

Appendix B

Biological Resource Documentation

U.S. Fish and Wildlife Service List of Threatened and Endangered Species

NMFS List of Threatened and Endangered Species, Critical Habitat, and Essential Fish Habitat

California Natural Diversity Database Summary

California Native Plant Society Summary

ENPLAN Summary Report: Potential for Special-Status Species to Occur on the Project Site

List of Vascular Plants Observed: March 26 and April 23, 2022



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

June 02, 2023

Project Code: 2023-0089207

Project Name: Bella Vista Water District 3-Million Gallon Regulating Station Tank

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0089207

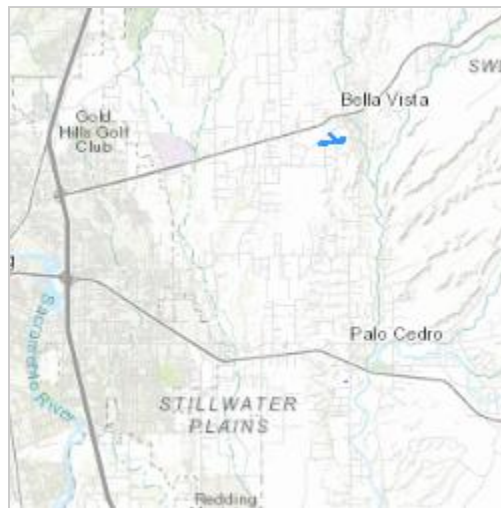
Project Name: Bella Vista Water District 3-Million Gallon Regulating Station Tank

Project Type: Water Supply Facility - New Constr

Project Description: New water storage tank and booster pump station; addition of SCADA systems at three well sites.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.63093295,-122.24143739210042,14z>



Counties: Shasta County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Shasta Crayfish <i>Pacifastacus fortis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8284	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

FLOWERING PLANTS

NAME	STATUS
Slender Orcutt Grass <i>Orcuttia tenuis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: ENPLAN

Name: Carla Thompson

Address: 3179 Bechelli Ln

City: Redding

State: CA

Zip: 96002

Email: cthompson@enplan.com

Phone: 5302210440

Bella Vista Water District 3MG Regulating Station Tank Project

National Marine Fisheries Service

Threatened (T) and Endangered (T) Species,
Critical Habitat, and Essential Fish Habitat

July 2023

Quad Name: Bella Vista

Quad Number: 40122-F2

ESA Anadromous Fish

CVSR Chinook Salmon ESU (T)

SRWR Chinook Salmon ESU (E)

CCV Steelhead DPS (T)

ESA Anadromous Fish Critical Habitat

CCV Steelhead Critical Habitat

Essential Fish Habitat

Chinook Salmon EFH

Quad Name: Palo Cedro

Quad Number: 40122-E2

ESA Anadromous Fish

CVSR Chinook Salmon ESU (T)

SRWR Chinook Salmon ESU (E)

CCV Steelhead DPS (T)

ESA Anadromous Fish Critical Habitat

CVSR Chinook Salmon Critical Habitat

CCV Steelhead Critical Habitat

Essential Fish Habitat

Chinook Salmon EFH

Quad Name: Enterprise

Quad Number: 40122-E3

ESA Anadromous Fish

CVSR Chinook Salmon ESU (T)

SRWR Chinook Salmon ESU (E)

CCV Steelhead DPS (T)

sDPS Green Sturgeon (T)

ESA Anadromous Fish Critical Habitat

CVSR Chinook Salmon Critical Habitat

SRWR Chinook Salmon Critical Habitat

CCV Steelhead Critical Habitat

sDPS Green Sturgeon Critical Habitat

Essential Fish Habitat

Chinook Salmon EFH

Quad Name: Project City

Quad Number: 40122-F3

ESA Anadromous Fish

CVSR Chinook Salmon ESU (T)

SRWR Chinook Salmon ESU (E)

CCV Steelhead DPS (T)

ESA Anadromous Fish Critical Habitat

CCV Steelhead Critical Habitat

Essential Fish Habitat

Chinook Salmon EFH

Rarefind (CNDDDB) Report Summary
Bella Vista Water District Three-Million-Gallon Regulating Station Tank Project
Five-Mile Radius of Project Area
June 2023

Listed Element	Quadrangle ¹								Status ²
	EP	BV	PJ	PC	CG	RD	BF	CO	
ANIMALS									
Bald eagle	•			•					FBCC, FD, SFP, SE
Bank swallow	•								ST
California linderiella	•							•	None
Chinook salmon – Central Valley spring-run ESU						•			FT, ST
Chinook salmon – Sacramento River winter-run ESU	•					•			FE, SE
Foothill yellow-legged frog – Northwest/North Coast Clade	•			•		•			SSSC
Green sturgeon – southern DPS	•					•			FT
North American porcupine		•							None
Pallid bat				•					SSSC
Shasta chaparral						•			None
Silver-haired bat	•								None
Spotted bat				•					SSSC
Steelhead – Central Valley DPS	•	•		•		•	•		FT
Tricolored blackbird						•		•	ST, SSSC
Valley elderberry longhorn beetle	•				•				FT
Vernal pool fairy shrimp	•			•			•	•	FT
Vernal pool tadpole shrimp	•			•			•	•	FE
Western pearlshell	•								None
Western pond turtle	•			•			•	•	SSSC
Western spadefoot	•			•			•	•	SSSC
PLANTS									
Ahart's paronychia				•					1B.1
Big-scale balsamroot				•					1B.2
Boggs Lake hedge-hyssop				•					1B.2
Dubious pea						•			3
Henderson's bent grass	•		•				•		3.2
Legenere	•						•		1B.1
Red Bluff dwarf rush	•		•	•			•	•	1B.1
Sanford's arrowhead			•						1B.2
Silky cryptantha	•		•	•			•		1B.2
Slender Orcutt grass	•			•			•	•	1B.1
Watershield							•		2B.3
Woolly meadowfoam				•			•		4.2
NATURAL COMMUNITIES									
Great Valley Cottonwood Riparian Forest	•								None
Great Valley Valley Oak Riparian Forest	•								None
Great Valley Willow Scrub	•								None

Highlighting denotes the quadrangle in which the project site is located

¹QUADRANGLE CODE

BV	Bella Vista	PC	Palo Cedro
EP	Enterprise	CG	Clough Gulch
PJ	Project City	RD	Redding
BF	Balls Ferry	CO	Cottonwood

²STATUS CODES

Federal

FE	Federally Listed – Endangered
FT	Federally Listed – Threatened
FC	Federal Candidate
FP	Federal Proposed
FD	Federally Delisted
FSC	Federal Species of Concern
FBCC	Federal Bird of Conservation Concern

State

SFP	State Fully Protected
SR	State Rare
SE	State Listed – Endangered
ST	State Listed – Threatened
SC	State Candidate
SD	State Delisted
SSSC	State Species of Special Concern
WL	Watch List

Rare Plant Rank

1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened or Endangered in California and Elsewhere
2	Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3	Plants About Which We Need More Information (<i>A Review List</i>) (generally not considered special-status, unless unusual circumstances warrant)
4	Plants of Limited Distribution (<i>A Watch List</i>) (generally not considered special-status, unless unusual circumstances warrant)

Rare Plant Threat Ranks

0.1	Seriously Threatened in California
0.2	Fairly Threatened in California
0.3	Not Very Threatened in California

California Native Plant Society
Inventory of Rare and Endangered Plants

U.S. Geological Survey's Bella Vista, Enterprise, Palo Cedro, and Project City 7.5-minute Quadrangles

Common Name	Scientific Name	CA Rare Plant Rank	Blooming Period	State Listing Status	Federal Listing Status
Ahart's paronychia	<i>Paronychia ahartii</i>	1B.1	Feb-June	None	None
Bellinger's meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>bellingermana</i>	1B.2	Apr-June	None	None
Big-scale balsamroot	<i>Balsamorhiza macrolepis</i>	1B.2	Mar-June	None	None
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	1B.2	Apr-Aug	SE	None
Broad-lobed leptosiphon	<i>Leptosiphon latisectus</i>	4.3	Apr-June	None	None
Depauperate milk-vetch	<i>Astragalus pauperculus</i>	4.3	Mar-June	None	None
Dubious pea	<i>Lathyrus sulphureus</i> var. <i>argillaceus</i>	3	Apr-May	None	None
Henderson's bent grass	<i>Agrostis hendersonii</i>	3.2	Apr-June	None	None
Legenere	<i>Legenere limosa</i>	1B.1	Apr-June	None	None
Northern clarkia	<i>Clarkia borealis</i> ssp. <i>borealis</i>	4.3	June-Sep	None	None
Oval-leaved viburnum	<i>Viburnum ellipticum</i>	2B.3	May-June	None	None
Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	1B.1	Mar-June	None	None
Redding checkerbloom	<i>Sidalcea celata</i>	3	Apr-Aug	None	None
Sanborn's onion	<i>Allium sanbornii</i> var. <i>sanbornii</i>	4.2	May-Sep	None	None
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	1B.2	May-Oct (Nov)	None	None
Shasta County arnica	<i>Arnica venosa</i>	4.2	May-Jul (Sep)	None	None
Shasta maidenhair fern	<i>Adiantum shastense</i>	4.3	Apr-Aug	None	None
Shasta snow-wreath	<i>Neviusia cliftonii</i>	1B.2	Apr-June	SC	None
Silky cryptantha	<i>Cryptantha crinita</i>	1B.2	Apr-May	None	None
Slender Orcutt grass	<i>Orcuttia tenuis</i>	1B.1	May-Sep (Oct)	SE	FT
Thread-leaved beakseed	<i>Bulbostylis capillaris</i>	4.2	June-Aug	None	None
Tripod buckwheat	<i>Eriogonum tripodum</i>	4.2	May-Jul	None	None
Woolly meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	4.2	Mar-May (June)	None	None

Source: California Native Plant Society, Rare Plant Program. 2023. CNPS Rare Plant Program (online edition, v9.5). <http://www.rareplants.cnps.org>. Accessed June 2023.

Rare Plant Rank	
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened or Endangered in California and Elsewhere
2	Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3	Plants About Which We Need More Information – A Review List (generally not considered special-status, unless unusual circumstances warrant)
4	Plants of Limited Distribution – A Watch List (generally not considered special-status, unless unusual circumstances warrant)

Rare Plant Threat Rank	
0.1	Seriously Threatened in California
0.2	Fairly Threatened in California
0.3	Not Very Threatened in California

Status Codes			
<u>Federal</u>		<u>State</u>	
FE	Federally Listed – Endangered	SFP	State Full Protected
FT	Federally Listed – Threatened	SR	State Rare
FC	Federal Candidate	SE	State Listed – Endangered
FP	Federal Proposed	ST	State Listed – Threatened
FD	Federal Delisted	SC	State Candidate
FSC	Federal Species of Concern	SD	State Delisted
FBCC	Federal Bird of Conservation Concern	SSSC	State Species of Special Concern
		WL	Watch List

Potential for Special-Status Species to Occur on the Project Site

Bella Vista Water District Three-Million-Gallon Water Storage Tank Project

June 2023

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
PLANTS							
Ahart's paronychia	<i>Paronychia ahartii</i>	1B.1	Ahart's paronychia is an annual herb that occurs in cismontane woodland, valley and foothill grassland, and vernal pools, in well-drained rocky outcrops, and in volcanic uplands. The species is reported between 100 and 1,700 feet in elevation. The flowering period is February through June.	No	No	No	No suitable habitat for Ahart's paronychia occurs in the project site or vicinity. The species was not observed during field surveys and is not expected to be present in the project area.
Bellinger's meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>bellingariana</i>	1B.2	Bellinger's meadowfoam is an annual herb that occurs in cismontane woodland, meadows, and seeps, typically in shallow, rocky clay soils of volcanic origin. The species is reported between 950 and 3,600 feet in elevation. The flowering period is April through June.	No	No	No	Suitable habitat for Bellinger's meadowfoam is not present in or adjacent to the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Big-scale balsamroot	<i>Balsamorhiza macrolepis</i>	1B.2	Big-scale balsamroot is a perennial herb that occurs on rocky slopes in serpentine soils and in chaparral, cismontane woodland, and grassland habitats. The species is reported between 150 and 5,100 feet in elevation. The flowering period is March through June.	Yes	No	No	Although marginally suitable habitat for big-scale balsamroot occurs in the project site, this species was not observed during field surveys; therefore, it is not expected to be present in the project area.
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	1B.2	Boggs Lake hedge-hyssop is an annual herb that occurs in marshes, swamps, and vernal pools. The species is reported between 35 and 7,800 feet in elevation. The flowering period is April through August.	No	No	No	Suitable habitat for Boggs Lake hedge-hyssop is not present in or adjacent to the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Legenere	<i>Legenere limosa</i>	1B.1	Legenere is an annual herb that occurs in vernal pools. The species is reported between 5 and 2,900 feet in elevation. The flowering period is April through June.	No	No	No	No suitable habitat exists for legenere in or adjacent to the project site. The species was not observed during field surveys and is not expected to be present in the project area.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Oval-leaved viburnum	<i>Viburnum ellipticum</i>	2B.3	Oval-leaved viburnum is a perennial deciduous shrub that generally occurs on north-facing slopes in chaparral, cismontane woodland, and lower montane coniferous forest. The species is reported between 700 and 4,600 feet in elevation. The flowering period is May to June.	No	No	No	Suitable habitat for oval-leaved viburnum is not present in or adjacent to the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	1B.1	Red Bluff dwarf rush is an annual herb that occurs in chaparral, cismontane woodland, and grassland habitats, and is always associated with vernal pools and swales. The species is reported between 100 and 4,100 feet in elevation. The flowering period is March through June.	No	No	No	Suitable habitat for Red Bluff dwarf rush is not present in the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	1B.2	Sanford's arrowhead is a perennial rhizomatous herb that occurs in marshes and swamps. The species is reported between sea level and 2,200 feet in elevation. The flowering period is May through October.	No	No	No	Suitable habitat for Sanford's arrowhead is not present in the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Shasta snow-wreath	<i>Nevusia cliftonii</i>	1B.2	Shasta snow-wreath is a perennial deciduous shrub that occurs in cismontane woodland, lower montane coniferous forest, and riparian woodland, and is typically associated with limestone-derived soils. The species is reported between 900 and 2,000 feet in elevation. The flowering period is April and June.	No	No	No	Suitable habitat for Shasta snow-wreath is not present in the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Silky cryptantha	<i>Cryptantha crinita</i>	1B.2	Silky cryptantha is an annual herb that occurs along low-gradient seasonal streams with broad floodplains, usually on the valley floor, where it is found on gravelly or cobbly substrates. The species also occurs in vernal moist uplands. Less frequently, it occurs along perennial streams, including the Sacramento River. The species is found between 200 and 4,000 feet in elevation. The flowering period is April and May.	No	No	No	Suitable habitat for silky cryptantha is not present in the project area. The species was not observed during field surveys and is not expected to be present in the project area.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Slender Orcutt grass	<i>Orcuttia tenuis</i>	1B.1	Slender Orcutt grass is an annual herb that occurs in vernal pools. The species is reported between 100 and 5,800 feet above sea level. The flowering period is May through October.	No	No	No	Suitable habitat for slender Orcutt grass is not present in or adjacent to the project area. The species was not observed during field surveys and is not expected to be present in the project area.
Watershield	<i>Brasenia schreberi</i>	2B.3	Watershield is a perennial rhizomatous herb that occurs in ponds, marshes and swamps. The species is reported between sea level and 7,300 feet above sea level. The flowering period is June through September.	No	No	No	Suitable habitat for watershield is not present in or adjacent to the project area. The species was not observed during field surveys and is not expected to be present in the project area.
CRUSTACEANS							
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	FE	Conservancy fairy shrimp inhabit large, cool-water vernal pools with moderately turbid water.	No	No	No	No vernal pools or other potentially suitable habitats for Conservancy fairy shrimp are present in the project site. Conservancy fairy shrimp would thus not be present.
Shasta crayfish	<i>Pacifastacus fortis</i>	FE	Shasta crayfish inhabit sections of the Pit River, Fall River, Hat Creek, and tributary streams and springs characterized by cool, clear water, low gradient, and substrate consisting of volcanic rubble on sand and/or gravel.	No	No	No	No potentially suitable habitat for Shasta crayfish is present in the project site. Shasta crayfish would thus not be present.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	Vernal pool fairy shrimp inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump or basalt-flow depression pools.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool fairy shrimp are present in the project site. Vernal pool fairy shrimp would thus not be present.
Vernal pool tadpole shrimp	<i>Lepidurus packardi</i>	FE	Vernal pool tadpole shrimp occur in vernal pools in California's Central Valley and in the surrounding foothills.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool tadpole shrimp are present in the project site. Vernal pool tadpole shrimp would thus not be present.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
BIRDS							
Bald eagle	<i>Haliaeetus leucocephalus</i>	FD, FBCC, SE, SFP	Bald eagles nest in large, old-growth trees or snags in mixed stands near open bodies of water. Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Bald eagles usually do not begin nesting if human disturbance is evident. In California, the bald eagle nesting season is from February through July.	No	No	No	The project site does not contain suitable nesting or foraging habitat for the bald eagle. Therefore, this species is not expected to be present in or adjacent to the project area.
Bank swallow	<i>Riparia riparia</i>	ST	Bank swallows require vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, or the ocean for nesting. In California, the bank swallow nesting season is from February through August.	No	No	No	No suitable nesting habitat occurs in the study area or vicinity for the bank swallow. This species is not expected to be present in or adjacent to the project site.
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT, ST	Northern spotted owls inhabit dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir forests from sea level to approximately 7,600 feet in elevation. Northern spotted owls typically nest in tree cavities, the broken tops of trees, or in snags. The nesting season is March through June.	No	No	No	The project site does not support suitable nesting or foraging habitat for the northern spotted owl. Therefore, this species is not expected to be present in or adjacent to the project area.
Tricolored blackbird	<i>Agelaius tricolor</i>	ST, FBCC, SSSC	Tricolored blackbirds are colonial nesters and generally nest near open water. Nesting areas must be large enough to support a minimum colony of about 50 pairs. Tricolored blackbirds generally construct nests in dense cattails or tules, although they can also nest in thickets of willow, blackberry, wild rose and tall herbs. The breeding season is March 15 to August 10.	No	No	No	No suitable nesting habitat occurs in the study area or vicinity for the tricolored blackbird. This species is not expected to be present in or adjacent to the project site.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
AMPHIBIANS							
Foothill yellow-legged frog	<i>Rana boylei</i>	SE, SSSC	Foothill yellow-legged frogs are typically found in shallow, partly shaded, perennial streams in areas with riffles and rocky substrates. This frog needs at least some cobble-sized substrate for egg-laying. Foothill yellow-legged frogs generally prefer low- to moderate-gradient streams, especially for breeding and egg-laying, although juvenile and adult frogs may utilize moderate- to steep-gradient streams during summer and early fall.	No	No	No	The project area does not contain perennial streams or other suitable habitat for the foothill yellow-legged frog. This species is not expected to be present in or adjacent to the project site.
Western spadefoot	<i>Spea hammondi</i>	SSSC	Western spadefoots breed from January through May in shallow, temporary pools that persist for at least three weeks. After breeding, adults seek shelter underground either by excavating a subterranean burrow or retreating into a small mammal burrow nearby. Tadpoles transform within three weeks. Following transformation, juveniles leave breeding pools and seek shelter underground. Western spadefoots remain underground until breeding pools form the following spring.	No	No	No	No suitable habitat occurs on the project site for the western spadefoot; therefore, the species would not be present.
REPTILES							
Western pond turtle	<i>Emys marmorata</i>	SSSC	The western pond turtle associates with permanent or nearly permanent water in a variety of habitats, and is typically found in quiet water environments. Pond turtles require basking sites such as partially submerged logs, rocks, or open mud banks, and suitable (sandy banks or grassy open fields) upland habitat for egg-laying. Nesting and courtship occur during spring. Nests are generally constructed within 500 feet of a waterbody, but some nests have been found up to 1,200 feet away. Pond turtles leave aquatic sites in the fall and overwinter in uplands nearby. Pond turtles return to aquatic sites in spring.	No	No	No	No suitable habitat occurs in the project site for the western pond turtle. The western pond turtle would thus not be present.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
INSECTS							
Monarch butterfly	<i>Danaus plexippus</i> pop. 1	FC	Monarch butterflies are reliant on milkweed species for development and survival. Adults migrate from their overwintering sites on the California Coast, Baja California, and to some extent the central Mexico mountains in February and March and reach the northern limit of their North America range in California, Oregon, Washington, Idaho, and Nevada, in early to mid-June. Eggs are laid singly on milkweed plants within their breeding range. Once hatched, larva reach the adult stage in 20 to 35 days; adults live 2 to 5 weeks. Several generations can be produced within one season, with the last generation beginning migration to their overwintering range in August and September where they live between 6 and 9 months before migrating north.	Yes	No	Pot.	Although a few milkweeds were observed in the project vicinity, none are present on the project site; thus, monarch butterflies are not expected to breed on the site. Additionally, floral resources are relatively limited in the general project area. Although the monarch butterflies may occasionally pass through the area (as is the case throughout most of the continental United States), the species would not be adversely affected by project implementation.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT	The valley elderberry longhorn beetle is found only in association with elderberry shrubs (<i>Sambucus</i> spp.). The species' elevational range extends from sea level to 3,000 feet. The species is known to occur in the Central Valley and foothills.	No	No	No	No elderberries were observed during botanical surveys. Since suitable habitat for this species is not present in the project area, the valley elderberry longhorn beetle is not expected to be present at the project site.
FISH							
Central Valley spring-run Chinook salmon (ESU)	<i>Oncorhynchus tshawytscha</i>	FT	Central Valley spring-run Chinook salmon enter the Sacramento-San Joaquin Delta in early January, and enter natal streams between mid-March and mid-October. Upon entering fresh water, spring-run are sexually immature and must hold in cold water habitats through summer to mature. Typically, spring-run utilize mid- to high-elevation streams that provide sufficient flow, water temperature, cover, and pool depth to allow over-summering. Spawning occurs between August and mid-October.	No	No	No	No suitable habitat exists within the project area for Central Valley spring-run Chinook salmon. Therefore, the species is not present within the project site.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Green sturgeon – Southern DPS	<i>Acipenser medirostris</i>	FT	The green sturgeon is an anadromous fish that spawns in large rivers. In California, green sturgeon spawn primarily in the Klamath and Trinity rivers, but a small number is known to spawn in the Sacramento River. Most spawning in the Sacramento River occurs above Hamilton City, and may range as far north as Keswick Dam. Spawning in the Sacramento River occurs between March and July, when water temperatures are 8° to 14°C. Spawning occurs in deep (greater than three meters) water with a swift current. Preferred spawning substrate is large cobble, but may include clean sand to bedrock.	No	No	No	No suitable habitat exists within the project area for the green sturgeon. Therefore, green sturgeons are not present within the project site.
Sacramento River winter-run Chinook salmon (ESU)	<i>Oncorhynchus tshawytscha</i>	FE	Sacramento River winter-run Chinook salmon spawn almost exclusively in the Sacramento River, and not in tributary streams. Spawning generally occurs in swift, relatively shallow riffles or along the edges of fast runs where there is an abundance of loose gravel. Juveniles may rear in tributaries of the Sacramento River.	No	No	No	No suitable habitat exists within the project area for the Sacramento River winter-run Chinook salmon. Therefore, the species is not present within the project site.
Steelhead – Central Valley DPS	<i>Oncorhynchus mykiss irideus</i> pop. 11	FT	Central Valley steelhead inhabit cold-water tributaries of the Sacramento and San Joaquin rivers. Adults begin their upstream spawning migration between August and March. Spawning occurs between December and April. Spawning habitat is characterized by loose, clean gravel in cold, swiftly flowing, shallow water.	No	No	No	No suitable habitat exists within the project area for steelhead – Central Valley DPS. Therefore, steelhead – Central Valley DPS are not present within the project site.

COMMON NAME	SCIENTIFIC NAME	STATUS ¹	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
MAMMALS							
Pallid bat	<i>Antrozous pallidus</i>	SSSC	Pallid bats inhabit grasslands, shrublands, woodlands, and forests, but are most common in open, dry habitats. Day roosts include caves, rock crevices, mines, and occasionally trees and buildings. Buildings are often used for night roosting. The breeding period is October through February, and pups are born between April and July.	Yes	No	Pot.	Large trees on the project site provide potentially suitable roosting habitat for the pallid bat. Tree removal required for the proposed project could potentially result in adverse effects to the pallid bat.
Spotted bat	<i>Euderma maculatum</i>	SSSC	Spotted bats inhabit grasslands, mixed coniferous forests, and deserts. Spotted bats typically roost in cliff crevices, but may also roost in caves, and manmade structures. Roosts usually occur near suitable foraging areas (i.e., open water, meadows, riparian habitat, and forest openings).	No	No	Pot.	No suitable roosting habitat for the spotted bat is present on the project site. Although spotted bats could potentially migrate through or forage in the project area, they would not be adversely affected by project implementation.

¹ Status Codes

Federal:

FE Federally Listed – Endangered
 FT Federally Listed – Threatened
 FC Federal Candidate Species
 FP Federal Proposed Species
 FD Federal Delisted
 FBCC Federal Bird of Conservation Concern

State:

SFP State Fully Protected
 SR State Rare
 SE State Listed - Endangered
 ST State Listed - Threatened
 SC State Candidate Species
 SCE State Candidate Endangered
 SSSC State Species of Special Concern
 WL Watch List

Rare Plant Rank

1A Plants Presumed Extinct in California
 1B Plants Rare, Threatened or Endangered in California and Elsewhere
 2A Presumed Extirpated in California, but More Common Elsewhere
 2B Rare or Endangered in California, but More Common Elsewhere

Rare Plant Threat Rank

0.1 Seriously Threatened in California
 0.2 Fairly Threatened in California
 0.3 Not Very Threatened in California

LIST OF VASCULAR PLANT SPECIES OBSERVED
Bella Vista Water District Three-Million-Gallon Regulating Station Tank
March 26 and April 23, 2022

Agavaceae

Chlorogalum pomeridianum var. *pomeridianum*

Alliaceae

Allium amplexans

Allium peninsulare

Anacardiaceae

Toxicodendron diversilobum

Apiaceae

Daucus pusillus

Lomatium caruifolium var. *denticulatum*

Lomatium marginatum var. *marginatum*

Perideridia sp.

Sanicula bipinnatifida

Sanicula crassicaulis

Torilis arvensis

Apocynaceae

Asclepias cordifolia

Asteraceae

Achillea millefolium

Balsamorhiza deltoidea

Carduus pycnocephalus

Centaurea melitensis

Centaurea solstitialis

Eriophyllum lanatum

Hypochaeris glabra

Lagophylla ramosissima

Leontodon saxatilis

Logfia gallica

Madia gracilis

Micropus californicus var. *californicus*

Senecio vulgaris

Wyethia angustifolia

Boraginaceae

Plagiobothrys shastensis

Brassicaceae

Cardamine hirsuta

Lepidium nitidum

Lepidium strictum

Raphanus raphanistrum

Caprifoliaceae

Lonicera interrupta

Century-plant Family

Wavy-leaved soap plant

Onion Family

Clasping onion

Mexicali onion

Sumac Family

Poison-oak

Carrot Family

Rattlesnake weed

Foothill lomatium

Margined lomatium

Yampah

Purple sanicle

Pacific sanicle

Field hedge-parsley

Dogbane Family

Purple milkweed

Sunflower Family

Common yarrow

Deltoid balsamroot

Italian thistle

Tocalote

Yellow star-thistle

Woolly sunflower

Smooth cat's ear

Common hareleaf

Hawkbit

Narrow-leaved cottonrose

Slender tarweed

Slender cottonweed

Old-man-in-the-Spring

Narrowleaf mule ears

Borage Family

Shasta popcorn-flower

Mustard Family

Hairy bittercress

Shining peppergrass

Peppergrass

Jointed charlock

Honeysuckle Family

Chaparral honeysuckle

LIST OF VASCULAR PLANT SPECIES OBSERVED

Bella Vista Water District (District) Three-Million-Gallon Regulating Station Tank

Caryophyllaceae

Scleranthus annuus subsp. *annuus*

Pink Family

German knotgrass

Cyperaceae

Carex sp.

Carex vulpinoidea

Sedge Family

Sedge

Fox sedge

Ericaceae

Arctostaphylos manzanita

Arctostaphylos viscida

Heath Family

Common manzanita

White-leaf manzanita

Euphorbiaceae

Euphorbia spathulata

Euphorbia sp.

Spurge Family

Warty spurge

Chinese caps

Fabaceae

Acmispon americanus var. *americanus*

Acmispon parviflorus

Acmispon wrangelianus

Lathyrus angulatus

Lupinus bicolor

Lupinus nanus

Trifolium hirtum

Vicia sativa

Vicia villosa

Legume Family

Spanish lotus

Miniature lotus

Wrangel lotus

Angular-seeded pea

Bicolored lupine

Valley sky lupine

Rose clover

Garden vetch

Winter vetch

Fagaceae

Quercus douglasii

Quercus wislizeni

Oak Family

Blue oak

Interior live oak

Geraniaceae

Erodium botrys

Erodium moschatum

Geranium carolinianum

Geranium molle

Geranium Family

Long-beaked filaree

White-stemmed filaree

Carolina geranium

Dove's-foot geranium

Hypericaceae

Hypericum perforatum

St. John's-wort Family

Klamath weed

Juncaceae

Juncus balticus subsp. *ater*

Luzula subsessilis

Rush Family

Baltic rush

Hairy wood rush

Lamiaceae

Mentha pulegium

Monardella sheltonii

Mint Family

Pennyroyal

Shelton's monardella

Lythraceae

Lythrum hyssopifolia

Loosestrife Family

Hyssop loosestrife

Malvaceae

Sidalcea celata

Mallow Family

Redding checkerbloom

LIST OF VASCULAR PLANT SPECIES OBSERVED

Bella Vista Water District (District) Three-Million-Gallon Regulating Station Tank

Montiaceae

Claytonia parviflora subsp. *parviflora*

Montia fontana

Moraceae

Ficus carica

Morus alba

Myrsinaceae

Lysimachia arvensis

Oleaceae

Ligustrum sp.

Onagraceae

Clarkia sp.

Clarkia purpurea

Orobanchaceae

Castilleja attenuata

Phrymaceae

Erythranthe guttata

Pinaceae

Pinus sabiniana

Plantaginaceae

Plantago elongata

Plantago erecta

Plantago lanceolata

Poaceae

Aira caryophylla

Anthoxanthum aristatum subsp. *aristatum*

Avena barbata

Avena fatua

Briza maxima

Briza minor

Bromus diandrus

Bromus hordeaceus

Bromus madritensis subsp. *madritensis*

Bromus rubens

Bromus sterilis

Cynosurus echinatus

Dactylis glomerata

Elymus caput-medusae

Elymus glaucus

Elymus multisetus

Festuca myuros

Festuca perennis

Miner's Lettuce Family

Small-flowered miner's lettuce

Water chickweed

Mulberry Family

Common fig

White mulberry

Myrsine Family

Scarlet pimpernel

Olive Family

Privet

Evening-Primrose Family

Clarkia

Four-spot

Broom-rape Family

Valley tassels

Lopseed Family

Common monkey-flower

Pine Family

Grey pine

Plantain Family

Elongate plantain

Hooker's plantain

English plantain

Grass Family

Silver hairgrass

Vernal grass

Slender wild oats

Wild oats

Big quaking grass

Little quaking grass

Ripgut grass

Soft chess

Foxtail chess

Red brome

Poverty brome

Hedgehog dogtail

Orchard grass

Medusahead

Blue wild rye

Big squirreltail

Foxtail fescue

Annual ryegrass

LIST OF VASCULAR PLANT SPECIES OBSERVED

Bella Vista Water District (District) Three-Million-Gallon Regulating Station Tank

Hordeum murinum

Melica californica

Poa bulbosa

Stipa lemmonii var. *lemmonii*

Stipa pulchra

Foxtail barley

California melic

Bulbous bluegrass

Lemmon's needlegrass

Purple needlegrass

Polemoniaceae

Navarretia sp.

Navarretia pubescens

Phlox Family

Navarretia

Downy navarretia

Polygonaceae

Rumex crispus

Buckwheat Family

Curly dock

Primulaceae

Primula hendersonii

Primrose Family

Henderson's shooting star

Pteridaceae

Pentagramma triangularis subsp. *triangularis*

Brake Family

Goldback fern

Ranunculaceae

Ranunculus muricatus

Ranunculus occidentalis var. *occidentalis*

Buttercup Family

Prickle-fruited buttercup

Western buttercup

Rhamnaceae

Ceanothus cuneatus var. *cuneatus*

Frangula californica subsp. *tomentella*

Buckthorn Family

Buckbrush

Hoary coffeeberry

Rosaceae

Photinia serratifolia

Pyracantha koidzumii

Rubus armeniacus

Rose Family

Taiwanese photinia

Taiwan firethorn

Himalayan blackberry

Rubiaceae

Crucianella angustifolia

Galium aparine

Galium parisiense

Galium porrigens var. *tenue*

Sherardia arvensis

Madder Family

Cross-wort

Cleavers

Wall bedstraw

Climbing bedstraw

Field madder

Sapindaceae

Aesculus californica

Soapberry Family

California buckeye

Solanaceae

Solanum parishii

Nightshade Family

Parish's nightshade

Tecophilaeaceae

Odontostomum hartwegii

Tecophilaea Family

Hartweg's odontostomum

Themidaceae

Dichelostemma multiflorum

Dipterostemon capitatus ssp. *capitatus*

Brodiaea Family

Round-toothed ookow

Blue dicks

LIST OF VASCULAR PLANT SPECIES OBSERVED

Bella Vista Water District (District) Three-Million-Gallon Regulating Station Tank

Valerianaceae

Plectritis sp.

Valerian Family

Plectritis

Vitaceae

Vitis californica

Vitis sp.

Grape Family

Wild grape

Grape (horticultural)