on soils, hydrology, and plant cover following the Routine Wetland Determination Method developed by the ACOE and described in the 1987 ACOE Wetlands Delineation Manual (Environmental Laboratory 1987), as well as the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (ACOE 2008) and ACOE's more recent guides to identification of OHWM in the Arid West (ACOE 2022). The boundaries of potential jurisdictional Waters identified in the Study Area were mapped using a Trimble GeoXH 6000 with nominal sub-foot precision. The specific methods for collecting data on soils, hydrology, and vegetation at delineation data points are described below.

4.2.1 Soils

Soil profiles were excavated at each data point using a tile spade shovel, and the profiles were examined for positive hydric soil indicators such as low matrix chromas, redox features, gleys, and iron and manganese concretions. The color and texture of the soil layers encountered were recorded on the delineation forms. Soil color was identified using a Munsell soil color chart (Kollmorgen 2000), and a standardized soil texture chart used by the California Native Plant Society (CNPS) for assessing soils (adapted from Brewer and McCann 1982) was used to determine texture (e.g., clay versus clay loam, etc.). All soil samples were moistened before

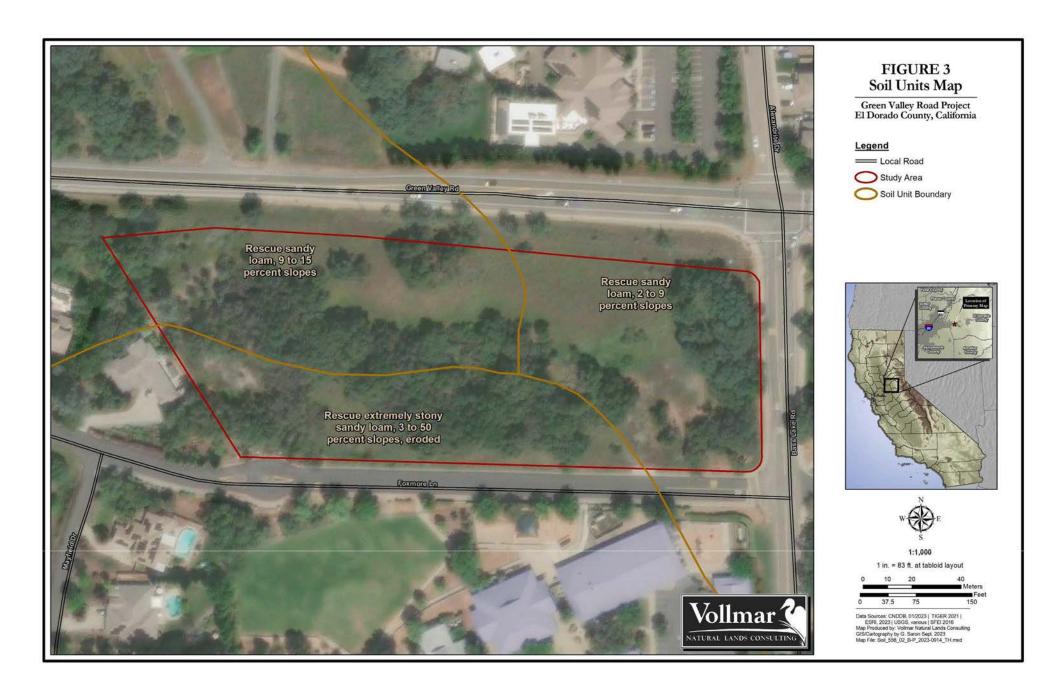
determining the color and texture. Soil map units were cross-referenced with the California hydric soils list (SCS 1993) and the national hydric soils list (SCS 1991). Determination of whether or not the hydric soil criterion was met was based upon the criteria specified by the National Technical Committee for Hydric Soils (ibid) and the Arid West Supplement (ACOE 2008), and informed by additional information provided by the US Department of Agriculture Natural Resource Conservation Service (USDA-NRCS 2018).

Prior to the survey, the project ecologist reviewed the U.S. Department of Agriculture-Soil Conservation Service (USDA-SCS) (2023) database to identify soil map units within the study area. **Table 3**, below, summarizes the soil map units within the study area. **Figure 3**, below, displays the soil units mapped within the study area.

Table 2. Characteristics of Soil Units Mapped within the Study Area

Soil Unit Name and Percent of the Study Area	Parent Material	Surface Texture*	Hydric Class	Drainage
Rescue sandy loam, 2-9% slopes, MLRA 18 (34%)	Residuum of gabbrodiorite rock	Sandy loam	Not Hydric	Well drained
Rescue sandy loam, 9-15% slopes, MRLA 18 (37%)	Residuum of gabbrodiorite rock	Sandy loam	Not Hydric	Well drained
Rescue extremely stony sandy loam, 3-50% slopes, MRLA 18 (29%)	Residuum of gabbrodiorite rock	Rocky Sandy loam	Not Hydric	Well drained

Three soil units occur within the Study Area: Rescue sandy loam, 2-9% slopes; Rescue sandy loam, 9-15% slopes; and Rescue extremely stony sandy loam, 3-50% slopes are mapped within the Study Area (**Figure 3**). Rescue sandy loam soils occur on gently sloping to very steep slopes at elevations of 800 to 2,000 feet. (USDA 2023). As indicated in **Table 2**, none of the three soil units are classified as "hydric", which is consistent with soil texture, slope, dominant vegetation cover, and present water resources.



4.2.2 Hydrology

Indicators of wetland hydrology were noted, such as the presence of surface soil cracks, saturated soil, water-stained vegetation, drainage patterns, and sediment deposits. Hydrological connectivity was investigated throughout the Study Area and surrounding habitats. It should be noted that some wetlands in the Arid West region periodically lack indicators of wetland hydrology. If the site is in a geomorphic position where a wetland could occur, but the site visit was during the dry season (i.e., June to October) following a period of 2-3 months of below-normal rainfall, or was during a year of an unusually low winter snowpack, indicators of wetland hydrology might not be present. According to the Arid West Supplement, "under these conditions, a site that contains hydric soils and hydrophytic vegetation and no evidence of hydrologic manipulation should be considered a wetland" (ACOE 2008). The delineation was conducted during the summer season following a wet season that resulted in normal wetland habitat conditions (see Section 3.2 above).

4.2.3 Vegetation

At each delineation data point, all herbaceous plant species within a five-foot radius were identified and a visual estimate of percent coverage for each species was recorded. No trees or shrub species were present at any of the delineation data points. Plant species cover estimations were calibrated using CNPS percent cover templates (CNPS 2001).

The indicator status of each species was then checked using the most recent ACOE National Wetland Plant List—Version 3.2 (Lichvar, R.W. et al. 2023). Indicator status categories are as follows:

OBL = obligate wetland; >99% probability of occurring in a wetland

FACW = facultative wetland; 67%-99% probability of occurring in a wetland

FAC = facultative; 33%-67% probability of occurring in a wetland

FACU = facultative upland; 1%-33% probability of occurring in a wetland

UPL = obligate upland; <1% probability of occurring in a wetland

NL = not listed (plants not listed in Lichvar et al. [2016], including some known to occur occasionally or primarily in wetlands)

The wetland vegetation criterion is met when the vegetation passes the dominance test: greater than 50 percent of the dominant plants are designated as OBL, FACW, or FAC wetland indicators. The ACOE defines dominant plant species as those that, when included in descending order of their percent cover, together sum up to 50 percent of the total cover in their stratum (tree, sapling/shrub/subshrub, herb, or woody vine). In addition, all species with at least 20 percent coverage of the relative cover within a given stratum are always counted as dominants. All scientific and common plant names correspond to Baldwin et al. (2012) and/or the Calflora database (2023). If the dominance test is not passed, vegetation can be considered hydrophytic if

it meets the requirements of the prevalence index, morphological adaptations, or problematic wetland situations (ACOE 2008).

5.0 EXISTING CONDITION

5.1 Landscape Setting

The Study Area is located in the Sierra Nevada foothills. The elevation within the Study Area is approximately 1,300 feet above sea level (USGS 2023). Slope within the Study Area ranges from 5 to 15 percent (ibid), and it does not contain any rocky outcrops, caves or other geologic features of interest. The Study Area encompasses predominately mixed oak and pine woodland habitat with a moderately disturbed annual grassland understory. At the western side of the parcel, there is a narrow ephemeral swale which connects to a riprap armored stormwater drainage along the fence line of the neighboring property to the west (**Features SWS-1 and ACW-1**, **Figure A-1**, **Appendix A**). There are several stands of coyote brush (*Baccharis pilularis*) scrub along with mixed stands of coyote brush and chamise (*Adenostoma fasciculatum*) throughout the parcel as well. The land is undeveloped and subject to minimal use except for mild trash accumulation and maintenance of a disced fire break along the property boundary. The site is not irrigated, and experienced normal hydrologic and vegetative conditions for the month of August.

5.2 Aquatic Resources

5.2.1 Overview

The delineation identified a total of 0.034 acre of potential jurisdictional Waters. **Table 1**, below, provides a summary of the aquatic resources delineated within the Study Area. A map of all aquatic resources within the Study Area is provided in **Appendix A** (**Figure A-1**).

Table 3. Aquatic Resources within the Survey Area

Aquatic Resource Type	Aquatic Resource Name	Location (Coordinates)	Area (sq. ft.)	Acreage	Width (ft)	Length (ft)
		Wetlands				
Seasonal Wetland Swale	SWS-1	38°41'53.4827" N, 121°0'38.3766" W	1177	0.027	-	-
Artificial Wetland Channel	AWC-1	38°41'52.3862" N, 121°0'37.7546" W	328	0.007	2	51
Total			1506	0.034	n/a	n/a

The wetland may be classified as a seasonal wetland swale. The seasonal wetland swale was dominated by a patch of wetland indicator vegetation and displayed soil indicators and wetland hydrology, including standing water. The seasonal wetland swale connects with an artificial wetland channel along the western edge of the Study Area, which collects and diverts water during significant storm events. The artificial wetland channel is primarily armored with stones but contains intermittent patches of fill soil which support wetland vegetation and soil and hydrologic indicators. The seasonal wetland swale flows via surface flow to Green Valley Creek, a tributary of the South Fork American River, a TNW.

There is a narrow upland swale situated in the central-western portion of the Study Area. This drains to the seasonal wetland swale along the west boundary. The upland swale is a non-wetland feature which was dominated by upland grasses and shrubs found throughout the Study Area and was characterized by slight erosional scour along the channel bed and a poorly defined channel margin. This indicates that the drainage will convey water during storm events but does not collect standing water. It is not treated as an aquatic resource, and is not a potential jurisdictional water.

5.2.2 Description of Wetland Resources

Seasonal Wetland Swale

A 0.027-acre seasonal wetland swale is located at the western border of the Study Area. This swale collects water from an upland swale drainage (see **Section 5.2.5**) and was observed to have standing water during the delineation. The seasonal wetland swale was dominated by disturbance-tolerant, nonnative facultative wetland and upland grasses and forbs. Dominant plant species included barnyard grass (*Echinochloa crus-galli*, FACW), bermudagrass (*Cynodon dactylon*, FACU) and sharp leaved fluellin (*Kicxia elatine*, UPL). Soil in the seasonal wetland swale was mapped as Rescue extremely stony sandy loam, 3-50% Slopes, MRLA 18. The seasonal wetland swale featured a shallow (6-inch) layer of soil underlain with large cobbles, consistent with the mapped soil unit. This soil matrix featured hue in the 10YR range with chroma/value of 4/2; 3% redox concentrations with hue in the 7.5YR range and chroma/value of 4/6 were present, satisfying indicator F3: depleted matrix. The swale featured wetland hydrologic indicators of surface water, saturation, and oxidized rhizospheres along living roots.

Artificial Wetland Channel

A 0.007-acre narrow, artificial wetland channel is present in the southwestern portion of the Study Area. This feature collects water from a culvert located offsite, as well as irrigation runoff from the neighboring property. The artificial wetland channel is armored with large cobbles and is mostly unvegetated. Ditch runoff percolates into its surrounding bank and gives rise to wetland indicators, including hydrophytic vegetation, redoximorphic hydric soil features and hydrology indicators. The herb stratum of the channel bank was dominated by tall flatsedge (*Cyperus eragrostis*, FACW), stinkwort (*Dittrichia graveolens*, NL) and barnyard grass (UPL). Soil in the ditch bank was dark with a hue of 10YR and a value/chroma of 4/2; redox features were observed

as 5% of the soil; these took the form of pore linings with a hue of 7.5YR and a value/chroma of 4/6. This satisfied the threshold for hydric soil indicator F3: depleted matrix. Hydrologic indicators included standing surface water, saturation and oxidized rhizospheres along living roots.

5.2.5. Non-Wetland Features

Upland Swale

A narrow, upland swale measuring 0.049 acre or 180 feet long, passes through the central-western portion of the Study Area and drains into the Seasonal Wetland Swale described above (Section 4.2.4). The vegetation in the herb stratum of this feature supported upland and facultative grasses and forbs common throughout the Study Area, including wild oat species (*Avena* spp., UPL), hairy vetch (*Vicia villosa*, NL), wall barley (*Hordeum murinum*, FACU) and Italian ryegrass (*Lolium multiflorum*, FAC). The shrub stratum included patches of Himalayan blackberry (*Rubus armeniacus*, FAC) and coyote brush (NL). The tree stratum of this feature included valley oak (*Quercus lobata*, FACU), blue oak (*Quercus douglasii*, NL), interior live oak (*Quercus wislizeni*, NL), and gray pine (*Pinus sabiniana*, NL). The feature did not possess indicators of hydric soils or wetland hydrology. The swale likely collects and diverts water during significant storm events but is unlikely to hold water for a considerable time period, if at all. This feature is not treated as an aquatic resource, and is not a potential jurisdictional water.

Upland

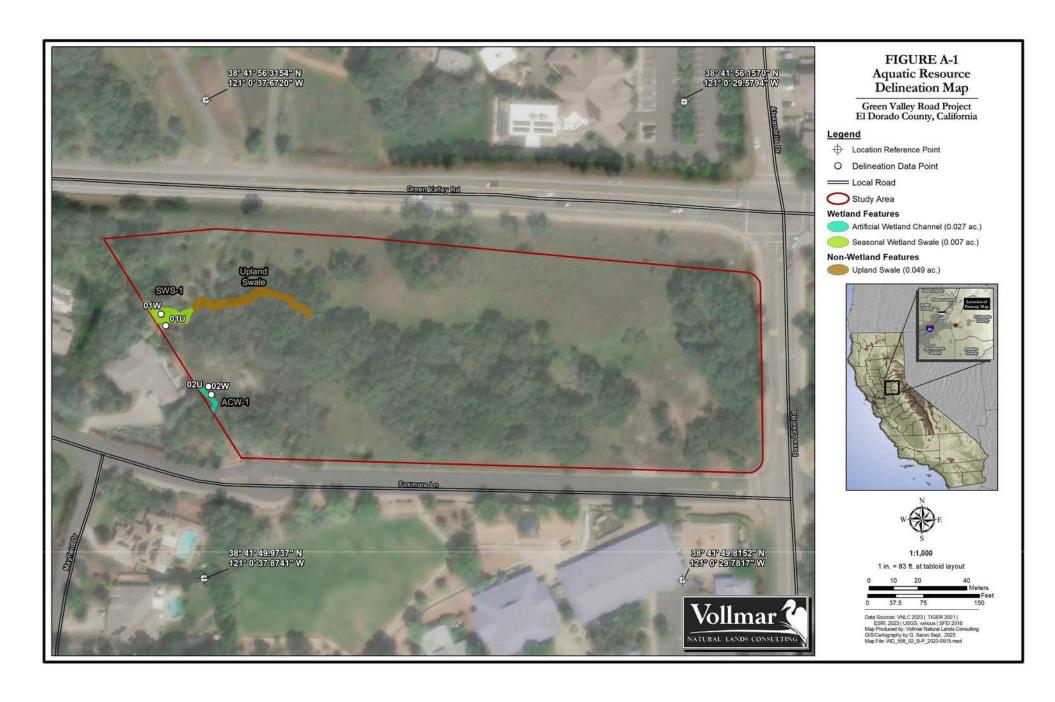
The majority of the Study Area is upland and consists of annual grassland, mixed oak and pine woodland, and coyote brush shrub plant communities. These included many of the upland species described above.

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APPENDIX A Aquatic Resource Delineation Map



APPENDIX B Representative Photographs



Photo 1: Representative upland habitat in Study Area, consisting of annual grassland and mixed oak woodland. (8/8/23)



Photo 2: Location of delineation data point 01W in Seasonal Wetland Swale. (8/8/23)



Photo 3: Location of delineation data point 01U in upland adjacent to Seasonal Wetland Swale. (8/8/23)



Photo 4: Location of delineation data point 02W in Artificial Wetland Channel. (8/8/23)



Photo 5: Location of upland delineation data point 02U upslope of Artificial Wetland Channel. (8/8/23)



Photo 6: Upland swale in Mixed Oak Woodland vegetation community.

APPENDIX C **Plant List**

Table C-1. Plant List

Scientific Name	Common Name	WIS*
Adenostoma fasciculatum	Chamise	NL
Avena spp.	Wild Oats	UPL
Baccharis pilularis	Coyote Brush	NL
Bromus diandrus	Ripgut brome	NL
Chamaesyce maculata	Spotted Spurge	FACU
Cynodon dactylon	Bermudagrass	FACU
Cynosurus echinatus	Dogtail grass	NL
Cyperus eragrostis	Tall flatsedge	OBL
Dittrichia graveolens	Stinkwort	NL
Echinochloa crus-galli	Barnyard grass	FACW
Hordeum murinum	Wal lbarley	FAC
Kicxia elatine	Sharp-leaved fluellin	UPL
Lactuca serriola	Prickly Lettuce	FACU
Lolium multiflorum	Italian ryegrass	FAC
Phalaris aquatica	bulbous canarygrass	FACU
Pinus sabiniana	Gray Pine	NL
Polypogon monspeliensis	Annual Rabbitsfoot Grass	FACW
Pseudognaphalium leteoalbum	Jersey cudweed	FAC
Pseudognaphalium luteoalbum	Jersey Cudweed	FAC
Quercus douglassii	Blue Oak	NL
Quercus lobata	Valley Oak	FACU
Quercus wislezeni	Interior Live Oak	NL
Torilis arvensis	Tall sock-destroyer	NL
Vicia villosa	Hairy Vetch	NL

^{*}Wetland Indicator Status (WIS):

OBL = occurs in aquatic resources > 99% of time

FACW = occurs in aquatic resources 67-99% of time

FAC = occurs in aquatic resources 34-66% of time

FACU = occurs in aquatic resources 1-33% of time occurs in uplands > 99% of time

UPL = occurs in aquatic resources < 1% of time

NI = indicator status not known in this region

NL = not listed, treated as UPL

APPENDIX D Wetland Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 556 Green Valley Road		City/Co	ounty:	Skinners	, El Dorado Co.	Sampling	Date: 8	3/08/2023
Applicant/Owner:								
Investigator(s): Gabe Saron, VNLC								
Landform (hillslope, terrace, etc.):								
Subregion (LRR):								
Soil Map Unit Name: Rescue extremeley stony sandy loa								
				_			iie .	
Are climatic / hydrologic conditions on the site typical for this t			-			·		
Are Vegetation, Soil, or Hydrology sig								_ No
Are Vegetation, Soil, or Hydrology nat	urally pro	blema	itic?	(If ne	eded, explain any ans	wers in Rema	arks.)	
SUMMARY OF FINDINGS – Attach site map sl	nowing	sam	pling	point l	ocations, transe	cts, import	ant feat	ures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:	\checkmark			Sampled a Wetlar	Area nd? Yes _	No_	<u>✓</u>	
Atop berm upslope of seasonal wetland.								
VEGETATION – Use scientific names of plants	Absolute	Dom	inant I	ndicator	Dominance Test w	orkobooti		
	% Cover				Number of Dominar			
1. Quercus wislizeni	10			NL	That Are OBL, FAC			(A)
2. Pinus sabiniana	7			NL	Total Number of Do	minant		
3					Species Across All S			(B)
4					Percent of Dominan	t Species		
Ocalias/Oback Obstance (Districts 10 ft v 10 ft)	17	= Tot	al Cove	er	That Are OBL, FAC			(A/B)
Sapling/Shrub Stratum (Plot size: 10 ft x 10 ft) 1. Quercus wislizeni	2			NII	Prevalence Index v	vorksheet:		
Quercus wislizeni 2					Total % Cover of		Multiply b	v.
					OBL species			
3 4					FACW species			
5					FAC species			
			al Cove	 er	FACU species			
Herb Stratum (Plot size: 3 ft x 3 ft)		-			UPL species	x 5	5 =	
1. Cynosurus echinatus	10			NL	Column Totals:	(A)		(B)
2. Bromus diandrus								
3. <u>Lactuca serriola</u>				FACU	Prevalence Inc			
4. Torilis arvensis					Hydrophytic Veget		ors:	
5. <u>Dittrichia graveolens</u>					Dominance Tes Prevalence Inde			
6					Morphological A		Drovido cu	nnorting
7					data in Rem	arks or on a s	eparate sh	eet)
8	22				Problematic Hy	drophytic Veg	etation¹ (E	xplain)
Woody Vine Stratum (Plot size:)		100	ai Cove	əl				
1					¹ Indicators of hydric			
2					be present, unless of	listurbed or pr	oblematic.	
			al Cove		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum	f Biotic C	rust	0		Present?	Yes	No <u>√</u>	_
Remarks:	·							
Mostly senescent ruderal, upland herbaceo	us vege	tatic	on.					

24-1414 G 28 of 37 Arid West – Version 2.0 SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Type¹ Loc² Texture (inches) 0-12 10YR 3/3 100 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: ___ Sandy Redox (S5) ___ Histosol (A1) _ 1 cm Muck (A9) (LRR C) ___ Histic Epipedon (A2) ___ Stripped Matrix (S6) ___ 2 cm Muck (A10) (LRR B) ___ Black Histic (A3) ___ Loamy Mucky Mineral (F1) __ Reduced Vertic (F18) ___ Hydrogen Sulfide (A4) ___ Loamy Gleyed Matrix (F2) Red Parent Material (TF2) ___ Depleted Matrix (F3) Stratified Layers (A5) (LRR C) Other (Explain in Remarks) ___ Redox Dark Surface (F6) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) ³Indicators of hydrophytic vegetation and Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, Sandy Gleved Matrix (S4) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): _ Hydric Soil Present? Yes _ Remarks: Compacted soil. **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) ___ Surface Water (A1) ___ Salt Crust (B11) ___ Water Marks (B1) (Riverine) ___ High Water Table (A2) ___ Biotic Crust (B12) ___ Sediment Deposits (B2) (Riverine) Saturation (A3) ___ Aquatic Invertebrates (B13) ___ Drift Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) ___ Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) ___ Oxidized Rhizospheres along Living Roots (C3) ___ Dry-Season Water Table (C2) ___ Drift Deposits (B3) (Nonriverine) ___ Crayfish Burrows (C8) Presence of Reduced Iron (C4) ___ Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) ___ Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Yes ____ No _✓ Depth (inches): __ Surface Water Present? Water Table Present? Yes _____ No _ ✓ Depth (inches): _____ Yes No ✓ Depth (inches): Saturation Present? Wetland Hydrology Present? Yes ____ No __✓ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

No wetland hydrology.

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Applicant/Owner:
Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 2 Subregion (LRR): Lat: 38° 41' 53.4869" N Long: 121° 0' 38.5066" W Datum: UTM 10N Soil Map Unit Name: Rescue Sandy Loam 10 Percent Slopes 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 Wetland Hydrology Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Seasonal wetland swale collects water from armored ditch. VEGETATION — Use scientific names of plants. Tree Stratum (Plot size: Absolute Sepcies? Slatus Sepcies? Slatus Sepcies Across All Strata: 1 (A) Total Number of Dominant Species That Are OBL, FACW, or FAC: 1 (B) Sapling/Shrub Stratum (Plot size: Across All Stratus: 1 (B) Sapling/Shrub Stratum (Plot size: Across All Stratus: 1 (B) Fervalence Index worksheet: Total % Cover of: Multiply by: Total Number of Dominant Species Sepcies
Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 2 Subregion (LRR): Lat: 38° 41' 53.4869" N Long: 121° 0' 38.5066" W Datum: UTM 10N Soil Map Unit Name: Rescue Sandy Loam 10 Percent Slopes 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 Wetland Hydrology Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No Seasonal wetland swale collects water from armored ditch. VEGETATION — Use scientific names of plants. Tree Stratum (Plot size: Absolute Sepcies? Slatus Sepcies? Slatus Sepcies Across All Strata: 1 (A) Total Number of Dominant Species That Are OBL, FACW, or FAC: 1 (B) Sapling/Shrub Stratum (Plot size: Across All Stratus: 1 (B) Sapling/Shrub Stratum (Plot size: Across All Stratus: 1 (B) Fervalence Index worksheet: Total % Cover of: Multiply by: Total Number of Dominant Species Sepcies
Subregion (LRR):
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 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 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?
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes
Hydrophytic Vegetation Present? Yes
Hydric Soil Present? Yes ✓ No within a Wetland? Yes ✓ No Remarks: Seasonal wetland swale collects water from armored ditch. VEGETATION – Use scientific names of plants. Absolute % Cover Species? Status Dominant Indicator % Cover Species? Status Dominant Species 1. 2. 3. 4. 2.

24-1414 G 30 of 37 Arid West – Version 2.0 SOIL Sampling Point: 01W

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	indicator	or confirr	n the absence of ir	ndicators.)
Depth Matrix Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-6	10YR 4/2	95	7.5YR 4/6	5	_ <u>C</u>	<u>PL</u>	SCL	
	-			-				
1 _{Type:} C=C		lotion DM-	- Boducod Matrix, CS		d or Coots		raina ² l agation	n: PL=Pore Lining, M=Matrix.
	oncentration, D=Dep Indicators: (Applic					u Sanu G		Problematic Hydric Soils ³ :
Histosol		abio to un	Sandy Red		ou.,			(A9) (LRR C)
	pipedon (A2)		Stripped Ma					(A10) (LRR B)
Black Hi			Loamy Muc		ıl (F1)		Reduced V	. , ,
	n Sulfide (A4)		Loamy Gley	-	. ,			: Material (TF2)
Stratified	Layers (A5) (LRR	C)	✓ Depleted M	atrix (F3)			Other (Expl	ain in Remarks)
1 cm Mu	ıck (A9) (LRR D)		Redox Dark	Surface ((F6)			
	d Below Dark Surfac	e (A11)	Depleted Da				0	
	ark Surface (A12)		Redox Dep	•	F8)		•	drophytic vegetation and
	fucky Mineral (S1)		Vernal Pool	s (F9)			-	ology must be present,
	ayer (if present):						uniess disturi	ped or problematic.
Type: Be								
								40 V / N
Depth (inc	cnes): <u>b</u>						Hydric Soil Pres	sent? Yes <u>√</u> No
Remarks:								
Shallow s	oil with embed	ded sto	nes.					
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	cators (minimum of c	ne required	l; check all that appl	y)			Secondary	Indicators (2 or more required)
✓ Surface	Water (A1)		Salt Crust	(B11)			Water	Marks (B1) (Riverine)
High Wa	iter Table (A2)		Biotic Crus	st (B12)			Sedim	ent Deposits (B2) (Riverine)
✓ Saturation	on (A3)		Aquatic In	vertebrate	es (B13)		Drift D	eposits (B3) (Riverine)
Water M	arks (B1) (Nonriver	ine)	Hydrogen	Sulfide O	dor (C1)		Draina	age Patterns (B10)
Sedimer	nt Deposits (B2) (No	nriverine)	✓ Oxidized F	Rhizosphe	res along	Living Ro	ots (C3) Dry-Se	eason Water Table (C2)
Drift Dep	oosits (B3) (Nonrive	rine)	Presence	of Reduce	ed Iron (C4	1)	Crayfis	sh Burrows (C8)
Surface	Soil Cracks (B6)		Recent Iro	n Reducti	on in Tille	d Soils (C	6) Satura	ation Visible on Aerial Imagery (C9)
Inundation	on Visible on Aerial	Imagery (B	7) Thin Muck	Surface ((C7)		Shallo	w Aquitard (D3)
Water-S	tained Leaves (B9)		Other (Exp	olain in Re	emarks)		FAC-N	leutral Test (D5)
Field Observ	vations:							
Surface Water	er Present? Y	′es <u> </u>	No Depth (in	ches):				
Water Table	Present? Y	'es I	No <u>√</u> Depth (in	ches):				
							land Hydrology Pre	esent? Yes <u>√</u> No
(includes cap	oillary fringe)							
Describe Red	corded Data (stream	n gauge, mo	nitoring well, aerial	photos, pr	evious ins	pections),	it available:	
Remarks:								
Standing	water and satu	rated sc	ils at the botto	m of se	easonal	swale.		

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 556 Green Valley Road		City/Co	unty: Skin	ners, El D	orado Co.	Sampling Da	te: <u>8/08</u>	/2023
Applicant/Owner:								
Investigator(s): Gabe Saron, VNLC								
Landform (hillslope, terrace, etc.): Hillslope								
Subregion (LRR):								
Soil Map Unit Name: Rescue extremely stony sandy I								
Are climatic / hydrologic conditions on the site typical for the						· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrology					al Circumstances		✓ N	0
Are Vegetation, Soil, or Hydrology					, explain any answ	•		
SUMMARY OF FINDINGS – Attach site map				•			•	s etc
			J9 PO	ioout				
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes✓	No <u>▼</u>		ls the Sam	npled Area				
Wetland Hydrology Present? Yes	No ✓	'	within a W	Vetland?	Yes	No <u>*</u>	<u></u>	
Remarks:								
Upland upslope of armored ditch bank.								
opiana apsiope of armorea attendants.								
VEGETATION III : (IC)	4							
VEGETATION – Use scientific names of pla								
Tree Stratum (Plot size: _50 ft x 50 ft _)	Absolute % Cover		nant Indica es? Statı		minance Test wo nber of Dominant			
1. Quercus wislizeni				I INUI	nber of Dominant at Are OBL, FACW		0	(A)
2					al Number of Dom	ninant		
3				100	ecies Across All St		3	(B)
4				_{Por}	cent of Dominant	Species		
0 1 (0) 1 (0) 1 (0) 1 (0)	10	_ = Tota	l Cover		at Are OBL, FACW		0	(A/B)
Sapling/Shrub Stratum (Plot size: 10ft x 10ft)	1	V	NII	l Pro	valence Index wo	orkehoot:		
1. Quercus wislizeni					Total % Cover of:		ultiply by:	
2					L species 0			
4					CW species 5			_
5					C species 0			_
	1		l Cover	FAC	CU species 22	x 4 = _	88	_
Herb Stratum (Plot size: 3 ft x 3 ft)					L species 13	x 5 = _	65	_
1. Kicxia elatine	<u>20</u>	<u> </u>			umn Totals:	<u>40</u> (A) _	163	(B)
2. Polypogon monspeliensis					Prevalence Inde	ev = R/Δ =	4 075	
Phalaris aquatica Dittrichia graveolens		N			drophytic Vegetat			
					Dominance Test			
5					Prevalence Index			
7.					Morphological Ad	daptations¹ (Prov	/ide suppor	ting
8						rks or on a sepa	,	
			l Cover	_ _	Problematic Hydr	rophytic Vegetat	ion' (Explai	in)
Woody Vine Stratum (Plot size:)				1.				
1					licators of hydric s oresent, unless dis			nust
2						<u>.</u>		
		-			drophytic getation			
% Bare Ground in Herb Stratum60	er of Biotic C	rust	0	_ Pre	sent? Y	res No	> <u> </u>	
Remarks:								
Ruderal upland community.								
1					0.4	4444 0 20	1-507	

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Profile Description: (Describe to the de	pth needed to docu	ment the	indicator	or confirm	n the absence	of indicators.)			
Depth Matrix (inches) Color (moist) %		ox Feature	es Type ¹	_Loc ²	Toyturo	Domarko			
	Color (moist)	%			Texture	Remarks			
0-12 10YR 3/2 75	7.5YR 4/6	25	<u>C</u>	M	CL	Mottled matrix			
			-						
			_						
				·					
	-								
	-								
1					. 2,				
¹ Type: C=Concentration, D=Depletion, RM Hydric Soil Indicators: (Applicable to al				ed Sand G		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :			
— Histosol (A1)			ieu.)			Muck (A9) (LRR C)			
Histosof (A1) Histic Epipedon (A2)	Sandy Red Stripped M					Muck (A10) (LRR B)			
Black Histic (A3)	Loamy Mu	. ,	al (F1)			ed Vertic (F18)			
Hydrogen Sulfide (A4)	Loamy Gle				Red P	arent Material (TF2)			
Stratified Layers (A5) (LRR C)	✓ Depleted N				Other (Explain in Remarks)				
1 cm Muck (A9) (LRR D)	Redox Dar		. ,						
Depleted Below Dark Surface (A11)Thick Dark Surface (A12)	Depleted D Redox Dep				3Indicators	of hydrophytic vegetation and			
Sandy Mucky Mineral (S1)	Vernal Poo		(10)		wetland hydrology must be present,				
Sandy Gleyed Matrix (S4)		(, -)				listurbed or problematic.			
Restrictive Layer (if present):									
Туре:									
Depth (inches):						Present? Yes No			
Remarks:									
Extremely rocky. Mottled soil co	olor likely the r	acult of	fill soil	s from a	round the	site			
Extremely rocky. Wiottied Soil Co	olor likely the r	esuit oi	1111 3011	3 11 0111 6	irodila tile	site.			
HYDROLOGY									
Wetland Hydrology Indicators:									
Primary Indicators (minimum of one require	ed; check all that app	lv)			Secor	ndary Indicators (2 or more required)			
Surface Water (A1)	Salt Crus					Vater Marks (B1) (Riverine)			
High Water Table (A2)	Biotic Cru					sediment Deposits (B2) (Riverine)			
Saturation (A3)	Aquatic Ir		es (B13)			Prift Deposits (B3) (Riverine)			
Water Marks (B1) (Nonriverine)	Hydrogen	Sulfide C	dor (C1)		D	Prainage Patterns (B10)			
Sediment Deposits (B2) (Nonriverine)	Oxidized	Rhizosphe	eres along	Living Ro	ots (C3) D	ry-Season Water Table (C2)			
Drift Deposits (B3) (Nonriverine)	Presence	of Reduc	ed Iron (C	4)	c	crayfish Burrows (C8)			
Surface Soil Cracks (B6)				ed Soils (C		aturation Visible on Aerial Imagery (C9)			
Inundation Visible on Aerial Imagery (E	· —		` '			hallow Aquitard (D3)			
Water-Stained Leaves (B9)	Other (Ex	plain in R	emarks)		F	AC-Neutral Test (D5)			
Field Observations:									
	No <u>✓</u> Depth (ir								
Water Table Present? Yes									
Saturation Present? Yes (includes capillary fringe)	No <u>✓</u> Depth (ir	nches):		Wet	land Hydrolog	y Present? Yes No✓			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Remarks:									
No wetland hydrology.									
ivo wedana nyarology.									

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 556 Green Valley Road	(City/Cour	nty: Skinners	, El Dorado Co.	Sampling Date:	8/08/2023
Applicant/Owner:				State: <u>CA</u>	Sampling Point:	02W
Investigator(s): Gabe Saron, VNLC		Section, ⁻	Township, Ra	nge: <u>Section 29, To</u>	ownship 10 N, Rang	e 09 E, MDPM
Landform (hillslope, terrace, etc.): <u>Ditch bank</u>		Local reli	ief (concave,	convex, none): conc	cave Slo	ppe (%):2
Subregion (LRR):	_ Lat: <u>38°</u>	41' 52.4	1056" N	Long: 121° 0' 37.	.6879" W Datu	ım: <u>UTM 10N</u>
Soil Map Unit Name: Rescue extremely stony sandy loa	am, 3 to 5	0 % slop	es, eroded	NWI cla	ssification: none	
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrologys		_			•	√ No
Are Vegetation, Soil, or Hydrology n						
SUMMARY OF FINDINGS – Attach site map						eatures, etc.
Hydrophytic Vegetation Present? Yes ✓ No.	0	la la	the Commission	I Avec		
Hydric Soil Present? Yes <u>√</u> No	o		the Sampled ithin a Wetlar		No	
Wetland Hydrology Present? Yes ✓ N	0		a vvotidi	100	110	_
Remarks:						
Vegetated bank of armored ditch.						
VEGETATION – Use scientific names of plan	ts.					
Total Christians (Distriction EO ft v EO ft v	Absolute		nt Indicator	Dominance Test v	worksheet:	
<u>Tree Stratum</u> (Plot size: <u>50 ft x 50 ft</u>) 1. <u>Quercus wislizeni</u>			Status NI	Number of Domina That Are OBL, FAC		2 (A)
2						<u> </u>
3				Total Number of Description Species Across All		3(B)
4.						(5)
		= Total (Percent of Domina That Are OBL, FAC	ant Species CW, or FAC: <u>66</u>	.6% (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index		
1					r of: Multip	ly by:
2					x 1 =	-
4					x 2 =	
5					x 3 =	
	0	= Total (Cover	FACU species	x 4 =	
Herb Stratum (Plot size:)	10	V	EAC\\\		x 5 =	
Cyperus eragrostis Dittrichia graveolens		Y N	<u>FACW</u> NL	Column Totals:	(A)	(B)
Echinochloa crus-galli	7	Y	FACW	Prevalence I	ndex = B/A =	
4. <u>Kickxia elatine</u>	2	N	UPL		etation Indicators:	
5. Chamaesyce maculata	0.4	N	FACU	✓ Dominance Te		
6. Pseudognaphalium luteoalbum	1	N	FAC	Prevalence Inc		
7				Morphological	l Adaptations ¹ (Provide marks or on a separate	supporting
8					lydrophytic Vegetation	*
Woody Vine Stratum (Plot size:)	39	= Total (Cover		.yarapyaa ragatata	(=/(p/a)
1					ic soil and wetland hyd	
2.				be present, unless	disturbed or problema	atic.
		= Total (Cover	Hydrophytic		
% Bare Ground in Herb Stratum56 % Cover	of Biotic Cı	rust		Vegetation Present?	Yes <u>√</u> No _	
Remarks:		·				

24-1414 G 34 of 37 Arid West – Version 2.0 SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) % Type¹ Loc² Texture (inches) 10YR 4/2 97 7.5 YR 4/6 3 C PL SCL 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: ___ Histosol (A1) _ 1 cm Muck (A9) (LRR C) ___ Sandy Redox (S5) ___ Histic Epipedon (A2) ___ Stripped Matrix (S6) ___ 2 cm Muck (A10) (LRR B) ___ Black Histic (A3) ___ Loamy Mucky Mineral (F1) ___ Reduced Vertic (F18) ___ Hydrogen Sulfide (A4) __ Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) ✓ Depleted Matrix (F3) Other (Explain in Remarks) ___ Redox Dark Surface (F6) ___ 1 cm Muck (A9) (**LRR D**) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) ³Indicators of hydrophytic vegetation and ___ Redox Depressions (F8) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, Sandy Gleved Matrix (S4) unless disturbed or problematic. Restrictive Layer (if present): Type: Rock Depth (inches): 6 Hydric Soil Present? Yes ___ ✓ No _ Remarks: Fill soil over armored ditch bank. **HYDROLOGY** Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) ✓ Surface Water (A1) Salt Crust (B11) ___ Water Marks (B1) (Riverine) ___ High Water Table (A2) ___ Biotic Crust (B12) ___ Sediment Deposits (B2) (Riverine) ✓ Saturation (A3) ___ Aquatic Invertebrates (B13) ___ Drift Deposits (B3) (Riverine)

___ Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) ✓ Oxidized Rhizospheres along Living Roots (C3) ___ Dry-Season Water Table (C2) ___ Drift Deposits (B3) (Nonriverine) ___ Crayfish Burrows (C8) Presence of Reduced Iron (C4) ___ Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) ___ Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Yes _ ✓ No ____ Depth (inches): 1 Surface Water Present? Water Table Present? Yes _____ No _ ✓ Depth (inches): _____ Yes ✓ _ No ____ Depth (inches): _____ Saturation Present? Wetland Hydrology Present? Yes __ ✓ No __ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Ditch contains shallow ponded surface water and saturated soils. 24-1414 G 35 of 37 Arid West - Version 2.0 US Army Corps of Engineers

APPENDIX E Aquatic Resource Excel Sheet

APPENDIX E. AQUATIC RESOURCES SHEET, GREEN VALLEY ROAD PROJECT, EL DORADO COUNTY, CA.

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
SWS-1	CALIFORNIA	PEM	DEPRESS	Area	0.027	ACRE	DELIN.PJD-404	38.69819000	-121.01066000	
AWC-1	CALIFORNIA	PEM	DEPRESS	Area	0.007	ACRE	DELIN.PJD-404	38.69788500	-121.01048700	